Vancouver Birds in 1971

By R. Wayne Campbell, Michael G. Shepard, and Wayne C. Weber. Vancouver Natural History Society, Box 3021, Vancouver, B.C. 1972 (but date not given on book). 88 pp., 18 figures, 5 tables. \$1.50.

This slim volume consists primarily of annotated species accounts of birds observed in the vicinity of Vancouver, British Columbia during 1971, although occasional habitat or behavior notes are included, and a table compares measurements from dowitchers (Limnodromus spp.) of both species collected in the area to such measurements from specimens taken elsewhere. Besides the usual introductory material and credits, additional sections explain sources of material used, cirteria for accepting records, and the format followed. The weather for the year is summarized, and changes of status of some species within recent years listed. Accounts of escaped and recently introduced species are in a separate section following the accounts of native and long-established introduced species. Additional features include a list of references and reports on several projects involving banding, counts, duck nesting boxes, and permanent records.

On the whole the book is carefully prepared and well documented, although it suffers from poor proof-reading, which a long list of corrections included in some (not all) copies only partially rectifies. The species accounts are well written and concise, and most of the photographs are excellent. The list of references might usefully have included the earlier publications from Vancouver and British Columbia in general, and at least some mention of the similar annual bird reports from Victoria and the seasonal reports in American Birds. However, these points are minor and I unhesitatingly recommend this book to anybody living in, or planning to visit, the West Coast of Canada, and to compilers and editors of the monthly, seasonal, and annual bird reports springing up all across Canada.

MARTIN K. MCNICHOLL

Department of Zoology University of Alberta Edmonton, Alberta T6G 2E1

The Spotted Hyena: A study of predation and social behavior

By Hans Kruuk. The University of Chicago Press, Chicago and London. 1972. xvi + 335 pages, illustrations, maps. Wildlife Behavior and Ecology Series. \$15.00 (U.S.).

When I went to Africa 16 years ago to study giraffe, facilities and encouragement for wildlife research were practically non-existent. Even to be allowed to do research at a ranch where there were wild giraffe, I had to buy a car in order to be able to approach and observe the animals, and pretend in my letters of arrangement that I was a man. It is heartening to read in Kruuk's superb book on the Spotted Hyena that excellent conditions now exist for wildlife study in the game lands of East Africa. Dr. Kruuk states that he was able to use tranquilizing darts to immobilize and mark by ear clippings hundreds of hyenas; radio transmitters and a receiver to follow the daily movements of an individual (a female was tracked minute by minute for 12 consecutive days and nights); a tape recorder to capture the yells

and giggles of hyenas at a kill; a loud speaker to replay these sounds and attract other hyenas; equipment for fecal analyses so he could determine what the hyenas ate; and a light aircraft to make a census of plains' animals.

The results of his three-and-a-half year research program are well set out in this book. The text alone is highly readable, and it is supplemented with more detailed results presented in the tables and figures, with peripheral data in the appendices, and with informative sketches and photographs. This new method of presenting data from field research in book form (pioneered by the University of Chicago Press) is far superior to the erstwhile common alternative — the publication of one or even of a number of technical papers which seldom, if ever, are read by laymen or even by zoologists working in unrelated fields.

Before the publication of this book, little was known about the Spotted Hyena. Now we find it a fascinating species. Kruuk discusses the hyena as an active predator rather than as a scavenger; as a frequent pack hunter not unlike the wolf, which attacks various prey species in different ways; as an individual which competes with other hyenas at the same kill not by fighting but by speed of eating (a single hyena can consume a gazelle fawn in under two minutes); and as an animal which caches food in waterholes where it cannot be smelled nor seen by rival predators.

There are bases for the unsavory reputation of the hyena. For example, hyenas destroy their prey by devouring them alive. They bring down a zebra by eating its intestines and flesh as it flees or as it stands in a state of shock. Hyenas also devastate wildebeest calves — in the Ngorongoro Crater they kill three-quarters of those born each year. (As a countermeasure, however, the calves are born in a one-month period, as most caribou are, so that the predators are "swamped" by more individuals than they can consume at one time.) Hyenas are also not above killing and eating each other, which may explain why the female is larger than the male, dominant to him, and thus able to protect her young from him.

Kruuk, as a scientist should, suggests a number of unanswered questions. I found myself mulling over problems such as these: Why do hyenas struggle over their kill so raucously that lions may be attracted to take over the feast and thus exclude the hyenas? Why are not wildebeest calves, a favorite food of hyenas, protected against them by speed of movement or by camouflaging coloration? And why do some hyenas observe such strict clan territories that if they chase and down an antelope in a neighbouring clan's territory, they leave their meal for the neighbours' exclusive use?

For anyone more than superficially interested in wildlife, this book is well worth reading and thinking about.

ANNE INNIS DAGG

Department of Biology University of Waterloo Waterloo, Ontario

The Carnivores

By R. F. Ewer. Cornell University Press, Ithaca, New York. 1973. 494 pages. \$21.50.

This is another of those books which, purportingly aimed at both layman and serious scientist, can not really satisfy either customer. While it presents a reasonable review of carnivore biology, it is often too plodding to captivate any but the most persistent lay reader. At the same time, it seldom attains the depth necessary for it to be of much use to those who regularly follow carnivore literature.

Following brief introductory descriptions of the seven carnivore families are chapters on the skeleton, anatomy of the soft parts, the special senses, food and food finding, signals and social organization, social organization and living space, reproduction, fossil relatives, and classification and distribution of the living species. The approach is basically comparative, family against family, for the various subjects covered. Additionally, differences between species are often discussed; much of this information would have been more digestible in tabular form. The book, strictly about carnivores, does not deal with comparisons between this group and other mammals.

Many readers will be disappointed by the author's decision not to include information on

the dynamics of predation and carnivore populations. She felt that these subjects "take us too far away from the animals themselves and their adaptations, which constitute the main theme of the book." On the whole her efforts to synthesize the material available on the subjects she has selected are laudable. Her reviews of locomotion and feeding in relation to skeletal features, pelage, sensory capacities, hunting and killing behavior, and reproduction are all useful, and the summary tables of data on dentition, reproduction, and development are valuable. The palaeontology chapter, to me the best of all, includes recent data on species and family relationships as revealed by biochemical and chromosome morphology techniques. (Interestingly, even these sophisticated methods disagree on the degree of relationship between ursids and procyonids, and we are still not certain of where to put the pandas.) Another positive aspect of the book is the author's frequent speculation which calls at least indirectly, and often directly, for studies on specific subjects. Students of anatomy, physiology, taxonomy, and behavior will benefit most from these.

Of the impressive total of 974 references cited, 35 percent are post-1965 and an additional 20 percent appeared in 1960–65; thus the book is



Dagg, A I. 1974. "The Spotted Hyena: A Study of Predation and Social Behavior, by Hans Krusk [Review]." *The Canadian field-naturalist* 88(1), 116–117. <u>https://doi.org/10.5962/p.344352</u>.

View This Item Online: https://doi.org/10.5962/p.344352 Permalink: https://www.biodiversitylibrary.org/partpdf/344352

Holding Institution Harvard University, Museum of Comparative Zoology, Ernst Mayr Library

Sponsored by Harvard University, Museum of Comparative Zoology, Ernst Mayr Library

Copyright & Reuse Copyright Status: In copyright. Digitized with the permission of the rights holder. Rights Holder: Ottawa Field-Naturalists' Club License: <u>http://creativecommons.org/licenses/by-nc-sa/3.0/</u> Rights: <u>https://biodiversitylibrary.org/permissions</u>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at https://www.biodiversitylibrary.org.