Monitoring Bird Populations Using Mist Nets: Studies in Avian Biology #29

Edited by C. John Ralph and Erica H. Dunn. 2004. Cooper Ornithological Society, c/o western Foundation of Vertebrate Zoology, 439 Calle San Pablo, Camarillo, California 93012-8506 USA. 211 pages. U.S.\$39.95.

A workshop was held in California in October 1993. Forty experts (six from Europe, five from Canada, including one of the two editors, and the remainder from the United States and Puerto Rico) evaluated the strength and weaknesses of mist-netting as a method of monitoring bird populations. Six additional individuals contributed to the papers, incorporating new data and updated analyses prior to final editing – which occurred only after a remarkable delay of ten years.

As stated by the editors in their Introduction, the advantages of mist nets include ease of standardized sampling, low observer bias, ability to detect species that are often missed (sometimes including rarities unlikely to have been spotted by routine observation), and the opportunity to examine birds in the hand. Mist net studies, as do other visual and aural methods, provide indices of abundance rather than total counts of populations.

Three programs with some variation in methodologies, but using mist-nets in a standardized fashion, are the MAPS (Monitoring Avian Productivity and Survivorship) Program pioneered in California by David DeSante and now spreading across the continent, the British Trust for Ornithology's Constant Effort Sites Program, and the MRI Program in continental Europe (named from the first letter of the three initial sites, since expanded to seven). All three methods have the potential to detect long-term temporal trends. Sampling only at weekends should be avoided.

Two major papers deal with 18 years of data collected at Long Point Bird Observatory in Ontario. At Beaverhill Bird Observatory in Alberta, six participants in an informal banding training program failed to attain fully satisfactory performances. Summary recommendations, to produce as much information as possible with the lowest bird mortality, include training of all participants, checking the nets every 15 to 30 minutes, and use of 30- and 36-mm-mesh nets that are 12 m long.

This volume is a must for anyone using mist nets, and for Bird Observatory libraries.

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Portraits of the Bison: An Illustrated Guide to Bison Society

By Wes Olson. 2005. The University of Alberta Press, Edmonton. 108 pages. ISBN 0-88864-432-9. Paperback. \$39.95.

Bison are the iconic animal of the Canadian prairies. If you live in western Canada, then pictures of bison being hunted, as piles of skulls by train tracks, as a provincial symbol - are woven into your consciousness. Yet, most people know little about them. It is this deficiency that Wes Olson has set out to remedy with this full-colour guide. Olson has worked as a park warden at Elk Island National Park, located just east of Edmonton, for many years. Despite its name, the Park is probably best known as the home of two bison herds, one of plains bison and the other of wood bison. Olson's experience in working with these herds has given him unique insight into the social structure and biology of the animals. At the same time, his interactions with park visitors have made him aware, as he explains in the introduction, that most people do not treat bison with the respect they deserve and thus sometimes get themselves into dangerous situations. These are the two incentives that encouraged him to compile this volume. Wes Olsen is a talented artist and the book is abundantly illustrated with his drawings of bison, providing vivid evidence of keen observation and long study. His wife, Johane Janelle, contributed many outstanding colour photographs, capturing bison in different moods and surroundings.

The book is arranged in four chapters. Olson provides a short introduction to bison and notes the occurrence and ranges of the two main modern forms, plains and wood bison. Interestingly, he describes the capture and establishment of the wood bison herd, but does not go into the history of the plains bison recovery in any detail. I found this omission curious, given that the rest of the volume concentrates on plains bison, especially since saving the bison from the brink of extinction is a classic conservation story. The second chapter focuses on safety and awareness for hikers and others who might run into bison in the field. Olson describes the stages of a bison's reaction to an encounter with a human. He emphasizes that bison have a very large "personal space" and should be given an extremely wide berth. Olson identifies three zones within "bison space" - the awareness zone, the escape zone, and the fight zone - and indicates what a bison's behaviour may be when a human impinges on each of these zones.

The next two chapters comprise the heart of the book. The first is focused on the seasonal cycle and structure of bison herds. This makes it clear that bison have a complex social structure, related to biological events, such as calving and the rut, and the life-stages of the animals. The next chapter provides more detail on the life-stages of a male and a female plains bison. This is the longest chapter (34 pages) and is richly illustrated with page by page pictures of bison, usually acutely-detailed profile drawings with the salient identifying features indicated. Olson comments that distinguishing male and female bison is not as straightforward as one might think, especially when the bison