

THE NATURAL AND GEOGRAPHICAL ENVIRONMENT AND STONE AGE SITES OF THE GUZAR DISTRICT, SOUTHERN UZBEKISTAN: THE DISCOVERY OF THE BUTABULAK 1–6 AND CHUCHUKBULAK COMPLEXES

Sodiqova D.

National Center of Archaeology, Academy of Sciences of the Republic of Uzbekistan, 81 Mirzo Ulugbek Street, Tashkent, 100007, Uzbekistan
<https://doi.org/10.5281/zenodo.17608964>

Abstract

This paper presents new data on the Stone Age of the Kashkadarya region in southern Uzbekistan, focusing on recent discoveries in the Guzar district. Fieldwork conducted in 2023–2025 revealed several open-air lithic workshop sites (Butabulak 1–6) and a Neolithic settlement (Chuchukbulak). These sites are located in a favorable natural setting with ancient river terraces and accessible raw material sources. The finds demonstrate the high archaeological potential of the region and provide evidence for cultural continuity from the Late Palaeolithic to the Neolithic. The results contribute to a better understanding of prehistoric human adaptation and settlement patterns in southern Uzbekistan.

Keywords: Kashkadarya region, Guzar district, Butabulak, Chuchukbulak, Stone Age, Paleolithic, Neolithic, Uzbekistan

Located in the heart of Central Asia, the territory of Uzbekistan stands out for the remarkable diversity of its Stone Age cultures. Nevertheless, some regions of the country—despite their significant archaeological potential—have long remained insufficiently explored. A striking example of this is the Kashkadarya region, particularly its mountainous and foothill zones, as well as the areas surrounding natural springs [Turg'unova, M. S. (2020). The study of the history of the Stone Age in Uzbekistan. *European Journal of Research and Reflection in Educational Sciences*, 8(11), 113–118].

From a physical-geographical perspective, the Kashkadarya basin represents one of the key natural and geographical units of southern Uzbekistan. It is bordered by the foothills of the Hisor Range to the north and the Karshi deserts to the south. The Karshi oasis, situated between these two contrasting environments, has historically served as a transitional ecological zone favorable for early anthropogenic processes. The archaeological sites analyzed in this paper—Butabulak 1–6 [Muhammadiyev, A., & Brunet, F., 2024] and Chuchukbulak—are located in the Guzar District, in the southwestern part of the oasis, encompassing ancient river systems, alluvial plains, and piedmont zones.

Geographical Location

The Guzar District is located in the southern part of the Kashkadarya region, approximately between 38°30'–39°10' N latitude and 66°20'–66°50' E longitude. Its northern boundary adjoins the foothills of the Hisor Mountains, while the southern part merges with the Karshi Plain. The topography gradually rises from west to east, which influenced the formation of ancient riverbeds and the positioning of prehistoric settlements along fluvial terraces.

Hydrological Features

The main watercourse of the region is the Kashkadarya River, fed by tributaries such as the Guzardarya and Katta Uradarya. These rivers are mainly supplied by snowmelt and seasonal precipitation, with peak discharge occurring in spring. The formation of ancient river terraces led to the accumulation of alluvial sediments, within which prehistoric sites

such as Butabulak and Chuchukbulak are located. In certain areas, subsurface freshwater layers provided stable sources of drinking and domestic water for ancient communities.

Geological Structure

Geologically, the Karshi oasis consists of Neogene and Quaternary sedimentary rocks, including sand, gravel, clay, limestone, and conglomerate. The Guzar District lies within the piedmont alluvial-fan zone, where ancient river and torrential deposits accumulated over time. Such geological conditions ensured the proximity of raw-material sources essential for prehistoric stone-tool production.

Climate and Soil Conditions

The region is characterized by a dry continental climate, with summer temperatures reaching +38–42 °C and winter temperatures dropping to –5 to –10 °C. Annual precipitation ranges from 250 to 300 mm, falling mainly in spring. Prevailing winds blow from the west and northwest. Soil composition varies: fertile alluvial layers occur along river valleys, while brown and stony-gray soils dominate in the foothill zones. These environmental conditions provided favorable habitats for hunting, gathering, and, later, early agriculture.

Flora and Fauna

The vegetation cover is typical of desert and foothill landscapes. Dominant plant species include *Haloxylon* (saxaul), *Alhagi* (camelthorn), *Astragalus*, *Juniperus*, and *Calligonum*. These plants were likely used as sources of fuel and construction materials in prehistoric times. The fauna includes gazelles, hares, foxes, wolves, wild sheep, and waterfowl such as ducks and geese along river courses—all of which served as major subsistence resources for ancient hunter-gatherer communities.

