

“Sacral centers” of Russian science at the Moskva River in their archaeological perspective

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Abstract

The article describes the history of archaeological research (in which Mika Lavento took part) at two key points on the Moskva River – Nikolina Gora and Zvenigorod Biological Station in Lutsino. In both places, where science flourished in the XX century, significant archaeological sites were discovered – settlements of the Corded Ware Culture dated from III millennium BC. Resource zones of Iron Age settlements were also studied and complex paleoecological investigations were carried out, which allowed the discovery ancient fields.

Keywords: history of science, Moskva River, Cord Ware Culture, Iron Age cultivation.

The page of Mika Lavento’s fieldwork in the valley of the Moskva River is only known to a narrow circle of participants of these excavations. The anniversary is a good occasion to lift the curtain. Two sites attracted special attention. Both of these small ‘islands’ surprisingly won the struggle with the state monster and turned out to be, above all expectations, very interesting from the archaeological point of view.

The first is the dacha of the physicist Academician Pyotr L. Kapitsa at the foot of Nikolina Gora (Fig. 37.1), the Nikolina hill. Here the scientist lived and worked in exile. He openly defied the omnipotent occupant of the Kremlin and his main henchmen by refusing to take part in the atomic project, working instead on plasma physics. The dacha is now home to an unofficial museum, housing the physical instruments used in the experiments. It must be said that the dacha Cooperative at Nikolina Gora itself has an unusual history. Its founder was the scientist and economist A. V. Chayanov. Having established the house in the mid-1920s, Chayanov soon fell out of favour with the authorities. Stalin called for an end to the ‘Chayanovshchina’ in 1929. Nevertheless, deprived of all posts in his direct area of expertise, Chayanov devoted two years (1928 and 1929) before his arrest to archaeology, and surveyed the vicinity of the dacha Cooperative. These works proved to be very advanced in terms of excavation methodology and general strategy of scientific research. For the first time, the focus was on the archaeological remains of unfortified settlements, dating back to the High Middle Ages, and the archaeological data were compared with medieval written sources (Chayanov 2007; Krenke 2007). Thus, the theme of archaeology has ‘sounded’ on Nikolina Gora almost from the very foundation of

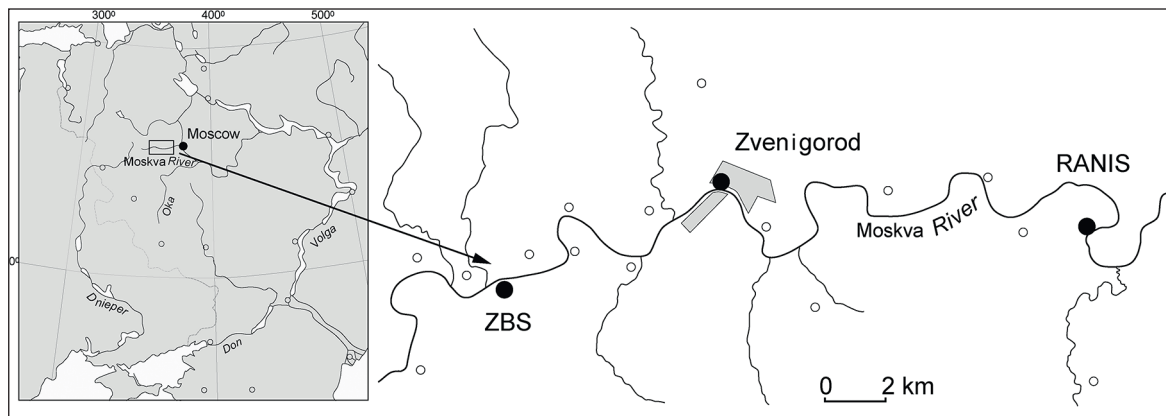


Figure 37.1. Map of the Moskva River with the key monuments described in the article - the Bronze Age 'RANIS-floodplain' settlement and the place of the Zvenigorod Biological Station (ZBS). Map E. Erschova.

the settlement. Supported was this theme by discoveries of burial mounds and fortresses of the Iron Age at the settlement's dachas.

