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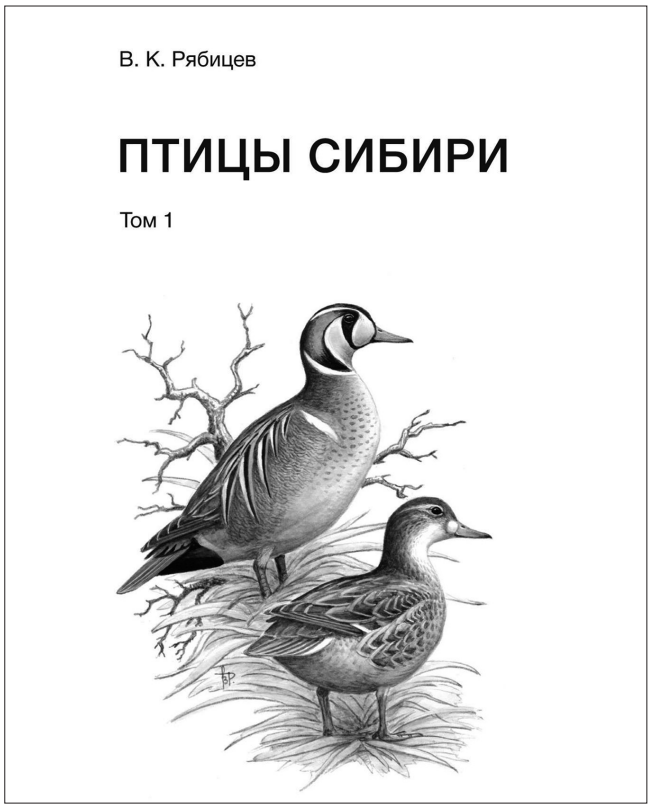
Book reviews



Птицы Сибири Том 1 (Birds of Siberia Volume 1)

Vadim Konstantinovich Ryabitsev

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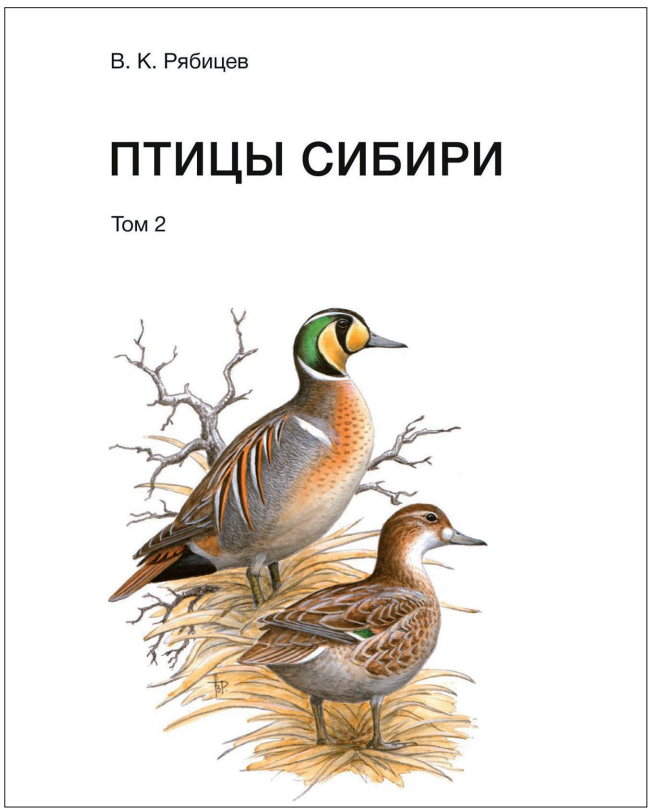
ISBN: 978-5-7584-0309-9
Armchair Scientist, Moscow-Ekaterinburg, Russia



Птицы Сибири Том 2 (Birds of Siberia Volume 2)

Vadim Konstantinovich Ryabitsev

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Armchair Scientist, Moscow-Ekaterinburg, Russia

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In the common feeling of Western culture, the mountain range of the Urals is very similar to the hedge in the poetry "The Infinite" by Giacomo Leopardi; in fact, thought imagines «… interminable vastnesses of space beyond it, and unearthly silences, and profoundest calm …» (Robert C. Trevelyan, "Translations from Leopardi", Cambridge University Press, 1941). The fascination of Siberia, therefore, is well suited to what was expressed by the writer Ian Frazier: «Siberia is so big, it's almost more an idea than a place». Almost an abstract concept. The same etymology of the name "Siberia" is a subject of debate, with different and conflicting explanations. The most plausible and argued hypothesis seems to me to be the one suggested by Anatole Baikaloff (Notes on the origin of the name "Siberia", Slavonic and East Euro-

