ORNITHOLOGICAL LITERATURE

A CHECK-LIST OF THE BIRDS OF VIRGINIA. By Joseph James Murray. Virginia Society of Ornithology (obtainable from A. O. English, 2803 Rosalind Ave., S.W., Roanoke), 1952:6×9 in., 113 pp. \$1.50.

This booklet (paper-bound, photo-offset) will be a definite asset to students of Virginia birds, who have long lacked an up-to-date, competently prepared summary of the avifauna of that state. Students in neighboring areas should also find it useful. A brief preface, a rather extensive and interesting survey of the long history and development of ornithology in Virginia, a short account of physical features and faunal zones (*i. e.*, the Life Zones of Merriam; biomes are mentioned but not discussed), and a selected bibliography are followed in the work by the accounts of 415 forms: 348 species (11 of which are indicated as being of hypothetical occurrence by the use of parentheses), 64 additional subspecies, 13 of them hypothetical, and 3 hybrids (counting Sutton's Warbler).

The accounts, in telegraphic form and usually less than a half page in length, summarize in the briefest possible way the known abundance, distribution, and seasons of occurrence of each form, giving citations for particularly interesting records and the names of authorities for many other statements. In the space employed it has obviously been impossible to give citations for much of the material. A more elaborate edition, said in the work to be under consideration, is to be hoped for.

Apparently most or all of the taxonomic work on Virginia birds has been done by others and has not been critically reviewed by the author. Some of the subspecies listed are of rather tenuous distinctness, or have been included on the basis of one or a few specimens identified years ago. The accounts of the subspecies are headed, in the timehonored fashion, in the same manner as those of the species, a usage that places undue emphasis on the minor categories, and which I hope to see gradually abandoned in the future. A map would have added to the usefulness of the volume.—Robert M. Mengel.

A FIELD GUIDE TO THE MAMMALS. By William Henry Burt and Richard Philip Grossenheider. Houghton Mifflin Co., Boston, 1952:4¹/₂×7¹/₄ in., xxiv+200 pp., 24 color pls., 13 black and white pls., 168 maps, and numerous text figs. \$3.75.

Occasionally there appears in the literature of field zoology a book of great usefulness to amateur and professional alike. Such a book is the new volume by Burt and Grossenheider. The authors have prepared a handbook employing for the North American mammals the same techniques of illustration and identification as those so successfully employed by Roger Tory Peterson for the birds. Additionally, maps are included which give the known—and in some cases the supposed—geographic distribution of the various species.

The text and maps by Burt are models of brevity and accuracy. Each species account includes a terse statement on characteristics, similar species, and remarks on distribution and habitat. In all, 373 species are treated—a most conservative number. A few other species are mentioned only casually, but for the most part these are small groups of interest mainly to the specialist. With the aims of the authors in mind, such a treatment needs no apology. Subspecies are completely omitted.

The distribution maps will be of great interest to mammalogists. Although the authors freely admit that some inaccuracies probably occur in the maps owing to omissions, commissions, and an outright dearth of published information on some species, still the maps are by far the most accurate reflection extant of the recorded facts of mammal distribution—more accurate, in fact, than one would ordinarily expect to find in a work designed primarily for popular consumption. It is always refreshing to find that some authors think that popular science should still be scientific.

The illustrations clearly demonstrate that Mr. Grossenheider is one of the truly outstanding painters of mammals to grace the pages of modern mammalogy. Not only do the illustrations look like the real animals, but to the practiced eye some are readily identifiable to subspecies. Textural qualities, shading, and color patterns are so skillfully treated that, even sans background, Grossenheider's animals seem to be alive. Particularly is this true of the smaller mammals, the mice, rats, and squirrels; the paintings of the larger animals, the ungulates and larger carnivores, although better than good, suffer by comparison. The illustrations of the chipmunks, squirrels, microtines, wolves, foxes, and ringtail cat are superb. Grossenheider has also provided a number of text figures that not only enliven the pages, but impart information worth ten thousand words.