Not surprisingly, the granddaughter of Pyotr L. Kapitsa, Nadezhda Andreyevna Kapitsa (Guzenko), a graduate from the Department of Archaeology at Moscow University, was happy to provide shelter for the archaeological expedition of the Institute of Archaeology and the Zvenigorod Museum, which set itself the ambitious goal of discovering settlements of the Fatyanovo culture of the Bronze Age (this expedition was attended by Mika Lavento). This culture had previously been completely unknown in the region. A settlement of the Fatyanovo culture was indeed discovered on the right bank of the Moskva River, opposite the Kapitsa dacha. The area was named 'RANIS-floodplain' (RANIS being an abbreviation of the official name of the dacha Cooperative of 'Nikolina Gora – Workers of Science and Art'). The first ceramic finds were made on the site of the watering place for the horses of the 1st stud farm, in a protected (but poorly guarded) area, which archaeologists had to enter by boat. Here, with the participation of Mika Lavento, the 2005 excavation was laid out. (Fig. 37.2). Excavations of the 'RANIS-floodplain' site continued in 2006 and 2009. As a result, a seasonal (?) settlement with a number of hearths from likely huts was excavated over a large area and a significant assemblage of pottery was collected, including kitchen ware and food storage vessels otherwise not found in burials (Krenke et al. 2013). Of particular importance was obtaining a series of radiocarbon dates from three laboratories, including the University of Helsinki Accelerator Laboratory (Hela). Assistance in transporting samples, and making arrangements with this laboratory, was provided by Mika Lavento. Results of the radiocarbon dating of samples from the 'RANIS-floodplain' settlement conflicted with previously available, only two (!) rather late dates for the Fatyanovo culture, but they perfectly correlated with the dating range for the Corded Ware cultures of Central Europe (Furholt 2003). Thus, the chronology of Fatyanovo culture ceased to be perplexing and was reliably tied to the second quarter of the 3rd millennium BC (Krenke 2019a).

The second 'island' is the Zvenigorod Biological Station of Moscow University (hence ZBS), located near the academic dacha village of Lutsino (Fig. 37.1). The station had been founded as a private effort by S. N. Skadovsky in 1910, became a state institution after the Revolution, and moved to the Moscow University in 1934. The station's uniqueness lies in its independence from political storms. Everything in Russia changed dramatically after 1917 but not the ZBS. The reason for that was the unique circumstances and the patronage of the neurologist G. I. Rossolimo, who treated the Bolsheviks who had been suffering from anxiety during the Revolution (in return, he demanded complete 'political immunity' for the territory of his dacha, where the biological

station, headed by his adopted son, was located; a detailed history of ZBS can be found at <http://zbs.bio.msu.ru/doc/index.php?ID=29>). In the 1920s, famous biologists and geneticists such as N. I. Vavilov and N. V. Timofeev-Ressovsky worked here, and their colleagues from the USA came to visit them.

In 1940, archaeologists came to this biological station for the first time. There was a summer training excavation consisting of the uncovering of three kurgan groups dating to the 12th century, led by A. V. Artsikhovskiy (Avdusina 1962). The training excavation was attended by future well-known Moscow scientists I. V. Yatsenko (Scythologist), D. A. Avdusin (Gniezdov researcher), R. L. Rosenfeldt (specialist in the archaeology of the Moscow Region) and the talented scientist G. E. Bauer, whose life was cut short by the war. After 1945, the focus of attention of the Department of Archaeology of Moscow State University shifted to Veliky Novgorod and the valley of the Moskva River was almost forgotten.

