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**PRELIMINARY RESULTS OF AN INVESTIGATION OF A SINGLE BARROW
NEAR THE VILLAGE OF SERTEYA (SMOLENSK REGION)¹**

ABSTRACT

A single burial mound is located on the right bank of the Serteyka River (north-western Russia). It was discovered by E.A. Schmidt in 1951 and is attributed to the Old Russian Period. New researches on the burial mound conducted in 2013 and 2014 have uncovered several diachronic constructions. The first stage was connected to a flint knapping site, which was located on a natural elevation. It can be attributed to the 6th millennium BC on the basis of the Early Neolithic pottery fragments found nearby. The next period is dated to the second half of the 3rd millennium BC, when a ritual platform was created. Moreover, on another mound, a ditch was created, which can be attributed to the Long Barrow Culture due to a ceramic fragment found there. Samples from burnt bones

and charcoal indicate that the first and second stages of this construction could be dated to between the middle and the second half of the 3rd millennium BC – the late stage of the Zhizhitskaya Culture of pile-dwellers and the initial stage of the Uzmenskaya Culture. Animal bones were cremated along with bronze items, as evidenced by the patina visible on the surface of the bones. Such a rite has been recorded for the first time. Furthermore, a ritual fire-place was set on a flat platform, and additional fire-places were situated on the slope of the burial mound. This complex, which can be interpreted as a site of worship from the Late Neolithic through the Early Bronze Age, existed for a long period of time. Nowadays, it is difficult to find analogies to such ritual complexes from

¹ The research was performed within the frames of the state order of the Zoological Institute RAS (no. 0125-2016-004).

the 3rd millennium BC from the territory of Poland and the Upper Dnepr region; only the kurgans and burial mounds of the Corded Ware Culture dating to the 3rd millennium BC are known. It might also be supposed

that some of the sites with such a sepulchral rite, usually attributed to the Long Barrows Culture, could also be ritual sites – this, however, would require further research.

Keywords: ritual site, burial mounds, pile-dwellings, Neolithic, Bronze Age, Long Barrows Culture, magnetometer prospection, archaeological geophysics, Zhizhitskaya Culture, 3D reconstructions

Site location

The single burial mound under discussion is located near the village of Serteya (Velizhsky district, Smolensk region) and was discovered by E.A. Schmidt in 1951. It was attributed to the Old Russian Period.² Three more burial mounds were discovered near this site before the mid-1950s – E.A. Schmidt described a kurgan group consisting of four burial mounds in that location.³ Active ploughing in this area led to the destruction of the majority of these mounds. Agricultural activity ceased in the beginning of the 1960s, and later a pine forest developed there. Due to, among others, particularities of the landscape, its location, or form of the mound, this kurgan was not included in the list of early-medieval sites.⁴

The site is located 1100 m to the south-east from the village of Serteya, on the right bank of the Serteyka River, on a sandy narrow neck 330 m wide, between two basins where lakes used to be located in the past (Figs 1–2).

The diameter of the kurgan measures *c.* 20.0 m along the S-N axis and 18.3 m along the E-W axis. Its height is *c.* 0.8 m, the upper part is flat and measures *c.* 8.0 m in diameter, the ditch is 1.5 m wide and 0.1 m deep.

Methods of investigation

Geophysical survey was performed with a magnetometer in the area and in the direct vicinity of the kurgan before the excavations. In order to reach the highest possible sensitivity, a reasonable speed of prospection, and to gain additional information on the enrichment of magnetic minerals in the lateral sedimentary layers, we chose the caesium total field magnetometer (Scintrex SM4G-Special). We adapted the instrument for the survey in the forest environment and set it to the so-called ‘duo-sensor’ configuration. In this mode, probes are mounted on a wooden frame and carried along a zig-zag path at the height of *c.* 30±5 cm above the ground. The profiles of the 40 × 40 m grids were oriented E-W in order to minimise the technical disturbance and

interactions of the magnetometer probes with the electronic parts and batteries of the device. The sampling frequency of the magnetometer (10 readings per second) enabled surveying a 40 m profile in less than 30 s, at the same time maintaining the spatial resolution of data sampling (10 measurements per second) of approximately 10–15 cm by normal walking speed. After each 5 m, in parallel to the magnetic data, a manual switch set a marker. This helped achieve the best and most precise interpolation of the data during the subsequent processing stage, where the slight linear changes in the daily variation of the geomagnetic field were removed by a reduction filter and the mean value was calculated for the 40 m profile. Additionally, we calculated the mean value of all data of the grid and subtracted this value from the survey data. Here, we assume that the variation in the intensity of Earth’s magnetic field during a measurement of one 40 m profile follows a linear increase or a linear decrease. Thus, it is possible to eliminate this variation for each traverse line by a reduction to the mean line value. Alternatively, in magnetically quiet areas, it is also useful to calculate the mean value of the whole 40 × 40 m grid and use this value for further data processing as described above. To create discrete field values, we applied a resampling program, setting the data to a sampling interval of 25 × 25 cm. Additionally, by using this procedure, the difference between the measurement of both the magnetometer probes and the theoretically calculated mean value of Earth’s magnetic field was obtained. This intensity difference revealed an apparent magnetic anomaly caused by the magnetic properties of specific subsurface structures, soil magnetism, and geology. The application of the Smartmag optical pumped caesium magnetometer in the duo-sensor mode allowed for setting a reference value, *e.g.* a virtual gradient of the Earth’s magnetic field, to infinity in order to enable the recording of the full intensity of the magnetic anomalies.⁵

The great advantage of this configuration (as compared to fluxgate gradiometers) is rather obvious. The resulting data provides not only a higher magnetic

² Schmidt 1982, 26.

³ Schmidt 1982, 26.

⁴ Eremeev 2003; 2015.

⁵ Fassbinder 2015; 2017.

