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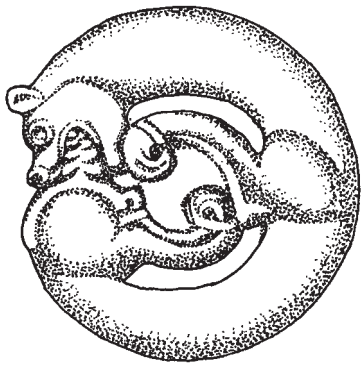

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SCYTHIAN PERIOD ASHMOUND NEAR MOHRYTSIA: RESEARCH METHODS AND RESULTS

In the article, the results of research at the Scythian period ashmound near Mohrytsia village are presented. The topography of the site and the methods of its investigation are described in detail. The materials from the Scythian period and other epochs discovered during excavations are discussed. Based on the obtained material, the article addresses questions regarding the interpretation of the site's functions and the specifics of its formation. The hypothesis is put forward about the possible use of mounds for marking specific societies within the Scythian Forest-Steppe region.

K e y w o r d s: Forest-Steppe, Eneolithic — Bronze Age, Scythian period, flint tools, ashmounds, communal practice, settlement patterns, regional division of the Scythian Forest-Steppe.

Introduction

Scythian period sites in the Psel River region can currently be considered as significantly underexplored. The last comprehensive study of these monuments was presented in a monograph based on the dissertation of P. Ya. Havrysh (Гавриш 2000). The researcher primarily focused on the materials he and other scholars obtained from the Knyshivka hillfort and its vicinity. He noted the similarity between the materials from the Bilsk hillfort and referred to this area as the periphery of the latter (Гавриш 1996, p. 21). Northern territories around Lebedyn, Sumy, and Oboian were predominantly investigated by researchers specialising in other epochs. Consequently, they appeared in the literature and reports mainly as points with a few ceramic fragments. In such a situation, it is not surprising that a new type of site for the region — ashmounds — was only discovered here in the 2000s during land allocation works for construction by archaeological survey of the Service for the Protection of Archaeological Heritage of Ukraine (OASU) (Білинський, Кабанов 2015, p. 124). Currently, there are more than ten locations with ashmounds in the Psel basin, each containing several dozens of mounds. Publication of surveys conducted in the Kursk region of the Russian Federation (Кашкин 1998, 2000) and active investigations by the OASU staff in the Ukrainian part of the river basin have revealed another feature of the region. It now appears quite densely populated. In areas where prospecting was actively conducted, dozens of settlements can be found at relatively short distances from each other. Despite their number, the materials from these sites, especially those published, are extremely scarce.

Moreover, the situation with the reconstruction of cultural and social processes that occurred during Scythian times is also far from ideal. Most recent studies employ the sites in the Psel region, primarily focusing on individual finds and the region's settlement patterns. This approach has served as the foundation for the latest research in this area (Білинський, Кабанов 2015; Гречко, Билинский, Кушнир 2021). While this approach

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has been successful, the absence of data on mass finds not only hinders precise dating of the region's sites, but also complicates the construction of a comprehensive understanding of them, making comparisons with neighbouring regions more challenging.

Apart from being a new type of site, which is significant by itself, ashmounds also hold substantial potential for the study of mass material culture. In the forest-steppe, we recognise them as barrow-like mounds with diameters of up to several dozen meters and heights of 4—5 meters. The layers of ashmounds are exceptionally rich in various artefacts. While some mounds contain residential structures, burials, household pits, and possibly ritual objects, it can be argued that the mass material culture of ashmounds is not distinct from what we observe at settlements. Therefore, they perfectly reflect mass material culture by concentrating a lot of artefacts in one place.

In the current situation with the degree of research in the Psel River basin, it was of utmost importance to have a relatively substantial sample of material culture items, even from a few "reference" sites, from which data could be extrapolated to the entire region. It was precisely for this purpose that, within the framework of the program to study the Scythian period sites in the Psel region[2], archaeological research on a Scythian ashmound near Mohrytsia village in Sumy Oblast was initiated by the Archaeological Expedition of the "Kyiv-Mohyla Academy."[3]

Location and site overview

The location with ashmounds near Mohrytsia was initially discovered by a local resident, Danyil Sorokin. He subsequently transferred all findings and data about the site to the staff of the Sumy Regional Museum of Local History. In 2020 the area was surveyed, and the presence of a group of ashmounds, consisting of several dozens of mounds, was confirmed (Білинський, Ходукіна 2020). An exploratory trench was dug on one of them, which confirmed the presence of a rich layer of ash and artefacts from a cultural stratum. The following year, we returned to the site for full-scale excavations. One of the smallest mounds, with a height of approximately 0.2 meters, was selected for investigation. At the outset of the research, the mound visually covered an area with a diameter of 12 meters, but during the excavation process, it became clear that it extended further in all directions.

Overall, the excavation site is situated in a mixed forest, predominantly composed of pine trees, at an elevation of approximately 20 meters above the Psel, which is about 300 meters away. Despite its anomalous altitude, the site was identified as an ancient dune formation, which, judging from its height, had likely been formed during the process of the Psel River valley formation, possibly during glacial melting. This is evident on the topographic map of the region (fig. 1). These conclusions were also confirmed during the excavations. The natural layer consisted of golden alluvial sand with noticeable clay inclusions and limestone concretions, which can be associated with very ancient geological processes. Above the strata of the ashmound formation from the Scythian period, there was a layer of forest soil. The presence of a forest is further confirmed by numerous gaps in the cultural layer, which resulted from tree falls, and, according to stratigraphy, the area had not been ploughed (fig. 2).

General Overview of Excavation Methods and Their Results

Ashmounds from the Scythian period have been known to researchers for a long time. Their exploration has begun almost simultaneously with the studying of settlement sites. The first excavations were likely conducted at the Bilsk hillfort by V. O. Horodtsov (Городцов 1911). Since then, ashmounds have been excavated during the research of settlements throughout the Forest-Steppe region.

A common feature of all these investigations has been the use of a methodology traditionally employed for the study of settlement sites, specifically, excavations with wide trenches and the tracking of general stratigraphy. And this approach led to significant results including microchronology, which was constructed by studying findings from specific layers at the Bilsk hillfort (Шрамко 2006). The research of the ashmound at Tsyrkuny hillfort helped to trace the trend of uneven distribution of findings across the site area, suggesting the specifics of its formation (Пеляшенко 2017).

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[2] Project "Settlement Patterns in the Scythian Forest-Steppe: Case Study on the Psel River Basin" at the National University of "Kyiv-Mohyla Academy."

