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Researches of paleometal archaeological sites in the Almaty region in 2022*

Research of the Kargaly scientific detachment in 2022 in the Zhambyl district of Almaty region was carried out near the northern slopes of Ile Alatau on the territory of the Kargaly, Kastek and Degere historical and geographical microdistricts. As a result of reconnaissance, about 50 archaeological sites of the Paleometal era were noted – settlements, burial grounds and sacred complexes. Specialized studies of a new type of archaeological monuments – stones with cup-shaped holes have been carried out. Three complexes with "fields" of cup stones have been identified in the valley of the Uzyn-Kargaly, Kastek and Shien rivers. Along their perimeter, a series of burial grounds of the Paleometal era and the Early Iron Age and objects of cult and ritual purpose are recorded. The general physical and geographical characteristics of the region have been compiled and materials characterizing the living conditions and economic activity of the population of the Paleometal epoch have been obtained. The conditions and resources for the development of nomadic, semi-nomadic cattle breeding, irrigated agriculture and the development of crafts have been clarified.

Keywords: Ile Alatau, Bronze Age, settlement, burial ground, stone with a cup-shaped hole

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Алматы облысындағы палеометалл дәуірі археологиялық ескерткіштерін 2022 жылғы зерттеу

Алматы облысы, Жамбыл ауданындағы 2022 жылғы Қарғалы ғылыми отрядының археологиялық зерттеулері Іле Алатауының солтүстік беткейлерінде Қарғалы, Қастек және Дегерес тарихи-географиялық шағын аудандарының аумағында жүргізілді. Барлау нәтижесінде палеометалл дәуіріне жататын 50-ге жуық археологиялық нысандар – қоныстар, қорымдар мен қасиетті кешендер есепке алынды. Археологиялық ескерткіштердің жаңа түрі – тостаған тәрізді қуысы бар тастарға мамандандырылған зерттеулер жүргізілді. Ұзынқарғалы, Қастек және Шиен өзендерінің аңғарында тостаған тастарының «алқабы» бар үш кешен анықталды. Осы кешендердің периметрі бойынша палеометалл дәуірі мен ерте темір дәуіріндегі қорымдар мен діни-салттық мақсаттағы нысандар тіркелді. Аймақтың жалпы физикалық-географиялық сипаттамасы жасалды және палеометалл дәуіріндегі тұрғындардың өмір сүру жағдайлары мен шаруашылық қызметін сипаттайтын материалдарға қол жетті. Отарлы, жартылай көшпелі мал шаруашылығы, ирригациялық егіншілікті және қолөнерді дамытуға қажетті жағдайлар мен ресурстар нақтыланды.

Түйін сөздер: Іле Алатауы, қола дәуірі, қоныс, қорым, тостаған тәрізді қуысы бар тас

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Исследования археологических памятников эпохи палеометалла в Алматинской области в 2022 году

Исследования Каргалинского научного отряда 2022 года в Жамбылском районе Алматинской области проводились у северных склонов Илейского Алатау на территории Каргалинского, Кастекского и Дегереского историко-географических микрорайонов. В результате разведки отмечено около 50 археологических объектов эпохи палеометалла – поселений, могильников и сакральных комплексов. Проведены специализированные исследования нового типа археологических памятников – камней с чашевидными лунками. Выделены три комплекса с «полями» чашечных камней в долине рек Узын-Каргалы, Кастек и Шиен. По их периметру фиксируются серии могильников эпохи палеометалла и раннего железного века и объекты культово-ритуального назначения. Составлена общая физико-географическая характеристика региона и получены материалы, характеризующие условия проживания и хозяйственной деятельности населения эпохи палеометалла. Выяснены условия и ресурсы для развития отгонного, полукочевого скотоводства, ирригационного земледелия и развития ремесел.

Ключевые слова: Иле Алатау, эпоха бронзы, поселение, могильник, камень с чашевидной лункой

In June–September 2022, research was conducted by the Kargaly Scientific detachment as part of the Almaty Exploration Archaeological Expedition, whose main task was to document, map and systematize materials from ancient settlements, burial grounds and petroglyphs near the northern slopes of the western end of the Ile Alatau Ridge. About 50 new archaeological sites were recorded on the territory of Zhambyl district of Almaty region. The purpose of these works is to analyze the economic and cultural development of the population of the Zhetysu paleometal epoch and, in particular, the foothill zone of the northern slopes of the Ile Alatau.