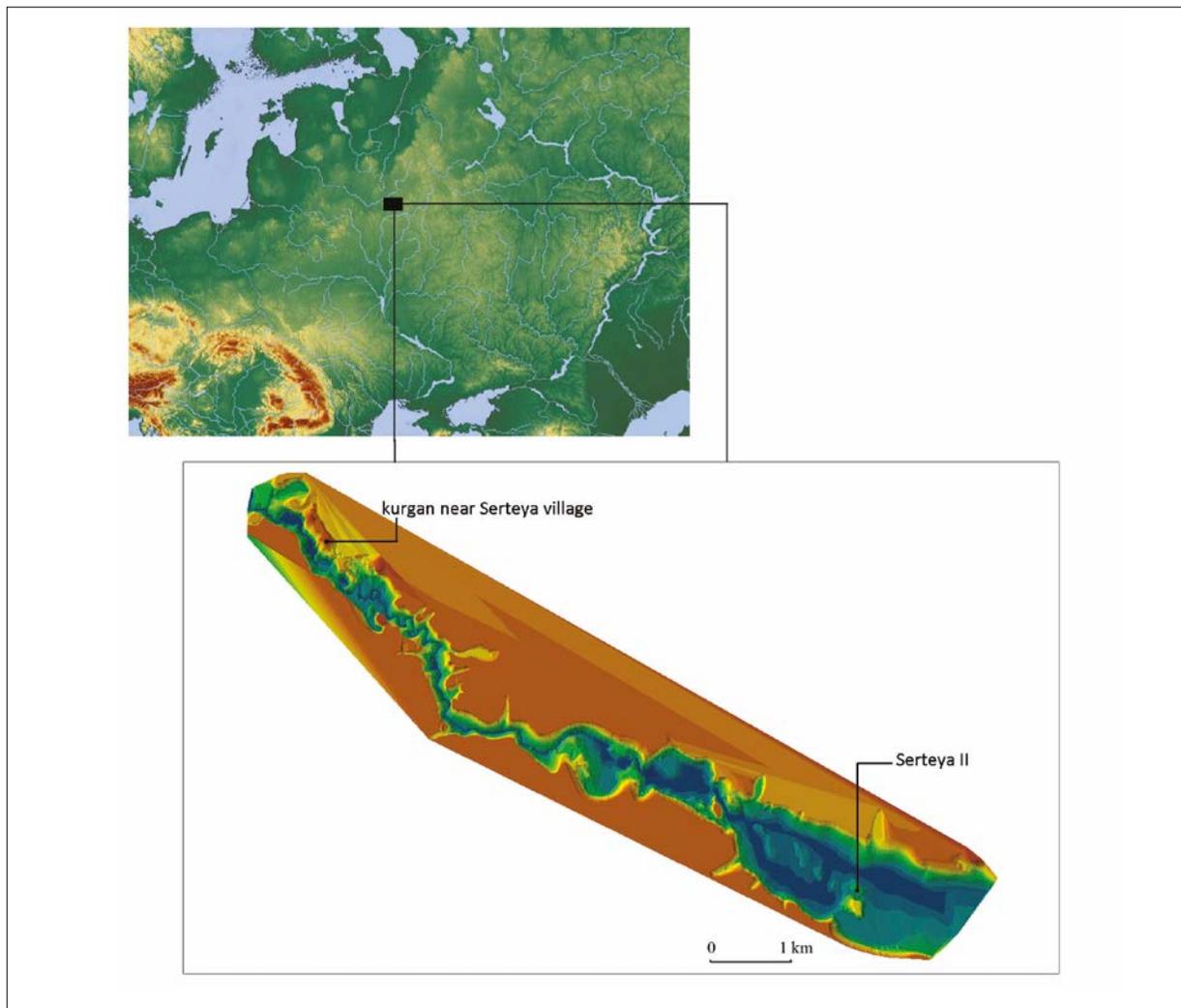


Fig. 1. Location of the single kurgan near the village of Serteya (north-western Russia) (compiled by E. Dolbunova).



Fig. 2. View of the kurgan prior to the excavations (photo by A. Mazurkevich).

intensity of the anomalies, and thus more information on the buried features, but also insights on the deeper parts of magnetically enriched layers, ash layers, palaeochannels, archaeological structures, and changes in depositional environments. The SM4G-Special magnetometer measures the total Earth's magnetic field intensity by an intrinsic sensitivity of ± 10.0 picotesla with a sampling rate of ten measurements per second. For comparison, the daily fluctuations of Earth's magnetic field in Serteya (07/2007) varied within the range of *c.* 52–250 \pm 20 nanotesla.

The data were stored as binary files on the read-out unit, then downloaded to a Panasonic Toughbook and unpacked to ASCII data. For image processing and further data treatment (resampling), we applied a special self-made software Resam2, as well as programmes Geoplot (Fa. Geoscan Ltd., UK) and Surfer (Golden Software, USA). The visualisation as a greyscale image (magnetogram) enabled tracing even negligible anomalies originating from the shade of slightly enriched sediment layers beneath the kurgan's surface. The application of a high-pass filter removed the deeper and predominantly geological features, and provided supplemental information on the type of the anomalies. The magnetometer measurements were complemented by magnetic susceptibility measurements of the topsoil and rocks on the site, which were conducted with a handheld magnetic susceptibility meter SM-30 by ZHInstruments.

The excavations of the kurgan involved 3D recording of all the finds. The analysis of the finds' distribution and their reconstruction were made in the AutoCad 3D software according to the code of each find. Also samples for geochemical, sedimentological, and radiocarbon analyses were taken during the excavations. The samples for the geochemical analysis were taken from each 50 \times 50 cm square from the kurgan's surface, including the identified features (*e.g.* fire-places or pits), and from each layer. Sedimentological analyses were applied to the main stratigraphical sections of the kurgan.

Results of the investigation

The ditch around the kurgan appears as a negative (white) anomaly because it was still preserved as a ditch and not backfilled with ashes or topsoil. The black/white dipole spot in the west of the kurgan turned out to be a modern piece of iron rubbish. The other inhomogeneity reflects an accumulation of finds, such as ash layers or a concentration of burnt bones in the south-western part of the kurgan. The ditch around the kurgan and a small passage in its south-western part can be clearly traced on

the magnetogram. Some anomalies of anthropogenic nature can be identified in the northern part of the mound (Fig. 3) and another one – in the southern part. The latter turned out to be traces of a burnt tree. Although we set the magnetometer to the highest possible sensitivity, and the height of the mound measured below one meter, we could not detect any clear traces of a burial chamber or other typical burial constructions, such as those found during previous research projects in a multitude of Scythian kurgans in the steppes of Siberia, Kazakhstan, and Caucasus.⁶

Stratigraphy

Several lithological layers traced in the burial mound reflect different stages of the mound's construction (Fig. 4). An upper yellow sand layer marks the third stage of the building works (Fig. 5). It is 40.0 cm thick in the central part and 60.0 cm – on the slopes. The upper part of the construction was cut in the past, and sand was moved to the slopes of the mound (fourth stage). During this last (fourth) stage, the mound was burnt, and the upper part of the kurgan was flattened (Figs 5 and 6–7.b). This fact can be testified by a grey-blackish interlayer of sand, which was abruptly cut under a modern layer of topsoil in the upper part of the mound. It is filled with charcoal. At the bottom of the yellow sand, a layer of ashy sand rich in charcoal was traced. The layer was 4.0–8.0 cm thick and measured 8.2 m in diameter (Figs 6–7.a and 8). This layer appeared when a big fire-place was set there and then backfilled after it burnt out (second stage). It is testified by small inclusions of charcoals and ash distributed above the ashy-sandy layer which may have appeared when an almost burnt fire-place was filled up (Fig. 7). The ashy-sandy layer was located on greyish-yellow sand 4.0 to 30.0 cm thick. This mound stretches for 10 m along the N-S axis and 9 m along the W-E axis. It represents the first stage of the mound's construction (Fig. 8). A lower dark yellowish sand layer 17.0 to 35.0 cm thick was recorded where Early Neolithic finds were uncovered (Fig. 9). The base layer was represented by light yellow sand (Fig. 10).

Parts of the construction

The ditch from which the yellow sand was taken for the final construction stage of the mound was partly covered with sand that accumulated after the flattening of the surface. It was 50.0 cm in depth, while in its south-western part a passage was preserved *c.* 2.1 m wide (Figs 5, 8). After a while, when the mound was constructed, small fire-places, which can be traced by lenses of reddish sand, were set in the ditch. These lenses (nos 1, 2, and 16–18)

⁶Parzinger *et al.* 2016.