Your reviewer can offer no important criticism of this book. The only really objectionable feature is the inferior reproduction of certain color plates. In all three copies examined, the plate of the rabbits is excessively pinkish and the plate of the insectivores is out of register. In two copies the plate of the deermice is out of register. This latter is most unfortunate because the original painting was one of the best of the entire set. Possibly in the interests of simplification, the scientific names of the animals do not occur on the legends of the plates or distribution maps. This will be a decided inconvenience to those professionals accustomed to using scientific names rather than common names, and especially so since for mammals many 'common' names are not in common usage. The bibliography is intended to be only the barest guide to a vast literature, but even so it seems excessively abbreviated. Another unfortunate discrepancy is the omission of Grossenheider's name from the cover although it is given on the title page and the dust jacket as co-author.

On the whole the book is very well done and the authors are to be congratulated. It fills an embarrassing gap in our literature in a highly satisfactory manner and is sure to enjoy a wide appeal.—Keith R. Kelson.

THE WHOOPING CRANE. By Robert Porter Allen. Research Report No. 3 of the National Audubon Society, New York, 1952: $7\frac{3}{4} \times 10\frac{1}{2}$ in., xxvi + 246 pp., color frontispiece, 17 black and white pls., and numerous text figs. \$3.00 (paper).

This is the third of a series of life-history monographs published by the National Audubon Society. It should be of interest to the general public, as well as to ornithologists, in that it presents, under one cover, a detailed analysis of all available information regarding a species (*Grus americana*) that has been on the "near extinct" list for many years.

The Whooping Crane is discussed under eight major headings: (1) distribution, (2) abundance, (3) migration, (4) food habits, (5) winter life, (6) the breeding cycle, (7) molts, plumages, and anatomy, and (8) survival: protection and conservation. In addition there is an introductory chapter that includes a brief description and the geographic range of each of the cranes of the world.

The paper is adequately illustrated with photographs, paintings and drawings from various contributors, and a series of excellent pen-and-ink drawings by the author. The

figures and tables would be of greater value if they were serially numbered or lettered to permit easy reference in the text.

The author's views regarding the abundance of Whooping Cranes are very interesting. On page 85 he states, "A 'myth of superabundance' has clouded the true facts and may stem from a misinterpretation of some of the early writings on the status of the species. Actually, there is evidence that the Whooping Crane was never observed in large numbers, even one hundred or more years ago." He then points out that the population as of 1869 probably numbered only 1300 birds. According to his calculations we can hope for an increase of only four Whooping Cranes in the next ten years, provided the rate of increase during that period equals that for the years 1940-1949.

A detailed knowledge and understanding of the life-history and ecology of any species is of utmost importance in its successful management. This is especially true in the case of the Whooping Crane, where even a minor error might have disastrous results. The author has taken this into consideration in presenting his suggestions regarding the future management of the Whooping Crane. His recommendations include enlargement of the Aransas Refuge in Texas, minor improvements at the Aransas Refuge to insure further the safety of the wintering birds, development of a refuge on the Platte River in Nebraska, education of the public, and further study.

Some readers will feel that Allen has avoided discussing the issue of placing the remaining Whooping Cranes in captivity in the hope that they might reproduce there satisfactorily. Until further information is accumulated regarding the breeding behavior of these birds, it seems to me that Allen's cautious approach is safest.—Thane S. Robinson.

VOYAGEUR'S COUNTRY: THE STORY OF THE QUETICO-SUPERIOR COUNTRY

A contribution from the Wilson Ornithological Club Conservation Committee

Grand Portage, that mountainous carry from Lake Superior around the rapids of the Pigeon River to Fort Charlotte, was nine miles of as tortured packing as there was on the continent. Even in the old days, it was something to boast about. To say, "I made Grand Portage" set a man apart. The French voyageurs judged a man by the way he took that trail, for two ninety-pound packets was the normal load and no Coureur du Bois who could not take the punishment was worthy of the name. Some men carried bigger loads and bragged of their feats around the campfires of the Voyageur's Highway for years afterward.

Today modern voyageurs again strain sinews in the country of the fur trading days, cruise thousands of miles along the delightful waterways of the international border between Lake of the Woods and Lake Superior. Like the Indians and voyageurs, they too love this country for the beauty of its lakes, its clean glaciated rocks, its tree-lined portages, and fascinating vistas. Primitive maps with great blank spaces are no more. Now there are excellent aerial photographs so accurate that every stream and pond is clearly shown.

Times have changed in the canoe country, but the spirit of exploration and adventure is still there. In spite of logging and fires and exploitation in some parts of it, the area is still surpassingly beautiful and much of it unchanged. There are still the sounds of the wilderness, the wild calling of the loons, the slap of a beaver's tail at dusk. The