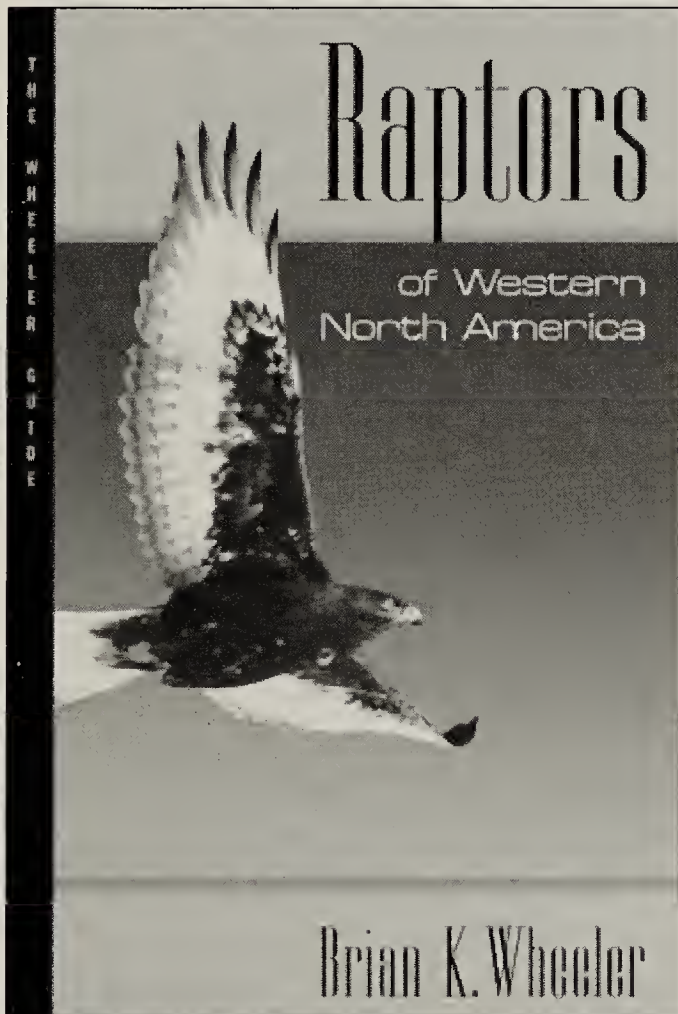


## RAPTORS OF WESTERN NORTH AMERICA

WHEELER, BRIAN K. 2007. Princeton University Press, Princeton, NJ. 15 cm by 23 cm. Soft Cover. 560 pages. 622 colour plates. 56 maps. \$29.95 US. ISBN: 978-0-691-13477-2.



This book is the definitive photographic guide to the 33 diurnal raptor species of western North America: vultures, hawks, eagles and falcons. There is a companion volume for eastern North America entitled *Raptors of Eastern North America* also by Brian Wheeler. For people in western Canada, the western edition will more than suffice. The volume's geographic coverage is the continental US west of the Mississippi River as well as Alaska, western Canada, Yukon, Northwest Territories, western Nunavut and northern Mexico. Seventeen of the 33 profiled species occur in western

Canada, the other 16 featured raptor species occur only in the southwestern US and northern Mexico.

Readers should carefully review the introduction, which clearly describes the structure and organization of the 33 species accounts that make up most of the book. Each species account begins with sections on ages (age cohorts), subspecies, colour morphs, size, species traits, subspecies traits, adult traits, subadult and juvenile traits and abnormal plumages. These sections are further subdivided by body region: head, body, wings and tail. Key external features are written in bold in the text. These descriptions are detailed and presumes the reader has previous knowledge of the species' basic identifying features.

The latter half of each species account has sections related to habits (behaviour), habitat, feeding and prey, flight, voice, status and distribution, nesting and courtship, conservation (including threats), similar species, abbreviated references and range map(s). Each species account ends with a series of superb colour plates and captions. Information in the colour plate captions is bulleted and highlights the key identifying features in the colour plate.

Unfortunately, the colour plates do not directly correspond to descriptions of

ages, subspecies and colour morphs in the species accounts. The descriptions of behaviour, biology, conservation and threats contain current information and are very readable. The conservation sections are particularly useful in discussing habitat loss, pesticides and efforts to conserve raptor species.

The range maps are based on the most up-to-date information available and use the detailed research/regional approach found in the *A Field Guide to the Warblers of North America* by Dunn and Garrett (1997). Largely, the range maps are accurate, clear and sharp though omissions do occur; for example, the Merlin range map does not show that Merlins breed and winter in the rural and urban areas in the southern Prairies.

Before the species accounts there is a series of glossaries of general terms; anatomy and feathers; plumage, molt and age; perching flying displays; and perching and flying attitudes. The terms in each glossary are subdivided into logical sections, which makes it easier to find the needed definition. For

the perching and flying attitudes glossary, there are colour plates directly linked with the term definitions. Definitions are clear and concise, and all key ornithological terms are included. These glossaries might become your avian 'dictionary' of choice. Following the glossaries, there is a brief section on the photography methods and equipment used to create the colour plates.

The reference section of this book is an excellent gateway to the raptor literature for western North America. There are over 300 publications cited in this volume. These are peer-reviewed articles, conference papers, book chapters, monographs and government reports. Each species account can have from 12 to over 80 references, depending on the species.

I highly recommend this guide to anyone seriously interested in the identification of diurnal raptors of western North America.

