

**O. V. Chervonenko**

*National Museum of Natural History, NAS of Ukraine, Kyiv*

## **FORMATION OF SCIENTIFIC KNOWLEDGE AND THE CREATION OF CONDITIONS FOR NATURAL SCIENCE COLLECTIONS IN UKRAINE FROM ANCIENT TIMES TO THE FIRST HALF OF THE XVII CENTURY**

### **Abstract**

The origin and history of the development of natural sciences and worldview in Ukraine in ancient times, and the level of biological knowledge in Kievan Rus are highlighted. The development and distribution of natural sciences in Ukraine by the beginning of the seventeenth century is studied. The notion of nature at the stage of immature natural science is analyzed. The main historical stages of the formation of natural sciences are allocated to the period of rapid development and specialization of natural sciences.

Based on obtained results, the author has made the following conclusions.

1) The history of the formation of natural sciences in Ukraine by the beginning of the XVII century can be divided into 5 stages: a) early period; It can be characterized as a stage of the emergence of imaginings about nature, exploration of nature and accumulation of the knowledge about it; these imaginings were integrated into the general worldview of ancient men; this period lasted until 30,000 BC; b) the stage of systematization of natural sciences and their use in economic activity; this period lasted until the late Paleolithic era, from 30,000 BC to 10,000 BC; c) the stage of improvement of tools and methods of hunting and fishing, agricultural activity, changes in the worldview leading to the formation of a new culture, the emergence of the first information about the animal world; this period covers the time of the existence of Kievan Rus, i.e. the IX-XIII centuries; d) the stage of formation of natural sciences under the influence of translations of natural philosophers of the Ancient World and church literature; the period lasted during the XIII-XIV centuries; e) the stage of specialization of natural sciences, their differentiation into separate disciplines and the separation of secular literature; it lasted during the XV-XVII centuries. 2) Accumulation and systematization of knowledge about the animal world, plant world, and the universe, its practical use was necessary for the Early Slavs to survive and ensure their livelihoods. 3) The idea of the real world and the development of scientific and natural knowledge during the studied time relied on empirical ground. 4) The development of science in Kievan Rus was appropriate to the knowledge in the European Middle Ages and did not differ from the level of Byzantine culture. 5) The prospect of rapid development of natural philosophy was interrupted in the middle of the XIII century by the Tatar-Mongol invasion, which significantly delayed the development of economy, culture and science in Slavic lands. 6) Radical changes in the socio-economic life of the society in the XVII century became an impetus for the further rapid development of natural sciences.

### **Key words:**

natural history knowledge, worldview of ancient Slavs, natural history collections, historical development.

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*Received in the editorial board 26.01.2016*