

Tanagers, Cardinals, and Finches of the United States and Canada

By D. Beadle and J. Rising. 2006. Princeton University Press, 41 William Street, Princeton, New Jersey 08540 USA 196 pages, U.S.\$29.95 Paper.

The authors use 200 selected photographs to complement text covering the biology, identification, molts, song and distribution of the tanagers, cardinals, and finches found north of Mexico. In all, forty-six species are covered. Of these, one is an introduced species and 31 are native residents of some part of North America. The remaining 14 are vagrants with five as Alaska specials and seven creeping north over the southern border.

I have just spent a couple of hours resolving an identification issue using about 20 photographs off the Internet (out of the 200 I found there) of a single species. Most of those photos were of limited use. Normally I find such photographs less useful than artwork because they are so influenced by light, angle and the condition of the specimen. However, my jaundiced eye is very impressed with the photographs in this book. I do believe that I would be able to separate female House and Purple finches using the photographs and text given in this book. Indeed I used this book to confirm that I had correctly identified a Hoary Redpoll I saw recently in the Arctic. The typical resident species are represented by several photographs taken at different angles thus giving the reader a better understanding of the bird.

The 31 residents each have a range map giving summer, winter, and permanent ranges. These are about 5.5 cm square and very readable and useful. There is a written description of range too, which adds more detail. I had no difficulty deciding I was at the northern edge of my Hoary Redpoll's range. The text is clear and provides great detail without wasted words.

The vagrants are similarly treated, but do not have a range map. Under distribution their normal range (outside of North America) is described, followed by a summary of their occurrence in North America, with additional details, such as precise locations and dates, where warranted.

This is a very useful supplementary guide (to the classical all-species field guides) for providing additional information on this group of birds. It is conveniently sized to carry in the field and will be especially useful in sorting out look-alikes such as Hoary and Common redpolls. It provides carefully organized and well-presented information to those who wish to learn more about these birds than is given in the typical field guide. This is the type of book that makes a most welcome present!

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Wheatears of Palaearctic: Ecology, Behaviour and Evolution of the Genus *Oenanthe*

By E. N. Panov. Pensoft, Sofia, Moscow. 439 pages, U.S. \$167.50

Wheatears are the quintessential Afro-Eurasian bird. Found anywhere there is open ground, the more desolate the better, wheatears make ideal subjects for ornithological study; indeed, according to the author they are among the most studied groups of passerines. They are easy to see and follow, they exhibit interesting behaviours, and, as a group, pose many riddles. How can up to four species with seemingly identical foraging behaviours co-exist in a relatively inhospitable habitat? Why in some species is there high sexual dimorphism and in others virtually none? What light can this group renowned for intra-species variation shed on the nature of polymorphism and its evolutionary origins? What are the advantages of a contrasty black and white plumage? How did one species of this desert loving family break through the oh so inhospitable for wheatears boreal forest to successfully colonize much of the Arctic including not once but twice in North America?

These and other questions are copiously answered in this book by E. N. Panov, a Russian scientist with a passion for this intriguing group. The book is divided into two parts, the first dealing with general features of wheatear biology, the latter providing detailed monographs on individual species or superspecies found in Eurasia. Between them, these sections cover

every conceivable angle on wheatears, from the geographic distribution and origins of the group in its entirety through habitats, movements, social behaviour, reproductive behaviour to predators and parasites. Each monograph follows a template covering systematics, distribution, behaviour, nesting, and movements. The book is extensively illustrated with black and white sketches illustrating everything from behaviours, nest sites to plumage variations and is amply provided with sonograms, family trees, graphs and maps illustrating key points. There is also a section of 40 colour plates showcasing the array of arid habitats so beloved of the genus, portraits of selected species, and at least one picture of one being devoured by a snake. The book closes with a 14-page bibliography and an index helpfully divided into a general subject index as well as an index of animal names.

