

RESCUE EXCAVATIONS OF BRONZE AGE BARROWS IN VETRINO REGION, NORTHEAST BULGARIA

Stefan ALEXANDROV^a, Vladimir SLAVCHEV^b, Eva TONKOVA^a

^a National Archaeological Institute with Museum – Bulgarian Academy of Sciences, Sofia; e-mails: stefanalexandrov@abv.bg, e.n.tonkova@gmail.com

^b Varna Archaeological Museum; e-mail: vladosl@yahoo.com

Keywords: Lower Danube, Bronze Age, barrow graves, Yamnaya culture, Usatovo culture, Zhivotilovka group

Abstract: The aim of this study is to present the results of the rescue excavations of three Bronze Age barrows in Vetrino region, Northeast Bulgaria. Fourteen Early Bronze Age graves (4th–3rd millennium BC), two of Middle Bronze Age date (first half of the 2nd millennium BC) and one Late Bronze Age grave (second half of the 2nd millennium BC) were excavated in the region in 2020. The majority of the Early Bronze Age graves were relaxed hocker inhumations dating to the periods 3100–2900 calBC and 2900–2600 calBC. Their nature, characteristics and relationship to contemporary burials in other regions to the north and west are discussed. The dating of 2000–1500 calBC period of the tightly-contracted hocker inhumations from Northeast Bulgaria is argued as well.

Cuvinte-cheie: Dunărea de Jos, epoca bronzului, morminte tumulare, cultura Yamnaya, cultura Usatovo, grupul Zhivotilovka

Rezumat: Scopul acestui articol este prezentarea cercetărilor arheologice de salvare desfășurate în trei tumuli atribuiți epocii bronzului în regiunea Vetrino din nord-estul Bulgariei. În 2020 au fost cercetate în această regiune 14 morminte atribuite epocii timpurii a bronzului (mileniile IV–III î.Hr.), două epocii mijlocii a bronzului (prima jumătate a mileniului II î.Hr.) și unul atribuit epocii târzii a bronzului (a doua jumătate a mileniului II î.Hr.). Majoritatea mormintelor conțineau indivizi în poziția chircit pe o parte, atribuite perioadelor 3100–2900 calBC și 2900–2600 calBC. Sunt discutate tipul lor, caracteristicile și relația lor cu morminte contemporane din alte regiuni la nord și vest. Este pusă în discuție și datarea unor morminte cu indivizi în poziția chircit puternic în perioada 2000–1500 calBC din nord-estul Bulgariei.

In 2019–2020, a large scale campaign of archaeological rescue excavations along the expansion of the gas-transmission infrastructure of the “*Bulgartransgaz EAD*” company in North Bulgaria was carried out, led by the National Archaeological Institute with Museum – BAS. During these two years, more than 120 archaeological sites dating from the Neolithic to the Late Medieval periods were explored¹. Five of the sites investigated were Bronze Age barrows located in Northeast Bulgaria, three of them were in the region of Vetrino (Pl. I).

Vetrino is located in the center of the closed hilly valley of the Zlatina River. The north–south and the east–west axes of the area are approximately equal – about 15 km. The valley has an easy slope from northwest (highest point about 300 m above sea level) to southeast (lowest point – about 50 m). It was formed on Lower and Upper Cretaceous marls and limestones, covered with a thin stratum of loose-textured soils. Today, the lands are almost completely arable, but in the past they were covered with grassy vegetation. The climate is humid continental, with relatively cold winters and warm summers. The Vetrino landscape is characterized by numerous Early Bronze Age (EBA) barrows, their number exceeding one hundred. The barrows themselves are

organized in extensive necropolises (Pl. II). The region itself is situated on the road that connects the northeastern part of the Lower Danube area to Thrace through the passes of the eastern Balkan range. It became of particular interest for studying the EBA mortuary practices after the excavations of the barrow necropolis near Belogradets, carried out by Goranka Tončeva in the 1970s, and the publication of the stone anthropomorphic stela from Nevsha, both situated in the immediate western vicinity of the barrows investigated in 2020². Finally, the region is connected through the water catchment of the Provadiyska River (Pl. I/2) to the well-known Varna lakes submerged prehistoric settlements³. All these particular elements of the archaeology of the region made the authors wish to publish as soon as possible the results of the investigations, hoping that this will contribute to a better understanding of the mortuary practices, cultural identity and relationships of the people that lived in the northeastern part of the Lower Danube region during the 4th–2nd millennia BC.

As mentioned above, three barrows with a total number of 17 Bronze Age graves were investigated in 2020. The features discovered will be presented in geographical order from west to east as follows:

¹ Popov 2020.

² Tončeva 1978; 1980; 1981b.

³ Tončeva 1981a; Roman *et alii* 1992.

VETRINO, NECROPOLIS 1, BARROW 34

This barrow was part of a necropolis consisting of more than 30 barrows arranged on the top of the hills west of the Vetrino and Sredno Selo villages (Pl. II). Nowadays, all the barrows are located on the agricultural areas and have been regularly ploughed with heavy machinery for decades, which has considerably enlarged their diameters and reduced their height. The latter varies from 0.10 m to 3.5 m. The barrows are arranged in a curved line following the ridge of the hills, with a total length of circa 4 km. Barrow no. 34 had, before the excavations, 0.40 m in height and 35 m in diameter (Pl. III/1; IV).

The barrow and its surroundings were completely investigated⁴. Four features were discovered, all dating to the Bronze Age. Feature no. 2 is the primary one, located in the central part of the barrow. Here, a modern-day, possibly treasure hunters' pit of 3 × 2.5 m was discovered cutting into the structure (Pl. V/2; VII/2). This pit had almost completely destroyed the upper part of the grave facility. It was a rectangular pit with steps; its upper part was observed at -1.32 m from the Central Point (CP). The preserved depth of the pit is 1.56 m. In that area, above and around the grave pit, a large quantity of medium- and large size stones was discovered (Pl. V/3–5; VI/1–2; VIII/2). Such stones were found in the grave pit itself to the depth of -2.80 m from the CP. The grave pit had, probably, two steps - the upper one had been destroyed by the treasure hunters' intervention (Pl. VI/3–4; VIII/1). This assumption is supported by the shape and dimensions of the dug-out space which was left when the virgin soil was removed from the grave pit (Pl. V/3; VIII/2). One can speculate that, the same as in Vetrino-3, Barrow 1, grave 1 (Pl. XVIII/1–2), the middle pit had been covered with stones that had then been relocated by the modern activities.

The scattered bones of a 9–10 year old infant⁵ were found at the bottom of the grave pit. The bones were not articulated, but the lower limb bones were found in the western part of the pit, and the bones from the skull and the torso were in its central area (Pl. VI/5; VII/1). Red ochre staining was registered on the long bones and skull. An organic layer was covering the bottom of the pit, lying beneath the bones. Considering the fact that this part of the barrow had been destroyed by the treasure hunters' ditch, as well as by numerous "tunnels" (observed in the grave pit) with a diameter of up to 0.50 m (Pl. V/3; VII/2), made by carnivores (foxes or badgers) we cannot be sure that the archaeological situation observed on the bottom of the pit had not been compromised by later

anthropogenic or animal activities. A barrow fill 0.70 m thick and circa 30 m in diameter had been piled over the grave. Its periphery had been covered by a stone ring. The ring was constructed using medium sized stones arranged in a single row, of 1.0–2.5 m in diameter (Pl. III/2; IV/3).

The grave pits of feature nos. 3 and 4 were dug into the already existing barrow fill. Both pits had one step, dug into the fill, the ancient humus and the virgin soil. The lower pit of feature no. 4 was covered with partly preserved tree bark (Pl. IX–X). At the bottom of the pits were buried a 20–25 year old male (feature no. 3) and a 6 year old infant (feature no. 4). In both cases the bodies were arranged in hocker⁶ position, lying on the right. The right arms were extended alongside the body, the left one – bent at the elbow with the palm at the right wrist. Orientation south/southeast – west/northwest with the head in the southern sector. Red ochre was found over the ankles of the infant, and feet and palms of the adult male (Pl. IX/7–9; X/3–4). Grave goods were found in feature no. 3 – two silver hair-rings, one on each side of the skull (one of them – in the right *auricular*), a bone bead, two rodent teeth and a segment from a copper wire in the chest area. In the upper fill of the pit, a sherd of pottery decorated with cord impressions was also found (Pl. IX/1–6).

In the central part of the barrow, at a depth of 0.40–0.50 m several fragments of human long bones were discovered, labelled as feature 1 (Pl. V/1–2). They probably came from a secondary grave destroyed by the treasure hunters. No traces of red ochre were discovered on the bones.

Considering the observations made during the excavations and the stratigraphic relationships between the features discovered, the following sequence could be argued for: no. 2 (primary grave with ring of stones) – nos. 3, 4 – no. 1.

VETRINO, NECROPOLIS 2, BARROW 7

This was part of a necropolis consisting of 10 barrows located south of the Vetrino village (Pl. II). Nowadays, all the barrows are located on agricultural land, having been ploughed with heavy machines for decades. As with the previous example, this has considerably enlarged their diameters and reduced their heights. Their height varies from 0.40 m to 2.5 m. The barrows are arranged in a curved line with a length of circa 1 km. Barrow no. 7 had, before the excavations, 1.0 m in height and 50 m in diameter (Pl. XI).

the knees, arms in front of the torso/head. An additional classification according to the angle formed by the spinal column and the legs of the deceased will be used here as well: "contracted hocker" – with an angle smaller than 90 degrees and, "relaxed hocker" – with an angle wider than 90 degrees.

⁴ Alexandrov, Slavchev 2020.

⁵ The anthropological analyses of the human skeletal remains from Barrow 34 were carried out by Dr Nadezda Atanassova (IEMPAM-BAS).

⁶ The term "*hocker*" has a long use in Southeast European archaeology and will be used here as well. It describes a particular position of the body in the grave – placed laterally in a foetal position: legs flexed at

The barrow and its surroundings were completely investigated⁷. Six features were discovered, all dating to the Bronze Age (Pl. XII). Feature no. 1 is the primary one, located 3 m west from the CP. The grave pit is rectangular, with two steps and a total depth of 0.94 m dug into the ancient humus and the virgin soil. Recovered remains of tree bark suggest they covered the centre of the pit. The grave pit was encircled with medium stones arranged in rows near the walls. At the bottom of the pit, in relaxed hocker position, lying on the right, a 20–30 year old male was buried⁸. Both arms were bent at the elbows with the palms in front of the head/torso. Orientation west – east, head to the west. Red ochre was observed at the ankles, femurs, ribs, shoulder and skull (Pl. XIII). A barrow fill with 1.0 m height and circa 30 m diameter had been piled over the grave pit.

Five more features were dug into the already existing barrow fill. In feature no. 3, located 10 m south from the CP, an infant (less than one year old) was buried. The grave pit (with steps) was dug into the barrow fill, the ancient humus level and the virgin soil. The lower pit was covered with four medium sized stones. The body was placed at the bottom of the pit, probably in hocker position⁹. Red ochre was observed on the skull. A ceramic vessel was placed in the southeastern corner of the lower pit, near the skull. Animal bones were placed on the pit floor (Pl. XIV).

Feature nos. 4 and 6 were secondary graves dug into the northern half of the barrow fill, and found at a depth of 0.25–0.35 m below the actual surface level. Grave pits were not detected, probably being destroyed by ploughing. Additionally, the skeletal remains were badly damaged (Pl. XV/1–4). The only anthropological data available on the individual in feature no. 4, were that it was a 40–60 year old male¹⁰. Red ochre was found on and around the preserved bones in feature no. 6. Features nos. 2 and 5 were agglomerations of large stones discovered in the barrow area, at the ancient humus level (Pl. XV/5–8). More stones were found scattered in the fill during the excavations. It is not to be excluded the existence of a stone ring surrounding the original barrow fill, nowadays destroyed by heavy machine ploughing.

Considering the observations during the excavations and the stratigraphic relationships between the features discovered, the following sequence could be argued for: no. 1 (primary grave with ring? of stones – features 2 and 5) – no. 3 – no. 4 and 6.

VETRINO, NECROPOLIS 3, BARROW 1

This barrow was part of a necropolis consisting of six barrows located southeast of the Vetrino village (Pl. II). Nowadays, all the barrows are located on agricultural land. The aforementioned situation with height reduction and diameter increase applies. Barrows nos. 5 and 6 are cut by modern trenches on their central parts. The height of the barrows varies from 0.50 m to 3.5 m. They are arranged in a curved line with a length of circa 1 km. Barrow no. 7 had, before the excavations, 1.2 m in height and 40 m in diameter (Pl. XVI/2).

The barrow and its surroundings were completely investigated¹¹. Nine features were discovered, all dating to the Bronze Age (Pl. XVII). Feature no. 4 is the primary one, located in the centre of the first barrow fill. The grave pit is rectangular with two steps and a total depth of 1.62 m, dug into the ancient humus and the virgin soil. The middle pit was covered with tree bark. At the bottom of the pit, over the remains of an organic layer, a 40–50 year old male was buried in relaxed hocker position, lying on the right. The right arm was extended alongside the body, the left one was bent at the elbow with the palm at the pelvis; oriented southeast-northwest, head to southeast, facing north. Red ochre was recorded on the skull, arms and feet. A bone awl was placed between the skull and the eastern wall of the pit (Pl. XXI/4; XXII). A barrow fill of 0.70 m in height and circa 18 m in diameter had been piled over the grave pit. The line of medium sized stones located 8 m southeast of the grave is probably to be related to that feature as well.

Feature 5, inhumation of a 50–60 year old male, was dug into the southeastern periphery of the first barrow fill and the virgin soil. The grave pit, with one step and 0.83 m depth, was covered with tree bark. The deceased was buried in relaxed hocker position, lying on the right. The skull was to the right of the chest, on the right humerus, the mandible was nearby the right shoulder. The right arm was extended alongside the body, the left one was bent at the elbow with the palm at the left femur. Orientation northeast-southwest. Red ochre was recorded on the right arm, knees and tibiae. Pieces of red ochre were sprinkled over the floor as well – in front of the knees and in the northwestern corner of the pit (Pl. XXIII/3; XXIV/2).

Next, chronologically, comes feature no. 1 dug into the barrow fill and the virgin soil, 2 m north of feature no. 4. The grave pit had two steps and 1.52 m in depth. The

⁷ Bozkova, Tonkova 2020. The authors would like to express their gratitude to Prof. Anelia Bozkova (the director of the excavations) for kindly giving permission to publish here the results of the investigations.

⁸ Anthropological analyses carried out by Assistant. Prof. Dr Victoria Russeva (IEMPAM-BAS).

⁹ The bones were in a very bad condition, so the position of the body is not quite clear.

¹⁰ Anthropological analyses were carried out by Ralitsa Konyovska (National Museum of Natural History - BAS).

¹¹ Excavations led by Stefan Alexandrov and Vladimir Slavchev.

middle pit was covered with tree bark. A very large quantity of very large and medium sized stones (weighing over 1000 kg) was discovered in the pit. Originally, the stones were arranged in two rows in the upper pit, later on sliding into the lower pits. At the bottom of the pit, on the remains of an organic layer, a 15–18/19 year old male was buried. The body was in relaxed hocker position, lying on the right. The right arm was extended alongside the body, the left one was bent at the elbow with the palm in front of the torso. Red ochre was recorded on the skull, wrists, palms and legs. Orientation northeast-southwest, head to the northeast, facing west (Pl. XVIII/1–4; XIX/1–3). A new fill was piled above the grave enlarging the barrow dimensions to 1.20 m in height and a circa 32 m in diameter. Its periphery had been covered by a stone ring. The ring was constructed with medium-sized stones arranged in a band up to 3 m in width (Pl. XVII).

Later, into the barrow fills, features nos. 3, 7, 8 and 9 were dug. The grave pits were with one- or two steps, their bottoms reaching the virgin soil level. The lower pits were covered with tree bark at features nos. 3, 8 and 9. In feature no. 3, a large quantity of medium sized stones was discovered, probably covering the middle pit. In features nos. 3 and 7, a 11–12 year old infant and a 35–45 year old male, respectively, were buried, both in semi-supine position, lying on the right. The right arm was placed alongside the body, the left one was bent at the elbow (Pl. XX; XXI/1–3; XXIII/5–6; XXIV/1). In feature no. 8 – a baby, aged around 6 months, lay buried in an uncertain position – probably hocker (Pl. XXV/1–3). In feature no. 9, a 55–65 year old individual, probably female, was buried in an unusual position. The body had been disarticulated into three parts – the pelvis and legs; the torso with the arms and finally, the head. All three parts were placed in the grave pit. The feet, arms and ribs were not buried in the pit (Pl. XXVI/1–3). Red ochre was registered on the bones in features nos. 3 and 8, especially over the skulls. A brown sediment was observed beneath the skeleton in feature no. 3. The grave inventory in feature no. 3 consisted of a flint unipolar flake core, recovered from the pit fill (Pl. XX/5) and, in feature 8, a ceramic cup was placed near the skull (Pl. XXV/3–4).

Next, stratigraphically, comes feature no. 6 – the inhumation in contracted hocker position of a 50–60 year old male. The grave pit had been dug into the barrow fill and the ancient humus level. The pit-floor had been covered with tree bark, now decayed but recognizable. Lamb bones were recovered from behind the skull (Pl. XXIII/4; XXIV/3). The last feature – no. 2, was dug into the northwestern part of the barrow fill, in a stone “cist” construction. It contained the remains of an Infant buried in an uncertain position (probably hocker)¹² (Pl. XVIII/5–6; XIX/4, 5).

Considering the observations made during the excavations and the stratigraphic relationships between the features discovered, the following sequence could be argued for: no. 4 (primary, with the first barrow fill) – no. 5 – no. 1 (with the second barrow fill and the cromlech) – nos. 3, 7, 8, 9 – no. 6 – no. 2.

ABSOLUTE CHRONOLOGY OF THE VETRINO GRAVES

Fourteen of the 17 graves investigated were dated by AMS samples; the dating was conducted at the laboratory of the Everledger and Scottish Universities Environmental Research Centre in Glasgow. The calibration dates discussed below were obtained using OxCal, version 4.4.4. All dates are presented within the 95.4% confidence range.

Vetrino-1, Barrow 34

As mentioned above, three main chronological stages could be distinguished stratigraphically. The first one (the primary grave – feature no. 2, the barrow fill and the cromlech) falls into the chronological interval 2886–2670 calBC. The next one is related to features nos. 3 and 4. The two secondary graves date between 2884–2640 calBC (feature no. 4) and 2873–2623 calBC (feature no. 3). The destroyed grave (feature no. 1) falls into the 1617–1515 calBC period. Generally, features nos. 2–4 fall into the 2900–2600 BC interval, *i.e.* the Early Bronze Age – 2 period, while the last chronological stage could be assigned to the Middle Bronze Age according to the Bulgarian Bronze Age periodization¹³ (Fig. 1).

Vetrino-2, Barrow 7

Three main stages could be distinguished stratigraphically as well. The first one, related to the primary grave (feature no. 1) and features nos. 2 and 5 falls into the chronological interval 3082–2912 calBC. The third stage is related to the two destroyed graves – features nos. 4 and 6 that, according to the date yielded by feature no. 6 indicating the 2873–2628 calBC time-span. The second stage, related to feature no.3 should, according to stratigraphic observations, be closer to the dates of stage 3. Thus, all the graves from that barrow fall into the EBA-2 period (Fig. 2).

Vetrino-3, Barrow 1

As seen in figs. 3 and 4, the EBA dates from the barrow are quite close to each other; the oldest dates

¹² The bones were almost completely disintegrated.

¹³ Alexandrov 2018.

actually came from the secondary graves nos. 3, 7 and 9.

Thus, internal analysis using both the AMS dates and the stratigraphic observations was needed. Such analysis allowed a more elaborate chronology of the EBA graves to be established, as follows¹⁴: chronological stage 1 – primary grave (feature no. 4) with the first barrow fill: 2867–2727 calBC; stage 2 – feature no. 5: 2855–2698 calBC; stage 3 – feature no. 1 with the cromlech: 2823–2681 calBC; stage 4 – features nos. 3, 7, 8 and 9: 2812–

2671 calBC (Fig. 5). Feature no. 6 enters the 1879–1636 calBC time-span or the Middle Bronze Age period. As for feature no. 2, due to the lack of radiocarbon dates, its dating could only be made by parallels with other securely dated similar structures, such as the Chudomir Barrow – feature no. 20, dated to the 1399–1223 calBC interval (Late Bronze Age period¹⁵) indicating a date for the Vetrino-3 grave, as well.

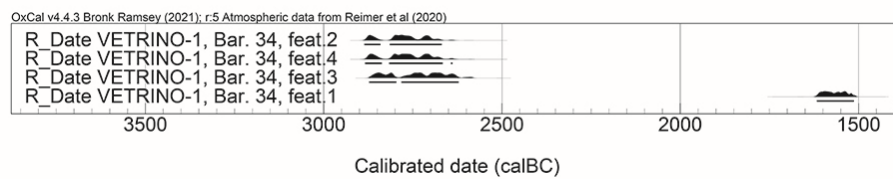


Figure 1. Calibrated dates from Vetrino-1, Barrow 34 graves.