The main method by which the monuments of the Bronze Age were discovered and the living conditions and economic activities of the population of the region were clarified was the archaeological exploration of traces of ancient residential and burial structures and surface finds. The work on the identification of monuments was carried out on the basis of visual detection of human labor activity signs in the historical past (traces of dwellings of ancient farmers, ditches and channels, barrows), fragments of ceramics and other surface finds. Cultural and typological attribution of objects was carried out based on the nature of the design features of the monuments, the items and ceramic material found on their territory. In the course of the work, mapping of individual microdistricts of the northern slopes of the Ile Alatau was carried out on the basis of GIS technologies, followed by the inclusion of materials in the general archaeological map of the Zhetysu paleometal epoch (Fig. 1). Analytical data were obtained as a result of systematization of geographical information and previously conducted geomorphological studies on the northern slopes of the Ile Alatau [Chupakhin 1987: 125–138; Aubekerov et al. 2009; National Atlas of the Republic of Kazakhstan... 2010].

The materials of the archaeological surveys of 2022 made it possible to determine the content and structure of paleometal era monuments near the northern slopes of the Ile Alatau. It turned out that they are usually recorded as part of complexes consisting of a settlement, a burial ground, and one of the types of sacred objects (petroglyphs or stones with cup mark). In the high-altitude zone of the eastern part of the ridge in the Turgen Gorge, a Bronze Age temple complex was excavated near the settlement, where the remains of the deceased were cremated before burial [Goryachev 2020: 135–138]. The settlements are located on high above-floodplain terraces of loess deposits and consist of a series (from 4-5 to 10–12) of farmsteads, which are stretched in a line along the bank of a river or stream (Fig. 2).

