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THE COUNTRY JOURNAL BOOK OF BIRDING AND BIRD ATTRACTION

ALAN PISTORIUS. 1981. 274 pp., 7¼ x 10¼, illustrated with drawings by Don Almquist. W. W. Norton & Co., New York. Canadian \$20.95.

Let me say at the outset that this is an enjoyable book. Dr. Pistorius, we learn from the dustjacket, once taught field ornithology so he knows quite a bit about birds. He goes often to the technical literature for information but he shares it with us through an easily understood discussion. He gives special thanks to Norton editor Stephen Sears who insisted that the text be readily understandable by those who, like himself, seldom bird beyond the patio. Remember that he lives in Vermont in the northeast corner of his subject region which he describes as the "extended Northeast" that stretches westward to include Regina, Saskatchewan.

An active birder, the author chronicles for us a birdwatcher's year so he has chapters at home and chapters away, although his first chapter in which he discusses the marvel of migration of birds fits neither. His discourse on migration is up to date and so comprehensive that the 30 pages on the subject justifies the purchase of the book for that chapter alone. If you still cherish the "four flyways" concept abandon it now. He gives us a vibrant account of the recently discovered route over the Atlantic Ocean which he terms

the "Sargasso Sea Loop". It boggles the mind to realize that a Blackpoll Warbler, fuelled with one-third of an ounce of fat, will launch itself from a point on the New England coast, head southeasterly on a 2000-mile trip over the empty Atlantic and make landfall 80 hours later in South America — if all goes well. The study of migration is wide-ranging and complex, so much so that Dr. Pistorius devotes a special paragraph in the chapter entitled "Bibliographical Note" on the literature of migration as it does not lend itself to his plan of inserting literature references as needed throughout the book. If a reader is used to relying on bibliographies in reference books for source material this lack of a formal bibliography may be disconcerting.

His chapters dealing with birding activities around the home cover winter feeding, feeders, a lengthy 62 pages on plantings around the yard to establish and improve bird habitat, building bird boxes, and supplying water for drinking and bathing, and nectar sources for hummingbirds. These chapters are very well written, with much common sense and considerable wit, and even though he may strike down some of your cherished beliefs, he does so in a most constructive way.

His "away" chapters will appeal to every birder who has braved the hinterland to census birds. The Christmas Bird Count chapter ranges from a straightforward account of its history and scientific value to hilarious tales of some counts he has experienced. When he had the job of compiler for a local C.B.C. his procedure for recruiting observers must be given verbatim:

"You accomplish this by explaining to

people that CBCs provide valuable scientific data, but that this is really only a by-product of the event. The real object, you explain, is to have *fun*, which is obtained by getting up before a December or January dawn and beating the bushes in all weathers until dark, writing down the names and numbers of such birds as you may encounter. What *proves* this is fun is that, when it's all over, you pay for the privilege of having done it. Potential recruits may be skeptical at this point, but many will weaken when you hurry on to describe the post-count party — the good cheer, the drinks, the hot food, and the excitement attendant upon the preliminary compiling of the species list."

Some of us still remember the Regina Bird Count day which featured such a cold, strong wind that the wind-chill factor dropped, it was said, to -100°F , but Doug and Dot Wade's post-count party was worth it!

Then there is the chapter on the game of the Big Day count which is now largely sponsored by the American Birding Association, although it was not the inventor of the sport. To get the most out of a Big Day count there is no doubt that rival teams' members must refine their identification techniques to a remarkable degree. However, his chapter on atlasing breeding birds is one which we should all examine very carefully as it has a serious goal.

Much of Europe is covered but atlasing in North America is still in its infancy with only a few states and provinces involved. However, it is expected that steady progress will be made now that the North American Ornithological Atlas Committee has been established under Chairman M. D. F. Udvardy, Dept. of Biological Sciences, California State University, Sacramento, California 95819. (NOTE: see Appendix IV, p. 582, "Estimating Numbers of Terrestrial Birds", Cooper Ornith. Soc. Studies in Avian Biology No. 6 (price: Can. \$27.00 from The Blue Jay Bookshop) for a full account of the project.)

The author also discusses the Breeding Bird Census and the Breeding

Bird Survey. The former, now about 50 years old, monitors the density of breeding populations of various species of birds within particular habitats, while the latter, which started in 1965, eventually yields computer printouts which can determine year-to-year population trends based on a widely distributed survey sample.

Finally there is the "Bibliographical Note" which is useful if only to draw the attention of newer birding recruits to the "Master List of Bird Books for North American Readers" and the "Annotated Selection of Regional Bird Books" both appearing in the Oct. 1976 issue of the magazine "American Birds". Neither list is published by Dr. Pistorius but he states that the "Master List" appears in "The Audubon Society Encyclopedia of North American Birds" by J. K. Terres. The lists are particularly valuable because the books are the selections of professional ornithologists. — Reviewed by *Frank Brazier*, 2657 Cameron St., Regina, Saskatchewan. S4T 2W5

A FLORA OF WATERTON LAKES NATIONAL PARK

JOB KUIJT. 1982. The University of Alberta Press, Edmonton. Pp. xxiv + 684, illus. Hardcover \$25.00 (out of print), softcover \$21.00.