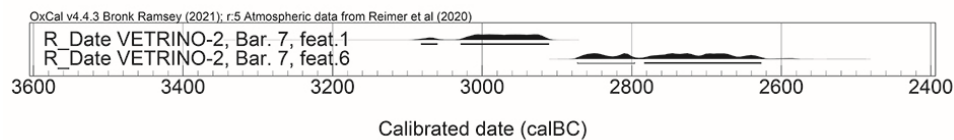


Figure 2. Calibrated dates from Vetrino-2, Barrow 7.

Feature	Date BP	Calibrated date
4	4127 ± 30 BP	2869–2581 calBC
5	4154 ± 27 BP	2876–2630 calBC
1	4117 ± 25 BP	2866–2577 calBC
3	4158 ± 29 BP	2878–2631 calBC
7	4158 ± 25 BP	2878–2631 calBC
8	4142 ± 29 BP	2875–2586 calBC
9	4172 ± 27 BP	2883–2635 calBC
6	3442 ± 28 BP	1879–1636 calBC

Figure 3. Calibrated dates from Vetrino-3, Barrow 1.

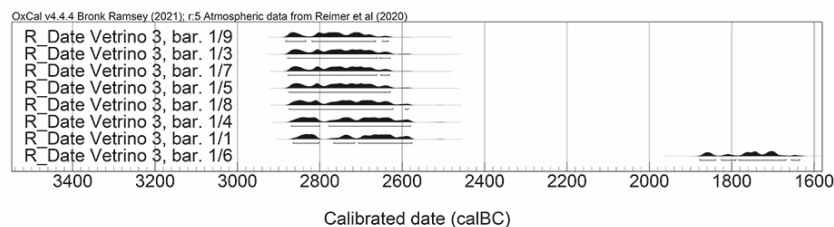


Figure 4. Calibrated dates from Vetrino-3, Barrow 1.

¹⁴ The analysis of the EBA graves internal chronology from the barrow was carried out by Prof. Piotr Włodarczyk (Institute of Archaeology and Ethnology – PAS).

¹⁵ Unpublished date. For Chudomir, feature 20, see Alexandrov 2020.

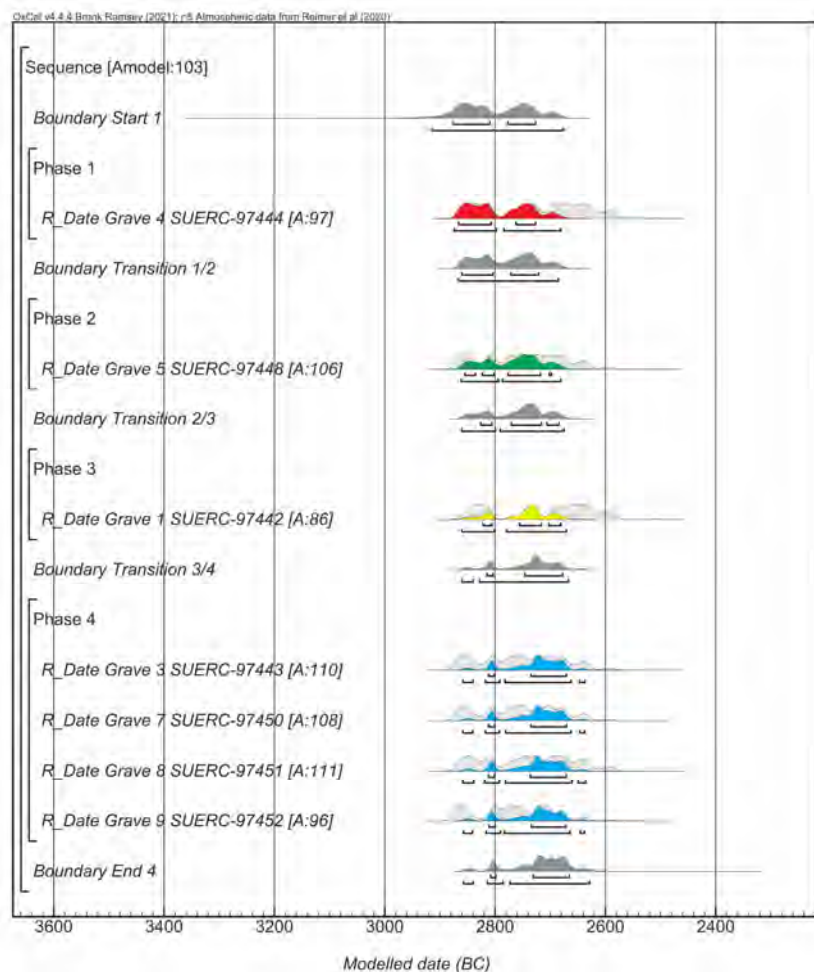


Figure 5. Bayesian model for the EBA graves from Vetrino-3, Barrow 1.

The Vetrino graves in the context of the Bronze Age mortuary practices in Northeast Bulgaria and the adjacent areas

The three barrows investigated were of small size, with one or two fills only. The fills were homogeneous, consisting mostly of ancient humus, probably brought from the immediate vicinity of the site. The central graves were surrounded by rings constructed with medium-sized stones arranged in single rows, up to 2.5 m in width and with diameters of around 30 m. The grave facilities were elaborated, the grave pits, both primary and secondary, had one or two steps. Most of the grave pits were deep, their bottom reaching the virgin soil or the continental rock. The middle/lower pits had been covered with tree bark. In several cases (primary graves Vetrino-1, Barrow 34 and Vetrino-2, Barrow 7; secondary graves Vetrino-3, Barrow 1, features 1 and 3), a large number of stones were placed over the bark layer, arranged in vertical rows. In Vetrino-3, Barrow 1, feature 1, stones even larger than

1 m were used; the total weight of the stones placed in the grave pit exceeded 1000 kg.

All fifteen EBA graves contained inhumations, mostly in hocker position, lying on the right. Only two individuals lay in semi-supine position, on the right. The exceptions to this pattern were Vetrino-3, Barrow 1, feature 9: the inhumation of a disarticulated body of a 55–65 year old individual, and Vetrino-1, Barrow 34, feature 2: the inhumation of the disarticulated body of an infant. No supine inhumations with flexed legs, or extended inhumations, were found in any of the three barrows. While the number of the latter in North Bulgaria is small¹⁶, the lack of supine inhumations with flexed legs in the three barrows was quite unexpected. In most of the EBA graves, red ochre was found sprinkled over certain body parts – the skull, pelvis, palms, and feet, or as ochre fragments placed on the pit-floor. Grave goods were found in five EBA features – ceramic cups in Vetrino-2, Barrow 7, feature 3 and Vetrino-3, Barrow 1, feature 9 (both *infant* / graves); personal ornaments – silver hair-rings in Vetrino-1, Barrow 34,

¹⁶ Alexandrov 2010.

feature 3 (*Adultus*) and tools – a bone awl in Vetrino-3, Barrow 1, feature 4 (*Maturus*). Flint pieces and one flint unipolar core, as well as a cord-decorated pottery sherd were found in the pit-fills of Vetrino-3, Barrow 1, features 1 and 3 (*Iuvenis* and *Infans II*) and, Vetrino-1, Barrow 34, feature 3 (*Adultus*), respectively.

The two MBA graves (*Adultus*+, *Maturus*) were inhumations; the preserved one (Vetrino-3, Barrow 1, feature 6) was buried in a very tightly contracted hocker position, with the palms and knees in front of the torso/skull. The grave pits were dug into the barrow fills, not reaching the virgin soil, the preserved one having an oval shape. No additional soil piling above the MBA grave was registered. No red ochre was used in the MBA mortuary practices either but lamb bones were recovered from behind the skull of the Vetrino-3, Barrow 1, feature 6 individual. The Vetrino-3, Barrow 1, grave 2 (*Infans I*) is assigned to the LBA period according to its typological similarities with the securely dated grave from the Chudomir Barrow only.

The Vetrino hocker graves

Seven of the seventeen graves investigated in 2020 presented single inhumations in well-articulated hocker positions. If we consider the Vetrino-2, Barrow 7, feature 3 and Vetrino-3, Barrow 1, feature 8 with children that most probably were buried in the same position, the hocker graves from the three barrows investigated will exceed 50% of the whole lot. The situation is not unique to the Vetrino region only, the number of BA hocker inhumations in barrows being quite notable in the Targovishte and Shumen regions as well. Generally, three groups, both typologically and chronologically, can be distinguished between the barrow hocker inhumations in Northeast Bulgaria, as follows:

Group 1. Relaxed hocker graves, both arms bent at the elbows, palms in front of the head/torso;

Group 2. Hocker graves with an angle formed by the spinal column and the legs at around 90°, one of the arms alongside the body, the other one bent at the elbow, palm in front of the torso;

Group 3. Very contracted hocker graves, arms bent at the elbows, palms in front of the head.

Group 1

Alongside the Vetrino-2, Barrow 7, feature 1, other

ten single graves from Northeast Bulgaria are part of this group so far. The first one is *Belogradets, Barrow 6, grave 1*, comprising a pit covered with a cairn of stones. The grave contained the inhumation of an adult male, placed in the west-east direction with the head to the west. Fragments of red ochre were found near the right wrist and beneath the skull¹⁷. Three more graves come from the Shumen region. The first one is *Pliska-West, Barrow 27, grave 1* – a male, *Adultus* buried in a rectangular pit, oriented east-west, with red ochre sprinkled over the bones¹⁸. The AMS sample dated the grave in the 3300–3100 calBC interval. The second grave from the same region is *Kiulevcha, Barrow 1, grave 3* – *Infant* placed in the northeast – southwest direction in an oval pit. Red ochre was found on the skull and torso. The pit was surrounded by a single row of stones with a diameter of 3 m¹⁹. The third grave from the Shumen region entering this group is *Kalugeritsa, Barrow III, grave 4*. A “... young woman” was buried there in a relaxed hocker position, lying on the right; orientation west-east, head to the west. Red ochre was recorded on the upper part of the body. The grave walls and the pit itself were covered by wooden planks. A ring of three rows of stones with the height of 0.60 m and a diameter of 11 m encircled the grave. An open silver ring was found in the chest area²⁰. Two more graves come from the Madara necropolis – *Barrow 2, grave 2* and *Barrow 4, grave 4*²¹. Further west, from the Targovishte region come the *Chudomir Barrow, feature 17 (Maturus, probably female)* and the *Ralitsa Barrow, feature 1 (Adultus, male)*. Both individuals were buried in the east-west direction, with the head to the east (Chudomir) and west (Ralitsa). Grave goods (a golden hair-ring and a flint core) were found in the Chudomir grave. Radiocarbon dates place both graves in the ranges of 3300 – 3100 calBC and 3100 – 2900 calBC respectively²². North of Vetrino, from the Southwestern Dobrudja come two single graves from the same group – *Pet mogili, Barrow 3, grave 4*²³ and *Kamentsi, Barrow 1, grave 5*²⁴. Both individuals were buried in the east–west direction with the head to the east (Pet Mogili) and northwest (Kamentsi) respectively. Grave inventory – a ceramic amphora-like vessel was found in Pet Mogili grave. For that vessel a date in the Cernavodă I–III periods was suggested²⁵.

To summarize: all graves from this group were primary burials for their respective barrows; the barrow fills, where it was possible to distinguish from publications, rarely exceeded 1.5 m height. The use of

¹⁷ Data acquired from the excavations journal kept in the NAIM-BAS archive.

¹⁸ Excavations carried out by Prof. Rasha Rashev and Prof. Stanislav Stanilov in 1998. The authors would like to express their gratitude to Prof. Stanilov for kindly giving his permission to publish here some of the results of the investigations.

¹⁹ Mikov 1936, p. 8.

²⁰ Mikov 1936, p. 4–5.

²¹ Mikov 1934, p. 431, 436.

²² Excavations in 2020 by Stefan Alexandrov (Chudomir) and Plamen Krailiev (Ralitsa). The authors would like to express their gratitude to P. Krailiev for kindly giving his permission to publish here some of the results of the investigations.

²³ Excavations by Georgi Atanasov in 1993. The authors would like to express their gratitude to Stanimir Stoychev for kindly giving his permission to publish here the results of the investigations.

²⁴ Vagalinski 2020, fig. 6.

²⁵ Alexandrov, Kaiser 2016, p. 365

stones is to be mentioned, such as stone rings surrounding some of the graves, or the encircling of the grave pit with stones. The dead were persons of all sexes and ages; the bodies lay in the east – west direction. Red ochre was used in the mortuary practices, as well. Three of the eight features had grave goods consisting of a ceramic vessel, a flint core, a golden hair-ring and one silver ring. The Belogradets, Pliska, Ralitsa and Pet Mogili graves were the only BA graves in their respective barrows²⁶. In the Kiulevcha, Kalugeritsa, Chudomir and Kamentsi barrows, the discussed graves were stratigraphically followed by supine inhumations with flexed legs and semi-supine inhumations. The radiocarbon dates (five samples) from that group in Northeast Bulgaria securely date it to the 3400/3300–2900 calBC interval (Fig. 6).

Several such graves are known from Northern Dobrudja, as well: Anadolkoï, Barrow 2; Tulcea-sud; Rahman, Barrow 2, grave 4, etc. The first two graves were the only ones in their respective barrows; the grave pit from Rahman was dug from the ancient humus level²⁷. Unfortunately, no radiocarbon dates exist for these graves, so their chronological position is to be ascertained by analogies with similar features from neighbouring areas.

North and northeast of the Danube Delta, in the North Pontic steppes, relaxed hocker graves very similar to our group 1 were included by Y. Rassamakin in group IIIC of the Eneolithic graves in the region. The group was named Zhivotilovka–Volchansk and dated to the 3500/3400–3000/2900 BC interval. Generally, the graves from that group were related by Rassamakin to the Late Tripolyan Gordinești group, but some analogies with the Late Maykop mortuary complexes from the North Caucasus region were argued for, as well²⁸. Lately, these graves were related to the “horizon of Late Tripolye CIII monuments” and incorporated into the so called “Zhivotilovka – Bursuceni” group. The group is represented by mortuary complexes only: relaxed hocker inhumations with arms raised in front of the head/torso. Unlike the Vetrino graves “... the burials sites of the Zhivotilovka type are characterized by the almost total absence of stone structures in the form of cromlechs, cairns, a dome-shaped coating of the mound, etc”²⁹. Several radiocarbon dates such as those from Krasnoe, Barrow 9 and Bursuceni, grave 20 allowed I. Manzura and T. Demchenko to place this grave group in the last quarter of the 4th millennium BC³⁰. The most recent published

radiocarbon dates for the features discussed come from Cimișlia, Barrow 8 (Republic of Moldova) allowing this group of graves to be dated “...to the second half of the 4th millennium BC”³¹.

West of Dobrudja, several more relaxed hocker barrow graves are also known. The first one comes from *Polsko Kosovo, Barrow I*, central North Bulgaria – a relaxed hocker grave with west–east orientation and red ochre sprinkled over the bones. Stratigraphically, it is situated between an extended inhumation encircled by a ring of stones and an inhumation in supine position with flexed legs³². The second one is from central North Bulgaria as well – *Goran-Slatina, Barrow VII, grave 5* where an individual was buried in relaxed hocker position, and placed in a rectangular pit covered with wooden planks, with red ochre over the bones and fragments of red ochre near the skull. It was the primary grave in the barrow, followed by an inhumation in semi-supine position, and two inhumations in supine position with flexed legs, and arms alongside the body³³. The third grave comes from Northwest Bulgaria – *Tarnak, “Ninovska Barrow”*. This was a relaxed hocker burial in a rectangular pit covered with wooden planks; with red ochre sprinkled over the bones³⁴. Such graves are known in the 3300–3100 BC period even further west – at the Sárrétudvari-Órhalom Barrow (Hungary), for example³⁵. The 3300–3100 BC hocker barrow graves are present in Wallachia, as well. There, they appear as primary graves, often encircled by rings of stones. In these regions the multiple graves and post-mortem body manipulation dominate³⁶. In Thrace, so far, relaxed hocker burials appear as early as 3100–2900 BC³⁷.

As the brief summary of the geographic distribution of the relaxed hocker burials of group 1 shows, in the last third of the forth millennium BC they are quite common for a vast region from the North Pontic steppes to the Middle Danube region. The problem of their appearance and nature should be a subject of a separate and more detailed analysis. Currently, the concept of “historic-cultural horizon”³⁸ or just “chronological horizon” for this phenomenon seems quite acceptable for the purpose of this article. In our opinion, the data related to those graves in Shumen – Vetrino and the Dobrudja regions lead, at least for the 3400–3100 BC period, to a relationship with the Cernavodă and Usatovo phenomena. Although of an arguable nature (flat or barrow necropolis)³⁹, the Durankulak site with its 17 graves already presented such

²⁶ It should be mentioned that the Ralitsa Barrow was not completely investigated and that the Pet Mogili Barrow was reused in the Roman Age.

²⁷ Schuchardt, Traeger 1918, Abb. 4; Simion 2003, p. 17, Fig. 3; Ailincăi et alii 2016, p. 35–37; Fig. 7.

²⁸ Rassamakin 2004, Teil 1, p. 55–59, 208–209.

²⁹ Manzura 2016, p. 153–154.

³⁰ Manzura 2016; Demchenko 2016.

³¹ Popovici et alii 2016; Popovici, Kaiser 2020, p. 73–74.

³² Stanchev 2002, p. 520–522.

³³ Kitov et alii 1991, p. 90–96

³⁴ Torbov 1994.

³⁵ Dani, Nepper 2006.

³⁶ Frînculeasa et alii 2015, p. 56, 83; Preda-Bălănică et alii 2020, p. 89–91.

³⁷ Alexandrov 2020a, p. 158.

³⁸ Manzura 2016, p. 169.

³⁹ Manzura 2005.

elements⁴⁰. The Usatovo characteristics are clearly visible in some barrows from the northern part of Dobrudja as well, such as Luncavița – *Drumul vacilor*, Barrow I, or the graves with a cairn of stones and rings of stones from Mihai Bravu, Murighiol or Tariverde⁴¹. An additional support for this argument is the fact that the Pliska and Pet Mogili graves are located 15 km south and northeast, respectively, from the Cernavodă III site near the Mirovtsi village⁴². Such influences are argued for the Northwest Pontic graves of the Zhivotilovka type as well, that “...can be regarded as a faded reflection of rich Usatovo cemeteries.”⁴³

Group 2

First of all, it is worth mentioning that so far, all the hocker graves from that group are crouched on their right side. Alongside the ten graves from Vetrino, this group of barrow hocker graves currently comprises ten more features from the Shumen – Vetrino area: *Belogradets*, Barrow 3, grave 3⁴⁴, four graves in the Pliska region – *Pliska-West Barrow* 21, grave 1 and Barrow 26, grave 1⁴⁵; *Izbul Barrow* 24, grave 3 and 5⁴⁶; and five graves in the Madara region – *Madara*, Barrow 1, graves 3 and Barrow 3, graves 3 and 4⁴⁷; *Kiulevcha Barrow* 1, graves 1 and 4⁴⁸. Five more graves come from the Southern Dobrudja region, as well – *Zeglartsî*, Barrow 1, grave 2; *Kavarna*⁴⁹; *Belitsa*, Barrow 1, grave 1⁵⁰ and, *Kamentsî*, Barrow 1, graves 1 and 6⁵¹.

The graves from group 2 were primary or secondary, with or without additional fills. Rings of stones covering barrow fills were found in the Vetrino barrows only. All 25 graves discussed had, where distinguished, rectangular pits covered with wooden planks or strips of tree bark. Stone constructions above the grave pit are characteristic for the Vetrino region, while outside this area these were mentioned at Kiulevcha, Barrow 1, grave 4 where the grave pit was covered with a cairn of stones, and at Kavarna grave where the pit had been covered with stone slabs. The anthropological analyses of the available human skeletal material show a predominance of male and child graves in this group. Unlike the hocker graves from group 1, there is no predominant orientation of the

body in group 2. Red ochre was used in the mortuary practices, where it was mostly sprinkled over the bones of the deceased. The grave goods consists of ceramic vessels, found mostly in infant graves – *Madara*, Barrow 3, graves 3 and 4⁵²; *Vetrino-2*, Barrow 7, feature 3 (Pl. XIV/3, 5); *Vetrino-3*, Barrow 1, feature 8 (Pl. XXV/3, 4) and pottery fragments in the pit-infills of *Vetrino-1*, Barrow 34, feature 3 (Pl. IX/3, 4) and *Belogradets*, Barrow 3, grave 3⁵³; a bone tool in *Vetrino-3*, Barrow 1, feature 4 (Pl. XXVI/1, 2) and personal adornments – silver hair-rings in *Madara*, Barrow 1, grave 3⁵⁴, *Vetrino-1*, Barrow 34, feature 3 (Pl. IX/1, 2, 5, 6) and *Belitsa*⁵⁵, amulets(?) made from animal teeth in *Belogradets*, Barrow 3, grave 3⁵⁶. The radiocarbon dates (twelve samples) from human skeletal material in the graves from that group securely date it to the 2900–2500 calBC period (Fig. 6).