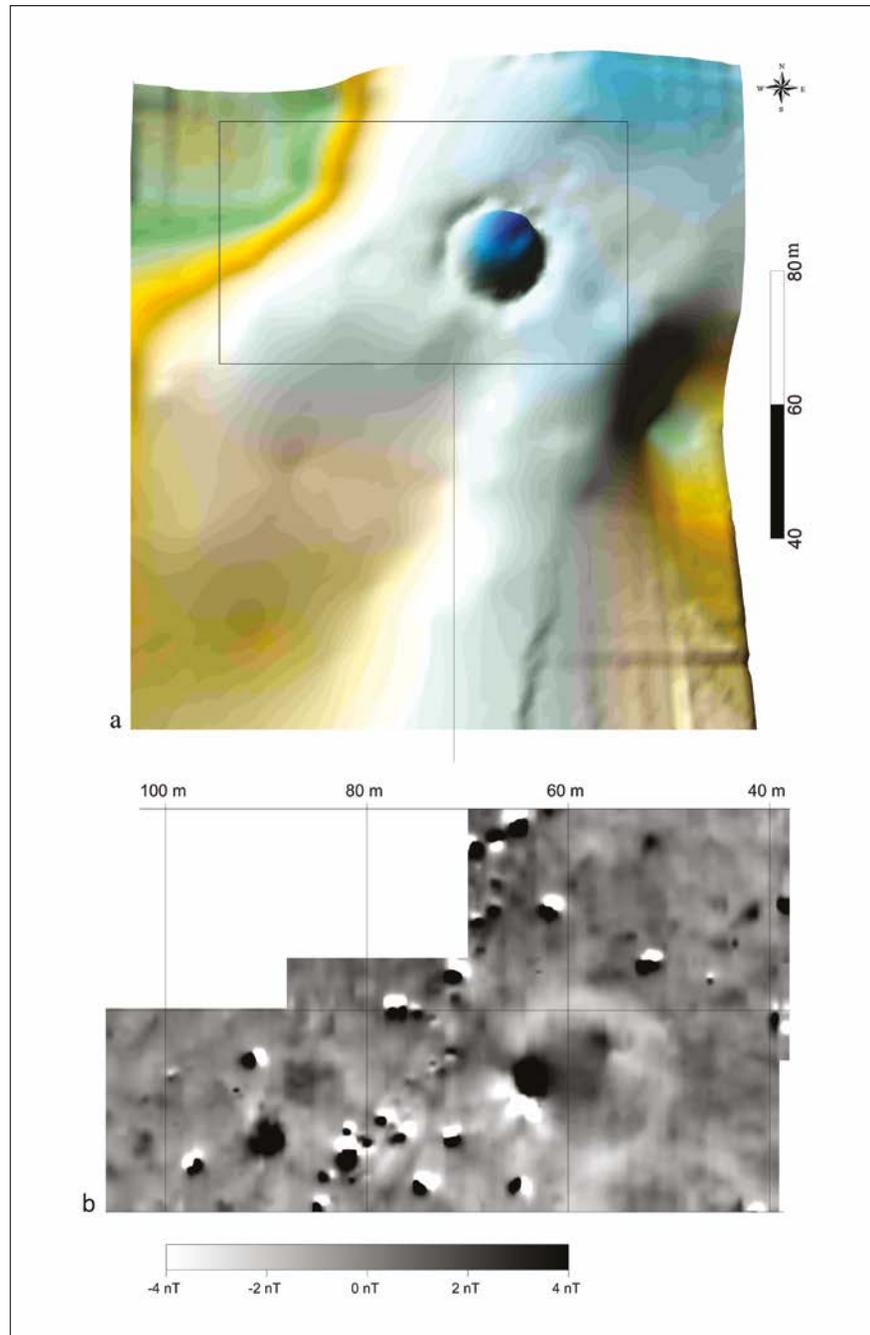


Fig. 3. Topography and magnetometry (a) elevation model and (b) a magnetogram of the kurgan and its surroundings (compiled by E. Dolbunova (a) and J. Fassbinder (b)).

were found in sectors A and D and in the northern part of the mound (Fig. 5). The biggest reddish spot no. 1 was located in its eastern part.

It was noted that when the ditch had been constructed, its inner part had slipped, and as a result a thin layer of ashy sand mixed with small charcoals could be traced below (Fig. 8). It appeared to be a part of an older ditch, from which earth was extracted to construct the mound located where the fire-place was set afterwards. The ditch was made *c.* 11.7 m in diameter and 1.3 m wide as a result of this mound's construction. There is

a passage in the south-western part that was preserved during the construction of the later mound. Oval spots of different diameters were traced on the slopes of the mound and on the outer surface of the ditch (nos 3–8 and 10). They were filled with reddish burnt sand 2.0 cm thick (Fig. 8). A pit no. 9 was traced in Square A/1–2 with a flat bottom, and it was filled with greyish sand and charcoals 3.0–6.0 cm thick. The charcoal from this pit was dated to 3485 ± 80 BP (SPb-1203). Under the ashy layer, there were found pits nos 11, 12, and 19. There, an accumulation of burnt bones 6.0 cm thick was found in Square B/II

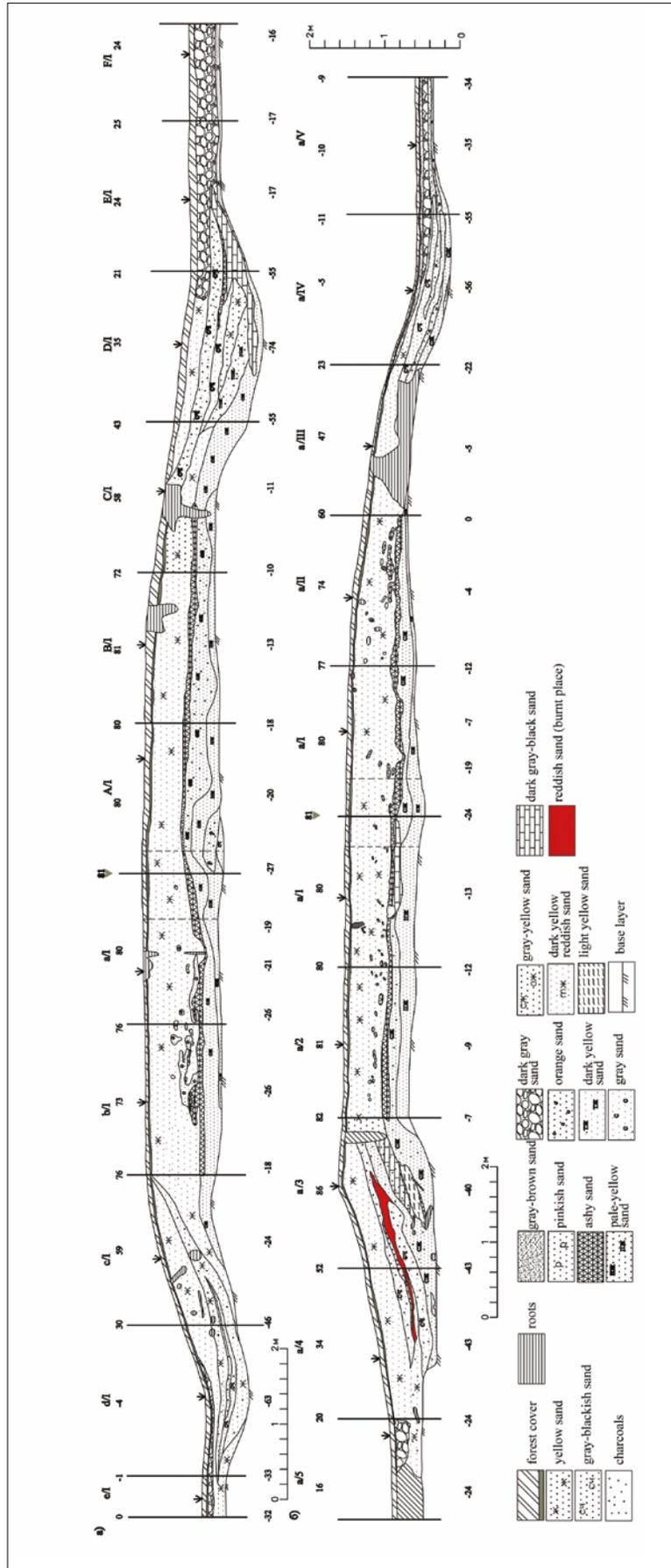


Fig. 4. North-south (a) and west-east (b) stratigraphy (drawing by E. Dolbunova and A. Mazurkevich).

