

## THE COMMON INSECTS OF NORTH AMERICA

By Lester A. Swan and Charles Papp.  
Harper and Row Publishers, Inc., 10 East  
63rd Street, New York, N.Y. 750 pp., 1972.  
\$15.00 (U.S.)

This book is meant to provide any interested person with a much needed, easy way to identify the common insects of North America north of Mexico. Text and description are minimized and emphasis is placed on black and white pictures and sketches for identification of the orders and species. The book is intended for the layman without formal courses in entomology as well as for the general biologist and specialist. To ensure that the readers may better understand the book's context brief general discussions of biology and classification (supplemented with drawings) preface the main part of the text.

Some 1,400 major species of insects in 23 main orders are illustrated and discussed. Discussions include information on distribution, food plants and types of injury, animal hosts, insect growth and size, time of occurrence, etc.

A bibliography of some 370 titles is included of which about 30 are Canadian. To evaluate in part the degree to which Canadian species of insects may have been overlooked, the list of species occurring in the 1971 Annual Report for the Forest Insect and Disease Survey, Canadian Forestry Service, was checked against the index of species included in this book. Of approximately 115 recorded in the Survey report, only some 50 species are included in this book.

Despite its shortcomings, this publication is a real contribution to entomology by bringing together a great deal of information on insects, hitherto found largely in separate leaflets, journals, etc., and available mainly to specialists. It will not provide answers to all questions and problems of insect identification encountered by laymen, general biologists or specialists but it will go far towards meeting many of their

needs both in the U.S.A. and Canada. The fact that identification is brought to the species level makes this publication better than other publications which fail to do so. It should prove practical and valuable as a reference source on insects for the high school library. — *Lloyd O. T. Peterson*, Indian Head, Sask.

## THE SNIPES: A STUDY OF THE GENUS CAPELLA

By Leslie M. Tuck.  
Canadian Wildlife Service Monograph  
Series, No. 5. 429 p. Information Canada,  
Ottawa. 1972. \$7.50.

I heard that sound again this morning — a sure sign that it is May. A sound that is felt as much as heard; a sound that shares spirit-like origins with the call of the Loon; a sound whose production puzzled scientists for over 100 years; the sound of "winnowing" or "bleating" of the Wilson's Snipe.

The production of this sound and all aspects of behaviour, systematics, morphology, ecology and management of this genus are methodically covered in this book. The text is well documented and illustrated. Dr. Tuck writes in a style that is most readable and which is equally appealing to the amateur and professional ornithologist. It is this ability to combine original, significant information with a very readable style that has won him the Wildlife Society's Terrestrial Publications Award in 1962 for his book *The Murre*, and again in 1973 for *The Snipes*. One can not find fault with content or format.

It is worthwhile to consider that both of Tuck's monographs and Erskine's *Buffleheads* are the products of long-term field investigations. Such long-term research is the only way in which such an accumulation of knowledge can be obtained. One wonders if the recent trend in government policy towards short-term research will bring an end to the Monograph Series. As a reader, a biologist and a concerned citizen I sincerely hope not. — *Glen A. Fox*, Edmonton, Alberta.

## ALBERTA VIREOS AND WOOD WARBLERS

Families Vireonidae and Parulidae.  
Distribution and Breeding.

By W. R. Salt.

Provincial Museum and Archives of  
Alberta, 12845 - 102nd Ave., Edmonton,  
Alberta. 141 p. \$4.50.

This is the third book in the Alberta Provincial Museum and Archives' publication series. The author is an Honourary Member of the Federation of Alberta Naturalists and is best known as the co-author of *Birds of Alberta*.

Using a vast amount of data too detailed for inclusion in *Birds of Alberta*, Dr. Salt provides a thorough description of the distribution, migration and nesting of the 4 vireos and 30 wood warblers occurring in Alberta.

Under "Distribution" and "Subspecies" there is a general description of the range and abundance of each species, and a brief description of the range of each subspecies. This is followed by a long list of localities giving local abundance in certain localities throughout the province and a full page map of the breeding range of each subspecies in the province.

