#### Savannah Sparrows (Passerculus sandwichensis)

By James D. Rising. 2001. Studies in Avian Biology Number 23. Cooper Ornithological Society, Camarillo, California. 65 pages. U.S.\$7. The newer field guides, such as *The Sibley Guide to Birds*, occasionally describe and illustrate subspecies of birds, usually based on differences in plumage or

soft parts. The "bander's bible", Peter Pyle's Identification Guide to North American Birds, includes wing and

tail measurements to help banders identify birds to the subspecies level – for example, he discusses 14 subspecies of the Savannah Sparrow. But have you ever wondered *why* these differences exist in the natural world?

Rising does and asks two questions in this regard: Why do features such as body size, wing length, or bill size and shape differ across a species' range? and, if these differences reflect adaptations to the different environments to which the species is exposed, what are the selective factors that have caused them?

One of the classic explanations for geographic variation in size is Bergmann's Rule, which holds that individuals of a species (vertebrates only) from colder areas are generally larger-bodied than individuals from warmer areas. Allen's Rule takes this one step further, stating that within such species, individuals from colder areas will have smaller appendages relative to their body size than individuals from warmer areas.

Rising asked his questions of the Savannah Sparrow, which is one of the most wide-spread songbirds in North America. He describes and quantifies geographic variation in the species throughout its breeding range, from Alaska to the Maritimes to central Mexico, and relates trends in phenotypic variation to environmental variation.

He found some clinal variation in size of Savannah Sparrows, with birds from the northeast being slightly larger than those from the west, and birds in cool, moist areas were larger than those where it is hot and dry. But the species overall did not seem to follow Bergmann's Rule; rather, measures of summer temperature and precipitation explained well the patterns of size variation. His more significant find, though, was that birds were larger on islands than on mainland sites, whether in the Aleutian Islands, Alaska, or on Sable Island, Nova Scotia. He speculates that the long, cool, moist summers on these islands results in a predictable and fairly rich food supply. This, combined with the rather long breeding season, allows multiple broods and perhaps enhanced competition for high quality territories. This competition for either food or territories might select for larger body size.

Rising ends with some taxonomic comments, coming out on the side of the "lumpers". He sees no virtue in naming subspecies where the only way they can be reliably separated is by locality. He suggests recognizing only two subspecies of non-saltmarsh Savannah Sparrows, *P. s. sandwichensis* (large size) and *P. s. princeps* (large and pallid), whereas the nine saltmarsh subspecies seem to be clearly separable by morphological characters. This is in contrast to the 17 subspecies currently recognized by the American Ornithologists' Union.

Rising's work relies on Principal Components and Discriminant Functions analyses, which, although I found it a little heavy going, was well presented sequentially and a good example of the use of these techniques for morphometric comparisons.

It will be interesting to watch in the coming years how Rising's thorough morphological studies interact with genetic analyses in assessing variation and the subspecies of Savannah Sparrows.

CYNDI M. SMITH

Box 5, Waterton Park, Alberta T0K 2M0 Canada

### Warblers of the Great Lakes and Eastern North America

By Chris Early. 2003. Firefly Books Ltd., 3680 Victoria Park Avenue, Toronto, Ontario, M2H 3K1. 131 + pages. Cloth \$24.95: paper \$16.95

# Sparrows and Finches of the Great Lakes and Eastern North America

By Chris Early. 2003. Firefly Books Ltd., 3680 Victoria Park Avenue, Toronto, Ontario, M2H 3K1. 128 + pages. Cloth \$24.95: paper \$.16.95

These books are an expansion and revision of two earlier books by Chris Early (*Warblers of Ontario* and *Sparrows and Finches of Ontario*). They both follow the successful format of the earlier books. Each species is shown in two to five photographs (Warblers) or two to seven photographs (Sparrows). The actual number of photographs for each species depends on how variable the bird's plumage can be. A short introductory note is followed by descriptions of the key plumage characteristics and other relevant details. A  $5 \times 3$  cm map of America shows the summer and winter ranges.

"Warblers" covers 37 species plus one hybrid in some detail. An additional seven vagrant species and one race (the Yellow-rumped "Audubon's" Warbler) are covered by brief comments and a single accompanying photograph.

"Sparrows" includes 25 species covered in full and 20 vagrant species. In addition to the North American sparrows (buntings) this volume includes longspurs, finches, grosbeaks, crossbills, snow bunting and house sparrow.

on one page. I think the arrangement of the warbler comparison table is very clever. Here the Mourning Warbler photograph is adjacent to a Connecticut Warbler photograph. In turn, the Connecticut is above a

photograph of a Nashville Warbler, which in turn is above a Northern Parula. All four birds share similar combinations of colour and cause confusion to the novice. This arrangement allows for easy comparison, either up and down or across the rows. For the warblers there are tables showing the spring and fall plumages. These features are on fold-out sheets at the end of the book, making them quickly available in the field. At the front of the book is a seasonal distribution list for Point Pelee National Park. Using line thickness the author also indicates the abundance of each species. I find such distribution lists to be extremely useful.

These then are two small, portable books that deal

### **Birds of the Yukon Territory**

Edited by P. H. Sinclair, W. A. Nixon, C. D. Eckert and N. L. Hughes. University of British Columbia Press, Van-

My appetite for a long-overdue return trip to the Yukon has been incredibly whetted! This book is not just

an atlas, but also a coffee table book, a very useful bird reference, and a source necessary for a planning

dramatic scenery (i.e., habitat shots) that will make birders and non-birders alike think, "I must go there."

Prior to the species accounts, there are chapters covering the environment, aboriginal use of birds, conservation, history and a month-by-month overview of birdlife. There is also a short chapter outlining the data management for the more than 160 000 records that were used.

Each species account spans one to three pages. All species are illustrated by a line drawing and at least one, sometimes several, colour photographs; frequently, there is a very good habitat shot as well. Each account also has a distribution map, and a histogram outlining the number of database records for each week of the year. The base layers of the maps show There are two features used by this author that will make this book particularly valuable to beginners. The first is called a cheat sheet and lists all the birds in groups according to a key characteristic – such as an unstreaked breast. The birds are further grouped by a second characteristic such as a breast spot. The second, and even better innovation, is a series of comparison tables. These consist of a set of photographs with birds in similar poses. The page is arranged to show the most similar birds close together. For example, there are three Common Redpoll photographs immediately above three equivalent Hoary Redpoll photographs. Similarly, all the rufous-capped sparrows are

with birds that many find difficult to identify. The text is well written. The photographs are both beautiful and illustrative. Any one who needs help with the species covered will find these books a tremendous help. Perhaps we can encourage the author to write a third book on shorebirds.

ROY JOHN

2193 Emard Crescent, Ontario, K1J 6K5 Canada

couver, British Columbia.

a trip to the Yukon. This book has stunning photographs throughout, and not just of birds, but of

major roads and rivers as well as ecozones; I would have liked to see the dominant population centers marked as well though.

The text is thorough and reads well. All the expected sections are there (distribution, nesting, habitat...), and, where appropriate, a section on aboriginal use of the bird is included. Several appendices and a 600+ reference list end the book.

The items that bothered me were few, and mostly minor. Noteworthy was the absence of birding essays, a feature I first saw in *Birds of Delaware*, and thought added spark to the thick reference book. Page numbers were located in the most irritating choice possible,

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