Waterton Lakes National Park is well known for its beauty and is high on the list of tourist attractions in the province of Alberta. Its flora and fauna is especially interesting because of its ecological diversity and uniqueness. Though the province is more than one thousand times as large as the Park, the Park has some 55% of the vascular plants known from Alberta.

The author, Job Kuijt of the University of Lethbridge, is an authority on parasitic vascular plants but is also known for his earlier book "Common Coulee Plants of Southern Alberta". A skilled writer, he is also a talented artist and most of the line drawings that accompany the species descriptions are his.

This flora is set up differently from most in that the arrangement is alphabetical rather than phylogenetic. This departure takes some getting used to but is straightforward. It would have helped in this regard if family names had appeared at the top of each page and if page numbers had accompanied family names in the introductory key.

This reviewer was disappointed with the brief descriptions of the fascinating plant geography, vegetation, and ecology of the area. The author could have easily added another page or two on each and should at least have made reference to literature dealing with the topics. No mention has been made of work that has been done on the fauna and nonvascular flora of the area, even though some of this has been highly enlightening.

No Flora is ever complete, but a shortcoming of this one is the small geographical area that it covers. On page xvii and xviii the author mentions 46 species that occur in the Rocky Mountains close to Waterton Lakes National Park but have not been found in it. These could have been added to the species keys and descriptions but unfortunately this was not done.

This excellent Flora will be appealing to many. The author is to be commended for producing a book of such high quality. Though unfortunately too big to easily carry in a knapsack, it will be a constant reference source to anyone interested in the vascular flora of southwestern Alberta. — Reviewed by Charles D. Bird, Box 165, Mirror, Alberta. T0B 3C0

DARWINISM DEFENDED. A guide to the evolutionary controversies.

MICHAEL RUSE. 1982. Addison - Wesley Pub. Co., Reading, Massachusetts. 356 pp. 11 tables and 14 figures.

If you are interested in Darwinism and evolutionary theories, you should read this fascinating book, a subject timely chosen to celebrate the life and work of Charles Darwin since it is a study of evolutionary controversies then and in 1982, the centenary of his death. The author treats his topic by thoroughly assessing evolutionary theories from a broad and philosophical perspective. The front cover carries an appropriate colour photo of "Darwin's Finches" and on the back cover there is a color drawing of the fruit-eating bird — *Tanagra darwini*. Several black and white photographs, charts, tables and graphs enhance an excellent publication.

The book opens with a brief but interesting introduction to the life and achievements of Darwin and an evaluation of changes that have occurred in evolutionary theorizing since Darwin's time and the *Origin of Species*. The author then draws particular attention to contemporary Neo-Darwinism and the relationship between theory and evidence, and further goes on to show that the mechanism of natural selection is bonded to a wide range of biological phenomena, from biogeography to paleontology.

In treating Darwinism and Humankind the author draws attention to the discoveries and theories on the evolution of our own species *Homo sapiens*, bringing into focus a wide range of topics from early Java man to the contemporary and controversial "Lucy", *Australopithecus afarensis*, and not overlooking the scientific fraud — Piltown Man. In his discussion of the

Neo-Darwinian discipline of sociobiology, we are made to realize that for all existing differences, we are brothers under the skin united by our evolutionary predicament. His closing chapters deal with the relation between Darwinism, ethics and religion, finally turning to "Scientific Creationism." The problems raised by Darwinism for the understanding of man and questions posed by a philosophy of man are evaluated in a thorough manner. These are engrossing questions for the open and inquisitive mind.

This volume will prove fascinating reading to the professional and to the amateur with a keen interest in evolutionary theories. The supplementary reading guide is helpful to those who wish to explore the vast literature on Darwinism. A bibliography gives the reference for every work mentioned in the text, and there are helpful name and subject indices. There are no problems with the binding or printing and the text is free of typographical errors. — Reviewed by *Bernard de Vries*, Box 1043, Fort Qu'Appelle, Saskatchewan. S0G 1S0

MANITOBA'S BIG CAT. THE STORY OF THE COUGAR IN MANITOBA

ROBERT E. WRIGLEY and ROBERT W. NERO. 1982. Manitoba Museum of Man and Nature, Winnipeg, Manitoba. 68 pp. \$6.95.

Writing a book about a creature which probably numbers less than 100 in Manitoba and is so elusive that neither of the authors has personally seen one, is a task that would only be attempted by two biologists. In spite of these problems, Robert Wrigley and Robert Nero have succeeded admirably in

providing a highly readable account of the Cougar in Manitoba, especially remarkable when only 10 years ago people were very skeptical that Cougars even existed in that province.