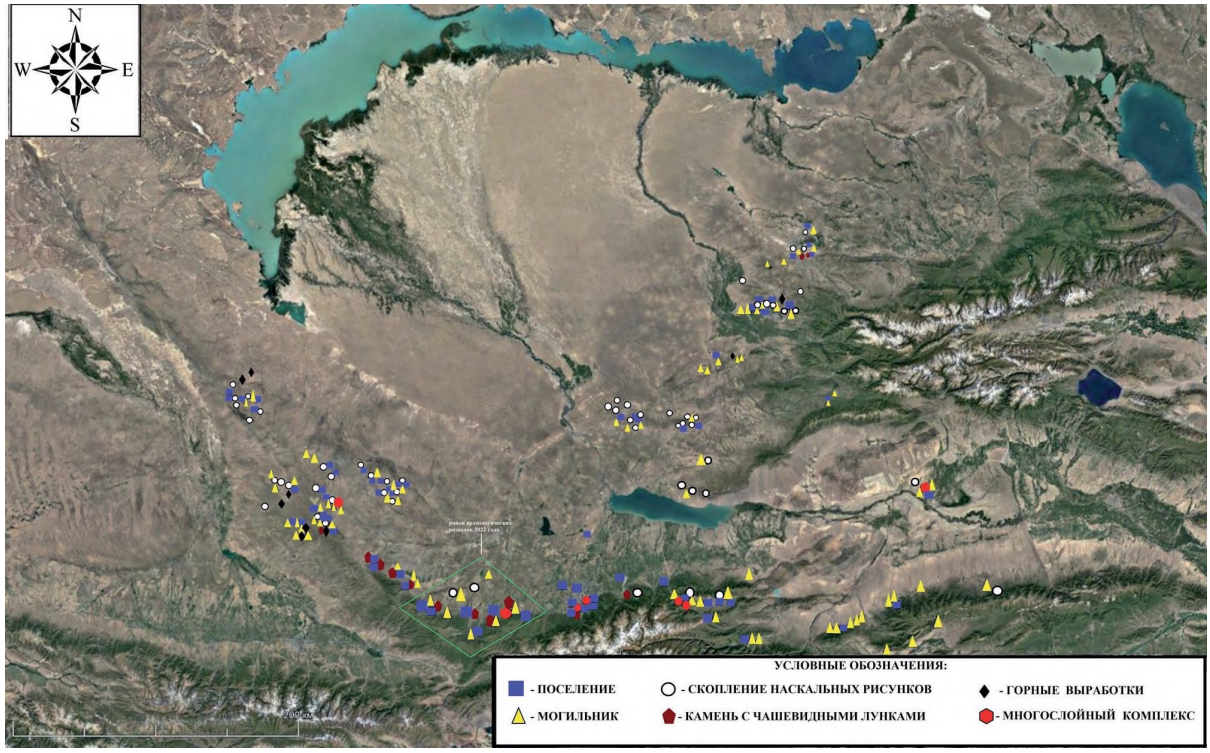


Fig. 1. Archaeological sites of the Bronze Age on the northern slopes of the Ile Alatau ridge
1-сур. Іле Алатау жотасының солтүстік беткейлеріндегі қола дәуірі археологиялық ескерткіштері
Рис. 1. Археологические памятники эпохи бронзы на северных склонах хребта Иле Алатау

Between settlements and burial grounds, a streambed or spring source, or a low hill, is typically documented. The burial grounds of the Bronze Age in this part of the foothill zone of the western part of the Ile Alatau are fixed to the west or north of settlements within 1-2 km downstream of the same water sources (Fig. 3). The choice of the site's place was determined by the presence of a flat platform at the summit or saddle of the hillock, or on the foothill base. The burial structures are represented by chains of stone fences and barrows with stone boxes or cists, less commonly by soil pits inside.

Such complexes are recorded almost at the exit from each gorge at the northern slopes of the Ile Alatau of the Kargaly, Kastek and Degeres historical and geographical microdistricts. During reconnaissance, they are noted at the mouths and exits of the Kainar, Maybulak, Yntymak, Kyzylauyz, Kastek, Karasai and Besmoinak gorges, as well as near Kogamshil, Sunkar, Beriktas and Degeres villages. New settlements and burial grounds of the Bronze Age were found in the high-altitude area of the Kastek gorge in the Saryzhazyk valley. In the studied interval of the piedmont zone of the northern slopes of the Ile-Alatau, in mountain gorges where there are convenient platforms of cone ejections from the lateral sais and in their upper reaches near numerous springs and streams, ancient wintering sites of cattle breeders, including those of this time, are noted.

The recorded complexes of the Bronze Age consisting of settlements and burial grounds in the foothill zone are linked locally to a system of irrigation structures (channels, ditches, water intakes and aqueducts) which are universally found along the northern slopes of the Ile Alatau [Saraev 2007]. The settlements of Kainar I, Maybulak II, Yntymak I and II, Kyzylauyz I, Kogamshil, Sunkar and Besmoinak I belong to those among the monuments of the Bronze Age. Research has shown that during periods when specialized technical devices and instruments did not exist, inhabitants of the Bronze Age had the capabilities to create and develop irrigation systems for agriculture in this region [Saraev 2021].

Based on the artifacts discovered at the new settlements and burial sites, the majority of them in the piedmont zone of the Ile Alatau are attributed to the

