## ORNITHOLOGICAL LITERATURE

PHEASANTS IN NORTH AMERICA. Edited by Durward L. Allen. The Stackpole Company, Harrisburg, Penn., and the Wildlife Management Institute, Washington, D. C., 1956:  $6\frac{14}{5} \times 9\frac{14}{5}$  in., xviii + 490 pp., illus. \$7.50.

This book is published as a successor to W. L. McAtee's "The Ring-necked Pheasant and Its Management in North America" (1945). It follows somewhat the plan of the earlier work but, by intent, the authors are different from those of McAtee's book. The book is illustrated by 82 fine plates, 33 figures, and a colored frontispiece reproduced from a painting by Bob Hines, who also contributed the excellent sketches which head each chapter. The bibliography lists 249 references and the book is concluded by a detailed index of subjects and authors.

In Chapter 1, Fred H. Dale clearly summarizes the present knowledge of the life history and biology of the Ring-necked Pheasant in North America. In Chapter 2, J. Burton Lauckhart and John W. McKean present a lucid discussion of the pheasants in the northwestern United States and British Columbia. Chapter 3, by Chester M. Hart, Ben Glading, and Harold T. Harper, deals entirely with California. Lee E. Yeager, Jessop B. Low, and Harry J. Figge discuss the pheasants in the arid southwest in Chapter 4. In Chapter 5, James W. Kimball, Edward L. Kozicky, and Bernard A. Nelson write about the pheasant in the mid-western prairie states. Chapter 6, the longest chapter in the book, on the pheasants in the Great Lakes region, is by Robert A. McCabe, Ralph A. MacMullan, and Eugene H. Dustman. In Chapter 7, Allen W. Stokes presents an account of the pheasant populations on Pelee Island, Ontario. Chapter 8, by Allan T. Studholme and Dirck Benson, covers the pheasant in the northeastern United States. Finally, in Chapter 9, the editor sums up the pheasant management outlook.

The seven chapters which deal with various geographical regions of North America follow the same general form. Each discusses the establishment of this exotic in the region and each includes a description of the present distribution and relative density of the birds. Each chapter also includes an excellent description of the habitat, a discussion of fluctuations in the numbers of the birds, consideration of limiting factors and possible causes for population fluctuations with, occasionally, some general discussion of population dynamics, and, finally, a discussion of management problems.

In the introduction, C. R. Gutermuth states that the book "... will provide answers to almost any of the questions of all those interested in this exotic ..." and that it will be of especial interest to wildlife students, fish and game technicians and administrators, game breeders, and sportsmen. It is not surprising that a book attempting to meet such an ambitious goal and aimed at satisfying such a wide audience should fall somewhat short of the mark. Although the book contains a great deal of information about pheasants, it still leaves many questions unanswered. It also fails to meet the needs of the wide audience for which it was intended, since it is obviously a technical work written by technicians for technicians. Such concessions as seem to have been made to the sportsman appear only to have decreased the technical value of the book without making it more intelligible to him.

For the technically minded, this book is an important summary of the existing knowledge and present day philosophy of pheasant research and management in North America. For the neophyte, the bibliography is a good general summary of the literature on pheasants through 1953. All who read this book will glean much from the excellent habitat descriptions for the various regions and from the discussions of the distribution and fluctuations of pheasant populations in these habitats. Wildlife biologists, especially, should gain much from the broadened perspective which they will gain from this work and the critically minded readers with a bent for research should be excited by the challenging problems which remain to be solved.

There are a few deficiencies in the book which detract, somewhat, from its usefulness. There is a lack of uniformity in expression of sex ratios and numbers of birds per unit area. The regional distribution maps are interesting diagrams of pheasant distribution but the break-down into birds per 100 acres is largely wasted effort since no indication is given as to the season represented. Information regarding band recoveries is often difficult to interpret since the birds released often are not described, the time of release is frequently not given, and often no information is presented regarding the method of release, the release areas, hunting pressure or method of band recovery. The excellent maps in Chapter 5 showing the east-west changes in pheasant populations during the 1940's are marred by being broken-down into population densities described as being low, medium, high, very high, and excessive. Terms such as these represent a point of view and as such may be meaningful to the authors today but even to them they may not have the same meaning that they did a decade ago or that they will a decade hence.

