Tribute to Anna Konstantinovna Shvyreva (1937–2024)



Anna Konstantinovna Shvyreva and the skeleton of *Elasmotherium sibiricum* in the Stavropol State Museum-Reserve named after G.N. Prozritelev and G.K. Prave, 2016.

On January 20, 2024, the famous Russian paleon-tologist, specialist in megafauna and archaeozoology of the South of Russia, candidate of biological sciences Anna Konstantinovna Shvyreva, passed away. Most part of her life was connected with the Stavropol Museum-Reserve named after G.N. Prozritelev and G.K. Prave — the oldest and largest museum in the Northern Caucasus in volume of funds, where she worked for 60 years. Thanks to the efforts of Anna Konstantinovna, the paleontological collection of this institution has become the best collection in the region, currently including more than 3,000 storage units.

Anna Konstantinovna was born on May 18, 1937 in Stavropol in the family of a worker, Konstantin Rodionovich, and a teacher, Anna Ivanovna Bondarenko. One of the most vivid memories of her childhood was the return of her father from the front. "Even if wounded, crippled, but alive!" — she recalled. From 1944 to 1955 she studied at Girls' secondary school No.1 in

Stavropol. During 1954–1959 Anna was a student at the Faculty of Natural Geography at the Stavropol State Pedagogical Institute.

After graduating from university, she worked for a year as a chemical technologist in the research laboratory of the Wool Moist Plant in Nevinnomyssk. But it is no coincidence that her birth date fell on the International Museum Day. In 1961, Anna Konstantinovna went to work at the Stavropol Regional Museum, where she passed her way up from a tour guide to the head of the nature department. Within the walls of the Museum, her growth as a paleontologist took place. A leading role in this was played Sergei Konstantinovich Dal, who was a member of the Scientific Council of the Museum and advised its employees on issues of zoology and paleontology. Together with him, Anna Konstantinovna carried out the restoration of the skeleton of the Sarmatian whale Kurdalagonus cf. maicopicus (Spasskii, 1951), discovered in 1963 in the vicinA group of employees of the Zoological Institute of the USSR Academy of Sciences and the Stavropol Regional Museum mounted the skull of *Archidiskodon meridionalis* from vicinity of the Alexandriyskaya Village. From left to right: A.A. Kolokolchikov (sculptor), I.P. Zorina, V.E. Garutt, I.N. Khitrov (sculptor), A.K. Shvyreva, 1965.

ity of the Novomarievskaya Village. She considered this work as a "graduation" that allowed her to master a wide range of paleontological methods. Among her teachers, she gratefully named Lyudmila Ivanovna Alekseeva and Vadim Evgenievich Garutt.

Since the mid-1960s A.K. Shvyreva started participating in expeditions of leading scientific centers of the country: Geological, Zoological and Paleontological institutes of the USSR Academy of Sciences. The collected and processed material became the basis for her more than 70 publications. Her main research topic was the fossil rhinoceros Elasmotherium Fischer, 1808. History of research of these taxon spans more than 200 years. Anna Konstantinovna developed a method for morphometry of Elasmotherium remains. Based on the study of separate finds from a number of localities and almost complete skeletons discovered near the Gaevskaya Village (1964) and in the city of Zelenokumsk (1966), she was the first to give a complete description of the skeleton of Elasmotherium sibiricum Fischer, 1808. In addition, her works examined issues of phylogeny, evolution and distribution of representatives of the genus, paleobiology, habitat dynamics and the causes of their extinction; a new species which lived in the Black Sea region at the beginning of the early Pleistocene was described — Elasmotherium chaprovicum Shvyreva, 2004, and in



2005 a Candidate of biological sciences (=PhD) thesis "Elasmotherium of southern Eastern Europe" was defended. It must be said that Anna Konstantinovna prepared her dissertation back in the mid-1980s, but the sudden death of her husband forced her to postpone her defense for a long time. The summarize work of the scientist was the 2016 monograph "Elasmotherium of the Pleistocene of Eurasia".



A.K. Shvyreva and S.K. Dal are restoring the skeleton of Kurdalagonus cf. maicopicus, 1967.

She vividly reported the results of her scientific research (helped by her guiding experience) at numerous paleontological symposiums and conferences in Russia and abroad (even at school she mastered the German language well, and in her old age she independently mastered English) — in Germany, Greece and France; was a participant in the International Mammoth Symposium (starting from the very first one in 1995), sessions of the All-Union (later Russian) Paleontological Society, at which in 2019 she made personal reports for the last time, and took part in absentia in 2022.

In 2007, in the Novoaleksandrovsky District, Stavropol Region, the remains of a southern elephant *Archidiskodon meridionalis* Nesti, 1825, were discovered. As a result of excavations carried out under the leadership of Anna Konstantinovna, a skeleton was delivered to the Stavropol Museum-Reserve, approximately 70% preserved. This can be called a feat of the researcher: not long before, she suffered a stroke, but was able to find the strength to continue working even in difficult field conditions. Currently, the museum exhibits two skeletons of *A. meridionalis*: the Georgievsky skeleton (discovered in 1960), restored by Vadim E. Garutt, and the Novoaleksandrovsky skeleton, restored under the direction of A.K. Shvyreva.

In 2008 A.K. Shvyreva became the winner of the "Changing Museum in a Changing World" competition, presenting the project "Stavropol Region — the Homeland of Elephants". One of the stages of its implementation was Anna Konstantinovna's internship in the largest museums of England.

Another significant discovery of Anna Konstantinovna was the description of the big-horned deer *Meg*- aloceros stavropolensis Titov et Shvyreva, 2016 from the Georgievsky quarry. This find dates back to the early Pleistocene, which makes this species the most ancient known representative of the genus, which had antlers with a well-developed palmation.

She also analyzed osteological material from archaeological excavations in the Northern Caucasus, the results of which she regularly reported at specialized conferences. Her advice on identifying the remains of domestic animals from different eras has been regularly used by archaeologists for many years.

Until the end of her days, Anna Konstantinovna maintained a clear mind and excellent memory. Even after losing the opportunity to leave home after a severe coronavirus infection, she continued to compile a scientific archive and was taking interest in the life of the Museum and her colleagues. The scientist's latest publication was a revision of the most valuable part of the paleontological collection of the Stavropol Museum-Reserve — type specimens. She herself called it "a matter of honor."

Anna Konstantinovna Shvyreva was a painstaking researcher, a charming woman, a loving mother and grandmother. The good memory of her will forever remain in the hearts of everyone who was lucky enough to live and work with this bright woman.

I.V. Doronin (Zoological Institute of the Russian Academy of Sciences), V.G. Danilevich (Stavropol State Museum-Reserve named after G.N. Prozritelev and G.K. Prave), V.V. Titov (Southern Scientific Centre of the Russian Academy of Sciences)



A.K. Shvyreva, at the excavation of the skeleton Archidiskodon meridionalis in Novoaleksandrovsky District, 2007.