Landscape Zonation

The Guzar District belongs to the foothill zone, which, from a paleoecological perspective, offered the most favorable conditions for human settlement. The area transitions from the mountain foothills in the north to the Karshi desert plain in the south. The proximity of

water sources, fertile soils, and abundant natural resources contributed to the concentration of prehistoric habitation sites in this zone.

History of Archaeological Research and New Findings

In the Kashkadarya region, the identification and study of Paleolithic and Mesolithic sites began later than in the Surkhandarya region—mainly during the late Soviet period and the years of independence. [Nishiaki, Y., O. Aripdjanov, R. Soleymanov, A. Rajabov, H. Nakata, T. Miki, and S. Arai, 2017] In the 1960s, the Archaeological and Topographical Expedition of Kashkadarya (KATE) of the Institute of Ancient and Medieval Archaeology of the Academy of Sciences of Uzbekistan was established (in 1963). However, the initial focus of this expedition was primarily on sites from the Early Iron Age and historical periods. In the 1980s–1990s, the leadership of KATE changed, and from 1999 onwards, under the direction of Professor R. Kh. Sulaymonov, the Kashkadarya Archaeological Expedition began to pay attention to Stone Age sites as well. As a result, previously unknown Paleolithic sites in the region were discovered.

A new stage began in the early 2000s with the field investigations conducted by R. Kh. Suleymanov, which brought this region back onto the archaeological map of Uzbekistan. His excavations at the Karakamar and Agillak [EPRA Journals. (2020). Archaeological research on the Anghilak and Amir Temur caves of southern Uzbekistan. *International Journal of Multidisciplinary Research*, 7(4), 669–671] sites provided the first reliable evidence of Paleolithic human occupation within the oasis.

Further surveys have since opened a new chapter in the study of the region's prehistoric past. In 2023–2024, the Landscape Archaeology Department of the National Archaeological Center of Uzbekistan, under the direction of PhD A. Muxammadiyev, conducted extensive fieldwork in the Kashkadarya (Guzar) region. The results revealed the great potential of this area for understanding the chronological and cultural sequence of the Stone Age. One of the most important outcomes was the discovery of a new open-air lithic workshop complex—the Butabulak 1–6 sites. [Mukhammadiyev, A., & Landscape Archaeology Department, National

Archaeological Center of Uzbekistan. (2024). *Preliminary results of field research in the Guzar District of Kashkadarya Region* [Unpublished manuscript].

These localities are situated in the Guzar District, within a small intermontane valley between the Katta Uradarya and Langardarya rivers, tributaries of the Guzardarya. The area lies along the northern slopes of the Chakchar Mountains, a southwestern extension of the Hisor Range. Numerous small ravines run north and northwest, where outcrops of Paleogene flint-bearing rocks provided abundant raw materials.

During the 2025 field season, further research led to the discovery of the Chuchukbulak Neolithic settlement, located not far from the Butabulak complex [fig. 1]. This site provides crucial evidence of the cultural and chronological continuity of Stone Age occupation in southern Uzbekistan, bridging the Late Paleolithic and Neolithic periods.

The discoveries made by R. Kh. Suleymanov at the Angillak site, together with the newly identified sites in the Guzar District, contribute to reconstructing the cultural sequence of the Stone Age in the Karshi oasis. Based on lithic typology, Suleymanov tentatively attributed the Angillak assemblage to the Obirahmat cultural tradition. However, the cultural attribution of the discovered Late Paleolithic sites remains open, pending further technological and typological analyses. The current lithic collection is insufficient to allow a definitive cultural classification at this stage.

At the Butabulak 1–6 complex, the technical and typological characteristics of the recovered artifacts, along with the patina covering their surfaces, make it possible to date them from the Late Paleolithic to the Neolithic period. Such features are typically characteristic of stone-working workshops, and the composition of the assemblage as well as the spatial distribution of finds suggest that workshop-settlement type sites may also exist in this area.

At present, these collections are being thoroughly studied, and definitive conclusions about them will be presented in future research. Considering that fieldwork at the Chuchukbulak Neolithic settlement is planned to continue in March–April 2026, it is premature to provide final conclusions regarding the overall collections.