[3] Fieldwork was conducted throughout the 2021 field season. We had unquestionably planned to continue it in the following year; however, these plans were disrupted by the full-scale invasion of Russia. Currently, the site is located within a 10-kilometer zone along the border, access to which is restricted for civilians. As soon as conditions permit, we will intend to return to the site and finish our research.

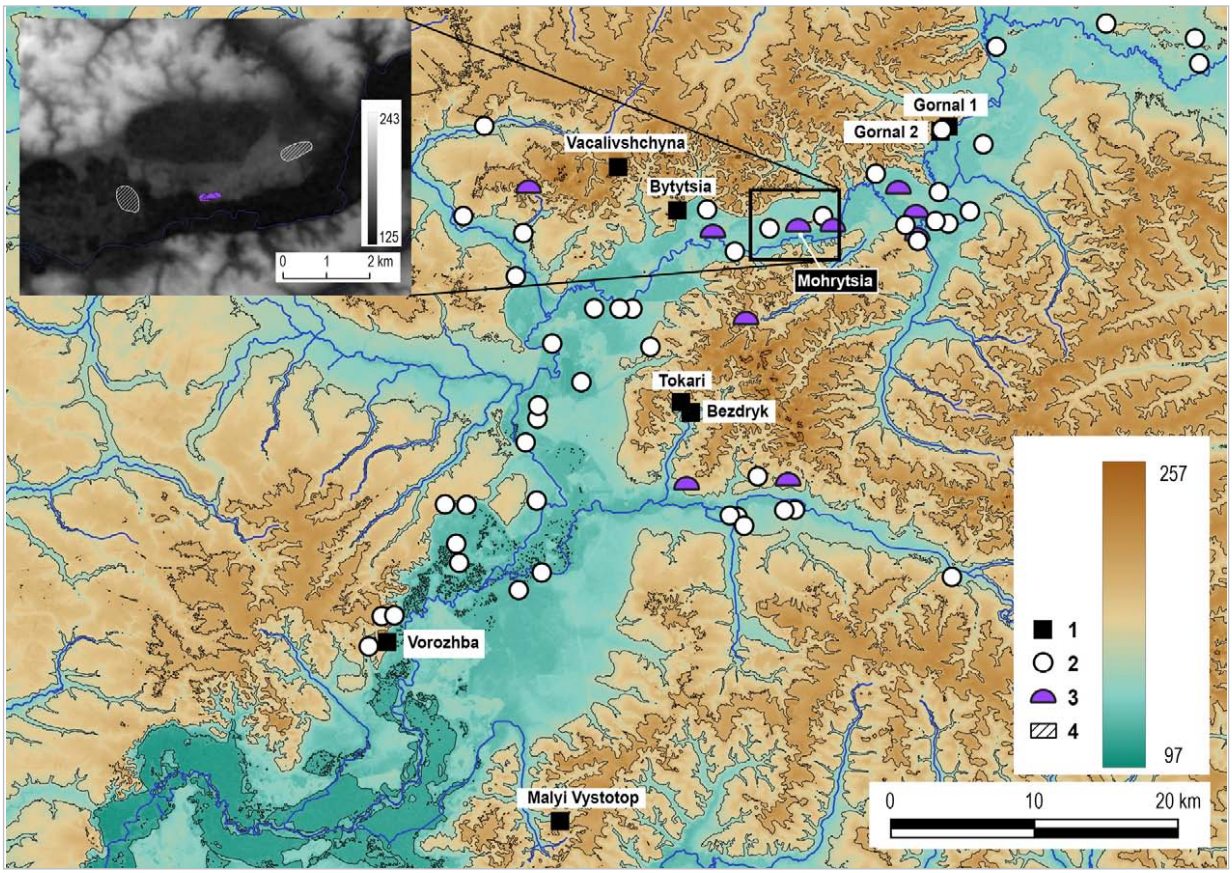

Fig. 1. Map of Scythian period Psel River region sites near Sumy: *1* — hillforts; *2* — unfortified settlements; *3* — ashmounds; *4* — settlement borders

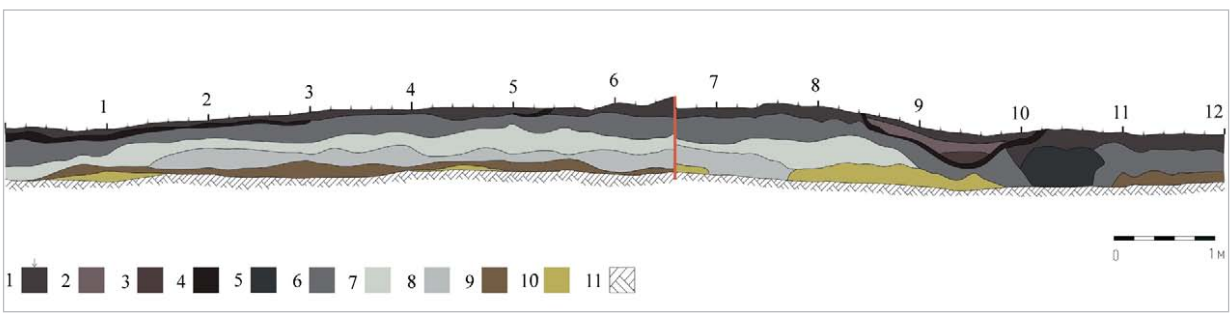

Fig. 2. Eastern profile E1-E6, south-western sector: *1* — forest soil; *2* — light brown layer; *3* — dark brown layer; *4* — dark chestnut forest soil; *5* — black-and-ash layer; *6* — upper ash layer; *7* — middle ash layer; *8* — lower ash layer; *9* — pre-natural ash sand; *10* — natural layer sand; *11* — natural layer

On the other hand, the issue of the origin and purpose of ashmounds remains open, and there is no consensus among researchers regarding the interpretation of this type of site. Therefore, the primary task is to meticulously document the characteristics of the archaeological complex during fieldwork to obtain more information. The key metrics to assess the results of such research include the approximate quantity of findings, the number of stratigraphy sections (the total length in meters relative to the excavation area), and interdisciplinary research.

Methods Used in the Research

In the investigation of the ashmound near Mohrytsia, previous experiences from similar sites were taken into consideration. The primary goal of our research was to enhance informativeness within the limitations of fieldwork.