Hocker barrow graves from that group are well known in Northern Dobrudja as well, such as *Baia/Hamangia*⁵⁷; *Sabangia*, Barrow 2, grave 1 and *Zebil*, Barrow 3⁵⁸; *Medgidia*, Barrow 3, grave 7⁵⁹; *Rahman*, Barrow 2, graves 3⁶⁰, etc. Unfortunately, all the mentioned graves had no grave goods and no radiocarbon dates are available for them so far. The flat grave from Cernavodă – *Cetatea Veche* should be mentioned here also: a hocker inhumation with the same position as those in our group 2, with two vessels placed near the skull as grave goods⁶¹. For this grave, a possible relation to the Cernavodă I culture was proposed⁶². If we consider the date of the barrow graves in discussion, then the grave from Cernavodă could be dated to the 2900–2500 BC period, as well. North of the Danube River, such graves were included by F. Burtănescu into the so called “*Vânători – Bolotești*” group. It included hocker graves in rectangular pits, with red ochre sprinkled over the bones and clay vessels as grave goods, some of them with close parallels to the Vetrino ones. To establish the chronological position of the group, Burtănescu used analogies with the vessels from grave 13 at Smeeni – *Movila Mare*⁶³. The grave was assigned to the chronological phase IIb in the barrow that was dated between 2900 and 2600 BC⁶⁴, a date that fully corresponds to the one for the hocker graves of our group 2 in Northeast Bulgaria. Based on the correlation between the stratigraphy at Smeeni – *Movila Mare* and the

⁴⁰ Vajsov 2002.

⁴¹ Alexandrov 2011.

⁴² Zmeykova 2001.

⁴³ Manzura 2016, p. 168.

⁴⁴ Data acquired from the excavations journal kept in the NAIM-BAS archive.

⁴⁵ See note 19.

⁴⁶ Kitov 2000.

⁴⁷ Mikov 1934, p. 430–432. The graves were not illustrated in the original publication so, their attribution to *hocker graves group 2* is made according to their description only.

⁴⁸ Mikov 1936, p. 7–8, fig. 4. The graves were not illustrated in the original publication so, their attribution to *hocker graves group 2* is made according to their description only.

⁴⁹ Panayotov 1989, p. 123–124, 133.

⁵⁰ Alexandrov, Benham 1995.

⁵¹ Vagalinski 2020, fig. 4, 7.

⁵² Mikov 1934, p. 432, fig. 296/c–d.

⁵³ Data acquired from the excavations journal kept in the NAIM-BAS archive.

⁵⁴ Alexandrov *et alii* 2018, Cat. Nos. 26–28.

⁵⁵ Alexandrov, Benham 1995.

⁵⁶ Data acquired from the excavations journal kept in the NAIM-BAS archive.

⁵⁷ Lazurca 1980, pl. 1/3

⁵⁸ Simion 2003, fig. 3; 5/5, 6; 9.

⁵⁹ Schuster *et alii* 2011, fig. 33

⁶⁰ Ailincăi *et alii* 2016, fig. 6.

⁶¹ Nestor 1937, p. 16; fig. 6–7.

⁶² Frînculeasa *et alii* 2017b, p. 83; pl. VIII/1–3.

⁶³ Burtănescu 2002, p. 393–395, table VII.

⁶⁴ Frînculeasa *et alii* 2017a, p. 74–76, 110.

position of the body in the graves, the discussed hocker group has been assigned to phase II of the Yamnaya groups in Wallachia, dated to the same period⁶⁵.

Four of the graves from that group had clay vessels placed near the skull of the deceased (all infants). They have similar morphological characteristics – cups with an elongated “S”-shape, decorated with impressions/cuts at the rim and the largest part of the body. As mentioned above, similar vessels were found in the “*Vănători – Bolotești*” group⁶⁶. For the vessel from *Vănători*, Barrow 222 (*Movila Tocu*), grave 11⁶⁷ good analogies exist in the Cernavodă II pottery. Generally, those vessels were dated to 2900/2850–2600 BC and related to the second phase of the Yamnaya groups in the Lower Danube region⁶⁸. The shape and decoration discussed are common for the pottery assemblage of the EBA underwater settlements from the Bulgarian Black Sea coast as well, synchronized with the second phase of the EBA in Bulgaria and the Cernavodă II culture⁶⁹. The silver hair-rings from the hocker graves, group 2 (six in three graves) have their good parallels in the EBA jewellery at the Lower Danube and the adjacent territories, and fit quite well in the chronological and cultural phenomena discussed here⁷⁰.

In the Northwest Pontic area such graves, alongside with the semi-supine inhumations, were generally related by V. Dergacev to the Budzak variant of the Yamnaya Culture. A characteristic feature of those graves, according to Dergacev, was the small amount or even lack of red ochre sprinkled over the bones, as well as the presence of clay vessels in the grave pits⁷¹. The position was recognized as characteristic for the Yamnaya/Budzak Culture by S. Ivanova as well, being described as the “... *position of the buried body no. 2*” with 16.3% of the deceased being buried in such way. In her opinion, all five positions of the body in the grave are to be found simultaneously in the Yamnaya/Budzak Culture in the Northwest Pontic region⁷². Graves of our hocker group 2 appear further north, in the Prydnistrianske, Yampil Region (Ukraine) – Barrow IV, grave 9 for example, dated between 2871 and 2576 calBC and related to the Late Yamnaya Culture⁷³.

It is quite clear that most of the researchers are inclined to connect the discussed hocker graves group to the Yamnaya phenomenon, generally to its later manifestations. In our opinion such an approach is reasonable but, still needs additional arguments,

especially considering the relations, both spatial and chronological between the discussed graves and the ones from the hocker group 1 presented here.

Group 3

These are very tightly contracted hocker graves with the knees drawn up in front of the torso, the arms bent at the elbows, and the palms in front of the head. The group includes at least eight barrow graves from Northeast Bulgaria: *Madara*, Barrow 1, grave 1⁷⁴; *Izbul 24/1*⁷⁵; *Plachi Dol*, Barrow 1, grave 4 and Barrow 2, grave 4⁷⁶; *Riltsi*, Barrow 260, graves 1 and 2⁷⁷; *Kamentsi*, Barrow 1, grave 1⁷⁸. All graves are secondary, with oval pits (when it was possible to distinguish their shape) dug into the barrow fills at a depth less than 1 m from the actual surface level. Red ochre is missing. Grave goods were found in the *Madara* grave only – a ceramic cup placed near the skull of the deceased⁷⁹.

This hocker group has been subject of different analyses and approaches. However, a possible date in the Middle Bronze Age period for the graves from Northeast Bulgaria has already been proposed⁸⁰, a suggestion supported by the recent radiocarbon dates for such graves from the region. Three such dates are available for that group, all placed in the first half of the second millennium calBC (Fig. 6).

The number of those graves is still limited as are the possibilities for their cultural affiliation. A certain relation to the MBA Tei Culture pottery is to be mentioned for the *Madara* grave with the clay cup⁸¹. The situation is very similar north of the Danube River, in Eastern Muntenia, where the pottery from the very much contracted hocker barrow graves – *Baldovinești*, grave 5; *Roșiori*, grave 2; *Puieni*, etc. was associated with the Tei Culture⁸². The similarities in the body position and the pottery inventory between the graves in discussion and the MBA Tei Culture graves⁸³ are quite good but, the nature of the appearance of those graves in the eastern part of the Lower Danube region still needs to be investigated. It is worth mentioning that such MBA barrow graves appear south of the Balkan range as well – the *Gyaurska* barrow (Karnobat region), *Peshtersko* (Karnobat region) and the *Manchova* barrow (Radnevo region)⁸⁴; *Irechekovo* (Yambol region)⁸⁵; *Boyanovo* (Elhovo region)⁸⁶, etc.

⁶⁵ Frînculeasa 2020a, p. 151–152, fig. 5.

⁶⁶ Burtănescu 2002, table VII.

⁶⁷ Brudiu 2003, fig. 17/3; 18/3.

⁶⁸ Frînculeasa 2020a – fig. 5–6; Frînculeasa *et alii* 2015, p. 23, fig. 13.

⁶⁹ Vasileva 2018, p. 140–141, fig. 3/7; Vasileva 2019, fig. 6.

⁷⁰ Subbotin 2002; Preda 2015.

⁷¹ Dergacev 1986, p. 83–85.

⁷² Ivanova 2013, p. 234–237.

⁷³ Klochko *et alii* 2015, p. 231–234, 238–239.

⁷⁴ Mikov 1934, p. 430, fig. 287.

⁷⁵ Kitov 2000, p. 315.

⁷⁶ Panayotov 1989, p. 101–102, 111; fig. 74; 89.

⁷⁷ Excavations carried out by S. Alexandrov in 2000.

⁷⁸ Vagalinski 2020, fig. 4.

⁷⁹ Mikov 1934, p. 430, fig. 296/a.

⁸⁰ Hristova 2010.

⁸¹ Hristova 2010.

⁸² Frînculeasa 2020b, p. 137.

⁸³ Motzoi-Chicideanu 2011, p. 441–444.

⁸⁴ Hristova 2010, p. 16–17.

⁸⁵ Iliev, Bakărdžiev 2020, p. 21–24, Taf.37.

⁸⁶ Agre 2015, fig. 13, 21–22; Iliev, Bakărdžiev 2020, p. 21–24; Taf. 46–47.

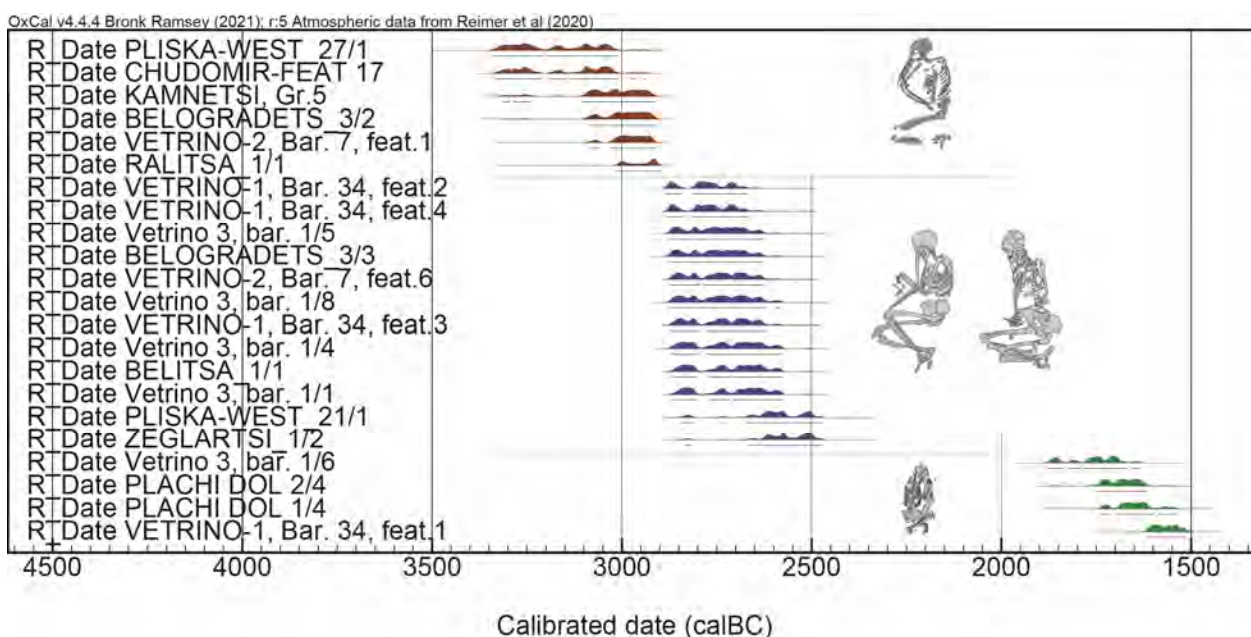


Figure 6. Hocker barrow graves in Northeast Bulgaria: body position and chronological setting.

The semi-supine graves from Vetrino

Alongside Vetrino-3, Barrow 1, features 3 and 7, 21 more single graves from Northeast Bulgaria enter this group so far. The nearest one is *Belogradets, Barrow 4, grave 2*⁸⁷. Further west, such graves are known at *Pliska-West, Barrow 25*; *Izbul, Barrow 23, graves 1, 5 and 6* and *Barrow 24, graves 1 and 7*⁸⁸; *Kabiyuk*⁸⁹; *Kalugeritsa, Barrow 3, graves 1 and 2*⁹⁰; *Chudomir, features nos. 2, 3, 9, 13, 14, 18, 19*⁹¹. Such graves come from Dobrudja as well: *Plachi dol, Barrow 1, grave 1*; *Barrow 5, grave 1*; *Geshanovo, Barrow 1, grave 1*⁹²; *Riltsi, Barrow 264, grave 5*⁹³. We should mention here that the number of semi-

supine barrow inhumations may be different, given the fact that some of them (generally the ones from old excavations) were included (or not) into the group based on their description only. The fact has already been discussed by I. Panayotov for some of the barrow graves from the excavations prior to the 1970s. In fact, the term “semi-supine position” was introduced in the Bulgarian literature by I. Panayotov in 1989⁹⁴. Thus, it is quite possible that some of the graves described in publications as supine or hocker graves to be semi-supine in reality and so, their number changes. Currently, there are nine radiocarbon dates for such graves that securely place them in the 2900–2500 calBC period (Fig. 7).

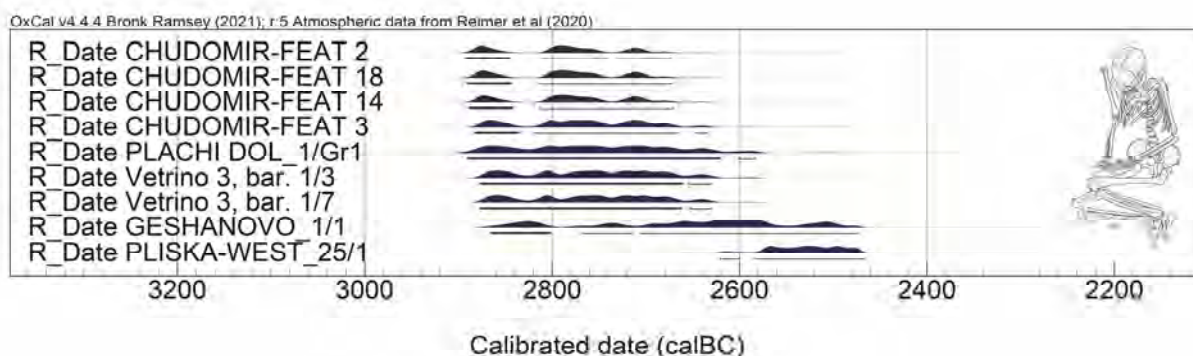


Figure 7. Semi-supine barrow graves in Northeast Bulgaria: chronological setting.

⁸⁷ Data acquired from the excavations journal kept in the NAIM-BAS archive.

⁸⁸ Kitov 2000.

⁸⁹ Mitkova 2014.

⁹⁰ Mikov 1936, p. 4.

⁹¹ Alexandrov 2020b

⁹² Panayotov 1989, p. 95–98, 118–119; 129–130.

⁹³ Excavations S. Alexandrov in 2000.

⁹⁴ Panayotov 1989.

Generally, the main characteristics of that group are quite the same as the ones of the hocker graves of our group 2: primary or secondary graves with or without additional fills; all graves had, where distinguishable, rectangular pits covered with wooden planks or tree bark. The grave pit in Plachi dol, Barrow 1, grave 1 had been covered with a wooden car/wagon⁹⁵, the only such discovery from the EBA in the Lower Danube region so far. Stone constructions above the grave pit are characteristic for the Vetrino region only. There is no predominant orientation of the body, as well. Red ochre was used in mortuary practices mostly sprinkled over the bones of the deceased. Grave goods are rare.

Such graves are common to North Dobrudja, Wallachia and North Pontic steppes. There, similar to the hocker graves from group 2, they are considered typical for the late phase of the Yamnaya/Budzak phenomenon⁹⁶. A similar interpretation has been applied for the Bulgarian finds as well⁹⁷. The semi-supine barrow graves are interpreted as representing the second phase of the “Lower-Danubian variant of Yamnaya Culture”⁹⁸. Such an approach seems to us quite logic, considering all the data available but, still additional investigations are required, especially considering the relations (spatial and chronologic) between the semi-supine and the hocker inhumations of our groups 1 and 2.

The Late Bronze Age Vetrino grave

Vetrino-3, Barrow 1, grave 2 differs in the construction of the grave facility to all other graves investigated in 2020. It was assigned to the LBA period according to its typological similarities with a securely dated grave – feature no. 20 from the Chudomir barrow only. If this assumption is correct, then a new group of barrow graves in Northeast Bulgaria could be distinguished – Late Bronze Age graves; secondary burials, without additional fills; with grave facilities constructed of stone slabs. The nature of the appearance and the characteristics of those graves are still to be investigated.

SOME CONCLUSIONS

The 2020 investigations in the Vetrino region brought to light seventeen new barrow complexes that allow a new perspective on the mortuary practices in Northeast Bulgaria and the adjacent regions. At a first look, the great number of hocker graves investigated, compared to the lack of typical “Yamnaya graves” in supine inhumations with flexed legs in all three barrows

seems surprising. However, the analyses show that such a situation is not unique to the region, with similar Early Bronze Age barrows from the Shumen-Vetrino region – *Madara, Barrows 1, 2 and 4; Kalugeritsa, Barrows 3 and 7, Izbul, Barrows 23 and 24; Pliska, Barrows 21, 25, 26 and 27, Kabiyyuk; Belogradets, Barrows 3 and 4*. Although, in the same necropolises, other barrows with supine inhumations with flexed legs were investigated as well, their number is considerably smaller than that of the hocker graves⁹⁹. If we accept that Dobrudja is the region “...we can find the first larger concentration of typical Yamnaya tumuli and burials”¹⁰⁰ in the Balkan peninsula, than the Shumen-Vetrino region should be regarded as the first contact area between the “Yamnaya” – and, probably, local(?) entities. Thus, the Vetrino investigations seem to put flesh on I. Panayotov’s thesis about the relations between the Yamnaya and the local populations in Northeast Bulgaria¹⁰¹.

Another question that the Vetrino investigations raise is related to the appearance and the nature of the relaxed hocker graves of our group 1. The similarities to the Zhivotilovka graves are quite impressive but, the problem needs additional and much more elaborated analyses. Such are needed in relation to the hocker graves, group 2 and, their affiliation to the “Vânători – Bolotești” or the Yamnaya groups. The Vetrino finds confirmed the chronological position of the very much contracted hocker graves in the Middle Bronze Age period and raised another question related to the existence of Late Bronze Age barrow graves in Northeast Bulgaria as well, thus proving once again the complexity of the investigations of the Bronze Age mortuary practices in the eastern part of the Lower Danube region.

CATALOGUE OF THE FEATURES INVESTIGATED

BARROW NECROPOLIS VETRINO-1

BARROW no. 34 (Pl. III–IV)

Location: 1.6 km south-west from Vetrino, in Küçük mera locality. Part of Vetrino-1 barrow necropolis, 34th in line from the north, third in line from the south.

Barrow form and dimensions: Segment of a globe. Height – 0.40 m, diameter – 35 m.

Barrow fills and constructions: One barrow fill surrounded by a ring of stones. The ring was constructed with medium-sized stones arranged in a single row, 1.0–2.5 m width and with a diameter of 26–27 m.

Number of graves/method of disposal: Four inhumation graves.

Excavations: Rescue excavations – Stefan Alexandrov and Vladimir Slavchev in 2020. Geophysical survey – Nikola Tonkov. The barrow was completely excavated. In the rescue excavation project, the barrow was called “site no. A1/3”.

⁹⁵ Panayotov 1989, p. 95–98.

⁹⁶ Burtănescu 2002; Motzoi-Chicideanu 2011; Frînculeasa *et alii* 2015; Dergacev 1986; Ivanova 2013.

⁹⁷ Panayotov 1989; Alexandrov 2011; Alexandrov, Kaiser 2016; Kaiser, Winger 2015; Kaiser 2019, p. 199–200.

⁹⁸ Panayotov 1989, p. 55–60.

⁹⁹ Alexandrov 2021.

¹⁰⁰ Heyd 2011, p. 536; Alexandrov, Kaiser 2016.

¹⁰¹ Panayotov 1989, p. 50–51.