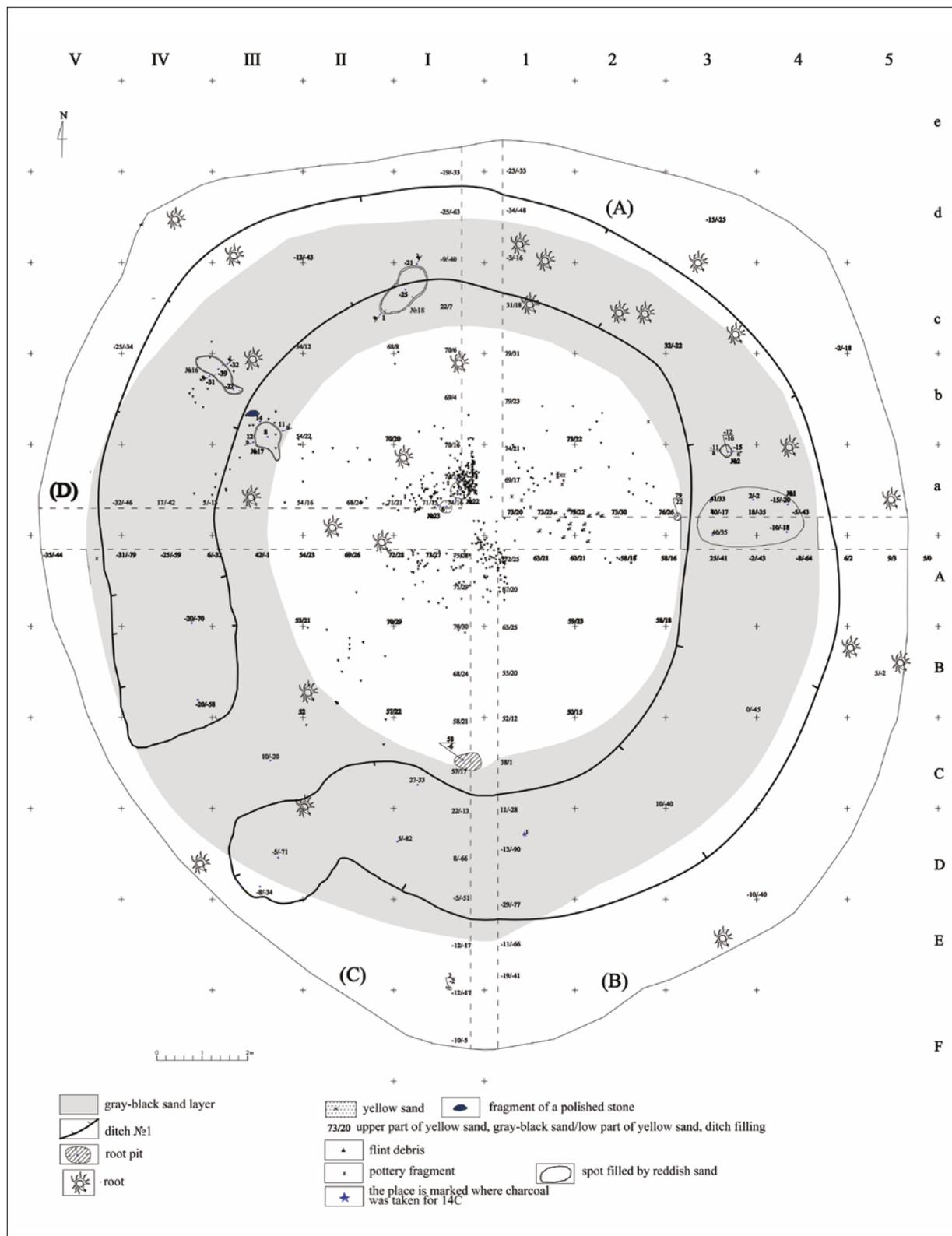


Fig. 5. Plan of the burial mound (third stage of the mound's construction) with the indication of burnt slopes marked in grey (fourth stage) (drawing by E. Dolbunova).

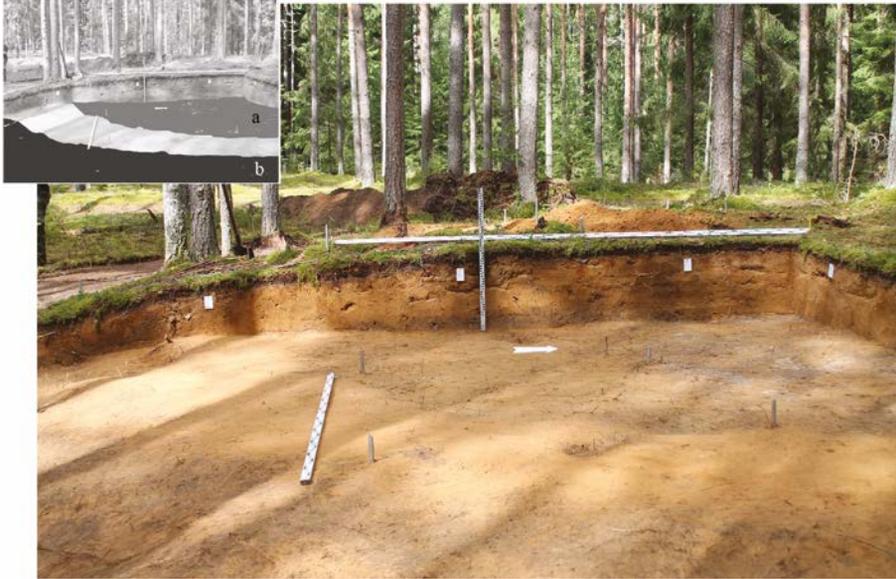


Fig. 6. Platform covered with ash in the central part of the kurgan (first stage of the kurgan's creation – a); slopes with traces of fire (fourth stage – b) (photo by A. Mazurkevich).



Fig. 7. Stratigraphy of the southern wall of Square a/1–4: ashy interlayer (first stage of the mound's creation – a); slopes with traces of fire (fourth stage – b); mound above the ashy interlayer with ash spots (c); burnt spot (d) (photo by A. Mazurkevich).