There were three main research objectives: to study the homogeneity of the mound; investigate the stratigraphy in all directions and maximise the documentation of findings per square meter. To achieve these objectives, the entire soil of the mound was sieved unit by unit and in layers. A method for documenting the stratigraphy was developed, which allowed making cross-sections every two meters and one meter in all directions. A sorting, counting, and documentation system for mass findings was also established. In addition to these techniques, we decided to employ as many interdisciplinary methods as possible to comprehensively characterise the mound and its discovered items.

First and foremost, the mound was divided into four sectors based on cardinal directions (NW, SW, NE, SE), each measuring 6 × 6 meters. The entire mound was marked with a grid of 1 × 1 meter units labelled with Latin letters and numbers, which complemented the division into sectors. Some units remained unexcavated due to the presence of trees within the mound, which complicated the research. Depth measurements were taken using a theodolite positioned at the centre of the mound.

During the process of excavation of the cultural layer, the entire soil was sifted. For this purpose, a mesh with cell dimensions of 6 × 12 mm was used. This meticulous procedure ensured that no findings larger than these dimensions were lost. All discovered findings were sorted and counted according to the same scheme (unit, depth) and documented in tables. Consequently, each unit can be characterised by the number of various categories of findings and their percentage ratios. The stratigraphy was documented in great detail. In the SW sector, this involved a grid with 2-meter intervals, both longitudinally and latitudinally. In the NW sector, units were selected in a checkerboard pattern, which allowed covering of all four sides, reflecting half of them. This provided a complete stratigraphy in both latitudinal and longitudinal planes with a 1-meter step. Excavating in a checkerboard pattern, followed by soil sifting, made it impossible for findings from adjacent units to enter, allowing a strict square-by-square documentation. In addition to soil sifting from certain units, layers, and all objects, washing was performed through a plastic mesh with cell dimensions of approximately 1 × 1 mm. This process potentially allowed discovery of not only light fractions and charred seeds, but also small items that have passed through the sieve.

For specific research purposes, external experts were invited[4]. Flint artefacts were analysed by D. V. Stupak[5], while osteological material was examined by M. V. Kublii[6]. Given the orientation towards interdisciplinary methods, soil samples were collected and later transferred for the Fourier-Transform Infrared Spectroscopy (FTIR) analysis to O. V. Pykhova[7]. The FTIR spectroscopy is a method that allows the identification of organic molecules and the determination of their qualitative composition (Shillito et al. 2007). In our case, it was used to assess the quantity of organic waste within the layer, which had decomposed entirely by the time of the study. A similar approach was applied to the analysis of amber beads. During the data processing stage, O. O. Andreiev[8] conducted investigations of bronze artefacts and the most representative vessel rims using the X-Ray Fluorescence (XRF) analysis. The XRF analysis permits the determination of metal content in samples and their proportions relative to each other (Shackley 2014).

Stratigraphy of the Mound

During the investigation of the mound, several primary layers were identified, which were related to its construction and those formed due to natural processes. In total, 58.5 m^2 were investigated, and the overall length of the recorded stratigraphy was 110 m, resulting in a stratigraphy ratio of 1.88 m per square meter.

The uppermost layer was comprised of forest soil. This layer was loose and heavily interwoven with fine roots. It was present throughout the entire area of the mound, with a thickness ranging from 0.1 to 0.2 m. This layer had already contained a significant number of various finds. It can be assumed that this layer had been formed after the site ceased to be active and is associated with soil formation in the forest. Below this layer and sometimes overlapping with it, three additional layers were identified. All of these were the result of natural soil formation processes

[4] A series of separate publications will be dedicated to the dissemination of the results of these studies.

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[7] PhD Student at Nizhyn Mykola Gogol State University.

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and not associated with human activity. Their thickness rarely exceeded 0.1 m, and the finds were identical to those in the uppermost layer.

The upper ash layer (fig. 2: 6), located just beneath the forest soil, was unequivocally formed as a result of human activity. This layer was quite dense and had a distinct presence of ash, as well as traces of charred clay. It was widespread across the entire area of the mound, with a thickness ranging from 0.1 to 0.4 m. It likely extended beyond the excavation area and beneath this layer numerous finds and animal bones were discovered.

The middle ash layer (fig. 2: 7) of the mound, located immediately below the upper layer, was also associated with the construction of the mound. This layer was very dense, with a higher ash content compared to the upper layer, though the quantity of charcoal and charred clay was lower. Its thickness varied between 0.05 and 0.5 m. The number of finds in this layer and their proportions were similar to those in the upper layer.

The lower ash layer (fig. 2: 8) of the mound rested on the natural soil and is the initial phase of the mound construction. It appeared grey, consisting mostly of ash and sand particles, and had a very loose structure. It was the smallest in terms of area, with a thickness ranging from 0.1 to 0.3 m. The number of finds in this layer was significantly lower than in the previous layers, and animal bones were almost absent. Occasionally, layers of natural soil sand were identified underneath this layer, featuring traces of infiltrated ash from the upper layer or isolated fragments of charred clay or charcoal. These layers were not associated with human activity, but resulted from natural processes of layer diffusion.

The natural layer was composed of light yellow and yellow alluvial sand, with occasional streaks of light brown and light chestnut colours formed during the depositing of this layer. In some areas, there were inclusions of green and bluish sands, which were also linked to the geological history of the layer.

Due to the detailed and frequent stratigraphic recording, the extent of all layers within the excavation area was established (fig. 3). The lowermost layer of the mound (fig. 3: I) had the smallest area. Most likely, a larger portion of it extended to the eastern part of the mound, which remains uninvestigated. It's also worth noting a lens near the pit no. 3. The middle layer of the mound (fig. 3: II) covered the lower layer completely. An interesting feature is the discontinuity of this layer in the SW sector, though it reappears on the southern edge. Small lenses of this layer near the pit no. 2 are also intriguing. The discontinuity in this layer in the SW sector may be due to the specific nature of the construction or the fact that this feature emerged after the accumulation of the uppermost layer of the mound (fig. 3: III). Overall, it can be said that all layers have an irregular form, indicating the haphazard nature of their forming.

Features Description

At the level of natural soil several stains from pits became visible. Some of them, were found to have a natural origin, having traces of a fallen tree that had upturned its roots, mixing the soil in this area, or possibly animal burrows. Investigations of features nos. 5, 9, and 10 were postponed until the following year since they extended beyond the excavated area. The rest of the spots turned out to be pits from the Scythian period.

Pit no. 2 (fig. 3: 1) is represented by a feature dug into the upper ash layer. The pit had a depth of 0.4 m and lacked a distinct form. Notable finds include two fragments of spindle whorls, a clay artefact in the shape of a roundloaf, and a fragment of a clay vessel belonging to the Bondarykha culture. Washing was conducted for this pit, during which four beads were discovered.