pean Review, vol. 29, n. 72, Dec 1950, pp. 287-289) according to which the name derives from the combination of the two Turkish words "su" (water) and "birr" (wild land). This is probably to be understood as referring to the numerous rivers that, during the spring thaw period, are subject to large floods and overflows, thus transforming large portions of their respective catchment areas into swamps and marshes. The geographical name "Siberia" appeared for the first time around 1240 AD in the oldest Mongolian literary work, which has been passed down to us due to the Chinese transcription, known as 元朝 秘史 (Yuáncháo Mìshǐ, in English "Secret History of the Yuan Dynasty"). In Western Europe, the term was used in 1375 in the so-called Catalan Atlas where, with the name "Sebur", the territories east of the Volga River were indicated. In the Fra Mauro map, dating from around 1450, the "Sibir province" coincides with the area north-east of the Volga. Currently, the term Siberia refers to the territory bordered by the Ural Mountains to the west, the Pacific Ocean to the east, the Arctic Ocean to the north, and the hills of north-central Kazakhstan and the borders of Mongolia and China to the south. The total area of Siberia is about 13,100 km^2 (30% greater than the whole of Europe), and apart from the extreme south-western area, it is almost completely included in the territory of the Russian Federation. Overall, about 33,700,000 people live in Siberia, about 70% of which are concentrated in urban areas. Due to the great variety of landscapes, Siberia is usually considered to be divided into four major geographical regions. To the west, bordering the Urals, lies the huge West Siberian plain, drained by the Ob, Irtysh, and Yenisey rivers. Swamps and peat bogs are the dominant environments, while the taiga forest develops mainly along the numerous waterways. East of the Yenisey River is Eastern Siberia, an area consisting of plains and, above all, a vast plateau that extends to the crests of the watershed between the Arctic and Pacific drainage basins. Further east, the Lena River separates eastern Siberia from the complex series of plateaus, mountain ranges, and water catchment areas that make up north-eastern Siberia (also known as the Russian Far East) which is characterized by a monsoonal climate in the south and monsoon-maritime climates in the north. The smallest of the four regions is the Baikal area, which, centred on the lake of the same name, is in the central-southern part of Siberia. Due to its vastness, the territory of Siberia presents a significant diversity of climatic conditions. The large continental mass causes an extreme seasonal temperature range, especially in the central portion. The most important climate modulation factor in Siberia is the Arctic Ocean. Cold, dry air masses can form over the Arctic in both summer and winter. The Siberian rivers, in turn, discharge relatively warm water into the Arctic Ocean, playing a fundamental role in the delicate energy balances and thermal circulation of the ocean. As pointed out by Pavel Ya. Groisman and Garik Gutman (Regional Environmental Changes in Siberia and Their Global Consequences, Springer, 2013), ongoing global climate change is significantly affecting the dynamics of Siberian ecosystems. In particular, it is worth noting: (1) the dramatic rise of temperature and climatic aridity in vast continental regions; (2) the increase in seasonal variability of meteorological conditions with a significant proliferation and escalation of extreme events; (3) the changes in surface albedo due to regional variations in the snowpack; (4) changes in the extent and severity of forest fires; (5) changes in hydrological regimes related to thawing of permafrost and changes in land use; (6) increasing anthropogenic impacts. The response of trees to climate change is expected to be significant in the ecotones of alpine forests and northern tundra. There are already signs of invasive species in the tundra, densification of the population, and an increase in growth along the northern and alpine tree lines. Evidently, these changes will affect the entire Siberian ecosystem and therefore also the bird communities.

The pioneer of ornithological research in Siberia was Peter Simon Pallas who explored the lands east of the Urals between 1770 and 1773. His remarkable zoological discoveries were reported with a wealth of information and detail in the three-volume work "Zoographia Rosso-Asiatica" (1811-1831). In Western Europe, a renewed interest in the birds of Siberia was sparked by the publication of the book "The Birds of Siberia - A Record of a Naturalist's Visits to the Valleys of the Petchora and Yenesei" (1901) by the Englishman Henry Seebohm. It is a fascinating book, in which Seebohm recounts his entire journey in the Yenesei valley and provides valuable information about the environments and species of birds he encountered. This is how he describes his first contact with the tundra: «In the top of the bank I found myself on the real tundra. Not a trace of a pine-tree was visible, and the birches rarely exceeded twelve inches in height. There was less grass, more moss and lichen, and the ground was covered with patches of yellow mud or clay, in which were a few small stones, that were apparently too barren for even moss or lichen to grow upon. The tundra was hilly, with lakes, swamps, and bogs in the wide valleys and plains. As soon as I reached the flat bogs I heard the plaintive cry of a plover, and presently caught sight of two birds. … The bird proved to be the Asiatic golden plover, …». Information about the Siberian birdlife can be found in the work "Птицы Советского Союза" (Birds of the Soviet Union) (1951-1954) edited by G.P. Dement'ev and N.A. Gladkov, as well as in "Птицы СССР" (Birds of the USSR) (1968) by V.E. Flint, R.L. Boehme, Yu.V. Kostin and A.A. Kuznetsov. In more recent times, a collection of papers expressly dedicated to the birds of Siberia has been published in the volume "Birds of Siberia: fauna, communities and populations structure and dynamics" edited by L.G. Vartapetov (Proceedings of the Institute of Systematics and Ecology of Animals SB RAS, v. 47 - KMS Scientific Press Ltd, Moskow, 2011). Of particular interest is the opening paper "Ornithofaunistical Regioning of Central and East Siberia" by L.G. Vartapetov & N.I. Germogenov as it proposes a synthetic vision of the ornithic communities in the area between the Urals and the Lena River. The Far East regions of Russia are excluded due to their radical climatic and faunal dissimilarity with the territory of Siberia proper. In their publication, the two authors identified five ornithogeographic areas. The northernmost, which includes only the Severnaya Zeml-