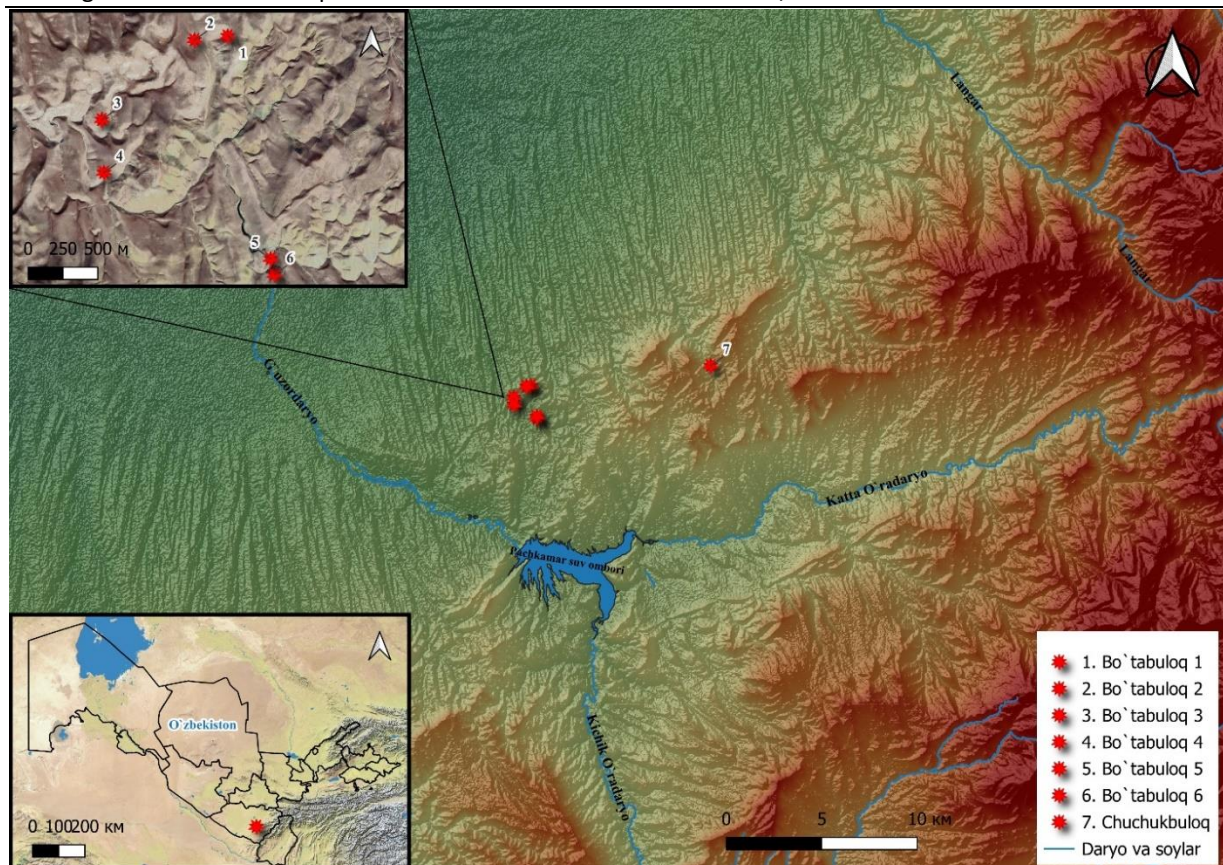


Figure 1. Location of the Butabulak and Chuchukbulak archaeological sites (prepared using QGIS 3.44.4).

References:

1. Nishiaki, Y., O. Aripdjanov, R. Soleymanov, A. Rajabov, H. Nakata, T. Miki, and S. Arai (2017) An archaeological reconnaissance survey of caves and rock-shelters in the Kashkadarya Valley, South Uzbekistan, 2014. *Bulletin of the Ancient Orient Museum* 36: 1–11.
2. Mukhammadiyev, A., & Landscape Archaeology Department, National Archaeological Center of Uzbekistan. (2024). *Preliminary results of field research in the Guzar District of Kashkadarya Region* [Unpublished manuscript].
3. **Muhammadiyev, A., & Brunet, F. (2024, May 30).** *Qarshi vohasining tosh davri bo'yicha dastlabki tadqiqot natijalari* [Preliminary results on the study of the Stone Age of the Karshi Oasis]. In *Issues of the History and Historiography of Central Asian Culture: Proceedings of the International Scientific and Practical Conference* (pp. 38–40). Tashkent, Uzbekistan. <https://doi.org/10.5281/zenodo.12605988>
4. Suleymanov, R. K. (2002). Preliminary investigations at the Anghilak Cave, Kashkadarya Region. *Proceedings of the Institute of Archaeology of Uzbekistan*, 12, 45–52.
5. Turg'unova, M. S. (2020). The study of the history of the Stone Age in Uzbekistan. *European Journal of Research and Reflection in Educational Sciences*, 8(11), 113–118.
6. Union Internationale des Sciences Préhistoriques et Protohistoriques (UISPP). (2025). *Abstracts of the 20th UISPP World Congress: Paleolithic cultural layers of Anghilak Cave, South Uzbekistan*. Lisbon, Portugal.
7. EPRA Journals. (2020). Archaeological research on the Anghilak and Amir Temur caves of southern Uzbekistan. *International Journal of Multidisciplinary Research*, 7(4), 669–671.