A few editorial errors occur but they do not detract unduly from the value of this work. These include some inconsistent table headings, some grammatical and typographical errors, an awkward placement of several tables, a paragraph in each of Chapters 6 and 8 which seems to have been misplaced, an error in numbering Figures 19, 20 and 21 in the text and the omission of a cited reference from the bibliography. More important is the fact that no references are cited for some of the information and conclusions presented in this work and, as a result, few but biologists currently engaged in pheasant work will be able to evaluate these for themselves.

The philosophy underlying much of present-day game research and management, as indicated in this book, is important. Throughout this work the underlying concept of population dynamics appears to be an extremely simplified one involving a carryingcapacity which is apparently a definite population level and which appears to be determined by the numbers and distribution of obvious, relatively easily measured environmental things but which seems to be largely unaware of obscure environmental factors and, except in a very superficial manner, of the biology and psychology of the animal being considered. There is often a tendency also to accept as fact certain theories which have been advanced by researchers to explain population phenomena observed on specific areas over relatively short spans of time. Some of these hypotheses, due perhaps to having been advanced by well known biologists or to having been in use for a long time, have acquired the status of ecological principles in wildlife thinking. As a result, conclusions are drawn at times from rather brief studies, particularly if the results of these studies seem to agree with the "principles," while at other times data which seem not to support the "principles" often appear to be overlooked. Thus we discover a statement being made regarding limits on pheasant populations (Chapter 9) which is based on a three-year study but find no mention of further data from the same area which would seem to require modification of any conclusions which might be based on the earlier work.

From this process certain characteristics of pheasant populations for which no research data seem to be available are postulated and management programs are developed. This type of reasoning seems to be the basis for conclusions such as ". . . where only cocks are shot, nearly all topgrade ranges are supporting an excess of hens that cannot be as effective as breeders." (p. 460). Two somewhat similar statements are: "Between incubation time and October, on many ranges it takes about two eggs to make one subadult bird. This means that Nature has overproduced by 100 per cent to allow for a loss of half the crop between May and hunting season." (p. 436) and "Under ordinary conditions we can assume that Nature does a large overstocking job and natural limitations cut the annual production down to a size that will fit a given environmental pattern." (p. 437). No specific data are cited to support these conclusions, though this may be due to an attempt to make the text more readable for the non-technical audience, and they seem to be the basis, in part, for liberalizing the hunting seasons and for shooting hens in some areas where they would crowd a restricted winter habitat and overproduce the following breeding season. Stocking as a management procedure, except for commercial shooting areas, is generally discouraged, as are pheasant sanctuaries. State-wide habitat management programs are the rule at present and annual changes in hunting regulations seem to be regarded as unnecessary since when populations are low hunters stop hunting and take little game and ". . . it appears that getting the available surplus of cocks into the game bag is a much greater problem than preventing hunters from killing too many." (p. 463).

These remarks are intended to be entirely impersonal and are not intended to be critical of the authors or the editor of this book. They are intended to suggest, however, that this book, rather than being a final report which answers almost all questions about pheasants should, in fact, be considered a progress report which faithfully, and in a very excellent, readable manner, summarizes the present-day knowledge and philosophy of pheasant research and management. They are also intended to suggest that, while much progress has been made, there is still a vast *terra incognita* awaiting an enthusiastic, energetic explorer who can approach the problems with a fresh viewpoint. This book should be in the library of everyone interested in wildlife and it becomes, at once, a part of the necessary impedimenta of every game manager and administrator who has pheasant problems and of every technician working on a pheasant project. The editor is to be commended for performing well a big job, the completion of which has produced an extremely valuable contribution to the wildlife field.—ROBERT A. PIERCE

## CHECK-LIST OF THE BIRDS OF TEXAS. By Col. L. R. Wolfe. Published by the author at Kerrville, Texas, 1956: $6 1/8 \times 9 1/4$ in., 89 pp., map. \$1.75.