(Figs 8, 11). The dense and compact deposition of these burnt bones may testify that they were put in some container and then buried near the passage neighbouring the ditch (Fig. 8). The burnt skeletal remains are represented by calcined bones predominantly light-grey in colour and weighing 474 ± 16 gr (Fig. 11). Some of them, including fragments of bones with the articulation surface and inner part of diaphysis of long bones, are of black colour, which means that they were exposed to a lower temperature compared to the majority of the remains. Some of the bones were deformed. Different types of fractures were traced on the surfaces of the fragments: transversal, arc-shaped, or irregular. All these features

evidence that body with flesh, and not just bones, was burnt. Anatomical identification of the majority of the fragments is complicated. Their sizes fall below 4.0 or 5.0 cm, whereas most fragments do not exceed several millimetres. No parts of a human body were identified. Some of the bones were attributed to animal species, including a fragment of a thigh bone of an elk (*Alces alces*) and a fragment of a phalange with a partly preserved articulation surface. A micrometrical analysis conducted on one of the diaphyses of the long bone also testified to its animal origin. Between 30 and 35 Leeuwenhoek canals with a diameter not exceeding $20.0 \mu\text{m}$ were recorded within the area of 1.0 mm^2 . The determination of species was

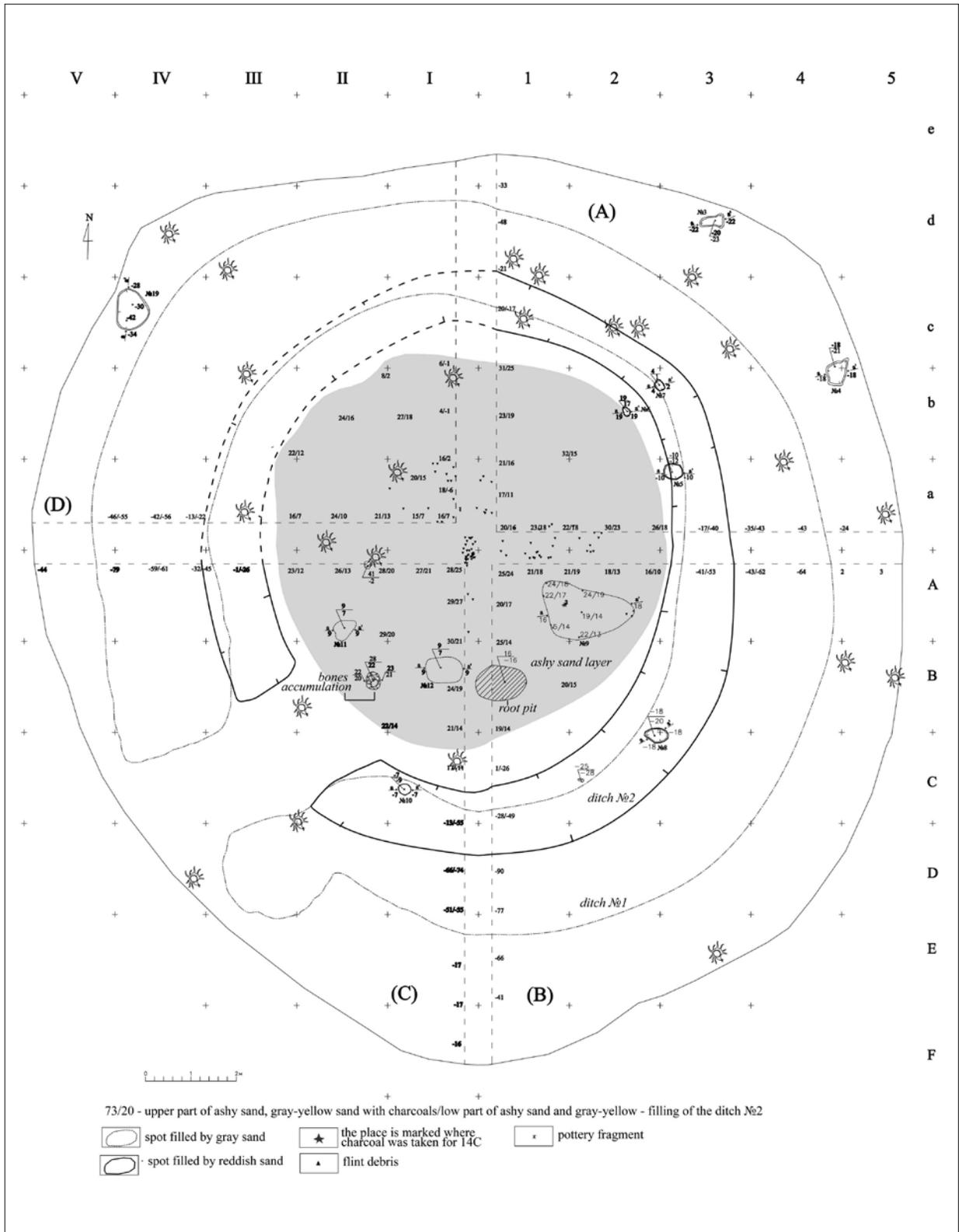


Fig. 8. Plan of the first stage of the mound's creation (drawing by E. Dolbunova).

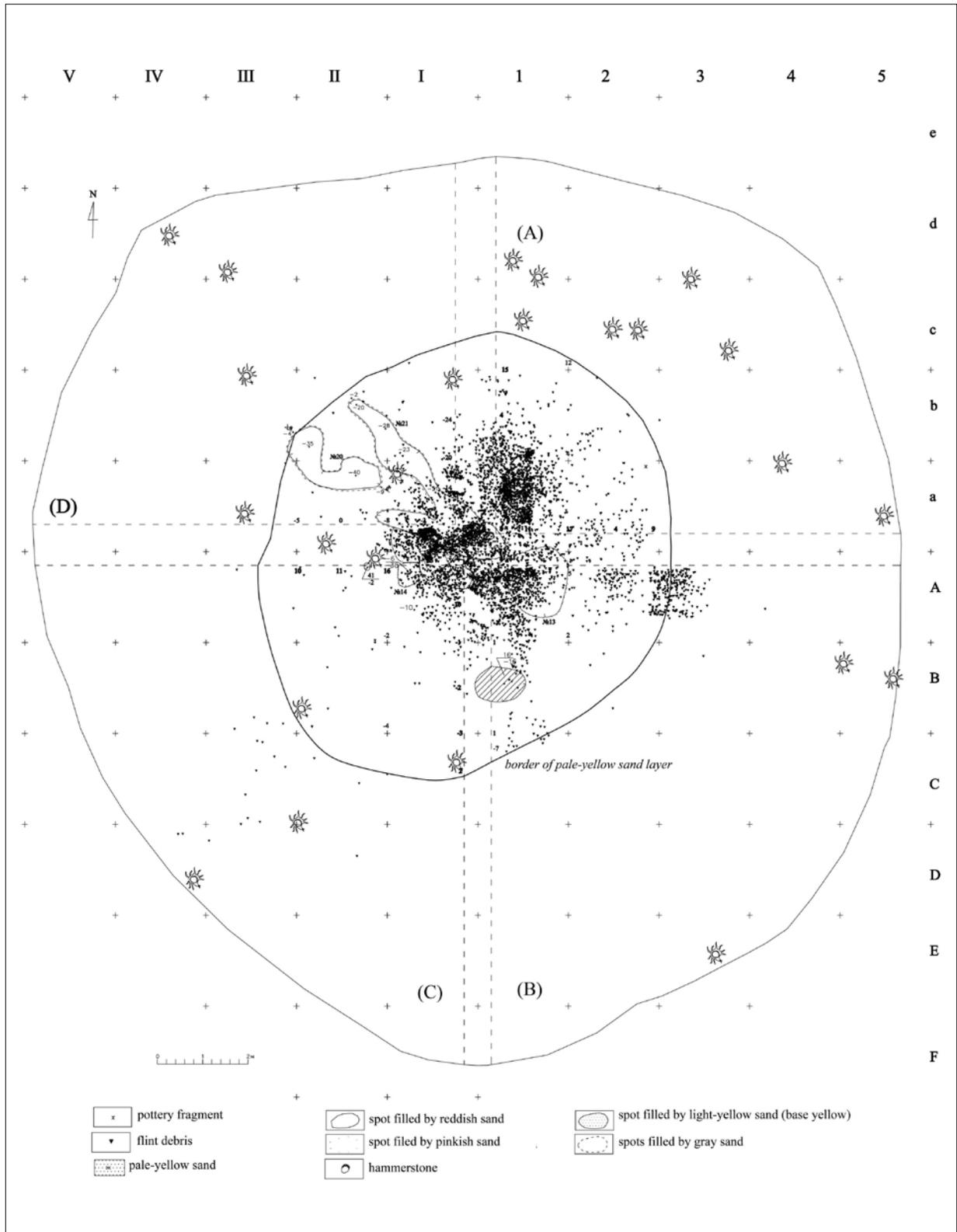


Fig. 9. Finds' distribution in the pale-yellow sand layer (Early Neolithic) (drawing by E. Dolbunova).