Notes: The barrow is located on agricultural land, and ploughed with heavy machines for decades; this has considerably enlarged its diameter and reduced its height. In the central part, a modern trench was found.

Preliminary reports: Alexandrov, Slavchev 2020.

Feature no. 1 (Pl. V/1–2)

Stratigraphic position & location: Secondary grave without additional fill, located in the central part of the barrow.

Grave facility: Destroyed.

Method of disposal: Inhumation.

Number and condition of the skeletons: 1(?). Fragmented human long bones were discovered in the central part of the barrow at a depth of 0.30–0.40 m.

Anthropological data: *Adultus* (>18–20 years old), sex undefined.

Position & orientation: Not determined.

¹⁴C date: **SUERC-95530: 3302 ± 22 BP.**

Notes: The grave has been completely destroyed by later anthropogenic activities.

Feature no. 2 (Pl. V/2, 5; VI–VIII)

Stratigraphic position & location: Primary grave, located in the central part of the barrow.

Grave facility: Rectangular pit with one step (?). Orientation: east–west. Dimensions: upper pit - 2.74 × 2.04 m, lower pit: 1.63 × 1.03 m. Width of the step: between 0.19 and 0.49 m. Upper level of the pit at -1.32 m from the CP. Upper level of the lower pit at -1.85 m from the CP, bottom at -2.88 m from the CP. Flat pit floor. Organic layer beneath the bones.

Pit fill: Ancient humus and virgin soil. Large quantity of medium-sized stones was discovered at different levels above and inside the pit, especially in its central and southeastern part.

Method of disposal: Inhumation.

Number and condition of the skeletons: 1, disarticulated.

Anthropological data: *Infans II* (9–10 years old), sex undefined.

Position & orientation: The bones were scattered over the organic layer and the pit floor. The femurs and tibiae were found near the western wall; the skull, the arms and the torso – in the central part of the pit floor.

Body treatment: Body disarticulated before placed in the grave pit (?). Red ochre on the long bones and the skull.

Inventory: No.

¹⁴C date: **SUERC-95534: 4184 ± 24 BP.**

Notes: The upper part of the pit was destroyed by a treasure hunters' ditch. In the pit itself several tunnels/burrows were detected, with a diameter of up to 0.50 m, probably made by carnivores (foxes or badgers). It is quite possible that originally the pit had two steps, the first pit being filled with the stones discovered, and some of them later being replaced by the treasure hunters.

Feature no. 3 (Pl. IX)

Stratigraphic position & location: Secondary grave without additional fill, dug into the already existing barrow fill and virgin soil, 3.5 m west of the CP.

Grave facility: Rectangular pit with the dimensions 1.35 × 0.83 m. Orientation: south–north. Upper level of the pit detected at -0.84 m from the CP, and bottom detected at -1.05 m from the CP. Flat pit floor. During the construction of the facility, a rectangular surface of approximately 2.5 × 1.5 m was dug into the barrow fill at a depth of -0.85 m from the CP. From that level the grave pit described above was dug.

Pit fill: Sediments from the barrow fill.

Method of disposal: Inhumation.

Number and condition of the skeletons: 1, well preserved.

Anthropological data: *Adultus* (20–25 years old), male.

Position & orientation: Articulated inhumation, in relaxed hocker position on the right, the body placed in south-east direction, head to south, facing east. The legs are bent at the knees; left arm bent at the elbow, right arm alongside the body, both palms in front of the pelvis.

Body treatment: Red ochre over the feet and palms.

Inventory: Two silver hair-rings in the skull area, one of them was found in the *auricula*.

Bone bead and 2 rodent teeth in the chest area.

Segment from a copper/bronze wire with rounded cross-section in the chest area.

Pot sherd was found in the fill above the grave, decorated with cord impressions.

¹⁴C date: **SUERC-95535: 4138 ± 22 BP.**

Feature no. 4 (Pl. X)

Stratigraphic position & location: Secondary grave without additional fill, dug into the barrow fill, the ancient humus level and the virgin soil.

Grave facility: Rectangular pit with one step. Orientation: east–west. Dimensions: upper pit: 1.55 × 1.29 m. Lower pit: 1.07 × 0.83 m. Width of the step: between 0.15 and 0.35 m. Upper level of the pit at -0.72 m from the CP. Upper level of the lower pit at -1.49 m from the CP, and bottom at -2.07 m from the CP. Traces indicate there was a cover made of strips of tree bark on the second pit. Flat pit floor.

Pit fill: Sediments from the barrow fill.

Method of disposal: Inhumation.

Number and condition of the skeletons: 1, well preserved.

Anthropological data: *Infans I* (approx. 6 years old), sex undefined.

Position & orientation: Articulated inhumation, in relaxed hocker position to the right, the body placed in north-east–south-west direction, north-east, facing north. The legs are bent at the knees; left arm bent at the elbow, right arm alongside the body, both palms in front of the knees.

Body treatment: Red ochre over the ankles.

Inventory: No.

¹⁴C date: **SUERC-95536: 4176 ± 24 BP.**

BARROW NECROPOLIS VETRINO-2

BARROW no. 7 (Pl. XI–XII)

Location: 1 km south of Vetrino. Part of the Vetrino-2 barrow necropolis, 7th in line from the north.

Barrow form and dimensions: Segment of a globe. Height – 1.0 m, diameter – 50 m.

Barrow fills and constructions: One barrow fill. Two stone agglomerations labelled as features nos. 2 and 5, discovered in the barrow periphery. More stones discovered in the barrow fill, probably displaced during ploughing.

Number of graves/method of disposal: Four inhumation graves.

Excavations: Rescue excavations – Anelia Bozkova and Eva Tonkova in 2020. The barrow was completely excavated. In the rescue excavation project, the barrow was called “Site A1- 089/7002”.

Notes: The barrow is located on agricultural land, and ploughing with heavy machines for decades has considerably enlarged its diameter and reduced its height.

Preliminary reports: Bozkova, Tonkova 2020.

Feature no. 1 (Pl. XIII)

Stratigraphic position & location: Primary grave, 3 m west from the CP. Dug into the ancient humus level and the virgin soil.

Grave facility: Rectangular pit with two steps. Orientation: west–east. Dimensions: upper pit: 2.42 × 1.84 m. Middle pit: 1.58 × 1.15 m. Lower pit: 1.47 × 0.95 m. Width of the steps: first step between 0.28–0.41 m. Second step – between 0.03–0.09 m. Upper pit at -0.60 m from the CP. Upper level of the middle pit at -0.97 m from the CP. Upper level of the lower pit at -1.29 m from the CP; bottom of the pit at -1.54 m from the CP. Flat floor. Traces indicate there was a cover made from strips of tree bark on the second pit. On the east, west and south sides the grave pit is encircled with medium-size stones arranged in one row near the long southern wall and, two-three vertical rows near the eastern and western walls of the pit.

Pit fill: sediments from the first barrow fill and virgin soil, dug out during the construction of the pit.

Method of disposal: Inhumation.

Number and condition of the skeletons: 1, well preserved.

Anthropological data: Adultus (20–30 years old), male, placed at the bottom of the lower pit.

Position & orientation: Articulated inhumation, in relaxed hocker position on the right, the body placed in west-east direction, head to west, facing south. The legs are bent at the knees; right arm bent at the elbow, palm in front of the head; left arm slightly bent at the elbow, palm missing.

Body treatment: Red ochre over the ankles, femur, ribs, shoulder, skull.

Inventory: No.

¹⁴C date: **SUERC-95544: 4372 ± 23 BP.**

Feature no. 2 (Pl. XV/5–6)

Stratigraphic position & location: 7.5 m north-east from the CP; at the ancient humus level.

Agglomeration of small and medium-sized stones arranged in an arch. Near the arch – *Bos Taurus* molar and bone.

Feature no. 3 (Pl. XIV)

Stratigraphic position & location: Secondary grave without additional fill, 10.5 m south from the CP. Dug into the barrow fill, the ancient humus level and the virgin soil.

Grave facility: Rectangular pit with two steps (?). Orientation: west-east. Dimensions of the upper pit were not clearly recognizable. Middle pit >1.62 × 1.48 m. Lower pit: 0.85 × 0.54 m. Width of the step: between 0.40–0.57 m. Upper pit at -0.32 m from the CP. Upper level of the middle pit at -0.84 m from the CP. Upper level of the lower pit at -1.21 m from the CP and bottom of the pit at -1.38 m from the CP. Flat floor. The lower pit was covered with four medium-sized stones.

Pit fill: Sediments from the barrow fill.

Method of disposal: Inhumation.

Number and condition of the skeletons: 1, badly preserved.

Anthropological data: *Infans I* (<1 years old), at the bottom of the lower pit.

Position & orientation: The bones were dislodged probably by foxes or badgers. Only the skull was found *in situ* – in the eastern part of the grave pit.

Body treatment: Red ochre over the skull.

Inventory: Clay vessel in the southeastern corner of the lower pit, near the skull. Clay vessel/cup with an elongated S-shape. Well-tempered clay with ingredients of fine sand and small pebbles. Burnished surface of dark brown colour. Decoration – oblique cuts on the rim; two rows of oblique cuts on the belly. Height – 14.69 cm (Pl. XIV/3, 5).

Animal bones on the pit floor.

Feature no. 4 (Pl. XV/1–2)

Stratigraphic position & location: Secondary grave without additional fill, 5 m north-west from the CP. Dug into the barrow fill at a depth of -0.23 m from the CP. The bottom of the grave pit was placed above the layer of the dug-out virgin soil from feature no. 1 grave pit.

Grave facility: Not recognized.

Method of disposal: Inhumation.

Number and condition of the skeletons: 1, badly preserved.

Anthropological data: *Maturus* (40–60 years old), male.

Position & orientation: The skeleton was destroyed probably by ploughing. The remaining bones *in situ* – the *acetabulum*, *femur*, *tibia* and *fibula* - indicate a hocker or semi-supine position (?).

Body treatment: No data.

Inventory: No.

Feature no. 5 (Pl. XV/7–8)

Stratigraphic position & location: 18.5 m west from the CP. Large sized stone – 0.55 × 40.0 × 0.20 m placed at the ancient humus level.

Feature no. 6 (Pl. XV/3–4)

Stratigraphic position & location: Secondary grave, 10.5 m north-west from the CP. Dug into the barrow infill at a depth of -0.35 m from the CP.

Grave facility: Not recognized.

Method of disposal: Inhumation.

Number and condition of the skeletons: 1, badly preserved.

Anthropological data: No data.

Position & orientation: The skeleton was destroyed probably by ploughing.

Body treatment: Red ochre on and around the bones preserved.

Inventory: No.

¹⁴C date: **SUERC-95545: 4145 ± 22 BP.**

BARROW NECROPOLIS VETRINO-3

BARROW no. 1 (Pl. XVI–XVII)

Location: 4.6 km south of Vetrino. Part of the Vetrino-3 barrow necropolis, first in the line from the south-west.

Barrow form & dimensions: Segment of a globe. Height – 1.20 m, diameter – 40 m. Central point (CP) of the barrow at 220.02 m altitude.

Barrow fills & constructions: Two barrow fills. The first one had a height of 0.80 m and diameter of 18 m. The second fill enlarged the barrow to 1.20 m in height and 30 m in diameter. It was surrounded by a ring of stones. The ring was constructed with medium-sized stones arranged in a single row, 1.0–2.5 m in width and with a diameter of 30 m.

Number of graves/method of disposal: Nine inhumation graves.

Excavations: Rescue excavations - Stefan Alexandrov and Vladimir Slavchev in 2020. The barrow was completely excavated. In the rescue excavation project, the barrow was called “*Site no. 1/Compressor station “Nova Provadia”*”.

Notes: The barrow is located on agricultural land, and ploughing with heavy machines for decades has considerably enlarged its diameter and reduced its height.

In different parts of the barrow fill, several flint flakes were found (Pl. XXVI/7).

Feature no. 1 (Pl. XVIII/1–4; XIX/1–3)

Stratigraphic position & location: Secondary grave, 2 m west from the CP with additional fill, and a second ring of stones. Dug into the first barrow fill and the virgin soil.

Grave facility: Rectangular pit with two steps. Orientation: north-east - south-west. Dimensions: upper pit: 2.32 × 2.24 m. Second pit: 1.53 × 1.79 m. Lower pit: 1.48 × 1.02 m. Width of the first step: between 0.31–0.45 m; second step: between 0.13–0.31 m. Upper pit at -0.64 m from the CP. Upper level of the middle pit at -1.22 m from the CP. Upper level of the lower pit at -1.84 m from the CP and bottom of the pit at -2.16 m from the CP. Flat floor. Traces indicate there was a cover made from strips of tree bark on the second pit. The floor beneath the skeleton was lined with an organic material.

Pit fill: In the middle and lower pits were sediments from the first barrow fill and virgin soil dug out during the construction of the pit. Additionally, two rows of large and very large stones (up to 1 m length) were placed horizontally in the upper pit, but later had fallen down into the middle one.

Method of disposal: Inhumation.

Number and condition of the skeletons: 1 complete skeleton at the bottom of the pit and a few bones from another individual in the upper half of the middle pit.

Anthropological data: *Iuvenis* (15–18/19 years old), male placed at the bottom of the lower pit.

Infans I (newborn?) 6 bone fragments in the middle pit.

Position & orientation: Articulated inhumation, in relaxed hocker position to the right, the body placed in the north-east–south-west direction, head to the north-east, facing west. The legs are bent at the knees. Left arm is bent at the elbow, the palm in front of the head; right arm is slightly bent at the elbow, the palm beneath the left knee.

Body treatment: Red ochre on the skull, wrists, palms and legs.

Inventory: 2 fragments of long bones from large ruminants in the fill of the middle pit and 2 bones from *Anas* sp. at both sides of the skull.

Flint in the fill of the middle pit.

¹⁴C date: **SUERC-97442: 4117 ± 25 BP.**

Feature no. 2 (Pl. XVIII/5–6; XIX/4–5)

Stratigraphic position & location: Secondary grave without additional fill, located in the northwestern sector of the barrow.

Grave facility: Stone construction/cist (?) consisting of vertical stone slabs covered by horizontal ones. The upper part of the vertical stones at -0.63/-0.76 m from the CP, bottom of the construction at -0.97 m from the CP. Dimensions of the construction: 1.20 × 0.70 m.

Pit fill: Sediments from the barrow fill.

Method of disposal: Inhumation.

Number and condition of the skeletons: 1, badly preserved.

Anthropological data: *Infans I*, sex undefined.

Position & orientation: Hocker (?). Head to the north-east.

Body treatment: No data.

Inventory: No.

¹⁴C date: No.

Feature no. 3 (Pl. XX; XXI/1–3)

Stratigraphic position & location: Secondary grave, dug into the first and second barrow fills and the virgin soil to the level of the bedrock, 4 m south of the CP.

Grave facility: Oval pit with one step. Orientation: north-east–south-west. Dimensions of the upper pit: 2.42 × 1.62 m. Lower pit: 1.54 × 1.11 m. Width of the step: between 0.49 and 0.19 m. Upper level of the upper pit at -1.50 m from the CP. Upper level of the lower pit at -2.66 m from the CP, and bottom of the pit at -3.02 m from the CP. Flat floor. Traces indicate there was a cover made from strips of tree bark on the lower pit. Brown sediment/floor cover beneath the skeleton.

Pit fill: Sediments from the barrow fills and the virgin soil dug out during the construction of the pit. Two rows of medium-sized stones placed near the walls of the upper pit, fallen down into the lower one.

Method of disposal: Inhumation.

Number and condition of the skeletons: 1, well preserved.

Anthropological data: *Infans II* (11–12 years old), sex undefined.

Position & orientation: Articulated inhumation, in semi-supine position on the right, the body placed in the north-east–south-west direction, head to the north-east, facing west. Head over the right shoulder. Legs bent at the knees, set down to the right. Right arm alongside the body, palm beneath the knees. Left arm bent at the elbow, palm in front of the knees.

Body treatment: Red ochre on the skull, ribs, pelvis and legs.

Inventory: Flint unipolar flak core in the fill of the lower pit; red ochre beneath the pelvis and near the knees (Pl. XX/5).

¹⁴C date: **SUERC-97443: 4158 ± 29 BP.**

Notes: The virgin soil dug out from the pit covers stratigraphically the tree bark covering of feature no. 5.

Feature no. 4 (Pl. XXI/4; XXII)

Stratigraphic position & location: Primary grave and above it, the first barrow fill was piled. 3 m west from the CP.

Grave facility: Rectangular pit with two steps. Orientation: south-east–north-west. Dimensions: upper pit: 2.92 × 2.16 m. Second pit: 2.12 × 1.35 m. Lower pit: 1.70 × 1.01 m. Width of the first step: between 0.32–0.43 m; second step: between 0.18–0.21 m. Upper pit at -1.30 m from the CP. Upper level of the middle pit at -1.61 m from the CP. Upper level of the lower pit at -1.95 m from the CP, and bottom of the pit at -2.62 m from the CP. Flat floor. Traces indicate there was a cover made from strips tree bark on the second pit. The floor beneath the skeleton was covered with an organic material.

Pit fill: Sediments from the barrow fills and virgin soil dug out during the construction of the pit.

Method of disposal: Inhumation.

Number and condition of the skeletons: 1, well preserved.

Anthropological data: *Maturus* (40–50 years old), male.

Position & orientation: Articulated inhumation, in relaxed hocker position on the right, the body was placed oriented south-east - north-west, head to the south east, facing north. Legs bent at the knees, set down to the right. Right arm alongside the body, palm beneath the knees. Left arm bent at the elbow, palm beneath pelvis.

Body treatment: Red ochre on the skull, fingers of the right hand, knees and feet. Near the ankles and skull – fragments of red ochre.

Inventory: bone awl, placed between the skull and the eastern wall of the pit, length – 8.55 cm (Pl. XXII/1–2).

¹⁴C date: **SUERC-97444: 4127 ± 30 BP.**

Feature no. 5 (Pl. XXIII/1–3; XXIV/1)

Stratigraphic position & location: Secondary grave without additional fill, dug into the periphery of the first barrow fill, ancient humus level and virgin soil, 7.5 m south-east from the CP.

Grave facility: Rectangular pit with one step. Orientation: north-east–south-west. Dimensions: upper pit: 2.01 × 1.23 m. Lower pit: 1.70 × 1.01 m. Width of the step: between 0.11 and 0.27 m. Upper level of the upper pit at -1.80 m from the CP. Upper level of the lower pit at -2.51 m from the CP, and bottom of the pit at -2.63 m from the CP. Flat floor. Traces indicate there was a cover of wooden tree bark on the upper pit. Brown sediment (floor cover) beneath the skeleton.

Pit fill: Sediments from the barrow fills and virgin soil dug out during the construction of the pit.

Method of disposal: Inhumation.

Number and condition of the skeletons: 1, well preserved.

Anthropological data: *Maturus* (50–60 years old), male.

Position & orientation: Articulated inhumation, in relaxed hocker position to the right, the body placed along the north-east–south-west direction. The skull is placed in front of the chest, over the right *humerus*, the mandible is at the right shoulder. Legs bent at the knees, set down to the right. The arms bent at the elbows, palms at the left knee.

Body treatment: Red ochre over the right arm, knees and tibiae.

Inventory: Fragments of red ochre on the floor, in front of the knees and in the north-western corner of the pit.

¹⁴C date: **SUERC-97448: 4154 ± 27 BP.**

Notes: The tree bark lay stratigraphically beneath the dug-out virgin soil from the pit of feature no. 3.

Feature no. 6 (Pl. XXIII/2, 4; XXIV/2)

Stratigraphic position & location: Secondary grave without additional fill, dug into the first and second barrow infills and the ancient humus level, 8 m south from the CP.

Grave facility: Oval pit. Orientation: east-west. Dimensions: 1.26 × 0.72 m; upper level of the pit at -1.01 m from the CP, bottom of the pit at -1.85 m from the CP. The floor is with a convex shape, covered with strips of tree bark.

Pit fill: Sediments from the barrow fills.

Method of disposal: Inhumation.

Number & condition of the skeletons: 1, well preserved.

Anthropological data: *Maturus* (50–60 years old), male.

Position & orientation: Articulated inhumation, in contracted hocker position on the left, the body was placed in the east-west direction, head to the east, facing south. Legs bent at the knees, the left one in front of the chest, the right one - in front of the pelvis. The arms bent at the elbows, the left palm in front of the skull, the right palm – at the left knee.

Body treatment: No data.

Inventory: Lamb bones found behind the skull.

¹⁴C date: **SUERC-97449: 3442 ± 28 BP.**

Notes: The grave pit cuts the second barrow fill, the dug-out virgin soil from feature no. 3 pit, and the first barrow fill. The bottom of the pit lies stratigraphically above the level of the tree bark of feature no. 5. During the construction of the grave structure a surface of approximately 3 × 3 m has been levelled from where the grave pit was dug. The shape of this upper pit was not clearly visible.