The purpose of this compilation is to provide a list of the species and races of birds reported reliably from Texas and to outline briefly the distribution of each within the state. The author lists only those forms recognized by the Check-list Committee of the American Ornithologists' Union. Details of the circumstances of record are provided for most of the species which have been reported infrequently from the state. However, for others, such as the Rivoli Hummingbird, the pertinent details would have required little more space than that taken by the statement "several specimens have been taken during the summer."

The distributional data in most instances are reported by the system of eight regions defined for administrative purposes by the Texas Ornithological Society; a map of these areas is provided. Even though these "areas" may be considered as having relatively uniform ecologic conditions, the designation of geographic ranges by such a system leads to vagueness. For many species this is a reflection of the lack of precise data on the limits of the range in the state, but I feel that the mention of counties of actual record would have been more effective. In addition to some indefinite distributional references, the author is prone to rely on the probability of occurrence in the assignment of ranges. For example, the Mountain Chickadee is stated to be "Resident in area 4" (trans-Pecos Texas), whereas it has been reported breeding only in the Guadalupe Mountains (in the northern part of the area) and once in winter in the Davis Mountains further to the south. The citation of a definite locality of record followed by a phrase "is to be looked for" in nearby areas, would seem preferable.

In a few cases reliance has been placed upon records which have not been substantiated in recent decades. Bachman's Sparrow is listed as a summer resident in some parts of central Texas that are rather sparsely wooded, apparently on the basis of Lloyd's report (1887. Auk, 4:292). I know of no recent specimen records for central Texas. However, the paucity of information concerning the distribution of this and some other species is considerable.

In reviewing a work with the distribution of a group in an area as large and diverse as Texas one tends to seek out the flaws and to pass over the bulk of satisfactory text. Persons interested in the ornithology of Texas owe Col. Wolfe a debt of gratitude for providing a firm basis for future work on the distribution of birds in that state. It is hoped that ornithologists with notebook records or unreported specimens will publish their data or report them to Col. Wolfe so that a revised list with more precise range definitions may be forthcoming.—KEITH L. DIXON.

AN ANNOTATED BIBLIOCRAPHY OF NORTH DAKOTA ORNITHOLOGY. By T. C. Stephens. Published by William Youngworth as Occasional Papers, No. 2, Nebraska Ornithologists Union, Crete, Nebr., 1956:  $8\frac{1}{2} \times 11$  in., 2 + 22 pp. multilith. \$1.00.

A chronological list of 267 titles, 1858-1947, and brief account of the author. In many of the references the species concerned are noted. References that have been re-checked are indicated and some are noted as "not seen". Through some oversight the years 1932 and 1933 are included in 1931.

It is unkind to criticize such a posthumous and apparently meritorious work but some discrepancies should be noted. Dr. Stephens apparently had not seen Coues' Field Notes of 1873-74 but it is hard to understand how he could have dismissed this important paper with "Uncertain if there are any explicit North Dakota Notes."

The references to Mrs. Bailey's series in the *Condor* include only 3 of the 17. Essential references missing include Bailey's Biological Survey of North Dakota, Swenk and Stevens on Harris' Sparrow, William's list from the Red River Valley, Reid's Birds and Mammals observed by Lewis and Clark, notes in Maximilian's travels, and in Audubon's journals.

Dr. Stephens probably was not aware of a manuscript bibliography to 1928 compiled by Russell Reid, a copy of which was deposited in the library of the North Dakota Agricultural College. This contains 168 entries, arranged alphabetically, and includes many additional titles.—O. A. STEVENS.

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