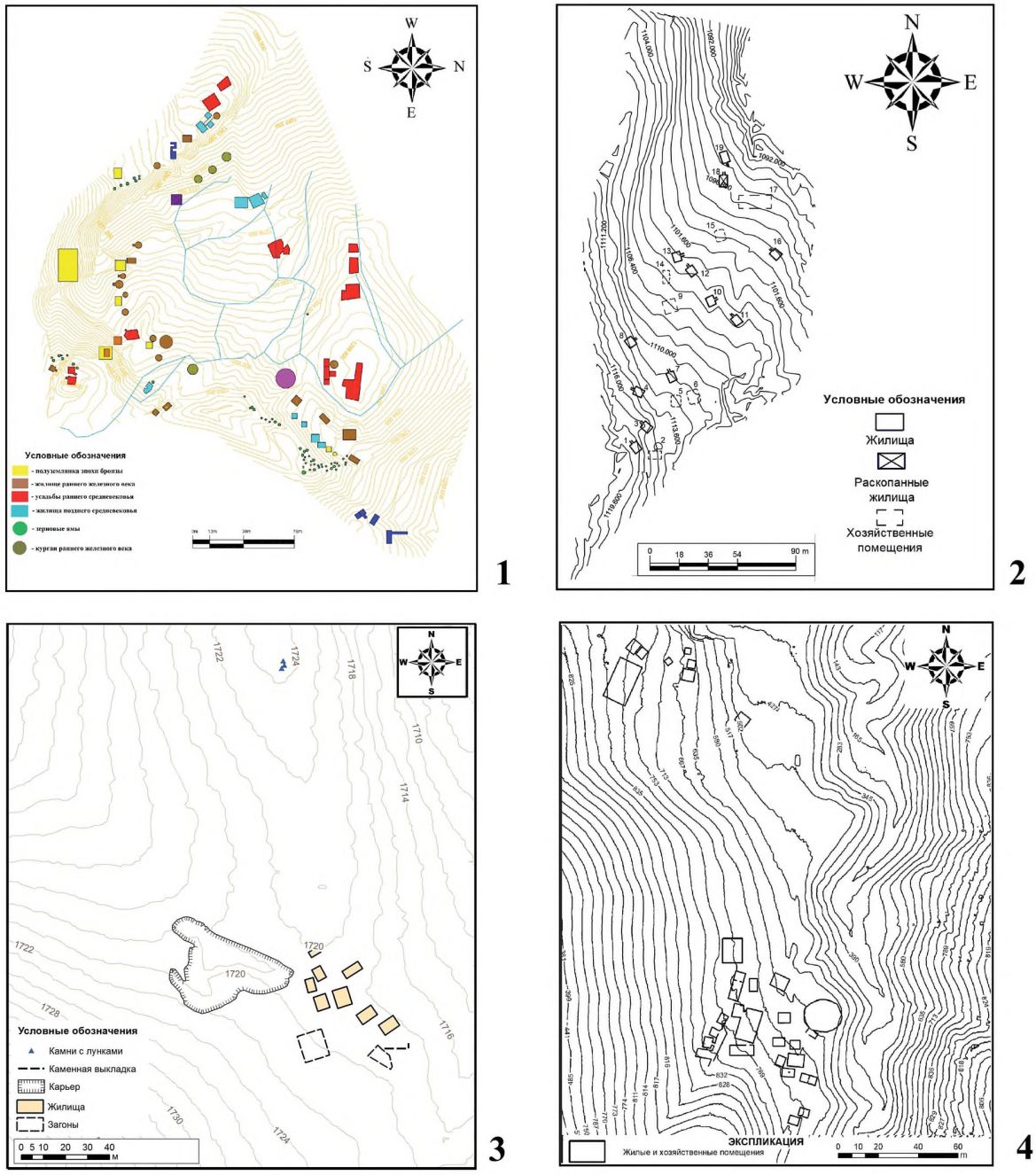


Fig. 2. Topographic plans of Bronze Age settlements on the northern slopes of the Ile Alatau:
1 – Kogamshil-I; 2 – Kainar-I; 3 – Besmoinak-I; Yntymak-I

2-сур. Іле Алатауының солтүстік беткейлеріндегі қола дәуірі қоныстарының топографиялық жоспарлары:
1 – Қоғамшыл I; 2 – Қайнар I; 3 – Бесмойнақ I; Ынтымақ I

Рис. 2. Топографические планы поселений эпохи бронзы у северных склонов Иле Алатау:
1 – Когамшил-I; 2 – Кайнар-I; 3 – Бесмойнак-I; 4 – Ынтымак-I



1



2



3

Fig. 3. Bronze Age burial grounds near the northern slopes of the Ile Alatau:
1 – Kargaly-I, view to the north; 2 – Yntymak-II, view to the east;
3 – Karaarsha-I, view to the northeast

3-сур. Іле Алатауының солтүстік беткейлеріндегі қола дәуірі қорымдары:
1 – Қарғалы I, солтүстікке қараған көрінісі; 2 – Ынтымақ II, шығысқа қараған көрінісі; 3 – Қарааршa I, солтүстік-шығысқа қараған көрінісі