ya archipelago, is made up of polar deserts, glaciers, and island coasts. It is characterized by faunal poverty, and in fact only 16 arctic species have been detected (5% of the avifauna of the considered part of Siberia), of which are mainly Charadriiformes such as gulls and auks that live on the coasts of the sea. Further south, both in the continental part and in the insular part, there is the tundra where a total of 117 species have been recorded (34% of the avifauna of the considered area). Arctic species predominate (mainly Charadriiformes and Anseriformes), but with a good presence also of Siberian and trans-Palearctic species (50%, 19%, and 5% respectively). The third type is characterized by territorially divided districts consisting mainly of the alpine and subalpine mountain ranges and, in part, of the adjacent tundra-forests and lowland forests and highlands of the northern taiga. 130 species have been recorded, equal to 38% of the total avifauna considered. Of these, the trans-Palearctic, Siberian, and arctic species have approximately equal shares (26-27% each), while the other components (Chinese, European, and Tibetan) are modest (4-5% each). The fourth type is made up of the taiga. This occupies most of the territory in question and is rich from an ornithological point of view, in fact, 202 species of nesting birds have been recorded, or 59% of the avifauna of the entire territory considered. Siberian species predominate, but the proportion of trans-Palearctic species is also significant (32% and 28%). Compared to the previous three ornithogeographic areas, the share of European and Chinese fauna is significantly higher while the Arctic presence decreases (14%, 8% and 9%). The southernmost of the ornithogeographic areas occupies the southern taiga and steppe, from the Yenisei to Lake Baikal, including the low-mountain forest belt of the Angarsk Ridge and the Angara-Lena Plateau. Compared to other types, the presence of Siberian and trans-Palearctic species is lower (25 and 23%), while the proportion of European, Chinese, and Mongolian species is greater (18%, 10%, and 9%). The species richness of nesting birds is the highest among all the identified areas, and in fact, 261 species have been registered, equal to 77% of the total avifauna considered.

But how to get more details about the birds of this immense area? With the publication of the first edition in 2014 and the second in 2018 of the work "Птицы Сибири" (Birds of Siberia), the author, Vadim Konstantinovich Ryabitsev, is as if he had wanted to answer this question and provides valuable material to deepen knowledge about the Siberian avifauna through the treatment of the single species, also with the aim identifying them in nature. Vadim K. Ryabitsev is a well-known ornithologist of Russia, Doctor and Professor of Biological Sciences, Leading Researcher at the Institute of Plant and Animal Ecology of the Ural Department of the Russian Academy of Sciences, and Chairman of the Ural Ornithological Society from 1986 to present. Leading Siberian ornithologists also contributed to the writing of the book. Ryabitsev is also an excellent illustrator, in fact he made all the drawings of the birds featured in the work. Ten of them were also used in the European Breeding Bird Atlas 2 (among them, for example, the Arctic Warbler, the Rosy Starling, and the Desert Finch).