Pit no. 3 (fig. 3: 2) was excavated from the upper ash layer, cutting across the middle ash layer. Interestingly, the latter terminated at the pit's walls, which likely indicates that the pit was dug at the edge of the middle ash layer. Of particular interest are a flint burin on a flake and a fragment of a black-glazed vessel. For this object, washing was also conducted, revealing 17 beads.

Pit no. 4 (fig. 3: 3) was also excavated from the upper ash layer. Notable findings are two fragments of a clay block, a fragment of a black-glazed vessel, two halves of belemnites of varying sizes, a flint flake, and fragments of Neolithic — Bronze Age vessels: Zrubna and Comb Ceramic cultures and Mali Budky type.

In summary, three features that turned out to be pits from the Scythian period were of similar size, but had diverse shapes. All of them were dug into the upper ash layer and featured a prominent black stain at the centre or along the edges. In terms of their construction, they all have numerous analogies at Scythian settlement sites, but do not belong to the classical cellar and likely represent different types of objects. Despite the discovery of Neo-

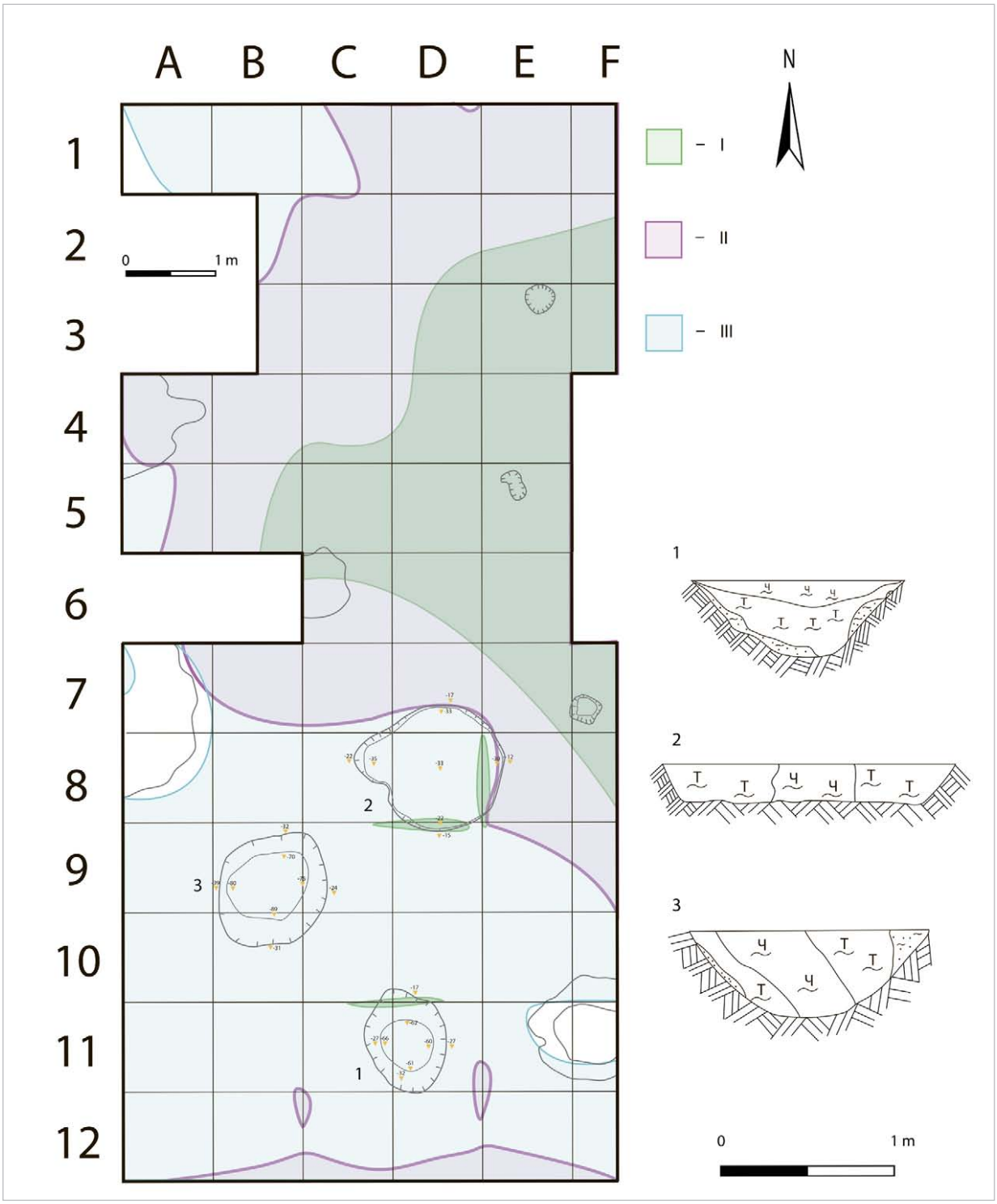

Fig. 3. Map of ashmounds distribution and pits: *I* — lower ash mound layer; *II* — middle ash mound layer; *III* — upper ash mound layer; *1* — pit no. 2; *2* — pit no. 3; *3* — pit no. 4

lithic-Bronze Age fragments, there is no doubt that these pits are dated to the Scythian period, and the earlier vessel fragments got mixed into it due to soil disturbance.

During the excavation, four features represented by concentration of ceramics were identified. The most interesting is feature no. 2 located in the unit C7. It contained numerous vessels fragments, three rims (two belonging to the same pot), one base resembling two rims, two pieces of quartzite, and a double-sided flint tool of the Bronze Age. This tool was found in the middle of two Scythi-

an period rims and base, strongly suggesting it entered this context along with the vessel, indicating its use by the Scythian period population.

Findings Description

In the course of the investigation, over 61693 artefacts were uncovered, resulting in an artefact density of 1054 per m^2. More than 99 % of the items for which cultural affiliation could be determined belong to the Scythian period. They can be roughly divided into two categories: diagnostic items, which were collected and carry specific informative value, and bulk artefacts, represented by small fragments of vessels, fired clay, etc.

Ceramic vessels are represented by few categories[9].

Bowls include 23 fragments, all of which have analogies in the Scythian Forest-Steppe. Among these fragments, three belong to the type 1 according to K. Yu. Peliashenko; three items to the type 6, variant 1, and one — type 2 (Пеляшенко 2020, с. 36-41). Most of the bowls are black-glazed and red slip, with only the type 2 represented by fragments of rough pottery.