Feature no. 7 (Pl. XXIII/5–6; XXIV/3)

Stratigraphic position & location: Secondary grave without additional fill, dug into the first and second barrow fills, the ancient humus level and the virgin soil, 7.5 m north from the CP.

Grave facility: Rectangular pit probably with one step (?). Orientation: south-east–north-west. Dimensions of the lower pit: 1.76 × 1.03 m. Upper level of the pit at -1.36 m from the CP. Bottom of the pit at -2.17 m from the CP. Flat floor.

Pit fill: Sediments from the barrow fills and virgin soil dug out during the construction of the pit.

Method of disposal: Inhumation.

Number & condition of the skeletons: 1, well preserved.

Anthropological data: Late Adultus – Early Maturus (35–45 years old), male.

Position & orientation: Articulated inhumation, in semi-supine position on the right, the body placed in the south-east – north-west direction, head to the east, facing north. Legs bent at the knees, set down to the right. Right arm bent at the elbow, palm beneath the knees; left arm bent at the elbow, palm in front of the pelvis.

Body treatment: No data.

Inventory: No.

¹⁴C date: **SUERC-97450: 4158 ± 25 BP.**

Notes: During the construction of the grave facility a surface of approximately 3 × 3 m has been levelled, from where the grave pit was dug. The shape of this upper pit was not clearly visible and was recognizable only by the virgin soil dug-out from the pit.

Feature no. 8 (Pl. XXV)

Stratigraphic position & location: Secondary grave without additional fill, dug into the first and second barrow fills, the ancient humus level and the virgin soil, 11 m south-west from the CP.

Grave facility: Rectangular pit with rounded corners. Orientation: east-west. Dimensions of the pit: 0.76 × 0.33 m. Upper level of the pit at -1.90 m from the CP, bottom of the pit at -2.47 m from the CP. Flat floor. Traces indicate there was a cover on the pit made from at least four strips of tree bark.

Pit fill: Sediments from the barrow fills and virgin soil, dug out during the construction of the pit.

Method of disposal: Inhumation.

Number & condition of the skeletons: 1, badly preserved.

Anthropological data: Infans I (around 6 months).

Position & orientation: Inhumation in hocker or semi-supine position? Head to the east.

Body treatment: Red ochre over the skull.

Inventory: Clay cup near the skull. Elongated S-shape, the rim is broken. Well-tempered clay with ingredients of fine sand and small pebbles. Burnished surface of brown colour. Height = 8.09 cm (Pl. XXV/3–4).

¹⁴C date: **SUERC-97451: 4142 ± 29 BP.**

Feature no. 9 (Pl. XXVI/1–3)

Stratigraphic position & location: Secondary grave without additional fill; dug into the first and second barrow fills, the ancient humus level and the virgin soil, 12.5 m southwest from the CP.

Grave facility: Pit with one step. Elongated four-sided upper pit and oval lower pit. Orientation: south-east – north-west. Dimensions: upper pit: 1.81 × 1.12 m. Lower pit: 1.23 × 0.78 m. Width of the step: between 0.11 and 0.51 m; upper level of the upper pit at -2.20 m from the CP, upper level of the lower pit at -2.44 m from the CP, bottom of the pit at -2.90 m from the CP. Flat floor. Traces indicate there was a cover made from strips of tree bark on the upper pit.

Pit fill: Sediments from the barrow fills and virgin soil dug out during the construction of the pit.

Method of disposal: Inhumation.

Number & condition of the skeletons: 1, well preserved.

Anthropological data: Late Maturus – Early Senilis (55–65 years old), probably female.

Position & orientation: Inhumation of a disarticulated body: pelvis and legs, shoulders and arms and skull.

Body treatment: The feet are missing, as are the palms and the ribs.

Inventory: No.

¹⁴C date: **SUERC-97452: 4172 ± 27 BP.**

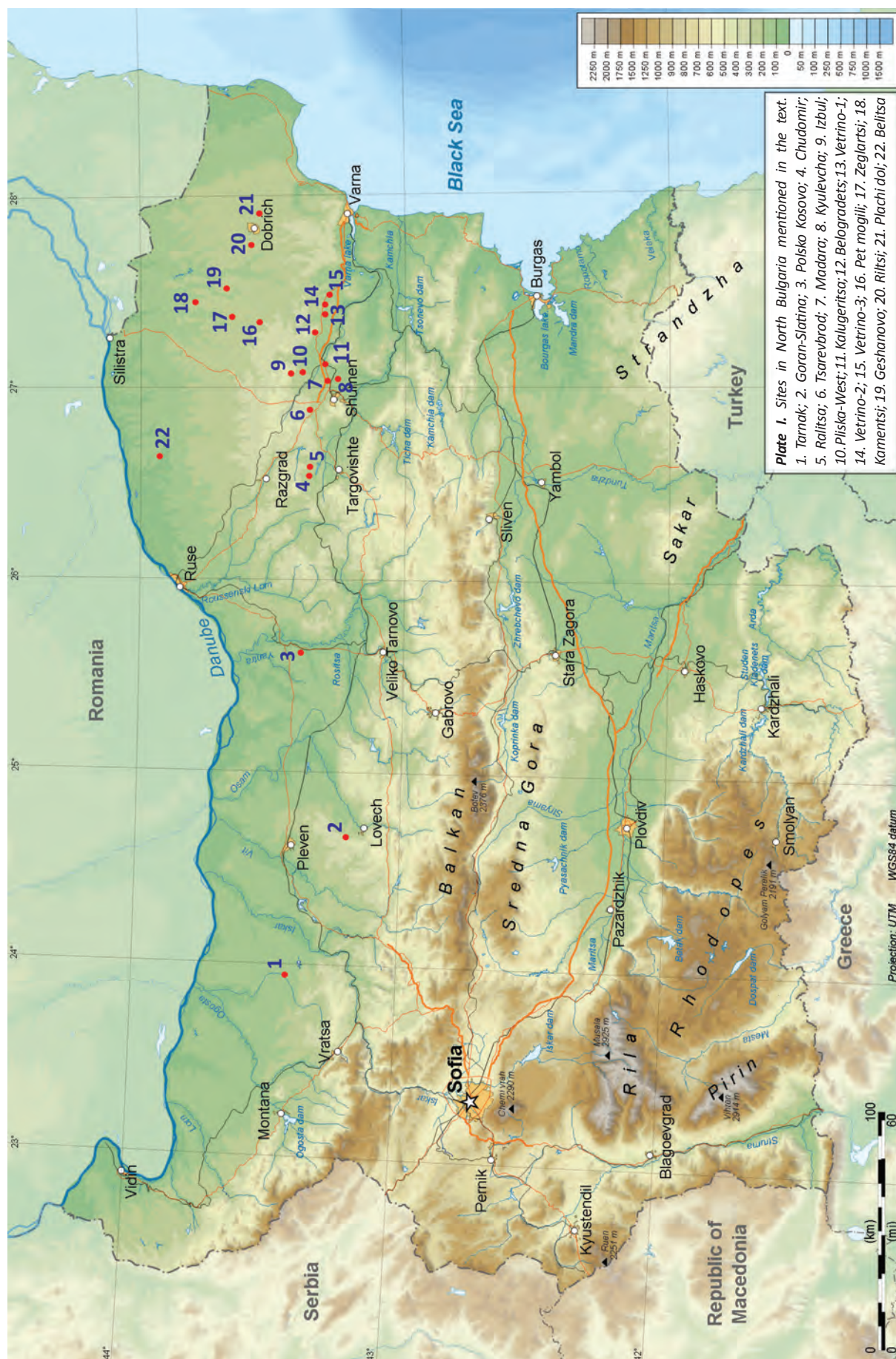
Notes: The observations concluded the following sequence for the position of the remains: shoulders and arms, bent at the ankles in the south–north direction; the pelvis and the legs set in contracted position over the tibiae in the east-west direction, the skull (facing north) over the right humerus and the mandible in front of the shoulders.

REFERENCES

- Agre 2015 – D. Agre, *Archaeological Investigation of the "Lozianska Mogila" Barrow located near the Village of Boyanovo, Municipality of Elkhovo, in South-eastern Bulgaria*, PZ 90, 2015, 1–2, p. 141–171.
- Ailincăi et alii 2016 – S. C. Ailincăi, F. Mihail, L. Carozza, M. Constantinescu, C. Micu, A. Buerns, *Découverte d'un tumulus de l'âge du bronze à Rahman, sur la commune de Casimcea (départ. de Tulcea)*, SCIVA 67, 2016, 1–2, p. 29–52.
- Alexandrov 2010 – S. Alexandrov, *Prehistoric barrow graves with extended inhumations between Danube and Balkan range*, Studia Praehistorica 13, 2010, p. 277–292.
- Alexandrov 2011 – S. Alexandrov, *Prehistoric barrow graves between the Danube and the Balkan range. Stratigraphy and relative chronology*, in: E. Borgna, S. Müller-Celka (eds), *Ancestral landscapes. Burial mounds in the Copper and Bronze Ages (Central and Eastern Europe-Balkans-Adriatic-Aegean, 4th–2nd millennium B. C.)*, *Proceedings of the International Conference held in Udine*, Travaux de la Maison 58, 2011, p. 307–320.
- Alexandrov 2018 – S. Alexandrov, *The Early and Middle Bronze Age in Bulgaria: Chronology, Periodization, Cultural Contacts and Precious Metal Finds*, in: S. Alexandrov, Y. Dimitrova, H. Popov, B. Horejs, K. Chukalev (eds), *Gold and Bronze. Metals, Technologies and Interregional Contacts in the Eastern Balkans during the Bronze Age*, Sofia, 2018, p. 85–96.
- Alexandrov 2020a – S. Alexandrov, *Bronze Age Barrow Graves in Upper Thrace. Old and New Questions*, in: S. Hansen (ed.), *Repräsentationen der Macht. Beiträge des Festkolloquiums zu Ehren des 65. Geburtstags von Blagoje Govedarica*, Kolloquien zur vorund Frühgeschichte 25, Wiesbaden, 2020, p. 147–170.
- Alexandrov 2020b – S. Alexandrov, *Site 3 near Chudomir, Loznitsa municipality*, in: H. Popov (ed.), *Stream Through Time. Rescue archaeological investigations along the expansion of the gas transmission infrastructure of Bulgartransgaz EAD*, National Archaeological Museum Catalogues, Supplementum 1, Sofia 2020, p. 462–471.
- Alexandrov in press – S. Alexandrov, *Forth – Third Millennium BC Barrow Graves in North-East Bulgaria (120 years of investigations)*, in: V. Heyd, G. Kulcsár, B. Preda-Bălănică (eds), *Yamnaya Interactions, Proceedings of the International Workshop held in Helsinki, 25–26th April 2019, The Yamnaya Impact in Prehistoric Europe*, vol. 2, Budapest, in press.
- Alexandrov, Benham 1995 – C. Александров, А. Бенам, *Разкопки на могила № 1 от раннобронзов могилен некропол до с. Белица (Тутраканско)*, in: *Тутракан в историческото развитие на Добруджа*, Тутракан, 1995, p. 49–54.
- Alexandrov, Kaiser 2016 – S. Alexandrov, E. Kaiser, *The Early Barrow Graves in West Pontic Area. Cultures? Migrations? Interactions?* PAS 30, 2016, p. 359–370.
- Alexandrov, Slavchev 2020 – S. Alexandrov, V. Slavchev, *Site A1/3 near Vetrino, Varna Region*, in: H. Popov (ed.), *Stream through time. Rescue archaeological investigations along the expansion of the gas transmission infrastructure of Bulgartransgaz EAD*, National Archaeological Museum – Catalogues. Supplementum 1, Sofia, 2020, p. 439–443.
- Alexandrov et alii 2018 – S. Alexandrov, Y. Dimitrova, H. Popov, B. Horejs, K. Chukalev (eds), *Gold and Bronze. Metals, Technologies and Interregional Contacts in the Eastern Balkans during the Bronze Age*, Sofia 2018.
- Bozkova, Tonkova 2020 – A. Bozkova, E. Tonkova, *Site A1/7002 near Vetrino, Varna Region*, in: H. Popov (ed.), *Stream through time. Rescue archaeological investigations along the expansion of the gas transmission infrastructure of Bulgartransgaz EAD*, National Archaeological Museum – Catalogues. Supplementum 1, Sofia, 2020, p. 450–455.
- Brudiu 2003 – M. Brudiu, *Lumea de sub tumulii din sudul Moldovei. De la indo-europeni la turanicii târzi. Mărturii arheologice*, București, 2003.
- Burtănescu 2002 – F. Burtănescu, *Epoca timpurie a bronzului între Carpați și Prut cu unele contribuții la problemele perioadei*

- premergătoare epocii bronzului în Moldova, BiblThrac 37, București, 2002.
- Dani, Nepper 2006 – J. Dani, I. M. Nepper, *Sárrétudvari-Örhalom. Tumulus grave from the beginning of the EBA in Eastern Hungary*, *Communicationes Archaeologicae Hungariae* 2006, Budapest, p. 29–48.
- Demchenko 2016 – Т. Демченко, К вопросу о выделении культурной группы Бурсучень в рамках Гординештско – Позднемайкопского феномена, in: L. Sîrbu, N. Telnov, I. Ciobanu, Gh. Sîrbu, M. Kaşuba (eds), *Culturi, procese și contexte în arheologie, Volum omagial Oleg Levițki la 60 de ani*, Chișinău, 2016, p. 84–99.
- Dergacev 1986 – В. Держачев, *Молдавия и соседние территории в эпоху бронзы*, Кишинев, 1986.
- Frînculeasa 2020a – A. Frînculeasa, *Cultura Cernavodă II la Dunărea Inferioară. Relevanța cronologiei și a înmormântărilor tumulare*, SP 17, 2020, p. 135–193.
- Frînculeasa 2020b – A. Frînculeasa, *Contributions regarding the Middle Bronze Age period in northern Muntenia*, *Mousaios* 23, 2020, p. 127–144.
- Frînculeasa et alii 2015 – A. Frînculeasa, B. Preda, V. Heyd, *Pit-Graves, Yamnaya and Kurgans along the Lower Danube: Disentangling IVth and IIIrd Millennium BC Burial Customs, Equipment and Chronology*, *PZ* 90, 2015, 1–2, p. 45–113.
- Frînculeasa et alii 2017a – A. Frînculeasa, A. Simalcsik, B. Preda, D. Garvăn, *Smeeni - Movila Mare. Monografia unui sit arheologic regăsit*, Târgoviște, 2017.
- Frînculeasa et alii 2017b – A. Frînculeasa, P. Mirea, G. Trohani, *Local cultural settings and transregional phenomena: on the impact of a funerary ritual in the Lower Danube in the 4th millennium BC*, *BMJ* 9, 2017, p. 75–116.
- Heyd 2011 – V. Heyd, *Yamnaya group and tumuli west of the Black Sea*, in: E. Borgna, S. Müller-Celka (eds), *Ancestral landscapes. Burial mounds in the Copper and Bronze Ages (Central and Eastern Europe-Balkans-Adriatic-Aegean, 4th–2nd millennium B. C.)*, *Proceedings of the International Conference held in Udine*, *Travaux de la Maison* 58, 2011, p. 535–555.
- Hristova 2010 – Т. Христова, *Гробни комплекси от средната бронзова епоха от Югоизточна България в контекста на културното развитие в Долнодунавския басейн*, in: P. Георгиева, Т. Стоянов, Д. Момчилов (ed.), *Югоизточна България през II–I хилядолетие пр.Хр.*, Варна, p. 16–21.
- Iliev, Bakardziev 2020 – I. Iliev, S. Bakardziev, *Kurgane der Frühen bis Späten Bronzezeit im Bezirk Jambol, Südostbulgarien*, Budapest, 2020.
- Ivanova 2013 – С. Иванова, *Ямная (Буджакская) Культура*, in: *Давні культури Північно-Західного Причорномор'я (до 95-річчя Національної академії наук України)*, Одеса, 2013, p. 211–254.
- Kaiser 2019 – E. Kaiser, *Das dritte Jahrtausend im osteuropäischen Steppenraum. Kulturhistorische Studien zu prähistorischer Subsistenzwirtschaft und Interaktion mit benachbarten Räumen*, *Berlin Studies of the Ancient World* 37, Berlin, 2019.
- Kaiser, Winger 2015 – E. Kaiser, K. Winger, *Pit graves in Bulgaria and the Yamnaya Culture*, *PZ* 90, 2015, 1–2, p. 114–140.
- Kitov 2000 – G. Kitov, *Pit-grave Culture tumulus graves near Izbul (Northeastern Bulgaria)*, in: L. Nikolova (ed.), *Technology, Style and Society. Contributions to the innovations between the Alps and the Black Sea in Prehistory*, *BARIntSer* 854, Oxford, p. 311–319.
- Kitov et alii 1991 – Г. Китов, И. Панайотов, П. Павлов, *Могилни некрополи в Ловешкия край. Ранна бронзова епоха. Некрополът Горан – Слатина*, Разкопки и Проучвания 23, София, 1991.
- Klochko et alii 2015 – V. Klochko, A. Koško, M. Potupchik, P. Włodarczak, D. Żurkiewicz, S. Ivanova, *Tripolye (Gordinești Group), Yamnaya and Catacomb Culture cemeteries, Prydnistrianske, site 1, Yampil region, Vinnitsa oblast: an archaeometric and chronometric description and a taxonomic and topogenetic discussion*, *Baltic-Pontic Studies* 20, 2015, p. 183–255.
- Lăzărca 1980 – E. Lăzărca, *Raport asupra noilor cercetări arheologice de la Baia (Hamangia), județul Tulcea*, Peuce 8, 1980, p. 7–36.
- Manzura 2005 – I. Manzura, *The proto-Bronze Age cemetery at Durankulak: a look from the east*, in: L. Nikolova, J. Fritz, J. Higgins (eds), *Prehistoric Archaeology & Anthropological Theory and Education*, *RPRP* 6–7, 2005, p. 51–55.
- Manzura 2016 – I. Manzura, *North-Pontic steppes at the end of the 4th millennium BC: the epoch of broken borders*, in: A. Zanoci, E. Kaiser, M. Kashuba, E. & M. Băț Izbitser (eds), *Man, culture and society from the Copper Age until the Early Iron Age in Northern Eurasia. Contributions in honour of the 60th anniversary of Eugen Sava*, Chișinău, 2016, p. 53–75.
- Mikov 1934 – В. Миков, *Последни могили находки*, in: *Мадара*, vol. I, София, 1934, p. 429–438.
- Mikov 1936 – В. Миков, *Стари могили гробове при Калугерица и Кюлевча*, in: *Мадара*, vol. II, София, 1936, p. 3–10.
- Mitkova 2014 – Р. Миткова, *Паметници от бронзовата епоха*, in: Рашо Рашев († 2008), *Станислав Станилов, Станимир Стойчев. Кабиюк. Ранносредновековен могилен комплекс*, София, 2014, p. 187–204.
- Motzoi-Chicideanu 2011 – I. Motzoi-Chicideanu, *Obiceiuri funerare în епока bronzului la Dunărea mijlocie și inferioară*, București, 2011.
- Nestor 1937 – I. Nestor, *Cercetări preistorice la Cernavodă*, *Analele Dobrogei* 18, 1937, p. 1–19.
- Panayotov 1989 – И. Панайотов, *Ямната култура в българските земи*, Разкопки и Проучвания 21, София, 1989.
- Popov 1932 – Р. Попов, *Могилните гробове при Ендже*, *Известия на археологическия институт* 6, 1930–1931, p. 89–113.
- Popov 2020 – H. Popov (ed.), *Stream through time. Rescue archaeological investigations along the expansion of the gas transmission infrastructure of Bulgartransgaz EAD*, *National Archaeological Museum – Catalogues. Supplementum* 1, Sofia, 2020.
- Popovici, Kaiser 2020 – S. Popovici, E. Kaiser, *A Burial Mound in the Town of Cimișlia in Southern Part of the Republic of Moldova: Relative and Absolute Chronology of the Burials*, in: H. Д. Бурова, А. А. Выборнов, М. А. Кулькова (eds), *Радиоуглерод в археологии и палеоэкологии: прошлое, настоящее, будущее. Материалы международной конференции, посвященной 80-летию старшего научного сотрудника ИИМК РАН, кандидата химических наук Ганны Ивановны Зайцевой*, Самара, 2020, p. 73–74.
- Popovici et alii 2016 – S. Popovici, I. Ciobanu, S. Agulnicov, I. Noroc, *Tumulul 8 de la Cimișlia. Considerații preliminare*, in: *Arheologia preventivă în Republica Moldova*, vol. III, 2016, p. 19–28.
- Preda 2015 – B. Preda, *Considerations regarding Barrow Burials and Metal Depositions during the Early Bronze Age in the Carpathian-Danube Area*, *Hiperboreea* 2, 2015, p. 5–51.
- Preda-Bălănică et alii 2020 – B. Preda-Bălănică, A. Frînculeasa, V. Heyd, *The Yamnaya Impact North of the Lower Danube: A Tale of Newcomers and Locals*, *BSPF* 117, 2020, 1, p. 85–101.
- Rassamakin 2004 – J. Rassamakin, *Die nordpontische Steppe in der Kupferzeit*, Teil I – Text, Teil II – Katalog, Tafeln, *Arhăologie in Eurasien* 17, Mainz, 2004.
- Roman et alii 1992 – P. Roman, A. Dodd-Oprîțescu, P. János, H. Hauptmann, W. Schrickel, *Beiträge zur Problematik der schnurverzierten Keramik Südosteuropas*, Mainz am Rhein, 1992.
- Schuchhard, Traeger 1918 – C. Schuchhard, P. Traeger, *Aussgrabung zwei Tumuli bei Constanza*, *PZ* 10, 1918, p. 150–155.
- Schuster et alii 2011 – C. Schuster, A. Morintz, R. Kogălniceanu, C. Ștefan, A. Comșa, G. El-Susi, M. Constantin, C. Constantin, G. Mureșan, *Cercetările arheologice de pe tronsonul Cernavodă-Medgidia al autostrăzii A2. Tumulul nr. 3*, Târgoviște, 2011.
- Simion 2003 – G. Simion, *Migrația popoarelor indo-europeene la Dunăre de Jos*, in: G. Simion, *Culturi antice în zona gurilor Dunării*, Vol. I. *Preistorie și protoistorie*, Biblioteca Istro-Pontica, Serie Arheologie 5, 2003, p. 13–50.
- Stanchev 2002 – Д. Станчев, *Резултати от археологическите разкопки на могилата Яланджи тепе до с. Полско Косово, Русенско*, in: *Пътът. Studia in honorem prof. Ivani Marazov*, София, 2002, p. 519–531.