The work, in Russian and in two volumes, deals with the birds known for the territory that from the eastern slopes of the Urals reaches east to the borders of Yakutia. The regions of the Far East of Russia are therefore excluded, except for the north-west of the Amur region which is wedged between the territory of trans-Baikal and the south of Yakutia. The first volume, in black and white, in the introduction (pp. 9-23) provides general indications on the most profitable way to use the two volumes, information on the structure and biology of birds, as well as practical advice for first time birdwatchers. This is followed by the systematic part which occupies 377 pages. The main characteristics of each order are illustrated and, to follow, the species that belong to it are presented. For each of them the Russian name, the scientific name, the English name and, in parentheses, a number indicating the page where the same species is treated in the second volume is indicated. This is followed by any alternative names both Russian and scientific, any distinctive characteristics (also at the subspecies level) useful for identification when having the individual in hand, the dimensions, and the eco-ethological characteristics (frequented environments, diet, reproductive biology, main migration routes, etc.). The book ends with the bibliography, with the indexes of Russian, scientific, and English names (relating to both the first and second volumes) and with the contents of the volume. In the front endpapers there are illustrations in shades of grey with the names of the parts of the birds, while in the back endpapers there is a map with the administrative division and the hydrographic network of Siberia. The second volume, in colour, opens with an explanation of the symbology used in the distribution maps, then immediately enters the merits of the description of the individual species up to page 431. Each species is treated by presenting one or more colour illustrations, a textual part, and a distribution map. The illustrations depict the adult in reproductive plumage (male and female in the case of sexual dimorphism), as well as individuals in other seasonal plumages. Birds are usually also represented in flight. For many non-passerine species, the still fluffy chicks are depicted, while for many passerines the image of the open mouth of the chicks is provided. In the textual part, the peculiarities of the birds in their different plumages are first highlighted, underlining the distinctive elements compared to similar species. The most diagnostic points are written in italics to facilitate their identification. Below is a description of the main vocalizations of the species (song, most common calls, anxiety signals, etc.) and a brief description of the entire range of the species and its distribution in Siberia. This last information is also visually reproduced on the map next to the text. The routes of seasonal migrations are not shown on the maps but are described in the text. Finally, information is provided about the characteristics of any subspecies present in Siberia and on their distributions. From pages 432 to 435 some very rare species are briefly described and illustrated, while in the following two pages accidental species are succinctly referred to. The book closes with a synthetic index of Russian names and with the contents of the volume. In the front endpapers there are colour illustrations with the names of the parts of the birds, while in the

back endpapers there is a colour map with the distribution of the seventeen different types of environments (tundra, taiga, steppe, etc.) of Siberia.

Overall, the work deals with 518 species in detail, to which 26 rare and 37 accidental species are added (more briefly and only in the second volume). From a structural point of view, it is a little unusual as the two volumes deal with the same species, but this has its own logic: the second volume is basically a guide to be used in the field for the identification of the species and the first volume is useful for further information. The inversion of the numbering between the two volumes could also be justified. About the scientific names and the order in which the species are presented, the author followed the indications of these publications: "Конспект орнитологической фауны России и сопредельных территорий" (Conspectus of the ornithological fauna of Russia and adjacent territories) by Leo S. Stepanyan (2003) and "Список птиц Российской Федерации" (List of birds of the Russian Federation) by Eugeny A. Koblik, Yaroslav A. Red'kin and Vladimir Yu. Arkhipov (2006). From a practical point of view, the sequence is quite familiar as it reflects that typical format of the identification guides published in Western Europe in the 1990s (for example "Birds of Europe" by Lars Jonsson). The texts, both of the first and second volume, are exhaustive and very interesting, especially regarding distributions and migratory routes. The elements used for identification are specially designed for observation in nature and therefore are not always close up. The maps are adequately sized (27 x 40 mm) and very clear. The drawings, all by the author, are of excellent quality and show the different plumages of the species, both of stationary and in-flight individuals, in a satisfactory way. Also illustrated are some hybrids between subspecies of wagtails and between subspecies of buntings that I have never seen in other manuals. The drawings relating to each species are however placed directly next to the respective texts. This makes the comparison between species problematic as the figures are frequently found on different pages. It would have been preferable to concentrate the drawings in separate tables from the textual parts by placing similar species next to each other to facilitate comparison, as is the normal use in almost all manuals for the identification of birds. Also noteworthy is the absence of indices for scientific and English names in the second volume.

In an article published on 23 September 2021 on the birdguide.com website entitled "Big Debate: Sibes vs Yanks - which are best?", between the serious and the facetious, the drafter wondered: «This autumn, what migrants should be getting your heart racing: those gems from the east, affectionately known as "Sibes", or those colourful Nearctic vagrants, the "Yanks"?». Craig Thomas, Chair of Flamborough Bird Observatory, replied: «Nearctic passerines are equal marvels of long-distance migration. However, a day scouring the western seaboard is rarely an avian spectacle, rather a case of "boom or bust". In contrast, Siberian vagrants are often the headline act for a greater whole and so much the better for it. … It is for this reason that Sibes provide the most exhilarating of birding days, the crown jewels of memories that shape and enhance our lives.». For those who share this opinion, Ryabitsev's books are certainly the best that can be found for up-to-date information from an authoritative source. Given the quality of the work, its translation and publication in English would be truly desirable, perhaps mitigating the few critical issues highlighted. To conclude, I would like to point out that, following the same scheme of the two-volume work and with the same publisher, Ryabitsev in 2020 also published "Птицы Европейской части России" (Birds of the European part of Russia), while the previous year, together with Oleg V. Belyalov and Abdulnazar G. Abdulnazarov, had published "Птицы Средней Азии" (Birds of Central Asia).

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