The life history of the Cougar is described and then related to Manitoba by adding appropriate examples of the documented cougar sightings in Manitoba since 1879. If one wants to learn about Cougar biology and ecology, the foreword along with the first portion of each chapter suffice; to learn about Manitoba cougars, one reads the chapter on distribution and the sightings that flesh out seven of the ten chapters. The book includes almost one in every six of all 436 sightings, most of which have occurred since 1950, with more than half since 1970.

The authors demonstrate how Cougar distribution in Manitoba has expanded since 1940, closely paralleling the range of the White-tailed Deer, the Cougar's probable principal prey. Well-forested river valleys offering dense cover and concentrations of White-tailed Deer constitute prime Cougar habitat.

The book is not designed for the biologist interested in large feline predators, nor does it purport to be. Written with naturalists and outdoors-people of Manitoba in mind, it should be successful in capturing their attention. If anything detracts from the book, it may be the inclusion of too many descriptions of a "big cat with a long tail" and too much about Manitoba's major ecological regions in the chapter on where cougars live. Quality of the writing and production is very high; excellent colour photographs by Maurice Hornocker and superb drawings by Dwayne Harty only add to it. *Manitoba's Big Cat* will be of interest to prairie province naturalists, especially those with a fondness for elusive animals. — Reviewed by *Hugh M. Hunt*, 2950 More Crescent, Regina, Saskatchewan. S4V 0T7

THE SQUIRRELS OF CANADA

S. E. WOODS, Jr. 1980. National Museums of Canada, Ottawa, Ontario. 208 pp. Hardcover \$29.95.

This book covers the 22 species of squirrels known to inhabit Canada. Each species is illustrated by a colour photograph and one or more line drawings (by Dwayne Harty from Regina). Two distribution maps, one showing distribution in Canada, the other showing range in North America, are presented for each species. Each species account has sections on com-

mon names, description, range, behaviour, personality, habitat, feeding habits, life cycle, natural enemies, relations with humans and where to observe. For the most part the information appears to be accurate, is definitely well presented and easy to read. The book is aimed at the layman rather than the professional and technical language is kept to a minimum, though the book has much useful information for professional mammalogists.

I have few complaints with this book. I was somewhat irritated by being told at least five times that *Spermophilus* means lover of seeds. There is no referencing of data in the text, making it



Golden-mantled Ground Squirrel

Wayne Lynch

very hard to locate the sources of information. The list of references consists mostly of old publications with virtually nothing since 1970 referred to, and I somehow doubt that the dearth of 1970's references truly reflects the lack of publications during the decade. I did some checking of data presented by Banfield in *The Mammals of Canada* (1974, Nat. Mus. of Canada, U. of Toronto Press, Toronto) and noted very few discrepancies (one example being weight of Red Squirrels given by Woods as 230 gm while Banfield gives 190 gm) but one cannot check Woods' references for confirmation of his data.

I highly recommend this book to all who are interested in Canada's squirrels. — Reviewed by *Wayne C. Harris*, Box 414, Raymore, Saskatchewan. S0A 3J0

NATURAL HISTORY NOTEBOOK No. 5

D. RUSSELL and D. HARRINGTON. 1981. National Museum of Natural Sciences, Ottawa. 108 pp. 52 illus. Paperback \$2.50.

The fifth in this series of Natural History notebooks was published in April 1982. This one deals with prehistoric life, mostly dinosaurs and ice age mammals. There are 52 pages of text with illustrations and blank pages for your notes between. Information is given on material that has been found in Canada and that which is preserved in the National Museum of Natural Sciences in Ottawa. (Notebook No. 3 was reviewed in the March 1982 *Blue Jay*).

WATERSHED RED

KATHY MARTIN. 1981. Ragweed Press, Charlottetown, Prince Edward Island. 153 pp. Paper \$6.95.

This book, subtitled "The Life of the Dunk River, Prince Edward Island", focuses attention on the Dunk river whose mouth is across the bay from Summerside, and is one of many small rivers found on the island.

In the preface, Dr. Ian MacQuarrie presents a very adept description of this book:

"People rate rivers in different ways, for purposes of transport, power or poetry. From this book it is evident that Kathy Martin has a high opinion of the Dunk and its inhabitants. She writes for people who want to *know*; she enquires politely but thoroughly into the lives of mosquito, muskrat and osprey, of fish and fisherman, of the hunter and the hunted. She writes with the enthusiasm of a biologist in love with her subject. At times there is anger, always controlled, but the kind of anger one feels at waste or misuse, at beauty unappreciated or destroyed. Problems are not minimized, neither are they ignored. She describes the landscape as it lives . . ."

The book is illustrated with quality pen and ink sketches by Connie Pound-Gaudet. Overall, I found the book to be well written, in a style which was interesting and easy to read. — Reviewed by *Wayne C. Harris*, Box 414, Raymore, Saskatchewan. S0A 3J0