There are about twenty species of wheatear, with the exact number hard to pinpoint because of blurry lines with other turdidae such as saxicola ("stone-chats") and uncertainty about the taxonomy of several closely related taxa. Taxonomic and genetic evidence suggests that the genus had its origins in Africa, where it may have emerged from an ancestor shared with redstarts. The large amount of variation and frequent contact zones within the genus suggest that there is an ongoing evolutionary process. The English name, which comes from the old English for white rump,

refers to the bold white “T” pattern which is characteristic of many members of the genus. Its Russian name, Kamenka, refers to the stony habitat they so love; their ability to cope with extreme conditions is witnessed by the fact for some 160 000 square kilometres in the Sahara the White-crowned Black Wheatear is the only breeding passerine, and the fact that the Northern Wheatear has successfully colonized arctic tundra. Given the lack of culinary choice their dietary habitats are pretty well catch as catch can; recorded food items include scorpions and bumblebees.

The Northern Wheatear, the only member of the genus in North America, is remarkable. Each year birds from Alaska, in the words of the author, “stubbornly make for their remote African homeland”, an epic voyage that would exhaust an Arctic Tern. Birds nesting in Eastern Canada head in the opposite direction, and are the only Canadian passerine that winters in Africa. Being found in places where lots of ornithologists live; the Northern Wheatear is one of the better known members of the group. From these studies, we know that they maintain a frenetic lifestyle during the breeding season that can, in the far north, involve a 24/7 routine of zealously patrolling its borders while attending the needs of two females in widely separated territories. According to Panov, Wheatears are highly aggressive with a “low threshold for territorial aggression”.

BOTANY

Giant Trees of Western America and the World

By Al Carder. 2006. Harbour Publishing Co., Madeira Park, British Columbia. 138 pages. \$18.05.

Al Carder has been researching giant trees for a lot of his long career, collecting stories of large trees in the Pacific forest of North America, his home and main study area. This book is a sequel to his earlier work trying to record the dimensions of many of the world's largest trees now including more facts and more tree species. The book is ordered by continents and tree families to give the reader perspective of the variety of trees which have achieved huge dimensions, but many of which have disappeared in the past century.

A short anecdotal essay at the beginning puts Carder's agenda forward quickly. He has always been awestruck by the beauty and perspective of being among the largest trees and wants to preserve the memory of those trees for future ages. Sadly the largest specimens of any tree species are gone from our world due to commercial logging in the last two centuries and when single giant trees survived the logging, these succumbed to windstorms, having been left without the surrounding forests which protected and supported their growth over the centuries. In North America, Australia and New Zealand, the story of logging is the history of large trees and our most impressive forests, a history

To communicate with one another they have three different song groups and a remarkably varied repertoire of physical signals involving different postures and movements. The author also usefully informs us that they have an unpleasant taste, evidenced by experiments in which hornets were offered wheatear “meat”.

It is disappointing that the author, demonstrably a competent illustrator and photographer, did not choose to include a series of systemic plates illustrating the various taxa and their variations. Another disappointment is that the author focused the species accounts on Eurasian taxa; one suspects that this reflects the author's research interests but also the fact that African taxa are relatively less well known. In the review copy the hatching on many of the maps was blurry, making them hard to figure out. Nonetheless, there are few errors in the book, although the fact that the title contains a grammatical error did not inspire much up front confidence.

This book is a scientific monograph primarily aimed at ornithologists. It poses, and proposes answers to a number of interesting ecological and behavioural questions and will be of great interest to anyone intrigued by evolutionary biology.

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which has more to do with destruction of forests than the story of humans interacting with their environment.

The book is short with only one hundred and thirty pages devoted to describing the trees. Each tree description has an accompanying page with a diagram of the tree at its largest reported size and shape, each species being unique in shape. Fifty of those pages are devoted to the trees of North America with the other pages listing and describing the outstanding trees of other continents. North America is obviously Carder's first priority but his love of trees encompasses the entire world.

Many trees in England and Europe have been available for study to written history over the centuries and Carder has researched these written accounts to give us historical anecdotes from their long life. A Tule tree in Mexico with an opening in the trunk large enough to accommodate twelve horsemen when reported 375 years ago, and the Sweet Chestnut in Sicily whose spread of branches sheltered the Queen of Aragon and her escort of 100 horsemen over 600 years ago are two of the anecdotes which describe trees still standing. Whether the tree has records of growing to over 400 feet as the Douglas Fir or whether its claim is to have lived over 5000 years as the English Yew, the grandeur of the trees is given to us by Carder to