Fig. 10. Base layer of the kurgan (photo by A. Mazurkevich).



Fig. 11. Accumulation of burnt bones (photo by A. Mazurkevich).

based on micrometric features and cannot be regarded as unambiguous. However, for human remains the amount of Leeuwenhoek canals should be lower and the diameter higher than it was recorded.

Some of the bones were covered with a dark-green patina, which was identified in the Department of Scientific-Technical Expertise of the State Hermitage Museum as bronze oxides (Tab. 1).

The pits nos 13, 14, 20, and 21 were traced in a cultural layer below this construction, alongside an accumulation of flint debris (Figs 9, 12).

Chronology

Charcoals from different structures and burnt bones were dated in order to determine the chronology of different stages of the construction.⁷ The charcoals from the grey-blackish interlayer of sand were dated to 120 ± 25 BP (SPb-1196). Charcoals from the pit no. 1 date back to 3485 ± 80 BP (SPb-1203). The burnt bones were dated to 3743 ± 50 BP (SPb-1194).

⁷ Mazurkevich *et al.* 2013.

Tab. 1. Results of XRF analysis of green residue on the surface of burnt bones (prepared by S.V. Khavrin).

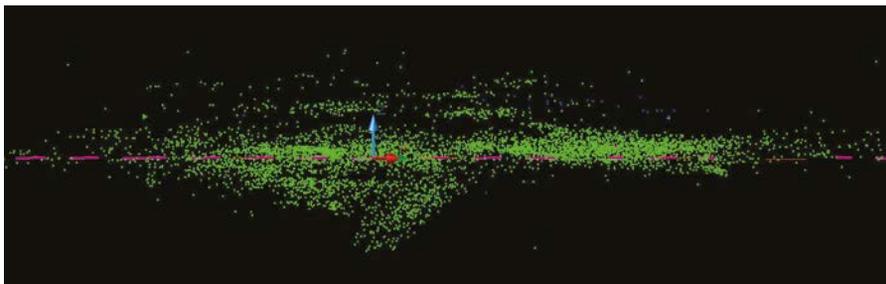
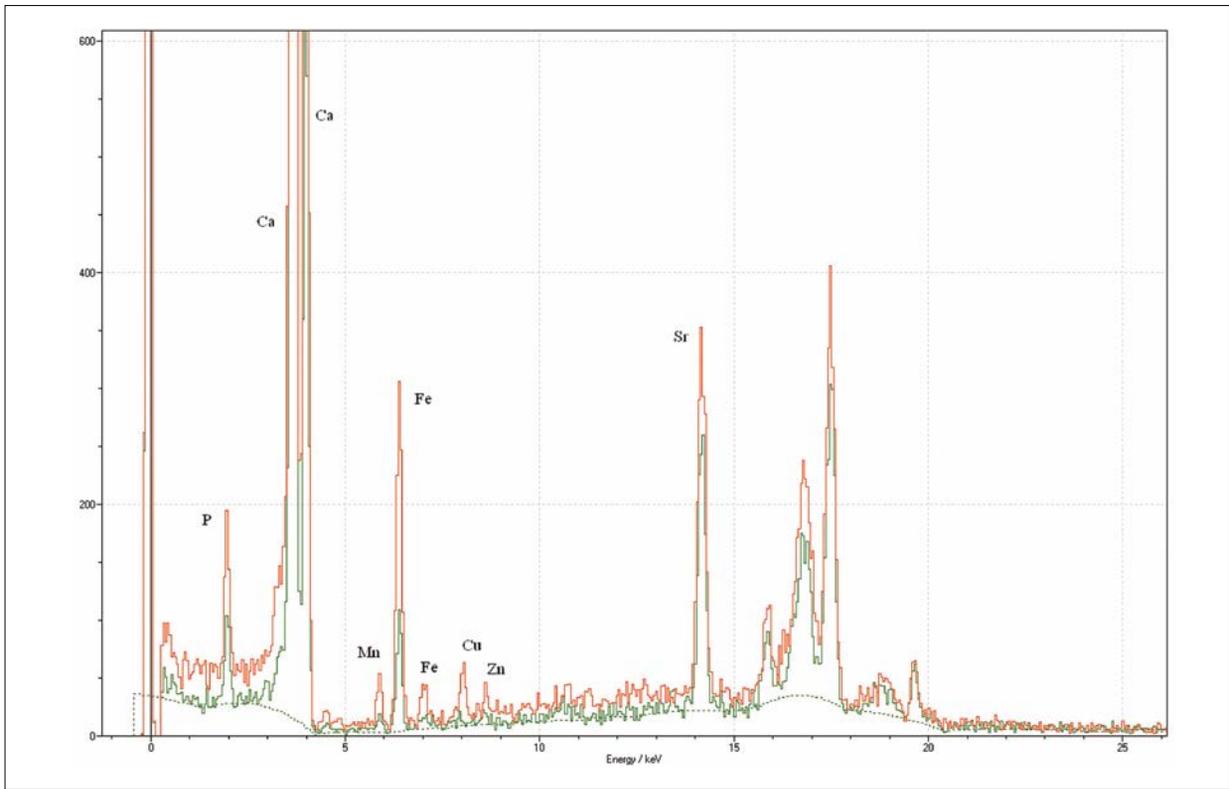


Fig. 12. 3D reconstruction of the finds (flint artefacts marked with green dots; pottery fragments marked with blue dots) (compiled by E. Dolbunova).

Artefacts' description

A potsherd attributed to the Long Barrows Culture was found in the south-eastern sector, in dark-grey sand (Fig. 13.10). This find may date to the final stage of this construction. The flint artefacts and pottery fragments which were found in the burial mound were taken from a cultural layer destroyed during the creation of the mound. A part of the cultural layer not destroyed was traced in the central area. The flint artefacts include 3348 chips, 397 flakes (including technological flakes, as well as numerous rejuvenation edge flakes), 1341 flint fragments, 471 flake-blades, 465 blades and 114 blade fragments, 156 microblades, and two cores (Fig. 13.7). The particularities of the raw flint material testify that nodules of different raw materials were processed there.

Also a few tools were found: a fragment of a flake tool (Fig. 13.2), a fragment of Swiderian-like arrowhead made from a blade (Fig. 13.4), a willow-leaf arrowhead with the edge retouched with a ventral flat retouch (Fig. 13.3), a blade fragment with a marginal retouch, a scraper made from a blade flake (Fig. 13.1), a scraper made from a massive flake, a notched blade tool (Fig. 13.5), as well as a fragment of polishing plate and a hammer stone (Fig. 13.6). These artefacts were found mostly in the central, highest part of the site in Square a-A/I and nearby.