Under the heading of "Nesting", there is a well-written description of the nest itself, its site, the general habitat preferred for nesting as well as a discussion of the habits of the bird near the nest. There follows a documented list of locations and dates for nests in Alberta.

In the section on migration early dates of arrival and late dates of fall departure are given for several localities throughout Alberta. Information on hybridization and parasitism is included for a few species. There is also a list of 120 references.

Unfortunately, for a book on warblers and vireos, no attention is paid in the text to their identification. The book does include a series of paintings of fall plumages but these are, in the opinion of the reviewer, too pale. This

may be due to faded museum specimens used, to poor reproduction or to the original paintings. Also the fact that only one individual of each of the 34 species is shown makes it of little help in identification since there is such a wide variation in colour of fall warblers of a particular species.

For Alberta birdwatchers, this volume will be useful as a guide to when and where they may find each species. For all birdwatchers, the section on nesting should be of value in helping them find nests of the warblers and vireos covered. — *Stan Shadick*, Saskatoon, Sask.

## A SIMULATION MODEL FOR THE MANAGEMENT OF SANDHILL CRANES

By Richard S. Miller, George S. Hochbaum and Daniel B. Botkin.

Bull. No. 80 School of Forestry and Environmental Studies, Yale University. New Haven, Connecticut. 49 p. 1972. \$2.50.

Miller et al. combine a critical review of Sandhill Crane management with their presentation of a simulation model designed to demonstrate the effects that change in demographic factors can have upon the population dynamics of cranes. The stated purpose of their study was "to suggest the kinds of data required for proper management of the species . . ." and "help focus our thinking and point out the crucial gaps in our knowledge about the population dynamics of Sandhill Cranes . . ." In reality the authors have interwoven theoretic considerations with practical criticisms of current crane management to such an extent that one must conclude that criticism of management appears to have been the primary objective.

Their main concern hinges upon their apparent belief that in the face of recreational hunting pressure, Sandhill Cranes "could enter into a long-term decline in population size before the evidence of such a decline was detected, and that the species might become endangered before it was returned to protected status." They have evident





Sandhill Cranes in flight.

Fred Lahrman

arrived at this conclusion through a subjective evaluation of current crane surveys and highly theoretical projections of the dynamics of a crane population exposed to different levels of simulated hunting. The conclusion is drawn despite their own qualifying statement that "These projections are made merely to illustrate a variety of possible hunting situations and to show limitations of the existing data; it should be clear that the projections should not be taken literally."

The average number of cranes counted during pre-season surveys in New Mexico and Texas over an 11-year period is about 195,000 cranes with the lowest being 135,000 in the first year of the survey. The total number of cranes is estimated at 300,000 on the basis of these and other surveys. Miller et al. interpret the variable nature of the survey to mean that a decline in crane numbers would not be detected until the population fell below 135,000 and that, by the time it was detected, the population could already be in serious trouble. This seems to me to be a misinterpretation of the capabilities of the annual survey. The survey has so far dealt with an apparently stable crane population and has yielded average counts of about 65 percent of the estimated population. It

is illogical to assume that if the population declined the accuracy of the survey would increase concurrently to produce results similar to previous years and that managers would therefore not suspect a decline until the population actually fell below 135,000 or about 45 percent of its currently estimated level.

Miller et al. have succeeded in pointing out the need for accurate measurements of demographic parameters of Sandhill Cranes but in my opinion their criticisms of current management are too easily discredited.

For a scholarly publication, this one has an incredible number of editorial shortcomings such as no pagination in the Table of Contents; all figures without numbers or legends in the text; no references cited for important population data and at least three references cited in the text but omitted from the Literature Cited. — *A. Brian Ransom, Boissevain, Manitoba.*

**Editor's Note:** Life history data as given in this bulletin is as follows: Sandhill Cranes probably begin to breed in their 4th year and live 20 to 25 years. Two eggs is the most frequent number in a nest but usually only one young survives to migrate south. On the average, about 30 young are produced per 100 adults. There are apparently no data on mortality rates for this species in the wild.