## BOOK REVIEWS

Watching Birds: An Introduction to Ornithology. — Roger F. Pasquier, illustrated by Margaret La Farge. 1977. Boston, Houghton Mifflin. xiii + 301 pp. \$10.00. — This well-written book may become the standard introduction to ornithology for amateur naturalists.. The text, illustrations, and lay-out are all of high quality. In 15 chapters Pasquier covers evolution, morphology, behavior, breeding cycle, migration, distribution, conservation, attracting birds, and ornithology today. Unfortunately, treatment of environmental physiology is lacking. There is a generally well-rounded list of further readings, to which Andrew Berger's "Bird study" should be added, and an appendix listing ornithological and conservation organizations.

As there is so much information available about birds, it is inevitable that a reviewer will find favorite topics slighted or occasional lapses of accuracy. On the drawing of a chicken skeleton (p. 88) labels for fibula and tibiotarsus are reversed and the carpometacarpus, coracoid, femur, and pubis are not labelled. Including a drawing showing how flight feathers are attached to the wing bones would have been useful. In Florida, Limpkins are not restricted to eating snails (p. 226); they also eat fresh-water bivalves. And only in Florida do Scrub Jays have helpers at the nest (p. 182).

However, these quibbles should not dissuade you from purchasing this book; it is probably the best of its genre. Its well rounded coverage of ornithology makes it a must for the novice who wants to learn more about birds, and I hope it soon appears in an inexpensive paperback edition so that it might better reach the audience that provided the original inspiration, secondary school students. — FRED E. LOHRER.

Vertebrates of Florida. Identification and Distribution. — Henry M. Stevenson. 1976. Gainesville, University Presses of Florida. 607 pp., 11 plates, 15 figures, and 68 maps. \$35.00. — As the subtitle indicates, this volume includes both an identification guide and distributional information for some 880 vertebrate species known from the state. Dichotomous keys provide means for identification of Agnatha, Chondrichthyes, Osteichthyes, Amphibia, Reptilia, Aves, and Mammalia. Because most readers of *Florida Field Naturalist* have a primary interest in birds, this review will be limited to the sections dealing with birds.

The keys are intended primarily for the identification of museum specimens ("study skins") but should be useful on freshly killed birds occurring in Florida; they are not intended for field identification. For birds, keys are provided for orders and families and species within the families. (Further into the book, for each species one finds information on Identification and Distribution and Variation [subspecific].) The goal of anyone designing keys is to identify correctly 100 percent of all specimens; to achieve this goal is often exceedingly difficult. Most of the characters used in the keys are standard, easily understood, and defined early in the book. Over the past year I have had my students in ornithology practice identifying unknowns by using these keys; their identifications were approximately 90 percent correct, some of the problems being indicated below.

The major problem areas involve measurements — use of total length and measuring the wing. The author states (p. 6): "Probably the most reliable index of size in museum skins is total length . . . wing length is equally variable." (All measurements are variable, but wing length is probably the *least* variable in my opinion.) "In such cases the total length of a museum skin may be assumed to be within 10 percent of the original in most species. . . . " I join other avian systematists in remaining skeptical of this measurement, and the keys in "Vertebrates of Florida" substantiate this skepticism. For example, in the key to orders and families (p. 82), total length of the Tytonidae (barn owls) is "about 45 cm," but in the species' description for *Tyto alba* the length is given as "38 to 53 cm." Furthermore, a specimen I measured was only

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36.5 cm. Total length of a Marsh Hawk that I measured was 39.5 cm, not within the range (or even 10% thereof) of total length 45 to 61 cm given on p. 333. I have no quarrel with the use of total length as a *general* indication of body size, especially in living birds, but there are simply too many variations in the ways that individuals prepare museum skins to use total length of skins as an *exact* measure.

Quite unfortunately, the author fails to clarify the method of taking a wing measurement, whether by flattened wing or its chord. This is a significant omission. Three Bridled Terns that I measured, for example, had wing lengths of 242, 245, and 252 mm (chord), and 247, 252, and 254 mm (flat), none of them ("about 265 mm") as given in the key. The Goshawk has a "wing length at least 300 mm" (p. 101), yet I have seen a specimen with a wing of 285.

One must exercise other cautions in using the keys. The author does not state that the key to the Stercorariidae is for adults only; most records of this family in Florida are of immatures. Imprecise words are frequent — "about," "usually," and "normal." What is meant, for example, by "tail coverts usually white," a primary being "of normal width," a "tarsus about 100 mm?" Without qualifiers, these terms are at best confusing. In the ordinal key to Gruiformes and Charadriiformes, it is assumed that the user already knows what Limpkins and Jacanas look like. The male House Sparrow does possess a black breast patch, but only in the full breeding plumage.

Distribution maps, especially intrastate, can be useful, but why waste an entire page with a map showing the distribution of the Blue-gray Tanager in the whole New World when it appears only as a tiny dot on the southeast coast of Florida? Similar comments apply to maps of the Worm-eating Warbler and the House Wren (which does not even breed in Florida!). These maps and others are a real waste of space and money.

This review is not intended to be nit-picking, but rather to point out certain problem areas for potential users. Even so, this is an extremely valuable and useful book because of its coverage. Everyone interested in Florida vertebrates, whether student, professional, or amateur, should have this important book for ready reference. Dr. Stevenson is to be commended for assembling all these data into a single volume. — DAVID W. JOHNSTON.

## Florida Birds in the Periodical Literature, 1977.

All articles were published in 1977 unless otherwise noted. Authors are requested to send reprints of their articles to the Editor for inclusion in this annual feature.

- BROWN, M. M. Status of Snow Buntings wintering in the southeast. Chat 41: 59-66. Includes the Carolinas, Georgia and Florida.
- CRAWFORD, R. L. 1976. Some old records of TV tower kills from southwest Georgia. Oriole 41: 45-51. — Compared with Tall Timbers TV tower kills, Leon Co.
- CRUZ, A. Ecology and behavior of the Jamaican Woodpecker. Bull. Fla. State Mus. 22: 149-204. — Includes comparison of density and foraging behavior with woodpeckers near Gainesville.
- DOUGLASS, J. F. Prairie Warbler feeds from spider web. Wilson Bull. 89: 158-159. Everglades Nat. Park, Monroe Co.
- GRUBB, T. C., JR. Discrimination of aerial predators by American Coot in nature. Anim. Behav. 25: 1065-1066. — Lake George, Lake Co.
- GRUBB, T. C., JR. Weather-dependent foraging in Ospreys. Auk 94: 146-149. Lake George, Lake Co.
- GRUBB, T. C., JR. Why Ospreys hover. Wilson Bull. 89: 149-150. Lake George, Lake Co.