Cups are represented by four fragments of profiled vessels with nipple-shaped projections. Such items exist in the early Scythian period, but may also belong to a previous period, given the presence of finds from the Bondarykha culture. Based on the wall thickness, they likely belong to two different vessels, although they share similar forms and decorations (fig. 4: 14). The closest analogies are known from the settlements Neporotove 2 and Kryvche in the Dnister River basin (Крушельницька 1998, рис. 8, 110).

Pot rims include 2372 fragments of vessels, with the majority being very small, making it impossible to determine their shape. The most representative vessel in terms of shape is the pot from feature no. 4, which was successfully reconstructed graphically to its full height (fig. 4: 13).

There are 678 fragments of pots' bases. Similar to the rim fragments, most of these are very small. However, they do not contradict the typical shape of Scythian pots.

Greek pottery is represented by eight fragments of amphorae. Six of them belong to the "proto-Thasian" amphorae (late 6th — early 5th centuries BC) (Bîrzescu 2012, p. 124). They were discovered compactly in the units E3 and E7, likely belonging to two separate vessels. Two more fragments were found together in the unit C7. One of these was heavily burned, making it difficult to judge its composition, but it is possible that despite their close proximity, these are fragments from different vessels. However, it is hard to determine their origin more precisely than "Eastern Mediterranean."

Other clay items include several main categories. First of all, it is fired clay fragments with signs of levelling of one or more surfaces. Such items are usually associated with altars or fragments of hearth. In this case, some of them indeed show signs of prolonged exposure to high temperatures, but not all.

Clay spindle whorls amount to a total of 40 complete items and fragments. They come in conical, oval, and nearly flat shapes. Of particular interest is one item with notches made in a circular pattern at the point of the greatest diameter.

Clay blocks are represented by fragments of items that share a common form and have traces of finger imprints and holes. Unfortunately, it was not possible to reconstruct the full shape of any of them.

Clay miniature art can be divided into several types. The first type consists of round-profile items in the shape of a mushroom cap. In both cases, these items have imprints from finger depressions on the bottom. The next type is disk-shaped items with clear fingerprints. The last type includes spherical items that partly have irregular holes made with a thin stick. Two clay beads were also found. One is complete, in the shape of a sphere with a diameter of 1 cm. The other is barrel-shaped, with a height of 5 mm and a diameter of 4 mm.

Bronze artefacts are represented by four items.

A bronze pin with a mushroom-shaped head (fig. 4: 1): This pin has five circular notches on the shaft. According to the typology of V. H. Petrenko, it can be classified as the second variant of the type 11 (Петренко 1978, с. 14). It's interesting to note that the morphology of this type suggests that this pin might have been cut and sharpened in antiquity. The location of the ornamented part of the pin, close to the tip, which is atypical for this type of pins, could indicate this possibility. The identical pin is known from ashmound 7 at the Bilsk hillfort. It also had a short and pointed stem. Here, it is dated the same as the "proto-Thasian" amphorae and was covered with a layer that was dated by the fragment of kylix to the end of the 6th — 5th centuries BC (Шрамко 2020, с. 255).

[9] In this article, only general data is provided since a separate article will be dedicated to the publication of ceramics from the ashmound.

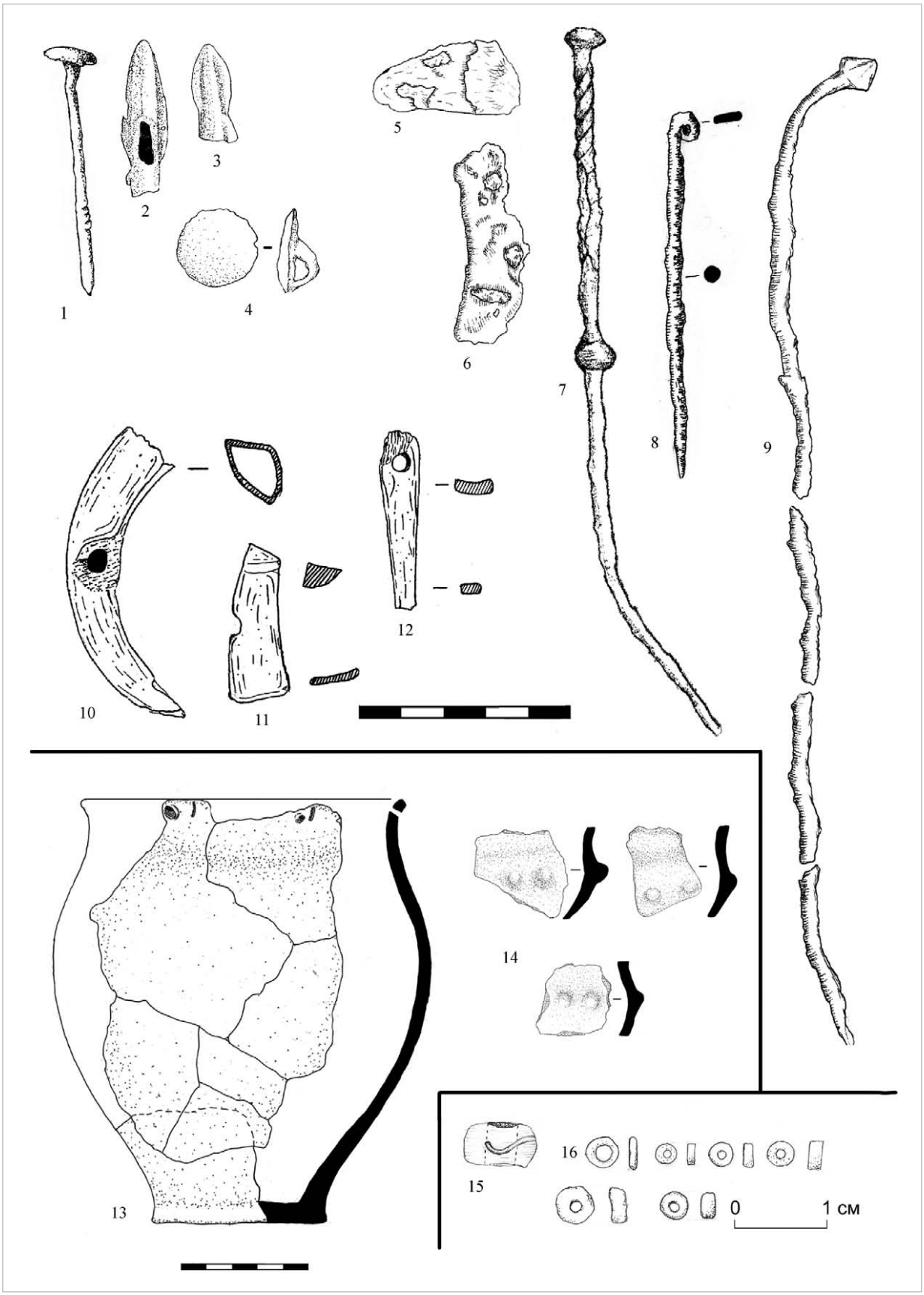

Fig. 4. Main findings of the Scythian period: *1—4* — bronze artefacts; *5—9* — iron artefacts; *10—12* — bone artefacts; *13—14* — pottery; *15* — a paste bead; *16* — beads made of minerals

A bronze round plaque with a foot (fig. 4: 4). Identifying this artefact is quite challenging. It might be a pinhead with the shaft bent inward after most of it broke off or a horse bridle part.

