ORNITHOLOGICAL LITERATURE

EXTINCT AND VANISHING BIRDS OF THE WORLD. By James C. Greenway, Jr. Special publication no. 13, American Committee for International Wild Life Protection, New York, N.Y., 1958: $6\frac{14}{4} \times 9\frac{1}{2}$ in., x + 518 pp., illus. \$5.00. (May be ordered from above committee, New York Zoological Park, New York 60, N.Y.)

The author, artist, and others who worked on or financed this book are to be highly complimented on turning out a handsome, valuable and most interesting volume, and for a very reasonable price. The constantly repeated tragedy to bird species caused by man and his exploitation or by his introduced cats, rats and other animals is sad but fascinating reading. One can hope, though, that compending the accounts of all extinct or decimated birds and giving much information on their ranges, habits, and reasons for extinction or reduction in numbers, will be both an inspiration and real help in the cause of preservation of threatened species.

Summarizing the scope of the book: after listing extinct or rare forms in several categories, brief accounts of some "rare birds probably not in immediate danger" are given. There follows a detailed section on the "Geography of Extinction" consolidating much regional information on the extinct or rare birds of North America, and of the West Indian, Hawaiian, various Pacific, and Indian Ocean islands. Accounts of birds known only from bones (not including fossil forms, however) or inadequate descriptions are chiefly in this section. The major part of the book is "Accounts of Extinct or Vanishing Forms" and it is here, especially, that one is impressed with the tremendous amount of careful gathering and organizing of information that went into the book. More than 160 species or subspecies are treated in detail (with long sections, such as 20 pages on the Great Auk, particularly for North American forms) usually as to status, range, habitat, description, habits, and location of specimens.

A bibliography of over 1000 references is a fine feature of the book. It is followed by a list of museums having extinct birds, useful as a cross reference with the species accounts. Lastly, is an index essentially of all genera, species, and vernacular names.

The color plate and 85 drawings by D. M. Reid-Henry are an outstanding feature of the book, for they are excellent. Giving the scale of drawings would have added to their value, but the size of each bird is usually given in the text. Various maps and charts augment the illustrations.

Having made very clear my high regard for the book, I must, nevertheless, list a number of corrections and make certain criticisms. Perhaps a listing by pages, although not pretending to be complete, will be most useful:

Page

- iv, 50 "Puffinus newelli" should be listed as Puffinus puffinus newelli if the text and recent revision are followed. On p. 148 the usual name of Newell's Shearwater could probably best be used, or Newell's Manx Shearwater, since this bird is now recognized as a race of the Manx. The difficulties involved in subspecific vernacular names become apparent in examples like this, but such names seem particularly appropriate in dealing with extinct or rare, usually insular, forms.
 - iv Moho bishopi may exist, if anywhere, on Molokai.
 - 5 The Passenger Pigeon is missing!
 - 8 "Tyto" should be listed under Tytonidae.
 - 11 A small population of Palmeria dolei probably remains on Maui only.

- 48 The some 13 islands making up French Frigate Shoal are coral islands except for small, rocky La Perouse Pinnacle. The Coast Guard has had a group of men on one island for some 10 years, and a few cats (as of 1954).
- 51 Laysan has never been "permanently" settled and has been uninhabited for many years now.
- 166 Regardless of how the Hawaiian and Laysan Island ducks are best classified, there is much confusion in the book. For example, *Anas laysanensis* (p. 167) is called *Anas wyvilliana laysanensis* on p. 50 and *Anas platyrhynchos laysanensis* on p. 10.
- 179 Koford's estimate of California Condors was 60, not "600." Breeding of this species is not confined to the coastal range but is known to extend inland as in a *Sequoia gigantea* (not a "redwood") in Tulare County, California.
- 391 "fuliginosa" disagrees with flabellifera on p. 6.
- 398 "Viridonia" should be put in the genus Loxops to agree with p. 7.
- 400 The heading should be Loxops coccinea rufa.
- 403 Some of the Nukupuus, according to Munro (who I think is correct) are up to 7.5 inches long rather than just 5.
- 413 "Psittirostra palmeri" belongs under the Koa "Finches."

The problems are numerous (indeed, often insoluble) in deciding whether certain birds are truly extinct or probably so or in danger of becoming so, or deciding whether early and inadequately described or preserved forms are hypothetical or not; but Greenway has done a careful and logical job of grouping the hundreds of birds involved. There is some avoidable confusion, though. For instance, at least eight birds (including *Atrichornis clamosus, Troglodytes musculus guadeloupensis* and *martinicensis*, and *Psittirostra flaviceps* and *palmeri*) are described as "probably extinct" in the species accounts, but as "extinct" in the summary on pp. 5 and 6. It would have been helpful, too, to describe, as at the start of the main accounts, the exact bases on which birds were included.

Under the "Small Populations" category on p. 10 a more forceful designation than "thought to be in danger of extinction" could well have been chosen for many species. Who can doubt from the massive evidence provided by this book that such species as the Whooping Crane, Ivory-billed Woodpecker, Short-tailed Albatross, Hawaiian Goose, California Condor and others are in anything but very real danger of extinction.

The page heading throughout most of the book is "Accounts of Extinct or Vanishing Forms," although it would have been most helpful and logical to use orders or families here. There is no indication or separation of orders in the book, and although birds are taken up in standard sequence, it is too much to expect that, for instance, many readers will know a Kagu is a gruiform bird and be able to follow the discussion on p. 255 as to which suborder it belongs in.

I was a bit disturbed by finding a number of mistakes or inconsistencies chiefly concerning the relatively few forms I had knowledge of, yet in comparison to the scope of the book they are rare and generally not too significant. Considering its many fine features this volume is one of the outstanding contributions to ornithological literature in recent years.—FRANK RICHARDSON

DEPARTMENT OF ZOOLOGY and WASHINGTON STATE MUSEUM UNIVERSITY OF WASHINGTON

SEATTLE 5, WASHINGTON