Рис. 3. Могильники эпохи бронзы у северных склонов Иле Алатау:
1 – Каргалы-I, вид на север; 2 – Ынтымак-II, вид на восток;
3 – Карааршa-I, вид на северо-восток

Andronovo period and the cultural community of roller ceramics from the Paleometal era. The active interaction of the population of the northern slopes of the Ile Alatau with the tribes of the Andronovo circle occurs in the early–middle of the 2nd millennium BC [Maryashev, Goryachev 1993; Goryachev, Motov 2018: 44–46; Goryachev 2020: 159-160]. The settlements of Kainar I, Maybulak II, Kyzylauyz I, Besmoinak I and a number of others in the foothill and mountainous zone of the Ile Alatau belong to this time. Late Bronze materials among the studied monuments were found in the complexes Yntymak I, II, Kyzylauyz II and Saryzhazyk I, II. The basis for such dating was the materials of the studied settlements and burial grounds in the upper reaches of the Turgen Gorge, on the Assy plateau and in the Butakovka gorge [Maryashev, Goryachev 2001; Goryachev 2012].

Moreover, the settlements of Kainar I, Maybulak II, Kogamshil I and Yntymak I probably existed during both stages of the Bronze Age. As it turned out during the research, the Bronze Age population of different ecological niches of the mountainous zone and the foothill strip had close relationships with each other. On the foothill plains of the region, residents developed the territory of the plains at a distance of 20–30 km from the mountains. Settlements were established at the foot of the mountains, or in the valleys of rivers and streams in areas with a southern exposure.

Traditionally, near settlements at the mouths of mountain gorges, Bronze Age petroglyphs are found here, which sometimes is indirect evidence of the presence of layers of this period on them. However, unlike the steppe regions of the Shu-Ile interfluve in this region, they are significantly fewer in number, and they are poorer in plots, with the exception of the Basbatyr and Akterek complexes [Zheleznyakov, Hermann 2014; Zheleznyakov et al. 2017]. They are located in the western spurs of the ridge in the natural and geographical conditions of the steppe zone, and contain several hundred images. Despite the small number, the rocks feature drawings

were made with high artistic proficiency and share a common narrative imbued with a specific semantic field [Saraev 2017]. In the studied region, such petroglyphs were found in the gorges of Uzyn-Kargaly, Maybulak and on cattle tracks in the Degeres Mountains.

Characteristic of Paleometallic settlements on the northern slopes of the western part of the Ile Alatau is the presence of stones with cup marks near the village. The ancient inhabitants of the region used large boulders carried out by mudflows, or stones that broke off from rock blocks and ended up near an ancient village. A space was arranged along their perimeter (Fig. 4, *1*). From 3–5 to several dozen or even more than a hundred holes were marked on the stones, some of them connected by specially rubbed grooves (Fig. 4, *2*). Similar stones were found near the settlements of Kogamshil, Sunkar and Besmoinak. In the area of the Kargaly, Kastek and Shien gorges, in the lower part of the foothill soles near ancient water distribution systems, there are entire "fields" of stones with cup marks (Fig. 4, *3*).

Thus, stones with cup-shaped depressions, which are considered sacred objects, are found both within the territory of individual settlements ("domestic sanctuaries") and in the form of large clusters of such objects in the area of the most concentrated ancient population of the region ("field" of cup marks stones). This allows us to consider them a common form of ritual practice. The conditions and circumstances under which they are found near ancient settlements allow us to consider such structures around natural stones as peculiar temples designed to facilitate the conduct of rituals and rites associated with the cult of ancestral spirits among the ancient population.

Research in 2022 showed that the natural and geographical situation and climatic conditions near the northern slopes of the western part of the Ile Alatau contributed to the emergence and long-term functioning of a peculiar structure of life support for the population of the paleometal epoch. According to research, farmers lived here on the foothill plains. The large settlements at the exit of the mountain gorges were handicraft and agricultural centers, where the population of the valley of the mountain river made up their district. The water basins of the Uzyn-Kargaly and Kastek rivers, as well as a kind of microdistrict between the northern slopes of the main ridge and the Degeres mountain range, become such in this territory.