Two bronze arrowheads (fig. 4: 2, 3). Both of them belong to the double-barbed arrow type with a segmented tip. These types of arrowheads were common from the late 7th century to the early 5th century BC. They are most commonly found in complexes from the first half of the 6th century BC, for example, at the Repiakhuvata Mohyla (Гречко 2012, с. 20).

The are 15 **iron artefacts.**

An iron pin with a disk on the end and a support ring (fig. 4: 7). The handle (or the upper part of the pin) is made in the form of twisted wire. It belongs to the type 27 according to V. H. Petrenko. Similar pins have been found at the site near Cheremushna village (Либеров 1962, с. 80). Currently, only three pins of this type are known, and this is one of them.

An iron pin with a conical head with multiple faces (fig. 4: 9). The shaft was bent in Scythian times. The fragments were found nearby in the correct order, allowing them to determine the full size. This suggests that the pin was deposited in one piece and and broke into several pieces due to corrosion in the ground. It belongs to the second variant of the type 16. Most pins of this type were found at sites in the Siverskyi Donets region (Петренко 1978, с. 15). The closest analogies are known from the Liubotyn (Либеров 1962, с. 78) and Horodyshche hillfort (Шрамко 1998, с. 53).

An iron pin with a spiral head formed by twisting the round cross-section shaft (fig. 4: 8). According to V. H. Petrenko, these pins belong to the second variant of the type 21. This type of pins has a wide distribution area, and most of them were found at the sites of the Vorskla River basin and the Dnipro Right Bank Forest-Steppe zone (Петренко 1978, с. 18).

Amorphous iron objects resembling knife blades are severely corroded (fig. 4: 5, 6).

The remaining iron objects consist of amorphous iron rods and plaques, which are impossible to identify with certainty as belonging to the Scythian period.

Bone artefacts consist of five items, which are as follows:

A boar tusk with notches on both sides (fig. 4: 10). This item resembles an unfinished bit shank, which are known in Scythia (Шрамко 1973, рис. 8).

A boar tusk with a drilled hole (fig. 4: 11). The artefact is broken in half, but its shape can still be reconstructed, suggesting that it might have served as a bone clasp.

A bone needle made of the radioulnar bone of a small ruminant or pig, or the metapodial bone of a small ruminant (fig. 4: 12). The artefact features a hole in the upper part and traces of surface abrasion. The lower part of the needle is broken.

The rest of the items consist of calcified bone fragments that are unidentifiable.

Stone artefacts from the Scythian period are represented by beads of yellowish, greyish, and almost black colours (fig. 4: 16). These beads have a diameter of 3 mm and a height of 1 mm. A total of 30 such beads were discovered. While similar items are typically categorised as bone products, elemental analysis revealed that they are mineral-based, with minimal calcium content (Андрєєв 2023). Identifying the exact mineral source, of which these beads were carved, remains inconclusive at present.

Artefacts from other materials include black paste beads with a yellow wave in the centre (fig. 4: 15). Chemical analysis has determined that these are silicates with metal impurities. In the case of the yellow wave analysis, a higher lead content is noted, indicating a pigment source (Андрєєв 2023). Furthermore, amber beads were also identified as a category of artefacts. The FTIR analysis has determined the source of the amber to be of Romanian and Baltic types (Пихова 2023, с. 188). An interesting discovery is a cowrie shell with a worn upper edge, suggesting its use in jewellery. Additionally, attention is drawn to the identification of seven belemnites during the excavation process. Some of these may reveal traces of processing, such as drilling and shaping. Such discoveries are often found in areas near chalk deposits, which are located nearby. The terrestrial soil in the research area is of alluvial origin, so the accidental presence of belemnites in the cultural layer is highly doubtful. Therefore, for the time being, they are attributed as objects brought to the burial mound. The depth at which the majority of these objects were found indicates that this occurred no later than the formation period of the ashmound.

Based on the information provided above, the dating of the ashmound can be broadly constrained to the second half of the 6th century — the beginning of the 5th century BC. The presence of dou-