Fragments of four vessels that can be attributed to the Early Neolithic (Sub-Neolithic) were found. The total of 27 fragments were parts of four vessels: the first decorated with horizontal rows of quadrangular impressions

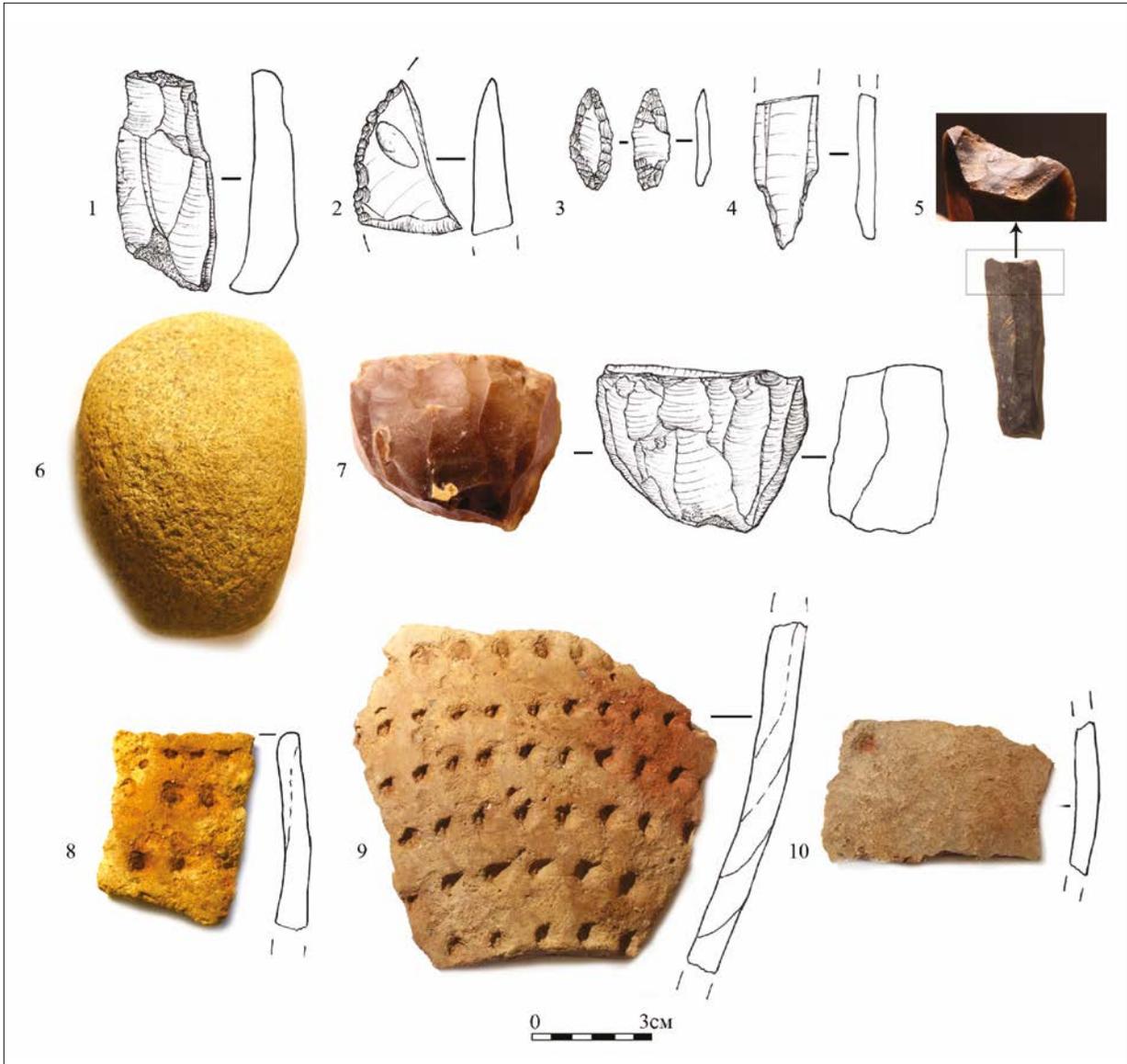


Fig. 13. Flint tools (1, 2, 5), arrowheads (3, 4), core (7), hammer stone (6), and pottery fragments: the Early Neolithic (8, 9) and the Long Barrows Culture (10) (drawing and photo by E. Dolbunova).

(Fig. 13.8–9), the second – a fragment decorated with roundish impressions, the third – fragments of a vessel tempered with organic admixtures, and the fourth – potsherds decorated with thin incisions. The Early Neolithic vessels were made from paste tempered with sand and small amounts of organic components and show the use of N-junction coils as well as traces of polishing on the outer surfaces and often scratching on the inner surface. The first vessel decorated with quadrangular impressions can be dated to the 6th millennium BC and is attributed to Ceramic Phase ‘b-4’.⁸

Sedimentological analysis

Soils buried under the kurgan do not differ a lot from their surroundings and can be classified as sandy sod-podzol soils. Several horizons can be distinguished: humic – A1, 10.0 cm thick, light coloured with a considerable amount of charcoals; podzol (eluvial) – E (depth 10.0–30.0 cm), pale-yellow sand with flint artefacts; Bf horizon divided into Bfe (depth of 30.0–50.0 cm, reddish sand) and Bff (50.0–100.0 cm; pale-yellow sand with pseudofibre; thin, dark-brown, wavy, dense interlayers) (Fig. 14).

⁸ Mazurkevich *et al.* 2013.

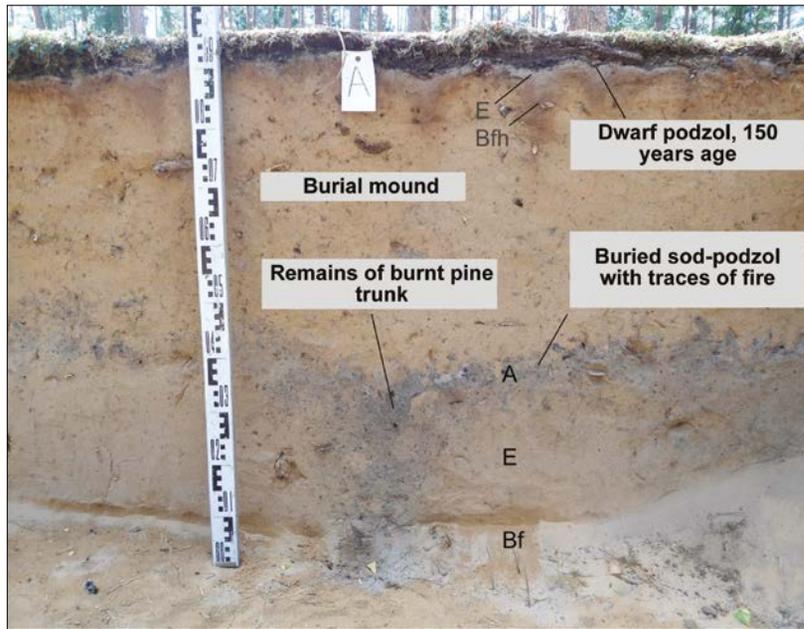


Fig. 14. Buried soils with their identification (photo by A. Aleksandrovsky).

Tab. 2. Wood species of charcoals.