- Subbotin 2002 – Л. Субботин, *Металлические изделия ямных племен северо-западного Причерноморья*, in: *The Varna eneolithic necropolis and problems of prehistory in Southeast Europe. Studia in memoriam Ivani Ivanov*, Acta Musei Varnaensis 6, 2002, p. 227–240.
- Tončeva 1978 – G. Tončeva, *Nécropole tumulaire de l'âge du bronze ancien près du village Belogradec*, Studia Praehistorica 1–2, 1978, p. 228–237.
- Tončeva 1980 – G. Tončeva, *Nécropole tumulaire du VII^e s. av. n. ère près du village Belogradec*, Thracia 5, 1980, p. 5–52.
- Tončeva 1981a – G. Tončeva, *Un habitat de l'âge du Bronze ancien dans les environs de la ville de Varna (Ezerovo II)*, Dacia NS 25, 1981, p. 41–59.
- Tončeva 1981b – G. Tončeva, *Monuments sculpturaux en Bulgarie du Nord-Est de l'âge du bronze*, Studia Praehistorica 5–6, 1981, p. 129–145.
- Torbov 1994 – Н. Торбов, *Резултати от археологическото проучване на Ниновската могила при Търнак, Белослатинско*, Известия на Музеите в Северозападна България 22, 1994, p. 11–21.
- Vagalinski 2020 – L. Vagalinski, *Early bronze age tumulus near the village of Kamentsi, Silistra region, NE Bulgaria*, Archaica 7–8, 2019–2020, p. 19–27.
- Vajsov 2002 – I. Vajsov, *Das Grab 982 und die Protobronzezeit in Bulgarien*, in: Todorova (Hrsg.), *Durankulak, Band II: 1. Die prähistorischen Gräberfelder*, Sofia, 2002, p. 159–176.
- Vasileva 2018 – H. Vasileva, *From the bottom of the sea: the Early Bronze Age ceramics from Sozopol and Urdoviza*, Pontica 51, 2018, p. 135–150.
- Vasileva 2019 – H. Vasileva, *A comparison between the decoration of the Early Bronze Age ceramics of the northern and the southern parts of the west pontic area*, Oltenia 26, 2019, p. 50–69.
- Zmeykova 2001 – I. Zmeykova, *The Cernavoda III culture in North-Eastern Bulgaria*, in: P. Roman, S. Diamandi (eds), *Cernavodă III – Boleráz. Ein vorgeschichtliches Phänomen zwischen dem Oberrhein und der unteren Donau, Symposium Mangalia/Neptun (18–24 Oktober 1999)*, Studia Danubiana, Series Symposia II, București, 2001, p. 213–235.



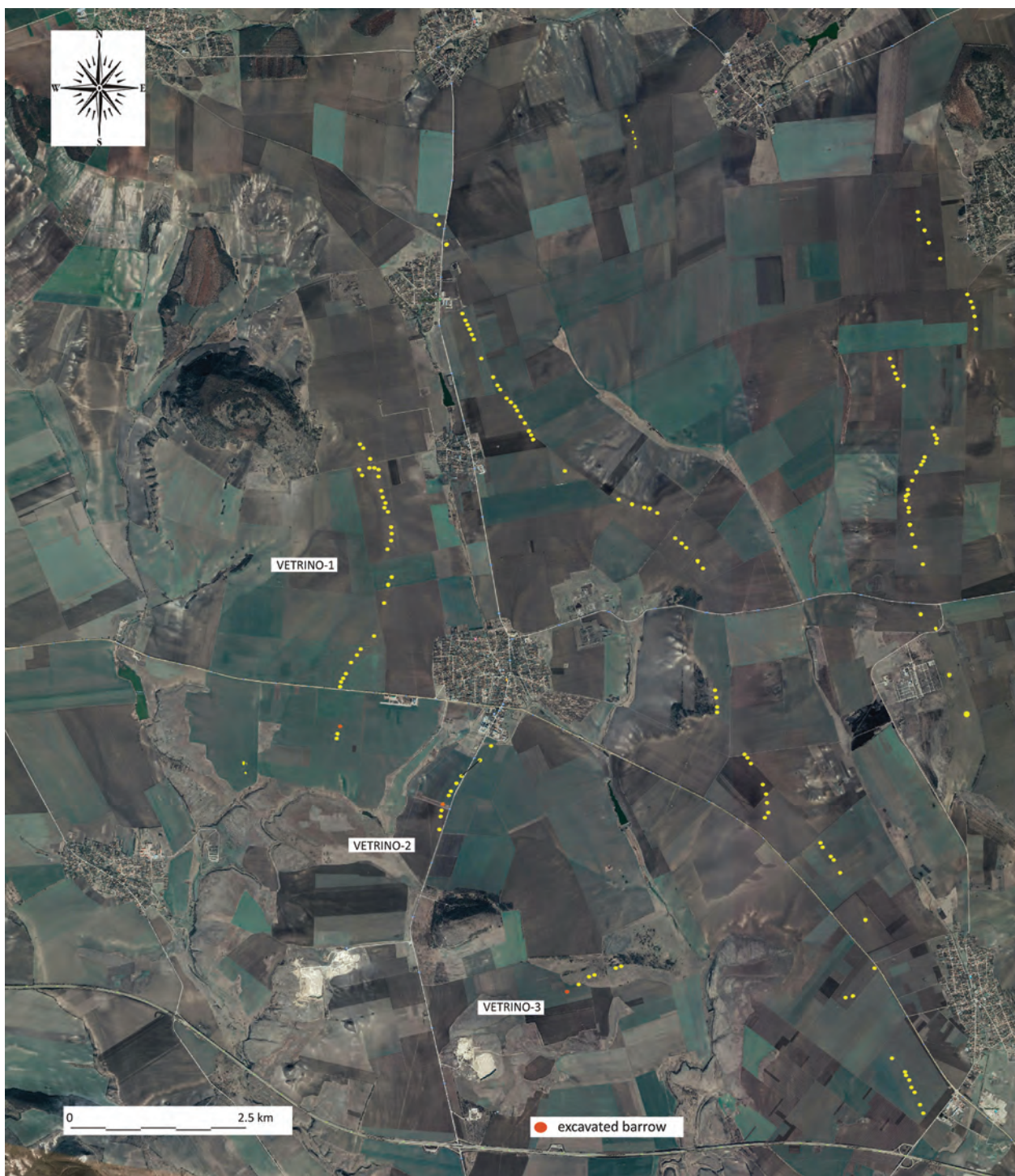


Plate II. Bronze Age barrow necropolises in Vetrino region.



1

2



Plate III. Vetrino-1 necropolis, Barrow 34. 1. The barrow before the excavations; 2. Aerial view.



Plate IV. Vetrino-1 necropolis, Barrow 34. Features investigated and profiles.

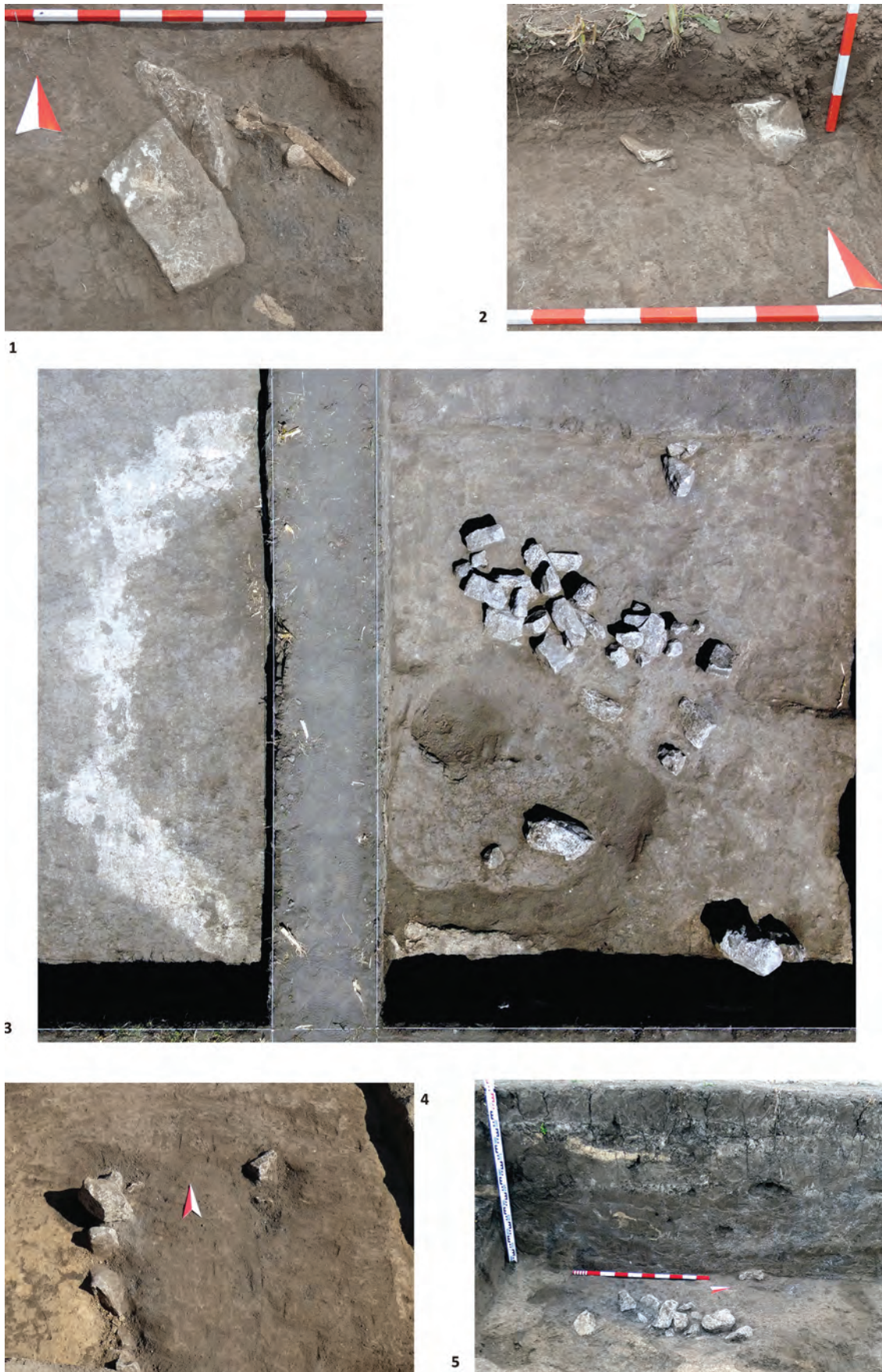


Plate V. Vetrino-1 necropolis, Barrow 34. 1–2. Human bones from the destroyed feature no. 1; 3–5. Feature no. 2 in the process of investigation.



1



2



3



4



5

Plate VI. Vetrino-1 necropolis, Barrow 34. Feature no. 2 in the process of investigation.

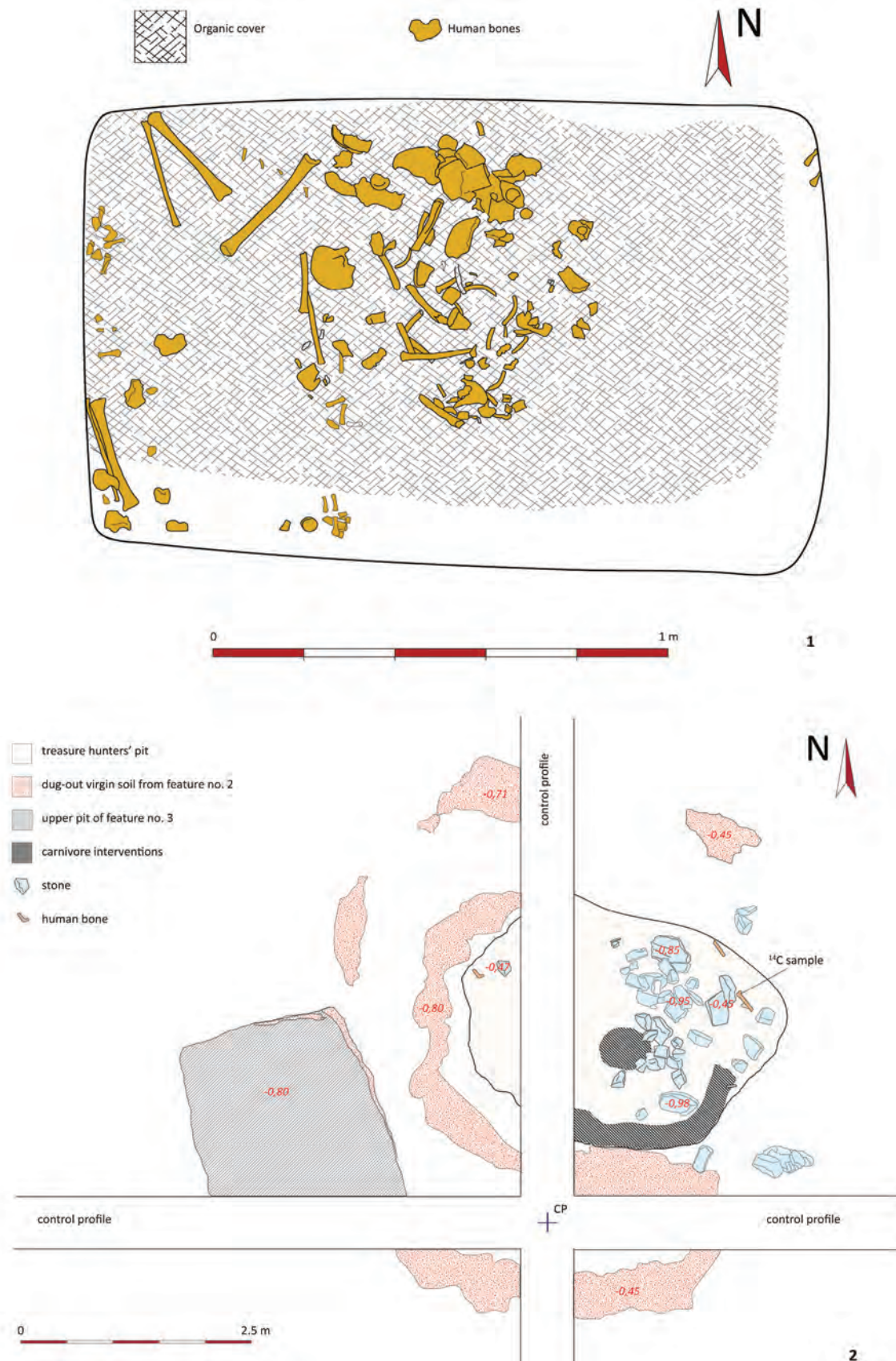


Plate VII. Vetrino-1 necropolis, Barrow 34. 1. Feature no. 2; 2. Features nos. 1-3.

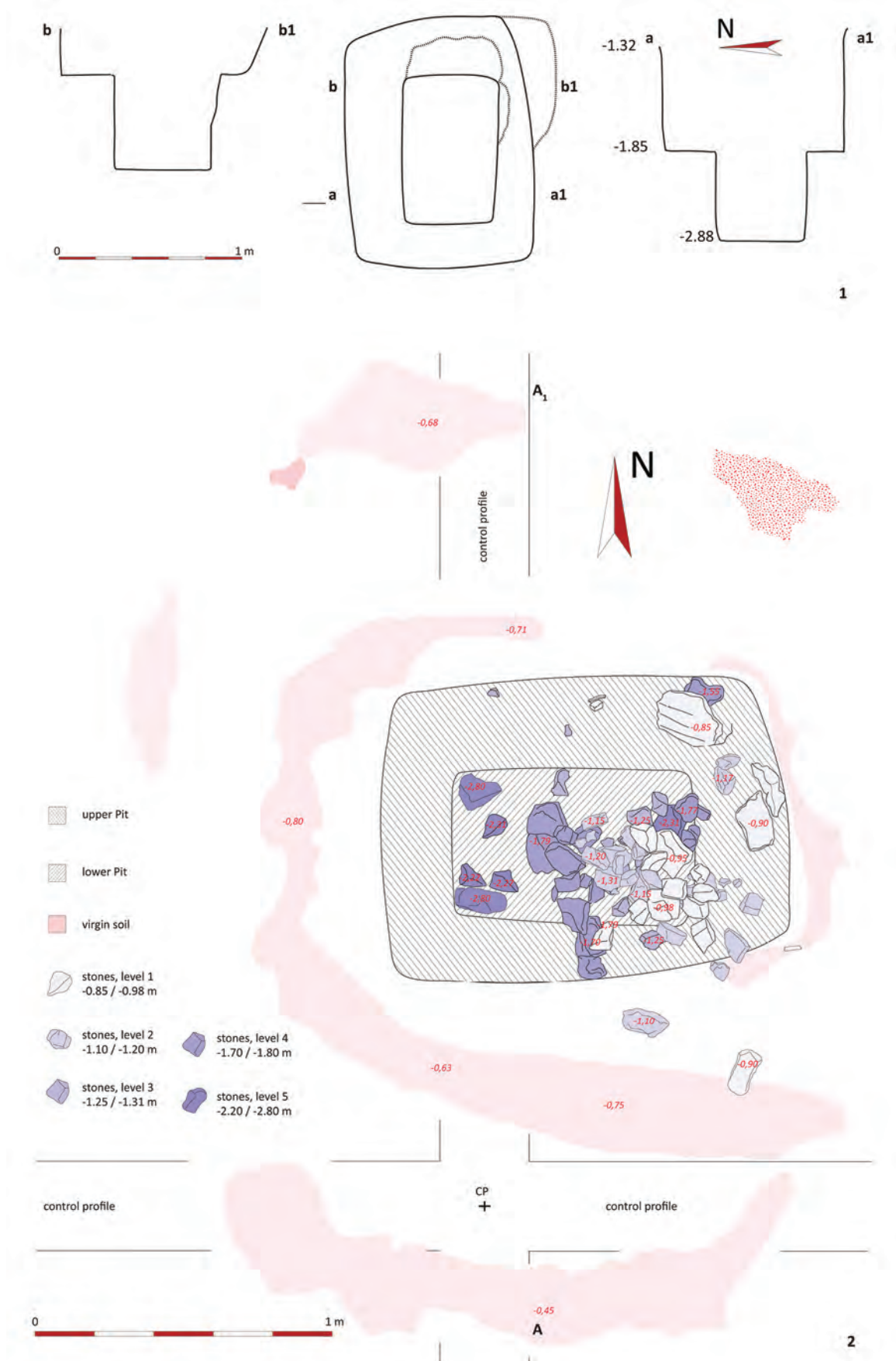


Plate VIII. Vetrino-1 necropolis, Barrow 34. Feature no. 2.