The area of preferential cattle breeding development is becoming the territory from the mouths

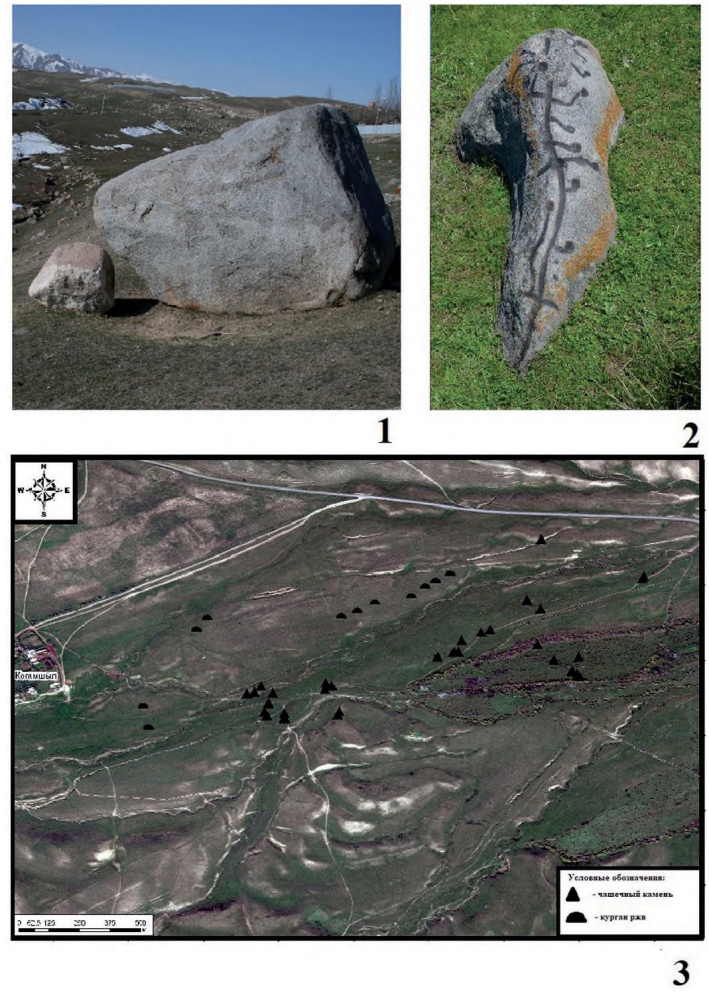


Fig. 4. Stones with cup mark at the northern slopes of the Ile Alatau:
1 – a stone on the eastern outskirts of Kogamshil village;
2 – stone on the left bank of the Shien River;
3 – the «area» of stones with cup mark in the Shien River Valley

4-сур. Іле Алатауының солтүстік беткейлеріндегі тостаған тастар:
1 – Қоғамшыл ауылының шығыс шетіндегі тас;
2 – Шиен өзенінің сол жағалауындағы тас;
3 – Шиен өзенінің аңғарындағы тостаған тастар «алқабы»

Рис. 4. Чашечные камни у северных склонов Иле Алатау:
1 – камень на восточной окраине аула Когамшил;
2 – камень по левому берегу реки Шиен;
3 – «поле» чашечных камней в долине реки Шиен

of mountain gorges to high-altitude plateaus in the area of alpine meadows. The economic structure and natural resources of the region made it possible to successfully develop crafts and home crafts. Data on the presence of an irrigation farming system in the foothill zone in the Bronze Age, a high level of handicraft production and the structural division of territories into zones of predominantly land use by pastoralists and farmers suggest a more complex and diverse ethnocultural and social structure than previously imagined. The materials and previously studied monuments of the region trace the household and cultural traditions of the tribes of the Paleometal epoch, which were spread from Siberia to the Southern Trans-Urals and from Central Kazakhstan to Middle Asia. Further study of the economic structure of the Paleometal era population near the northern slopes of the Ile Alatau is becoming extremely relevant, since in the future it will also highlight the issues of socio-economic development of the entire region.

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