In 2010, our expedition came to the ZBS almost by chance in search of a base for the study of Zvenigorod Neolithic sites. However, very soon the uniqueness of the territory became apparent, firstly, from a pure archaeological point of view and, secondly, due to the convenience the infrastructure created for conducting scientific work. We found here the possibility of cooperation with biologists and soil scientists (we owe it primarily to its director V. M. Gavrilov and engineer A. I. Shilov to preserve the unique traditions and prosperity of the ZBS).

Six years were devoted to a detailed archaeological study of the area of several square kilometres (Krenke 2019b). Priority was given to complex archaeo-biological and palaeo-soil investigations aimed at revealing traces of ancient land use. We were looking for a Neolithic site similar to the Zvenigorod site and a settlement of the Fatyanovo culture similar to the site of 'RANIS-floodplain' but found something different and perhaps more interesting, as the detected sites do not fully fit into the classification of archaeological monuments adopted in Russia. In the floodplain of the Moskva River within the micro-hills, hidden by the cover of younger alluvium, were discovered places of permanent economic activity, which began to be used in the Middle Neolithic (Lyalovo culture) and continued to be exploited at different stages of the Late Neolithic and Bronze Age. Archaeological research in the floodplain area is not possible without the cooperation of a geomorphologist and a soil scientist.



Figure 37.2. The beginning of works at the settlement of the Fatyanovo culture in the 'RANIS-floodplain' in 2005. On the left is A.V. Lazukin from the Zvenigorod museum, on the right M. Lavento from the University of Helsinki. Photo N. A. Krenke.



Figure 37.3. A section of floodplain deposits of the Moskva River at the Zvenigorod Biological Station (ZBS). A – Profile showing buried soils: the upper contains Iron Age and Medieval finds, the lower contains Neolithic and Bronze Age finds. B – Clearance of a hoard of tools of the Lyalovo Neolithic culture at the ZBS-5 site. Photos N. A. Krenke.

Only they open the eyes of archaeologists to the evolution of the natural landscape. The works in the floodplain have become a kind of testing ground for such a cooperation (Aleksandrovskiy & Krenke 2019).

The sites of economic activity found on the surface of the buried soils in the floodplain were characterised by weakly marked hearth spots, small clusters of pottery (sometimes the broken sherds of

a single pot), rare flint implements, and in one case a hoard of flint implements (Fig. 37.3). Flint debitage was rare, meaning that the tools were produced elsewhere. Spore-pollen (Ershova 2014; Ershova et al. 2016) and microbiological studies (Krenke et al. 2021b) allowed us to trace vegetation transformations in the river valley, including those driven by anthropogenic activities, establish the presence of agricultural occupation and obtain data on the maintenance of cattle in floodplain meadows.

Moving up the chronological ladder, we can say that the results of the study in the resource zones of the two Iron Age hillforts (Lutsino and Busharino), between which the territory of the ZBS is located, were significant. In the floodplain opposite one of the hillforts, traces of economic and residential activity were identified. A detailed study of the watershed peat bog, called 'Sima', situated on the root bank between the fortified settlements, revealed that in the period from 900–800 BC to 550–600 AD the peat bog went through several cycles of economic development of its outskirts (burning of the forest). At least one episode of agricultural activities took place with the cultivation of wheat, millet, barley and flax, which dates back to 370–200 BC (Krivokorin and Ershova 2020). Within the resource zone of the Busharinskoye fortified settlement, several buried soil horizons with signs of slash-and-burn agriculture with dates of 1866–1747, 1818–1709 and 1783–1640 calBP were identified under Slavic barrows of the 12th century (Ponomarenko et al. 2021). Thus, there is evidence of agriculture in the settlement's area within a radius of 1.5–2 km. Slash-and-burn fields were localized at high relief levels, in areas with good drainage (ravine edge) and provided with moisture (marsh edge).

In general, the work on the ZBS has made it possible to move from 'point' to spatial landscape archaeology, demonstrating the promise of multidisciplinary methods for studying historic landscapes.

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Abbreviations

KSIA – Kratkie soobshcheniya Instituta Arkheologii