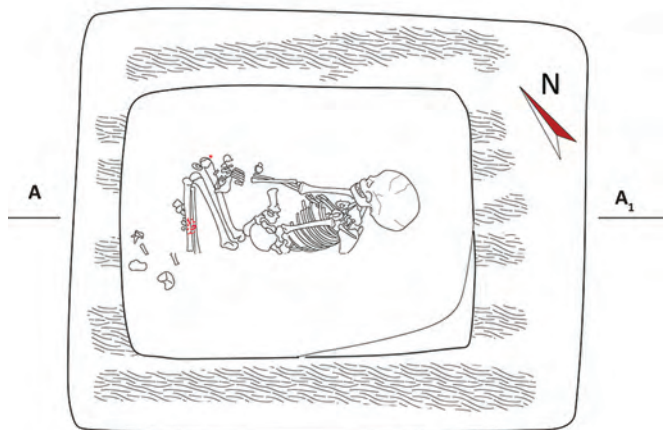
Plate IX. Vetrino-1 necropolis, Barrow 34. Feature no. 3 and the grave inventory.



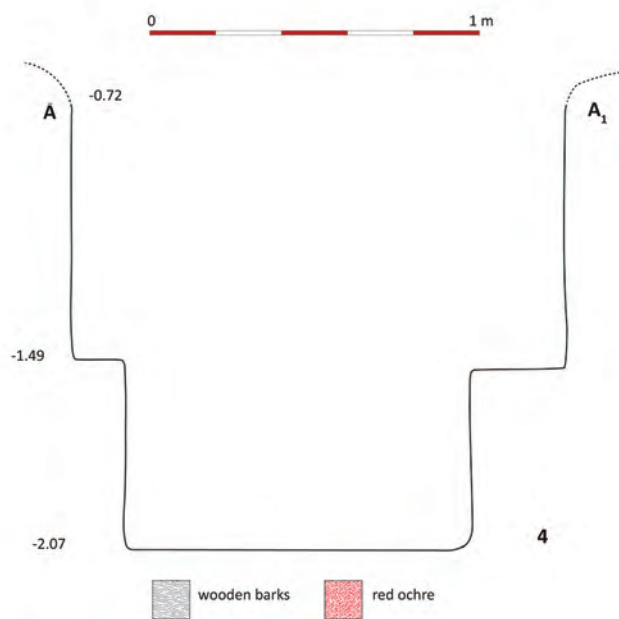
1



2



3



4



Plate X. Vetrino-1 necropolis, Barrow 34. Feature no. 4.



1



2

Plate XI. 1. Vetrino-2 necropolis, Barrows 1–7, Aerial view; 2. The barrows before the excavations.

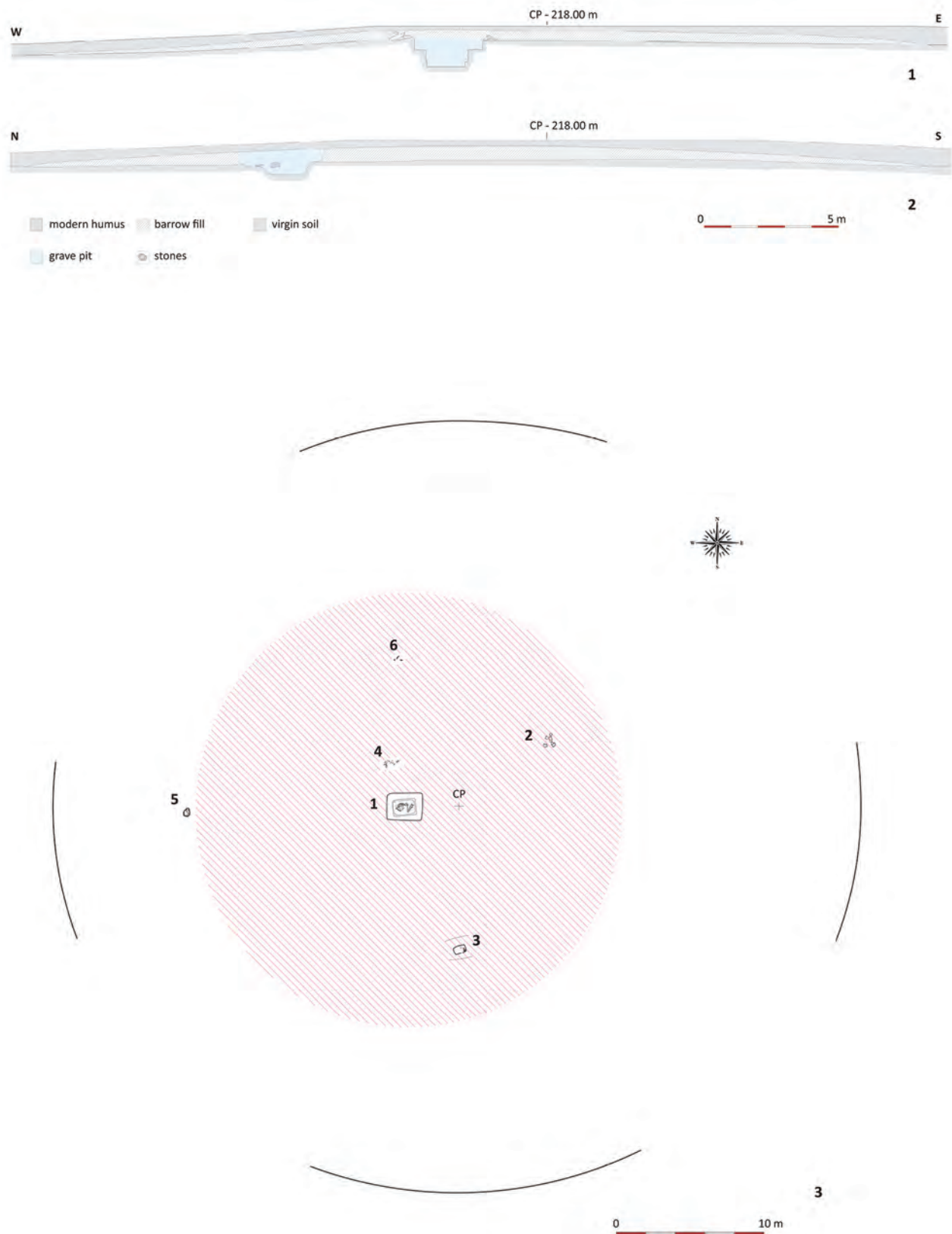
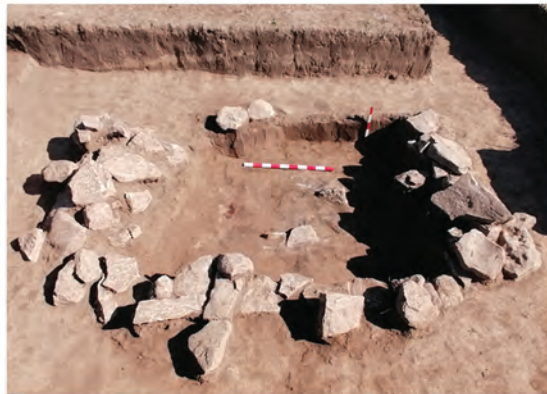
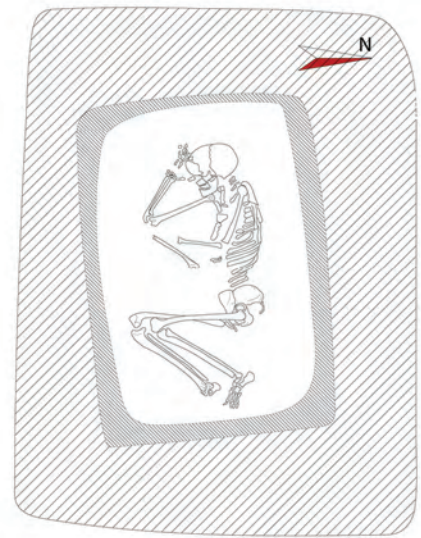
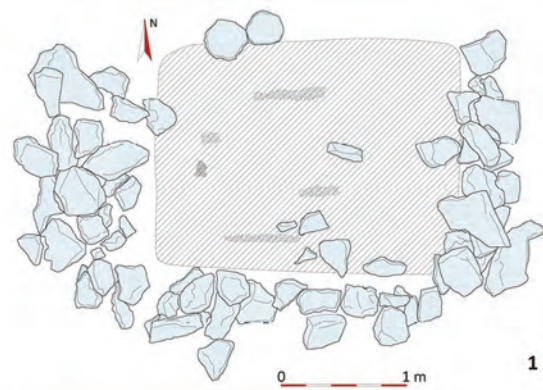


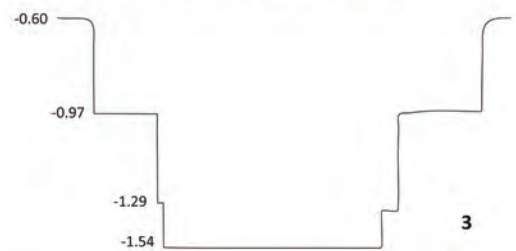
Plate XII. Vetrino-2 necropolis, Barrow 7. Features investigated and profiles.



2



4



3



5

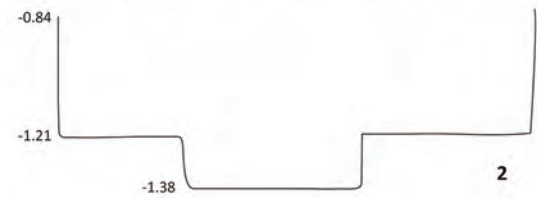
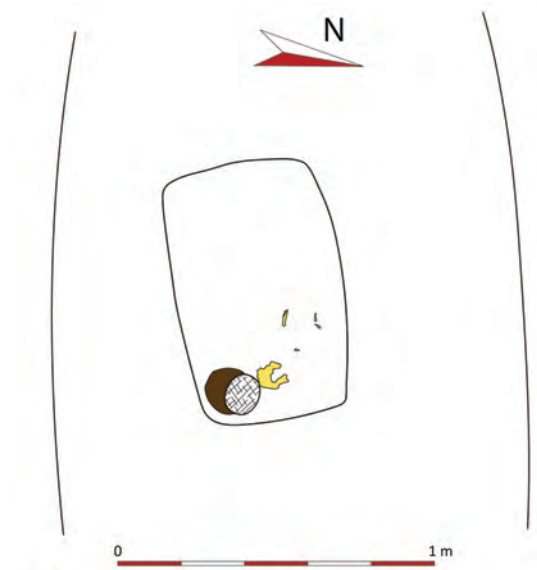


6

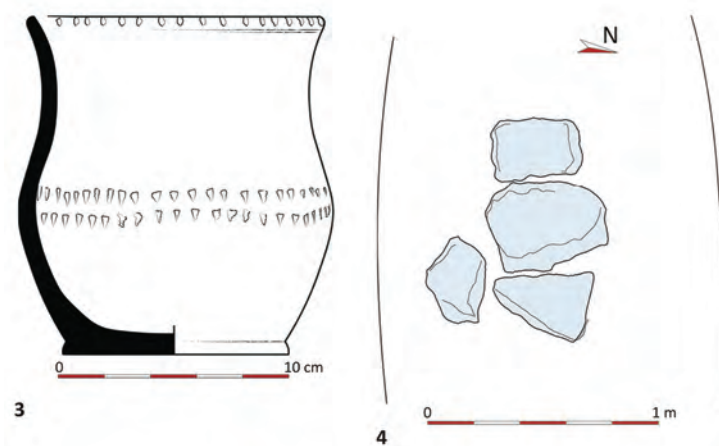
Plate XIII. Vetrino-2 necropolis, Barrow 7. Feature no. 1.



1



6



3

4



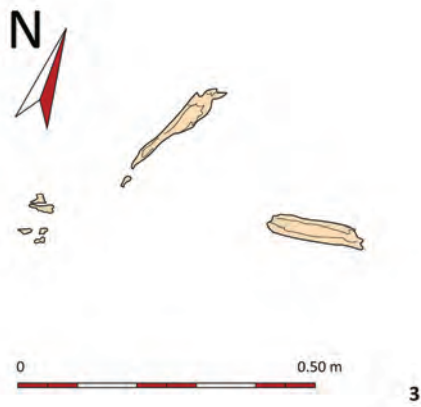
5



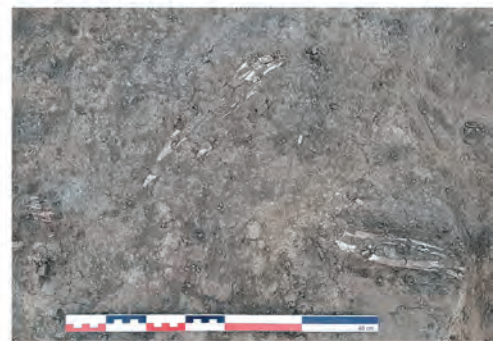
Plate XIV. Vetrino-2 necropolis, Barrow 7. Feature no. 3.



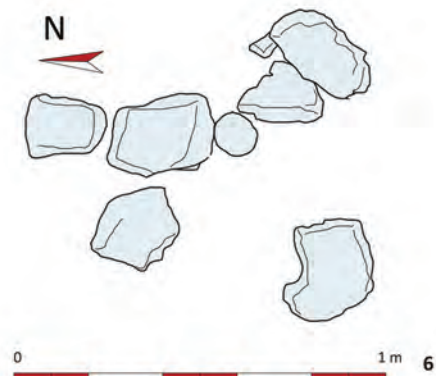
2



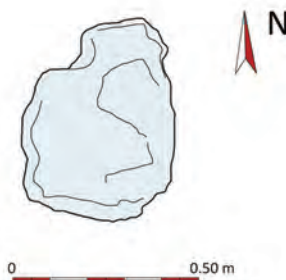
4



5



7



8



Plate XV. Vetrino-2 necropolis, Barrow 7. 1–2. Feature no. 4; 3–4. Feature no. 6; 5–6. Feature no. 2; 7–8. Feature no. 5.



1



2



3

Plate XVI. Vetrino-3 necropolis, Barrow 1. 1, 3. Aerial view; 2. The barrow before the excavations.

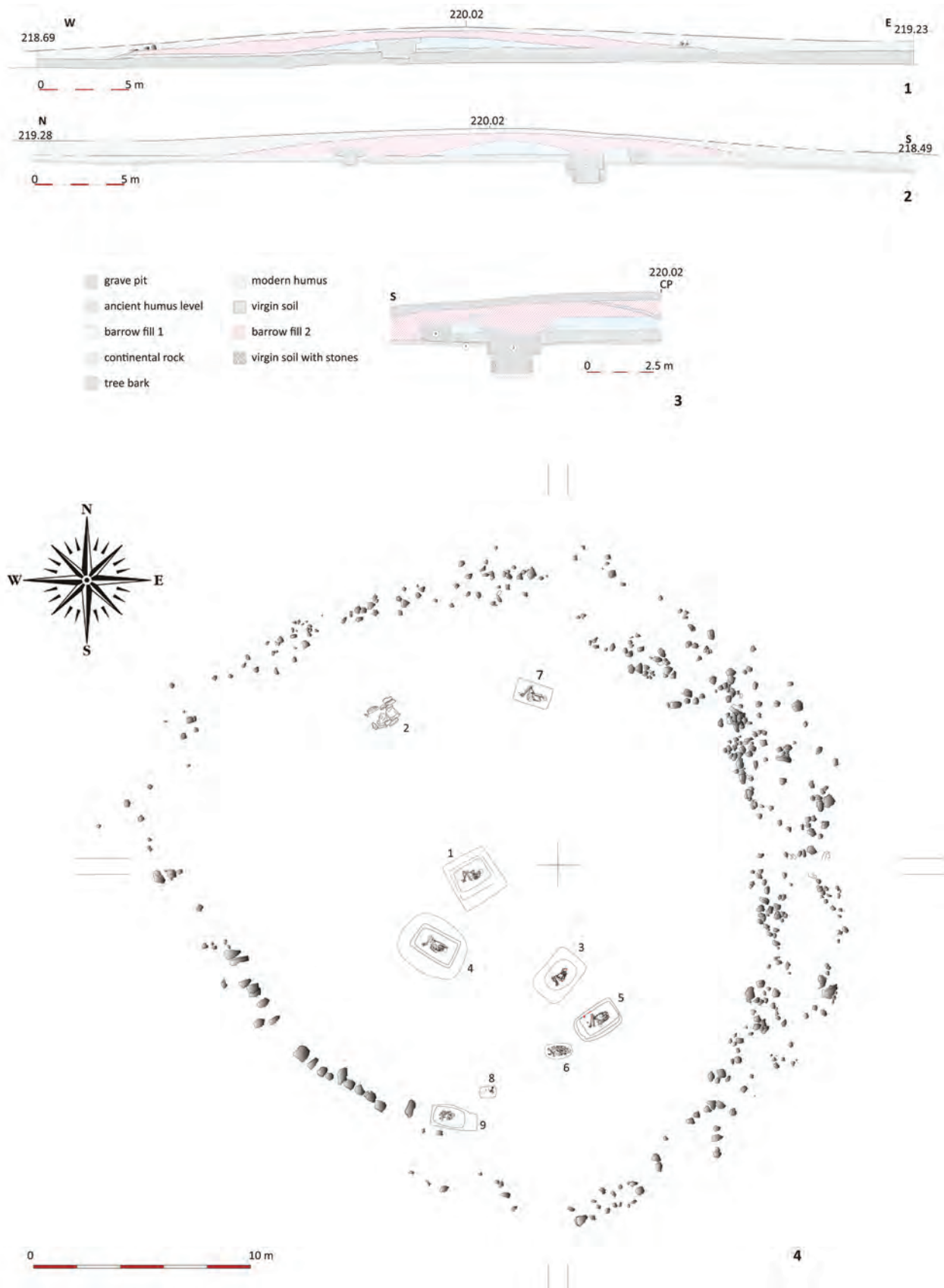


Plate XVII. Vetrino-3 necropolis, Barrow 1. Features investigated and profiles.



1



2



3



4



5



6

Plate XVIII. Vetrino-3 necropolis, Barrow 1. 1–4. Feature no. 1; 5–6. Feature no. 2.

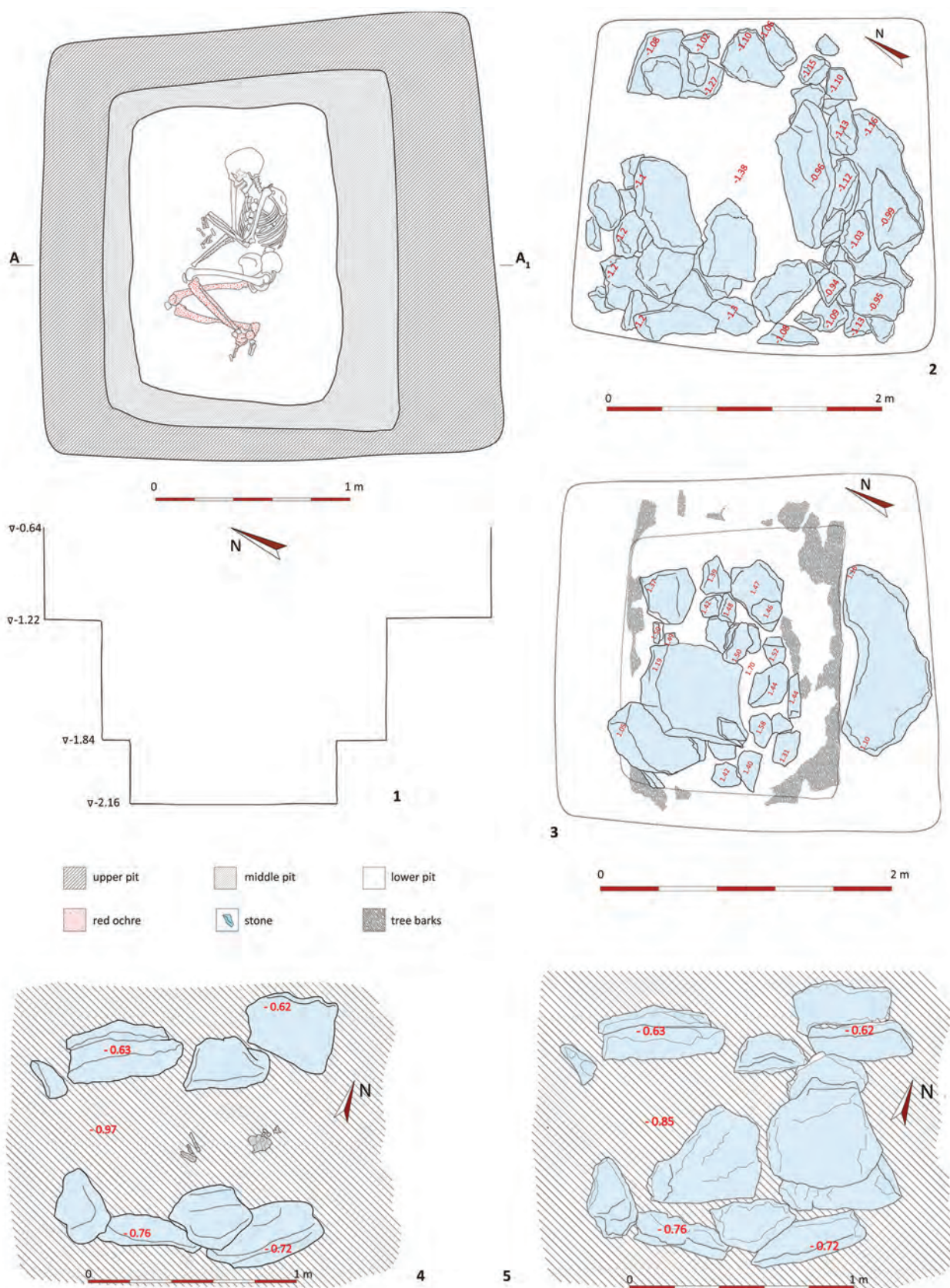


Plate XIX. Vetrino-3 necropolis, Barrow 1. 1–3. Feature no. 1; 4–5. Feature no. 2.



