

PREFACE

This volume of Anthropozoic summarizes the results of the most recent investigations into the Quaternary geology, stratigraphy, palaeontology and archaeology of Siberia. The research was mostly carried out by workers of local institutes of the Siberian Branch of the Russian Academy of Sciences, such as United Institute of Geology, Geophysics and Mineralogy at Novosibirsk, the Institute of Archaeology and Ethnography at Novosibirsk and at Krasnoyarsk, Buryat Geological Institute Ulan-Ude and Buryat Scientific Center Ulan-Ude in cooperation with the Institute of Geography at Moscow, the Institute for the Material Culture History at St. Petersburg of the Russian Academy of Sciences and the Pacific Institute of Geography, Far Eastern Branch of the Russian Academy of Sciences at Vladivostok. In addition, there are contributors from the Krasnoyarsk State Pedagogical University in Krasnoyarsk, Altai State University at Barnaul and Central Laboratory of Association "Sevvostokgeologia" (Northeastgeology) in Magadan. The research projects were supported mostly by the grants of the Russian Foundation for the Basic Research, Russian State Foundation for Humanities and by General European University Research Support Scheme. Other were funded by foreign or local organisations and by local authorities and industries, their funds being mostly allocated for archaeological and palaeontological rescue investigations.

The extreme size, remoteness and inaccessibility of large parts are the main reasons that Siberia remains one of the least known regions in the world. But, despite of mentioned disadvantages, large resources of mineral deposits, raw materials, one of the worlds greatest reserves of fresh water and woods emphasize remarkable economic potential. On the other hand multidisciplinary studies of Quaternary sediments at a number of localities have, likewise, revealed promising research potential of this little-known region. The high-resolution data have surprising analogies to those of the North American continent as well as to the classical Quaternary areas of Europe, suggesting thus the events and processes recorded in local sedimentary sequences are of regional or even global significance.

Strong continentality, and in some places, higher latitudes often ensure more detailed geological records in terms of the higher sensitivity of sediments allowing registration of relatively minor events that may not be

detected in other parts of the world. Surely spatial differentiation of environmental changes exists. For instance, the huge Ra and Salpausselkä moraines in Scandinavia, linked to short-lived Dryas climate changes, that are detected also around Northern Atlantic and in certain northern latitudes, have no real equivalents in southern parts of Central and Eastern Europe (comp. undivided Bölling- Alleröd complex). The same is true for short-lived Siberian changes (for example, the evidence for detailed subdivision of the OI 5e substage) which are not normally evidenced in other sequences. Such data may help to better understand some of the presently obscure details in our colluvial-aeolian profiles. The results may also help to improve the stratigraphy, sifting out unimportant short-lived events, and thus preventing erroneous stratigraphical overestimations of minor local deviations that muddle the interpretations and make interregional correlations of local stratigraphical schemes so difficult.

Besides providing new information and many chronostratigraphical dates and palaeomagnetic measurements, the articles critically summarize the present state of knowledge mostly available in literature inaccessible and incomprehensible to western readers. Thus, the volume mediates the information pathways across language barriers.

The Russian stratigraphical schemes are used in virtually all articles. Because of correlation problems with the European, American or global schemes, the original classifications were left in texts without any change. However, in order to help the foreign readers, a correlative stratigraphical scheme has been compiled. In addition to the stratigraphical classification and correlation problems (e.g. Tazov, Tobol and marine Oxygen Isotope Stages reflecting obviously in part analogous "Holsteinian problem" in Europe), the discrepancies in the position of the Pliocene/ Eopleistocene and Eopleistocene/Pleistocene boundaries were taken into account and also indicated. For better orientation the names of stratigraphical terms (stages) were unified. For example Tobolsk, Tobolian, Tobol to Tobol; Zyryana, Zyryansk, Zyriansk or Zyryanian to Zyriansk; Shirta, Shirtinsk, Shirtanian to Shirta etc.

Respecting the International Stratigraphic Guide the term "Formation" is used instead of the Russian "svita" and "Member" instead of "patchka" ("layer, layers") used in original manuscripts.

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STRATIGRAPHICAL SCHEME

