Book Reviews

Book Review Editor’s Note: The Canadian Field-Naturalist is a peer-reviewed scientific journal publishing papers on ecology, behaviour, taxonomy, conservation, and other topics relevant to Canadian natural history. In line with this mandate, we review books with a Canadian connection, including those on any species (native or non-native) that inhabits Canada, as well as books covering topics of global relevance, including climate change, biodiversity, species extinction, habitat loss, evolution, and field research experiences.

Currency Codes: CAD Canadian Dollars, USD United States Dollars, EUR Euros, AUD Australian Dollars, GBP British Pounds.

Conservation and Wildlife


The Wildlife Techniques Manual is a mainstay for many wildlife researchers and managers in North America; I suspect at least one of the various editions has resided on the bookshelves of most government and academic offices of wildlifers during the last 60 years. This edition, the eighth, will require a sturdy bookshelf. Volume 1, on research, is over 700 pages, while Volume 2, which covers management, is nearly as large at over 600 pages. The first edition (1960) was less than 400 pages total and focussed on game species only. Almost every 10 years, The Wildlife Society, which is the main professional organization for wildlife managers in North America, publishes another edition in an attempt to capture an increasing knowledge base, but also to cover the myriad of issues pertinent to wildlife in today’s often-complicated management of resources. By the seventh edition (2012), the expanding content warranted the production of a two-volume set, which has been carried over in this latest edition.

The audience for the two books is mainly specialists, rather than people with a general interest in wildlife, such as naturalists and hunters. Although people interested in conservation could benefit from exploring how wildlife managers tackle the often-conflicting values in management (e.g., hunting versus no-hunting, control of ‘pest’ species in agriculture, re-introductions), and hunters could track how government uses demographic data of harvested animals, most people will find that the books have more technical content than they need. In Volume 1, for example, Chapter 8 is on how to determine the age and gender of over 70 species of game birds and mammals, Chapters 1 and 2 cover statistics and experimental design, Chapters 19 and 20 cover sampling methods for vegetation and nutrition levels in the environment. However, for specialists, The Wildlife Techniques Manual is a must have. I use an earlier edition for my university course in wildlife investigation techniques.

In addition to researchers and university teachers, Volume 1 is popular with environmental consultants because it contains the standard methodology for such tools as population surveys, habitat assessment, environmental impact assessment, wildlife capture, radiotelemetry, and geo-spatial analyses.

Volume 2 focusses on management strategies that can be applied to real problems; there are chapters on wildlife management in different sectors, such as agriculture, forestry, wetlands, rangeland, and urban environments. There also are chapters on the context of wildlife management, such as the ethical foundations of management, conflict resolution, and communications because, as most managers will agree, wildlife management is often actually people management.

In total, there are 50 chapters, numbered sequentially, with 25 chapters in each volume. Thirteen new chapters were added since the seventh edition; the
chapters on nutrition analyses, bio-acoustic monitoring, invasive species, and climate change were oddly absent in the previous addition and are most welcome. Both volumes are edited by Nova Silvy, who dealt with nearly 150 authors for the various chapters. The authors are mainly university academics or government scientists, and each chapter was peer-reviewed.

Notwithstanding the overall worth of The Wildlife Techniques Manual, several issues remain. The Manual’s contents apply mainly to North America, and most of the species and issues dealt with are a priority more in the United States (US) than in Canada or Mexico. This is not surprising, given the larger US audience, but there is an opportunity to apply lessons learned from international wildlife management cases, particularly regarding wildlife conflicts in impoverished regions. Also, the new chapter on Indigenous Peoples and wildlife management is very focussed on the US, with just a page on Canada. Given that traditional rights to wildlife are legally recognized in Canada, much more content is needed on how nations will accommodate and integrate wildlife management as a shared resource. It is likely that Canada will be a leader in this area, with eventual application to the US. Finally, although minor, it was odd to see some very low-quality figures in some chapters, all of which seem to be carry-overs from older editions that have not held up to higher resolution printing. A figure on bias and accuracy appears in both Chapter 1 and 12. However, these problems do not detract from what is the most comprehensive two-volume set on the methodology used to quantify and understand wildlife populations, and then the application of that information to the management of wildlife in North America.

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