<i>Location</i>	<i>Quercus</i>	<i>Pinus</i>	<i>Picea</i>	<i>Coniferae</i>	<i>Bark</i>	<i>Not identified</i>
Accumulation of bones, sq. A/I	5					
Pale-yellow sand (Neolithic site)				40		
Grey sand – filling of the low ditch		5		8		1
Spots with reddish sand		8		14		1
Grey-black sandy layer		1	1?	20	1	5

The surface of the kurgan was flattened rather recently. This is testified by the soil which formed on the upper part of the kurgan – the dwarf podzol. Several horizons can be distinguished in its profile under the forest cover: E – 0–1.0(2.0) cm, greyish-white sand; Bfh – 1.0(2.0)–4.0 cm, greyish-brownish coloured with wedges up to 15.0–20.0 cm, more compacted in the wedges; C – 4.0(20.0)–50.0 cm, pale-yellow sand (kurgan mound) with patches of humus and eluvial horizons of the primary soil which was put into the burial mound during its construction. Such soil with a thin profile forms for 150–200 years. Thus, it may be suggested that there was no ploughing conducted on this kurgan in contrast to the others, and the forest was preserved during this period of time.

High concentration of charcoals in its upper humus horizon is a particular feature of buried soil. All the features described indicate that the kurgan appeared after a forest fire. The remains of a black pit left by a burnt-out

trunk (squares A1–A2) were recorded, its base being more than 40.0 cm deep under the surface of the buried soil.

The soil under the burial mound is classified as sod-podzol, with no features of a well-developed humus horizon, especially dark-humus horizon AU. This might constitute evidence that this soil was formed in conditions similar to the modern ones. Intensive diagenetic processes are typical of sandy soils and are often accompanied by the degradation of the humus horizon. Atmospheric moisture penetrates easily into sandy burial mounds; along with good aeration, it favours high microbiological activity and the destruction of the humus substance. That is why we cannot exclude more intensive development of humus horizon in the soils during the discussed time-period.

The charcoal species determined also enabled an attempt at the reconstruction of the surrounding forest cover as it was in the past (Tab. 2). We may suggest that, like nowadays, so during the Neolithic, pine forests grew

on sandy soils. Forest stands are different in the Serteyka River valley, where broadleaved forests dominated during the Neolithic.⁹ The charcoals found in the accumulation of burnt elk bones located in Square A/1 are completely different. They may have been brought there either with burnt elk, as wood species from the banks of the Serteyka River located approximately 700 m away, or from the southern part of the post-lake basins where broad-leaved forests grew and where a long-term pile dwelling is known to have existed (Serteya II).

Discussion

Chronological sequence of different construction stages can be reconstructed based on the above-mentioned results. The local landscape is characterised by hilly fluvio-glacial surfaces. Tops of these hills were used as seasonal camps or flint knapping sites during the Early Neolithic (Sub-Neolithic). One of these elevations located at the foot of the burial mound was inhabited and used for flint knapping, and may have been in use several times. The flint debris was deposited predominantly on the platform on a natural elevation and in two pits. Also, fragments of pottery attributed to the Early Neolithic were left there, which allows for dating these events to the 6th millennium BC.¹⁰ A soil layer was formed above this cultural layer, as represented now by a buried sod-podzol.

In the middle of the 3rd millennium BC (3743±50 BP [SPb-1194]), this natural elevation was chosen for a sepulchral construction and a mound *c.* 10.0–11.0 m in diameter with a flat top platform about 8.5 m in diameter. Sand was obtained locally, and thus the ditch *c.* 1.3 m wide with a passage in its south-western part appeared. The probable height of this construction was around 0.35 m above the surface, and it had the form of a truncated cone with entrance in the south-western part. Then, a cremation burial, which consisted of burnt animal (probably elk) bones, was placed on the site. The remains were put in some container with, probably, bronze items and buried near the bottom in the south-western part of the mound, near the entrance. The bones were accumulated within one spot; the whole accumulation of bones was 5.0 cm thick and had a round section. Fragments of oak charcoals among the cremains suggest that the cremation was performed in a different micro-region or in the southern part of the Serteysky micro-region where broadleaved forest grew. Such an area of broad-leaved forests, including oaks, may have been located 6 km to the south, where synchronous settlements (Serteya II) were also recorded. Anthropogenic activity was conducted on the platform and is traceable through

the remains of pits, which may be synchronous to this event or have been left later. Sometime afterwards, soil formed on the surface of the mound and the forest encroached. It is important to note that no flint artefacts were found in the thin interlayer around 5.0 cm thick. Instead, these were found in the above-lying and underlying layers (Fig. 12). This suggests that the initial mound was made from pure sand, brought from outside the borders of the Early Neolithic cultural layer.

The platform was burnt *c.* 3485±80 BP (SPb-1203), and, afterwards, the fire-place was covered with sand. It is marked in the modern profile by a buried sod-podzol with traces of fire. During this stage or just before the time when the platform was burnt, fires were started periodically, leaving burnt spots both on the slopes of the mound and beyond the ditch. The slope slide and the remains of fires were partly deposited on its bottom part and in the inner part of the ditch.

Afterwards, a mound with a conical form was created, and the construction height reached *c.* 1.3 m above the surface. Small fire-places were made after the mound was constructed, and these left lenses of reddish burnt sand recorded in the northern part. The biggest lens (no. 1) was located in the eastern part of the ditch. It is complicated to date this construction phase precisely. In the light of the stratigraphical and sedimentological data, the mound was made somewhat later, when the big fire-place on the platform was covered with sand, as soil did not form above this level. The spatial distribution of the flint artefacts in the mound shows that they were lying within several horizons. It indicates that either the mound was erected in several stages, or it was periodically renewed. However, it may also be evidence that the earth was taken from different places near the construction site and the Early Neolithic cultural layer was periodically destroyed.

The mound may have been used during the time of the Long Barrows Culture, as suggested by a pottery fragment found in the ditch. Remains from this time-period may have been located on the top and destroyed during subsequent reconstruction.

During the last construction stage, dated to the end of the 19th century, the mound was burnt, a flat platform *c.* 8.0 m in diameter was created, and the ground was put onto the slopes (Fig. 3). Then, after this last reconstruction, podzol soil formation started to develop on the top of the kurgan.

Conclusion

The sites of this type are usually attributed to the Long Barrows Culture. However, our research has made

⁹ Aleksandrovsky 2014.

¹⁰ Mazurkevich *et al.* 2013; 2016.

it clear that such constructions represent much more complicated events. The dating obtained from the burnt bones and different charcoal samples shows that one of the construction stages could be assigned to the mid- or the second half of the 3rd millennium BC and thus could be synchronous with the late stage of the Zhizhitskaya Culture or the beginning of the Uzmenskaya Culture. It is the first time when such a rite was recorded – remains of animal bones (elk) buried in a container with some bronze items. Based on radiocarbon dates, this complex can be interpreted as a ritual site from the Late

Neolithic through the Early Bronze Age which was in use over a long period of time. It has proven complicated to find any direct synchronous analogies to this complex. So far, in Poland, burial mounds of the 3rd millennium BC have been known only from the Corded Ware Culture sites, while in the Upper Dnepr region – from the Middle Dnepr Culture.¹¹ On the other hand, we may suggest that some of the sites with a similar burial rite previously attributed to the Long Barrows Culture may also contain remains of such ritual constructions, which can presumably be evidenced by future researches.

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¹¹ Kryval'cevic 2006; Jarosz *et al.* 2016.