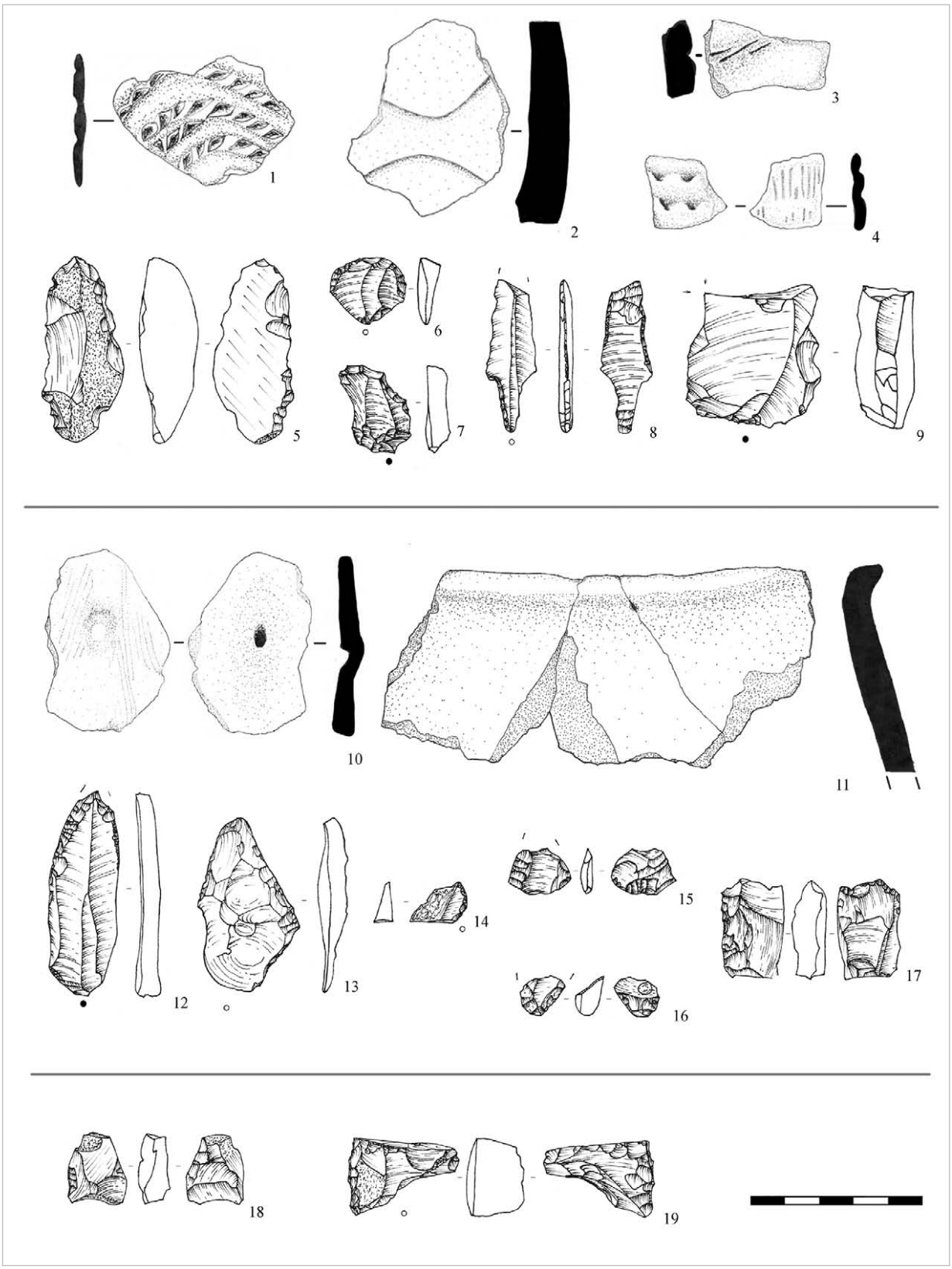

Fig. 5. Main findings of other epochs: *1—9* — artefacts of the Neolithic-Early Bronze Age; *10—17* — artefacts of the Bronze Age; *18—19* — artefacts of the Early Iron Age (flint drawings made by D. Stupak)

ble-edged arrowheads and relatively archaic pins possibly allows placing it within the 6th century.

Characteristics of Finds from Other Periods

The Flint Inventory comprises 54 artefacts, including those dating back to the Neolithic era, which include post-Swiderian points, burins, and scrapers (fig. 5: 5—9). From the Early Bronze Age, there is a fragment of an unidentified tool on a blade, along with probable fragments of tools made by using the bifacial technique (fig. 5: 12—17). These fragments likely correspond to arrowheads, spearheads, and a fragment of an implement, the surface of which, despite exposure to fire, still shows traces of work or tool usage. Artefacts from the Iron Age probably include flint for the strikers (fig. 5: 17, 18) (Ступак 2023).

A total of around 70 **ceramic items** from other eras were found.

From the Chalcolithic to the Early Bronze Age, 22 fragments of vessels were discovered. Most of them can be attributed to the Comb Ceramic culture. These fragments feature typical chaotic punctations and punctations made with triangular stamp, forming a fir tree pattern (fig. 5: 1, 3, 4). Identical materials are known from the neighbouring area of the Seim River (Белинская, Телиженко 2001). In terms of geographical proximity, the closest known sites are the settlements of Piskivka and Kurhan on the Psel River on V. I. Neprina's map (Неприна 1976, p. 11). Two vessels' fragments are ornamented with parallel wavy incised lines (fig. 5: 2). However, identifying their cultural affiliation has not been achieved yet.

Zrubna culture is represented by fragments with vertical rims, some of which are conical with a maximum diameter defined by the rim cross-section (fig. 5: 11). Several of these fragments seem to form two vessels, although they were found in different units. Identical pottery is documented in literature from the Myropillia-7 settlement (Гордієнко 2015).

Mali Budky type and Bondarykha cultures are introduced by 23 vessels' fragments with comb-stamping (fig. 5: 10). Sites belonging to this culture are also known in the vicinity (Гордієнко 2007).

Early Modern era consists of about two dozen fragments from smoke-blackened pots. These are likely connected to the village of Mohrytsia, located nearby, which was first mentioned around 1672 (Филарет 1857, p. 391).

Finds from Other Epochs in the Cultural Layer

One of the striking aspects, as observed from the description of the finds, is the presence of materials from different epochs within the filling of the ashmound and sometimes within the features themselves. In archaeology, it is well-documented that many sites show multiple layers, indicating habitation during various periods. However, in this particular case, we lack a representative sample for any of the period except Scythian. The minimal quantity of recovered material, primarily through sieving, is hardly sufficient to substantiate the presence of a permanent settlement. Therefore, questions arise regarding either short-term encampments or alternative means by which these finds entered the cultural layer. The first approach could be applied to a single culture, but here we observe the presence of materials from nearly all cultures known in the region.

Considering the aforementioned points, two explanatory models can be proposed. The first suggests that the abundance of materials points to the occasional loss of items on this territory, as full-fledged settlements of these cultures are known within a few kilometres' radius (Білинський, Потоцький, Ходукіна 2023, p. 23-26). The second model suggests the incorporation of around 80 items from different time periods into the Scythian-age complex due to their reuse during this period. This could explain the discovery of belemnites, which were often used for medicinal purposes (Пивоваров, Калініченко 2022, с. 409; Duffin 2008, p. 21-27; Kurasiński 2021). This is further supported by the discovery of bifacially processed flint tools directly within the remnants of Scythian-age vessels. These observations were made possible through systematic soil sieving.

What Is an Ashmound?

The primary question that we posed before commencing our research was to understand what an ashmound actually is. It was with this purpose in mind that we documented the mass finds and collected as much stratigraphic data as possible. Many researchers have proposed various models to explain what this type of site is (see: Русанова 1997, Пеляшенко 2017, с. 340). One of the most recent works that describes previous approaches and suggests a mixed approach (combining cultic and everyday objects) is the research made by O. D. Mohylov (Могилов 2021, с. 31-34). Without claiming to resolve this complex issue, we can provide our obser-

vations within the context of the site under our investigation.