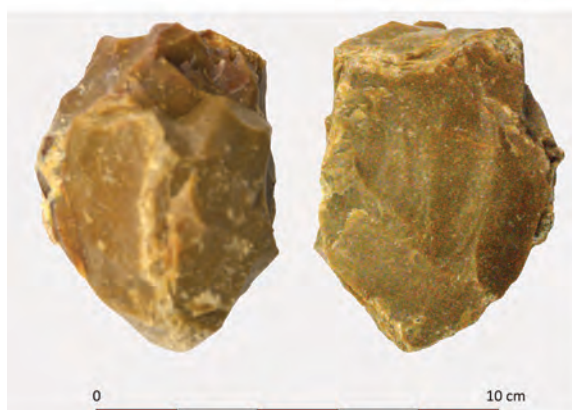
1

2



3

5

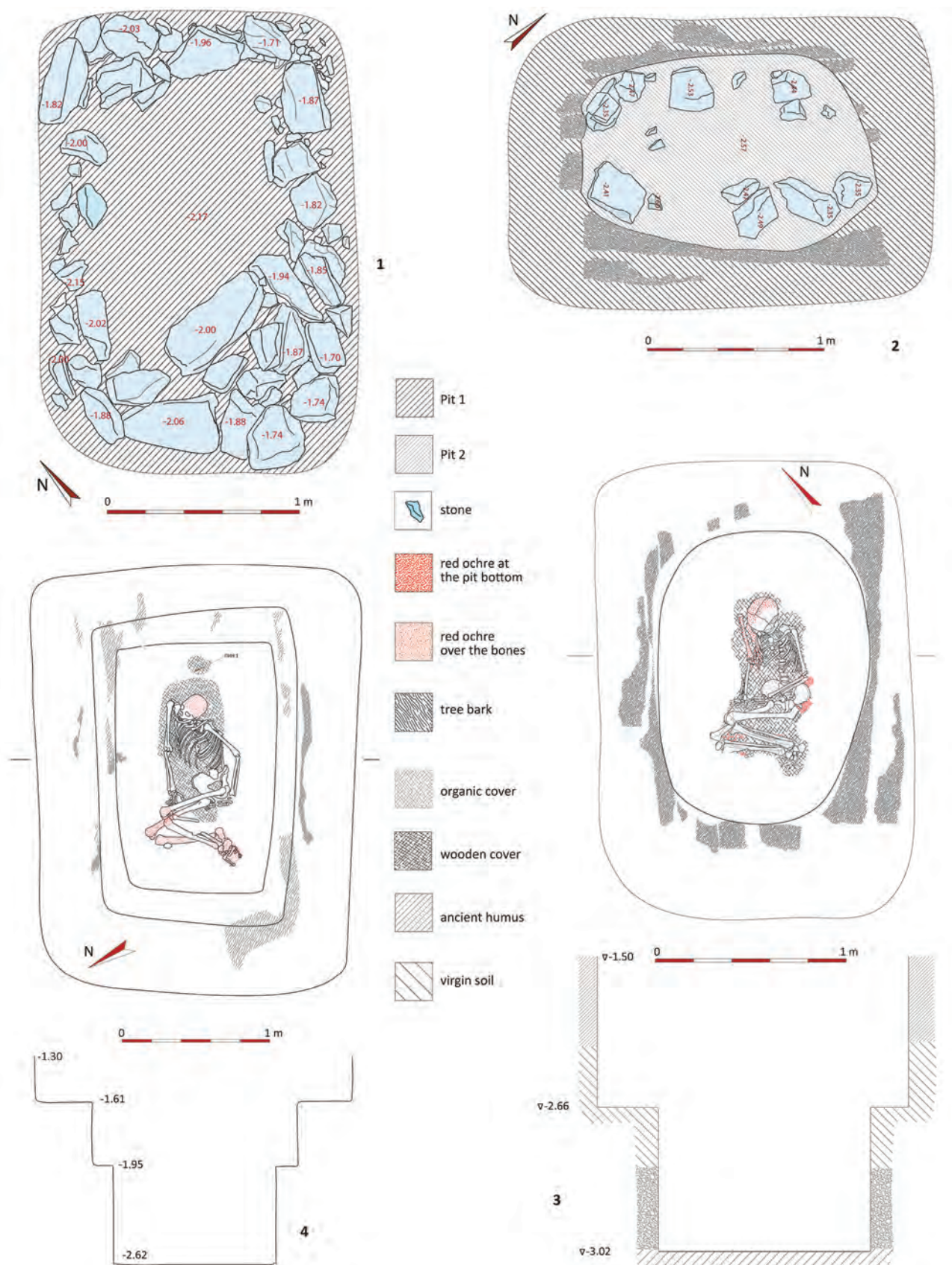


4



3

Plate XX. Vetrino-3 necropolis, Barrow 1. Feature no. 3.



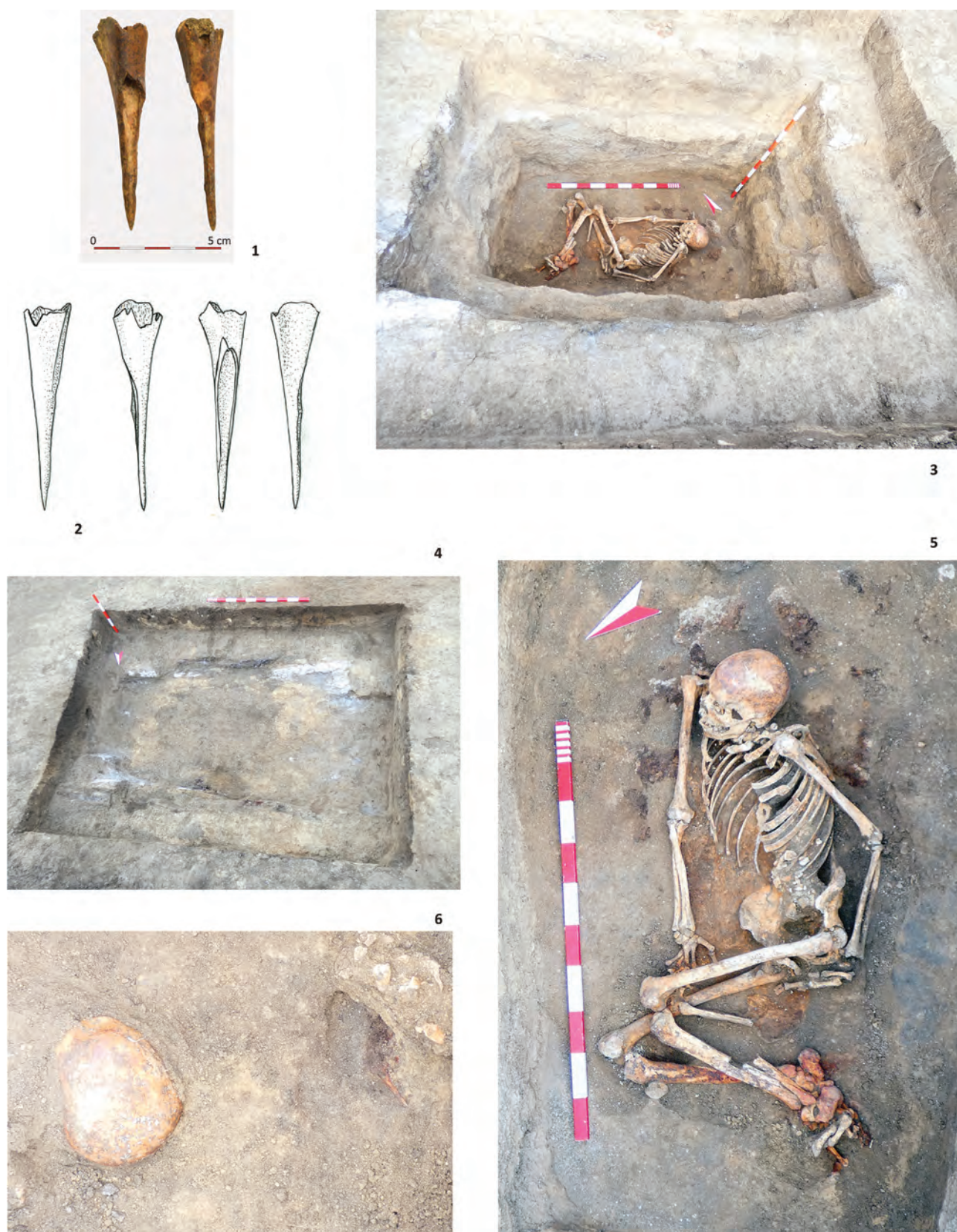


Plate XXII. Vetrino-3 necropolis, Barrow 1. Feature no. 4.



1



2



3

4



5



6

Plate XXIII. Vetrino-3 necropolis, Barrow 1. 1, 3. Feature no. 5; 2. Stratigraphic relation between features nos. 3, 5 and 6; 4. Feature no. 6; 5–6. Feature no. 7.

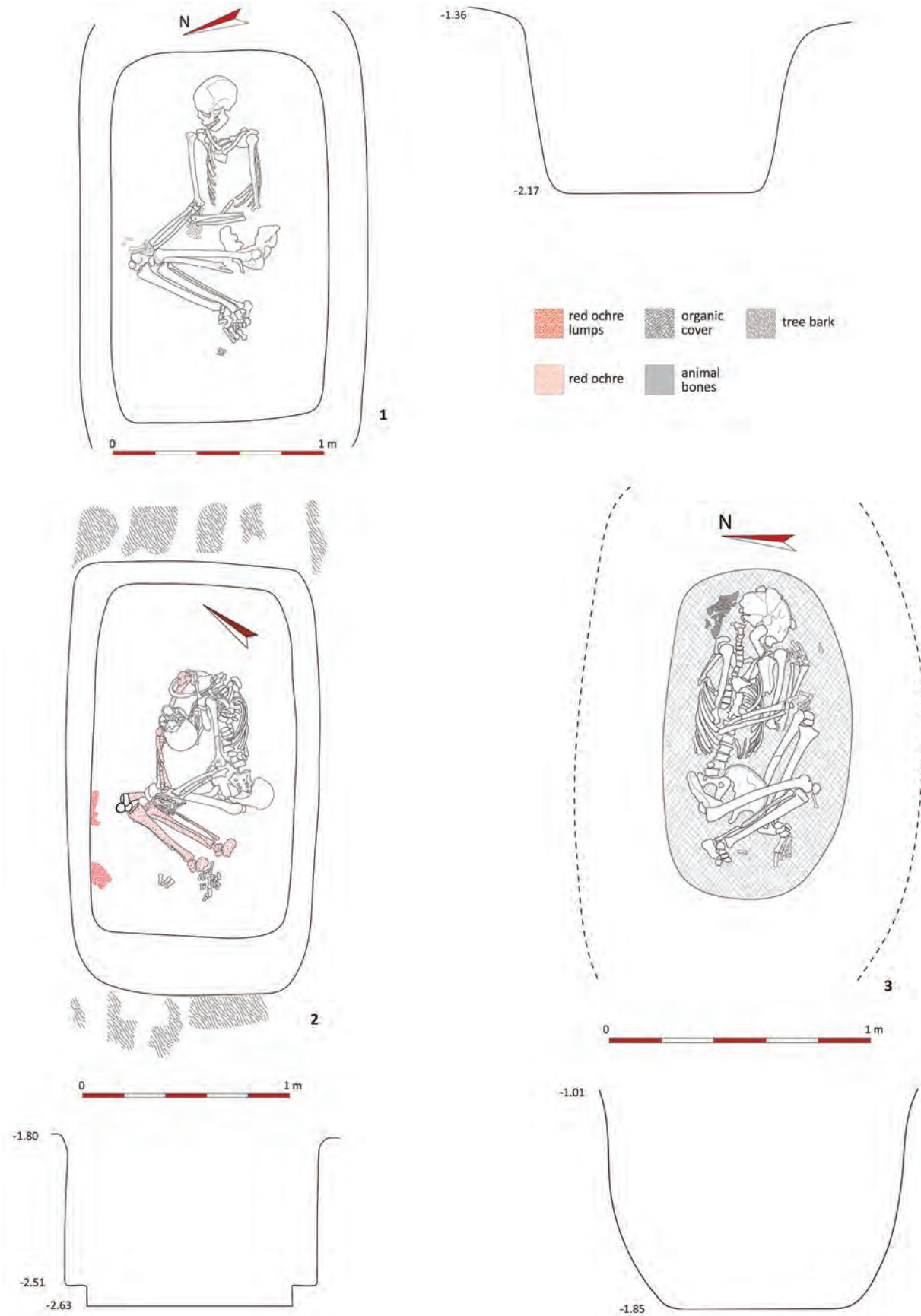
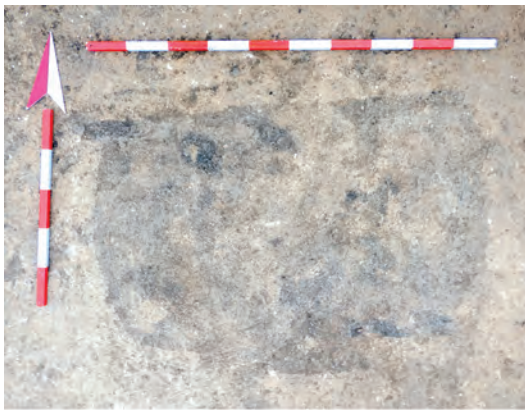


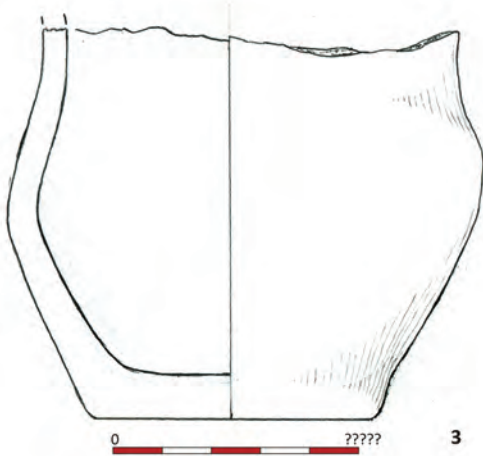
Plate XXIV. Vetrino-3 necropolis, Barrow 1. 1. Feature no. 7; 2. Feature no. 5; 3. Feature no. 6.



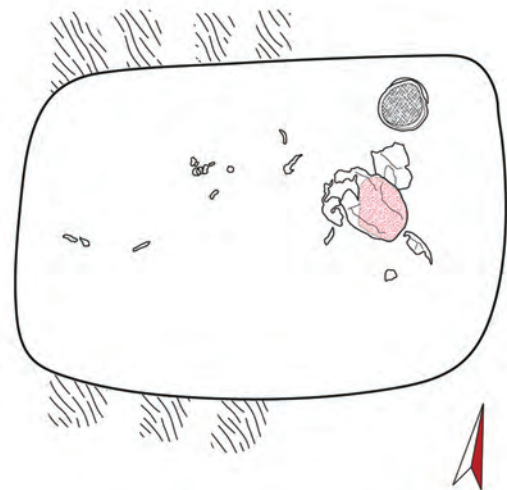
1



2

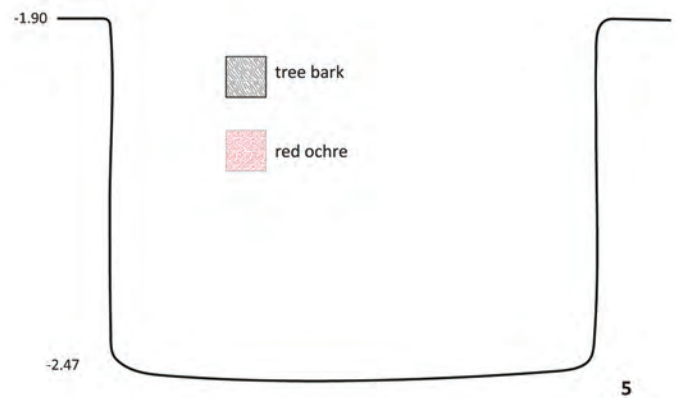


3



4

0 0.50 m



5

Plate XXV. Vetrino-3 necropolis, Barrow 1. Feature no. 8.

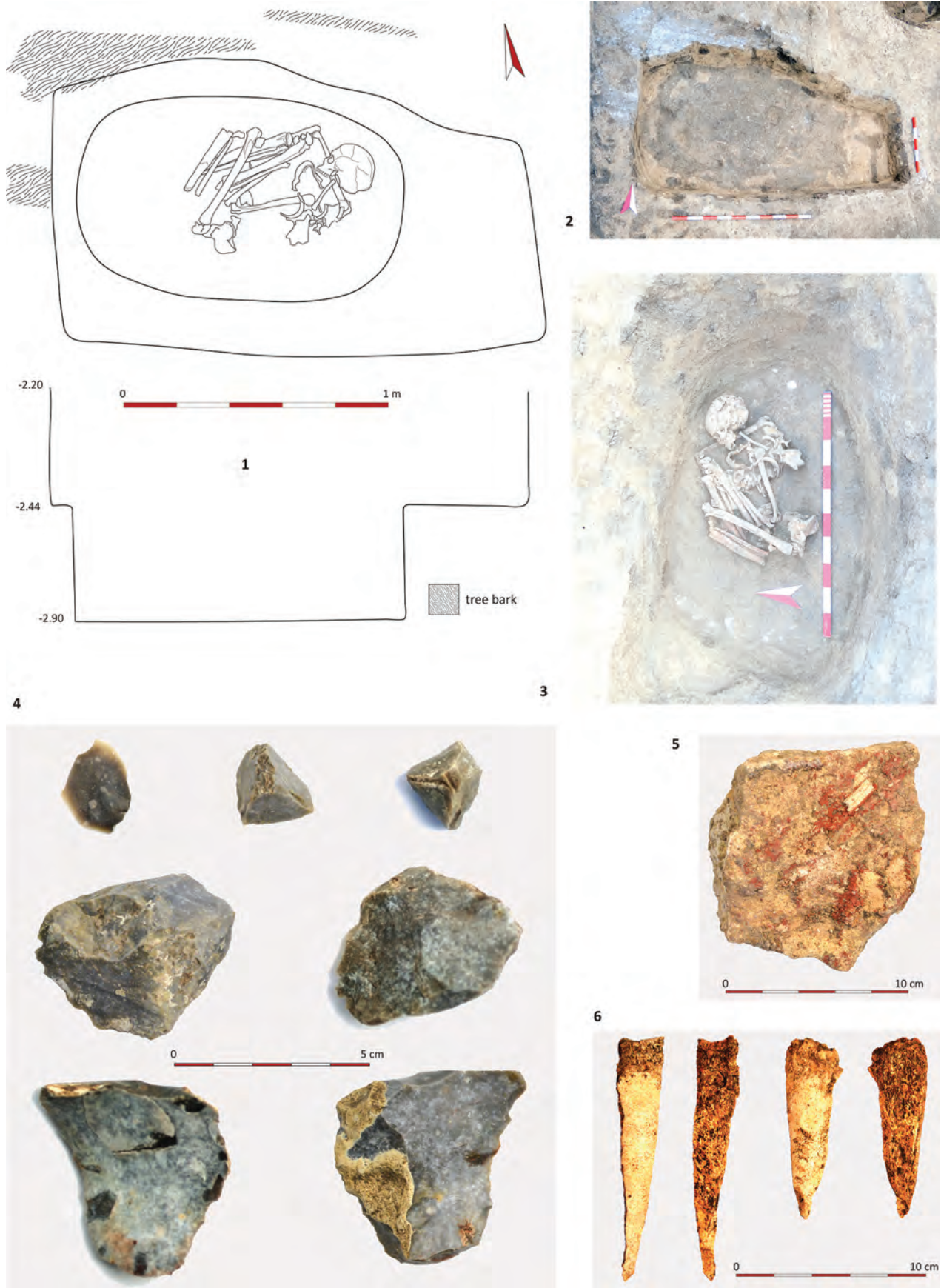


Plate XXVI. Vetrino-3 necropolis, Barrow 1. 1–3. Feature no. 9; 4. Flint flakes discovered in the barrow fills; 5. Stone with red ochre from feature no. 3; 6. Bones from feature no. 1 fill.