Books

BIRDS OF THE BESNARD LAKE AREA NORTH-CENTRAL SASKATCHEWAN 1968-1994. By Jon M. Gerrard, Gary R. Bortolotti and Karen L. Wiebe. 1996. Saskatchewan Natural History Society (Nature Saskatchewan) Special Publication No. 20, Regina, SK. 97 pp.

This book begins with a dedication to Douglas W. A. Whitfield, followed by several introductory sections [Contents, lists of four tables and 40 figures -two maps and 38 drawings, graphs and photographs, acknowledgements and a foreword by C. Stuart Houston outlining some of the genesis, history and rationale of the authors' studies at Besnard Lake and brief biographical details of the three authors and of Whitfield]. The introductory sections continue with a brief overview of the purpose and rationale for the book and the authors' studies, another one-paragraph biography of each author, a list of additional contributors, a brief discussion on area boundaries, focussed on major studies of two raptor species, with coverage on water birds differing in emphasis from that of land birds and brief accounts of various aspects of the study area (history, physical properties, dimensions and chemical aspects of Besnard Lake, soils, topography, vegetation [including habitat photographs], climate [including precipitation and temperature graphs] and travel information).

The bulk of the book, of course, consists of accounts of the birds observed in the area, starting with an explanation that coverage is primarily from early April through early fall, when the two main studies (Bald Eagle and American Kestrel nesting studies) were conducted, with areas emphasized varying by study. Some data from later in the fall and winter are also included, as are some observations from nearby localities, notably Beauval, about 60 km west of the main study area. Data on waterbirds observed during 32 boat surveys, initially for Bald Eagles, on Besnard Lake are also included, as are data tabulated from two roadside April night surveys for owls and periodic spring, summer and fall 45-minute walking surveys

in four forest habitats plus roadside right-of-way. The introduction to the species accounts ends with a page and a quarter of terminology on seasons, occurrence, abundance and breeding status.

The 201 accounts of species confirmed to have occurred in the area and 12 additional unconfirmed ("hypothetically" observed in the area or confirmed near enough to make occurrence very likely) consist of the formal English and scientific names, status and two lines to about two and a half pages of text, depending on regularity of occurrence and amount of information available on the species in the area. Topics covered range from simple occurrence for seldom reported species to local information on color phase(s)/race(s), habitat use, usual and/or unusual migration arrival and/or departure dates, effects of seasonal events, such as ice beak-up, on arrival times, flock size, height of flight, flocking associates, habitat use, courtship dates, nesting details [chronology, courtship activity, nest-sites, nest dimensions, nest heights, effects of weather on nest success, rebuilding of damaged nests, nest defense and distraction displays, clutch size, incubation and fledging periods, brood size (including apparent crèches), care of young], post-breeding dispersal, foods and/ or feeding behavior, probable effects of prey abundance on harrier, goshawk and kestrel populations, inter-specific interactions, population sizes and population trends. Occurrences, if any, on La Ronge Christmas Bird Counts are also mentioned, as indicative of possible winter presence of several species. Details not previously reported or seldom reported elsewhere include scavenging of dead fish by American White Pelicans, cleptoparasitism of gulls by pelicans, an Osprey carrying a snowshoe hare in its talons, a harrier preying on a kestrel, a pair of Greater Yellowlegs flying 80 km/hr, a family of Gray Jays caching strands of spaghetti in conifers, apparent distraction displays by Tennessee Warblers, a Chipping Sparrow taking porridge from a cooking pot and a pellet containing Common Grackle remains in an eagle nest. Photographs of birds or

habitat, mostly by Bortolotti, and superb drawings by Wiebe enhance several species accounts. The species accounts are followed by a discussion on "species diversity," comparing the findings at Besnard Lake with those of another study area along the Churchill River and Christmas Bird Count data from La Ronge, a discussion on possible reasons for population trends noted, a section on "birding tips" [including the effects of white sucker populations on local eagle numbers], a half-page note on references to other aspects of nature in the area and on publications on the eagle and kestrel study areas, a list of literature cited and a seasonal checklist of bird species reported to have occurred in the area by the time of publication.

The dedication to Whitfield explains that the book grew out of a Bald Eagle project of Gerrard and Whitfield that arose out of helping C. Stuart Houston with some of his raptor banding projects. Thus, banding features prominently, but primarily on the two most focused projects. Wing-tags placed on many Bald Eagles showed that the same individuals often use the same trees year after year, with one female using one nest from 1984 through 1994. This bird, tagged as a nestling, was also known to first nest a decade after hatching. Wingtags also helped determine age structure of the population and dispersal patterns. Besnard Laketagged eagles winter primarily west of the Mississippi River from Montana and South Dakota to Arkansas, Texas and Arizona, with some straying east to Maine and west to Alaska and California. Banding of two of three Great Horned Owls banded at Besnard Lake also resulted from the eagle project, as they were both young in eagle nests. During 1225 nesting attempts at nest boxes, 1855 adult American Kestrels were color-banded and 2569 young banded. The only kestrel banded as an adult that was recovered subsequently was a female in Nebraska, while males recovered during their first year of life were elsewhere in Saskatchewan [La Ronge], Manitoba, Mexico and Guatemala. About 15% of banded adults were encountered subsequently in the Besnard Lake area, whereas fewer than 3% of nestlings banded

were found breeding at Besnard Lake in subsequent years. Trapping for kestrels also resulted in the capture and banding of a Broad-winged Hawk, three Merlins. a Northern Hawk Owl and a Gray Jay. Another bonus from the kestrel study was the nesting of Boreal Owls in some of the boxes, as illustrated in the cover photograph. The female and four young in the second of these nests and two young in the third were banded as part of the documentation of these nestings. The only bandings not connected with the Bald Eagle or nestbox project were of an immature female Golden Eagle with such a bulging crop that she could not get airborne, enabling Bortolotti to capture her by hand(!) and band her, a third Great Horned Owl –an emaciated fledgling, also captured on the ground by hand and another Gray Jay banded in 1990 and observed subsequently at the same site during the next two summers.

This interesting book provides a glimpse into Saskatchewan's extensive boreal forest habitat. It is remarkably free of errors, although the Winter Wren account is separated from the other wren accounts by the kinglets, the Loggerhead and Northern shrike accounts are separated by the starling and vireo accounts and the Vesper Sparrow account appears between Chipping and two other *Spizella* sparrow accounts. It is another example of the high quality typical of Nature Saskatchewan's series of books on birds and other natural features.