Using the *contradictio in contrarium* approach, based on our research findings, we can outline what the ashmound near the village of Mohrytsia is not. The lack of the influence of fire on metal objects and most of the ceramics refutes the idea of a constantly burning hearth at this site. The minimal number of valuable items from Scythian times (~30), such as pins, arrowheads, beads, etc., with respect to the total number of finds (over 61000) unequivocally suggests that the mound was not constructed for the purpose of offering cult items in sacrifices.

As a result of our research, we recorded a significant number of mass finds. 76.1% of these consist of clay pottery fragments, while 13.8% are items of fired clay, 3% are bones, and 4.3% are fragments of quartz and other stones. This leads us to the conclusion that over 97% of the finds consist of domestic waste and trash. The bones, especially those with evidence of fire (32.2%), are particularly intriguing. This suggests that the majority of the ashmound content originated from household hearths where waste was discarded and then thrown away together with the ashes. There was no reason to burn broken vessels and some other wastes, so they were thrown away with ash and do not have traces of fire. Fragments of fired clay in this context appear to be remnants of hearth plaster or walls that continually crumbled and were discarded along with household waste. This is further supported by the chaotic formation of the mound, varying layer thicknesses at different locations etc. So, the mound was not constructed for a specific purpose; rather, it accumulated on the site of a refuse dump.

Therefore, our overarching idea is that the ashmound was primarily filled with household waste collected from around domestic hearths. At the outset of mound formation, it was primarily ashes, with significantly fewer artefacts. In the subsequent stage, ash remained prevalent, but a large amount of domestic waste was added. In the final stage, trash played the leading role in building up the layers.

A few words can also be said about the overlay of features by ashmounds and ashmounds by features. In the literature, there are assumptions that ashmounds were intentionally built over dwellings or household pits, which also applies to burials. In our case, all the examined objects were overlaid from the upper layer of the ashmound, or they cut through it, indicating the presence of pits formed after the mound's initial construction. Hence, it is conceivable that these pits resulted from the expanding settlement's activities, gradually reaching the area previously occupied by the ashmound. This approach can also be applied to overlaid dwellings or burials. As the settlement expanded, it covered the mound, or it receded, allowing new ashmounds to appear in the places of the old pits or dwellings. An analogous situation can be seen in the ashmound near Cheremushna village, where a regular Scythian 4th century BC burial was made in the mound of the 6th century BC ashmound (Либеров, 1962). It is not excluded that in this case, the later population entirely perceived the ashmound as a burial mound.

Ashmounds as a Mass Phenomenon and a Society Marker

Another conclusion stems from observations of other surveyed locations with ashmounds. While individual ashmounds are widespread throughout Scythia and beyond its borders, the tradition of constructing a large number of mounds closely associated with almost every settlement is distinctly linked to specific territories and time periods. A significant number of sites in the Vorskla River basin (Ковпаненко 1967, p. 51) and Siverskyi Donets River basins (Гречко 2010, p. 33) consist of settlements with ashmounds, where the latter are an integral part of the site complex. At the Siverskyi Donets, settlements with ashmounds comprise 39 % of the total number (Гречко 2010, с. 33-34). They are not isolated phenomena, as seen in three mounds at the Basivka hillfort (Болтрик, Фиалко 1995, с. 43) contrasting with their absence in the Sula basin or a single mound at the Motronyn hillfort (Бессонова, Скорый 2001, с. 16-29). Therefore, the presence of numerous ashmounds adjacent to settlements can be considered a consequence of a specific practice among certain population groups during particular periods within the heartland of Forest-Steppe Scythia. Currently, we are exploring similar clusters in the Psel River basin. All the locations with ashmounds are compactly situated to north-east of Sumy, each consisting of at least ten mounds. At the same time, such sites are not known in the rest of the Psel basin. This allows us to revisit the idea of distinguishing specific regions within the context of local variations of the Dnipro Left Bank Forest-Steppe (Білинський 2021). The compact clusters of settlements with dozens of ashmounds to the north-east of Sumy suggest the existence, in the late 6th century BC, of a distinct social group that had a common practice of building ashmounds, setting them apart from neighbouring societies.

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ЗОЛЬНИК СКІФСЬКОГО ЧАСУ БІЛЯ МОГРИЦІ: МЕТОДИ ТА РЕЗУЛЬТАТИ ДОСЛІДЖЕННЯ

Виявлені нещодавно зольники скіфського часу на Пслі не лише фактом своєї наявності, але й через надзвичайну насиченість знахідками мають чималий потенціал для дослідження, що дозволяє отримати велику кількість масового матеріалу з невеликої дослідженої площі. Задля досягнення максимальної ефективності дослідження зольника був розроблений комплексний підхід до його вивчення. Основною метою стала якомога точніша фіксація та орієнтація на масові знахідки. Для цього весь ґрунт просіювався, а деяка частина промивалася, максимально часто фіксувалася стратиграфія. У процесі розкопок відбиралися проби для вивчення за допомогою FTIR-спектроскопії. Для виробів із бронзи та частини репрезентативних вінець встановлювався хімічний склад за допомогою РФА. Крем'яний та остеологічний матеріал опрацьовували фахівці з відповідних епох та тем.

У процесі дослідження було виявлено понад 61 тис. знахідок, більшість яких представлена масовим матеріалом. Серед інформативних знахідок до скіфського часу належала колекція шпильок, стріл, виробів із кістки та каменю. Проте просіювання допомогло зафіксувати низку матеріалів інших епох — фрагменти посуду від доби енеоліту-ранньої бронзи до модерного часу та вироби з кременю.

Проведені зазначеними методами дослідження дозволили порушити кілька дискусійних тем. Передусім це цікавість населення скіфського часу до белемнітів, слідів життєдіяльності в попередні епохи та можливе повторне використання кременю. Іншою важливою темою є призначення зольників як типу пам'яток. Проведені дослідження дозволяють описати вивчений зольник як місце скидання попелу з вогнища та території навколо нього, уламків обмазки жител та вогнища, які постійно осипалися, та деяких побутових відходів. Остання тема стосується того, що поселення із зольниками можна розглядати як наслідок окремої суспільної практики, яка була притаманна не всьому населенню Скіфії, а окремим його групам в конкретні проміжки часу, що відкриває можливість для вивчення системи заселення.

К л ю ч о в і с л о в а: Лісостеп, доба енеоліту-бронзи, Скіфський час, крем'яні знаряддя, зольники, суспільні практики, соціальні процеси, система заселення, регіональний поділ скіфського Лісостепу.

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