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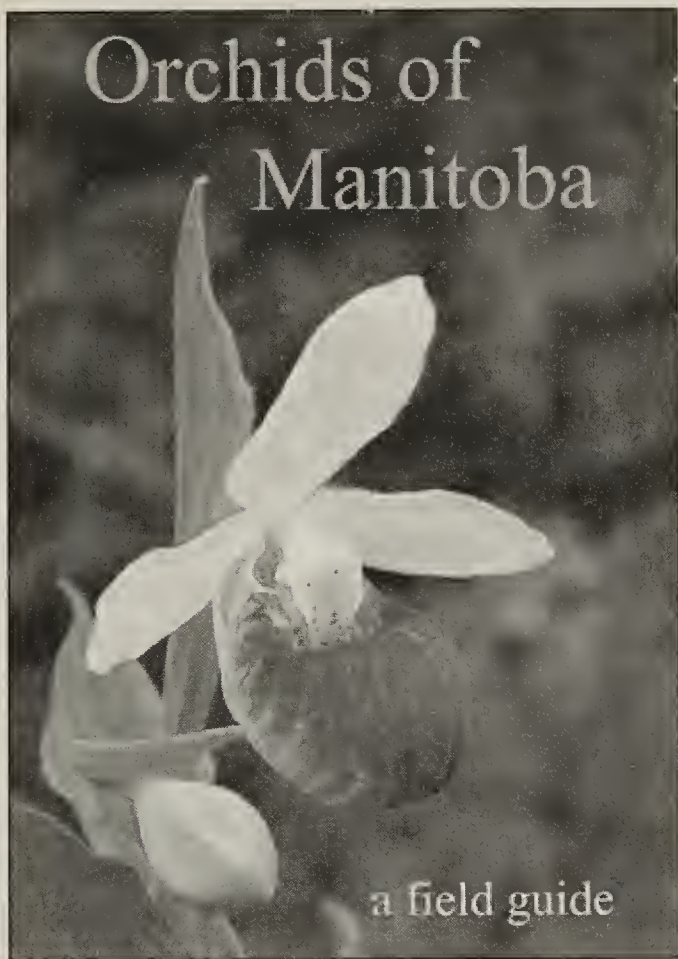
## ORCHIDS OF MANITOBA: A FIELD GUIDE

DORIS AMES, PEGGY BAINARD ACHESON, LORNE HESHKA, BOB JOYCE, JOHN NEUFLED, RICHARD REEVES, EUGENE REIMER and IAN WARD. 2005. Native Orchid Conservation Inc., Winnipeg, MB. 159 pages. Soft cover. 21.5 cm x 14 cm. Colour photographs throughout. ISBN 0-9734864-0-6. \$17.95 CAN.

Manitoba is well known (and sometimes disparaged) for its wetlands, fens and bogs but it is the presence of these features that have made it such good habitat for some of the most beautiful flowers in the world: orchids. Manitoba has the greatest orchid diversity in the prairie provinces with 36 species, including two that are protected under the national *Species*

*at Risk Act*: the Western Prairie Fringed-orchid (*Platanthera praeclara*) and Small White Lady's-slipper (*Cypripedium candidum*).

*Orchids of Manitoba* is a field guide prepared by the Native Orchid Conservation Inc. (NOCI) to help amateur naturalists and other plant enthusiasts identify and learn more



about wild orchids. NOCI, a non-profit organization based in Manitoba, was founded in 1998 to "protect mini-ecosystems and their plant communities" (p. 8). The enthusiasm of NOCI for orchids is evident in the book, which is full of spectacular colour photographs taken by NOCI members and represents a considerable amount of field work. The introduction contains an impassioned plea for orchid conservation by all levels of government as well as individuals. The back page reminds all orchid lovers not to unduly disturb these flowers while viewing or photographing them, and to report all observations of rare orchids to the Conservation Data Centre.

The field guide includes brief but well-illustrated chapters covering orchid history, biology, habitat, conservation, and protection of species and ecosystems. The section on orchid biology includes a labeled photograph of an orchid flower and a close-up of the column, which aids in the identification of species. A chart of flowering times shows at a glance when the different species are in bloom.

The taxonomic key to both genera and species is easy to use but is not generally necessary as most species can be identified by the wonderful colour photographs. A glossary is located near the end of the book in case you encounter unfamiliar terms.

The species accounts, organized alphabetically by the Latin name, are thorough. Two pages are devoted to each species and include a range map, character descriptions and at least three photographs. Close-up shots of the flowers, fruit and/or leaves are commonly included. The character descriptions contain information about the overall height of the plant, leaf shape and texture, and colour and appearance of the flowers. A special section called "aids to identification" notes which species are similar and how to best tell them apart. The relative abundance and habitat of each species is noted as well as the etymology of the Latin names. Information about the ecology of the species as well as the main pollinating organisms are included. According to the guide, orchids in Manitoba are pollinated by a diverse range of insects including nocturnal moths, parasitic wasps, bumblebees, small Halictid bees, Syrphid flies and yes, even mosquitoes. One species is actually pollinated by rain!

Most of the orchids in Saskatchewan, Alberta, Minnesota and the Dakotas are covered in this publication, making it useful for orchid lovers outside the province of Manitoba as well. The photographs alone make this an outstanding book, and anyone who has ever trekked through a bog to see a rare orchid will find this book a useful addition to his or her library.

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