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ENEOLITHIC, YAMNAYA, CATACOMB AND  
BABYNO CULTURE CEMETERIES, PIDLISIVKA,  
BARROW 1, YAMPIL REGION, VINNITSA OBLAST:  
ARCHAEOLOGY, CHRONOMETRY AND TAXONOMY

ABSTRACT

The paper presents excavation results and analytical studies concerning the taxonomic classification of a funerary site identified with the communities of the early 'barrow cultures' settling the north-western Black Sea Coast in the 4th/3rd-2nd millennium BC. The study focuses on the ceremonial centres of the Eneolithic, Yamnaya, Catacomb and Babyno cultures.

**Key words:** 'barrow cultures', Eneolithic, Early Bronze Age, Late Bronze Age, Middle Dniester Area

The investigations of barrow 1, Pidlisivka, Yampil Region, Vinnitsa *Oblast*, were carried out in 2010 as part of the Polish-Ukrainian research project to investigate the north-western frontier of settlement by 'Early Bronze' culture communi-

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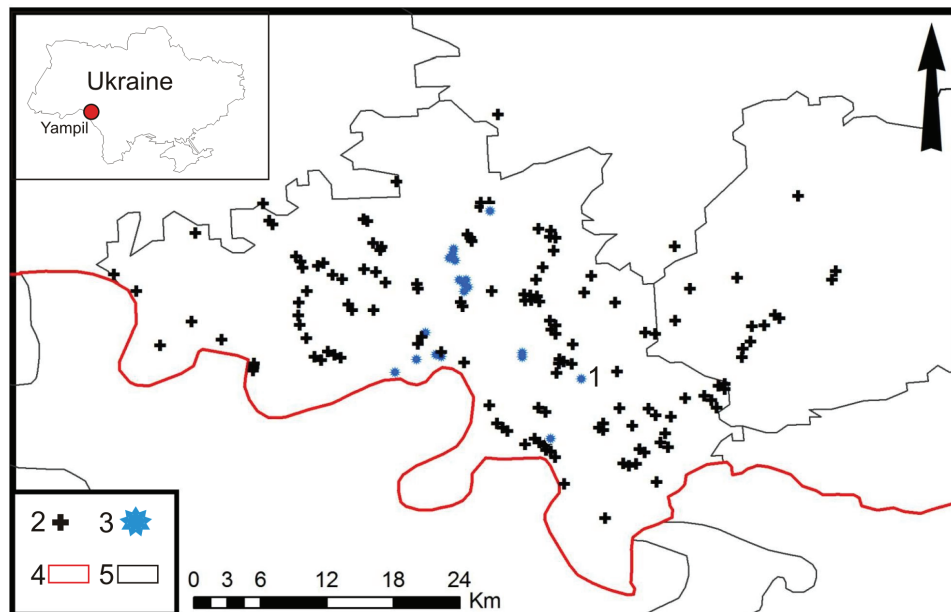


Fig. 1. Map of *Yampil Barrow Complex* showing administrative borders: 1 – Pidlisivka, barrow 1; 2 – barrows; 3 – excavated barrows; 4 – Ukrainian-Moldovan frontier; 5 – Yampil Region border. After Jachimowicz 2015, revised

ties in the Pontic zone by the Institute of Prehistory, Adam Mickiewicz University (AMU) in Poznań and the Institute of Archaeology, Ukrainian National Academy of Sciences (IA UNAS). The project was headed by Prof. Aleksander Koško, representing the AMU Institute of Prehistory, and Dr. Serhij M. Razumov, representing the IA UNAS. The excavation of barrow 1 in Pidlisivka commenced the five-year field work by *Yampil Expedition* of the above-named institutions in the Podolia part of the Middle Dniester Area, specifically in the *Yampil barrow cemetery complex* [Koško *et al.* (Eds) 2014].

The results of investigations in Pidlisivka 1 were published – in Polish and Ukrainian – in 2014 [Koško *et al.* 2014] and initiated an inspiring discussion about the relativity of formal criteria in the identification of Pontic ‘Early Bronze’ taxa especially when the peripheries of their development are concerned [Toshev 1991; Ivanova, Toshev 2015; 2015a]. The discussion was strongly stimulated by the chronometric (radiocarbon) exploration of funerary practices pursued by the users of the *Yampil barrow complex* [Goslar *et al.* 2014; Goslar *et al.* 2015]. This fact made researchers revisit Pidlisivka sources expanded to include attempts to modify their cultural indications (elaboration on the issues raised in the discussion

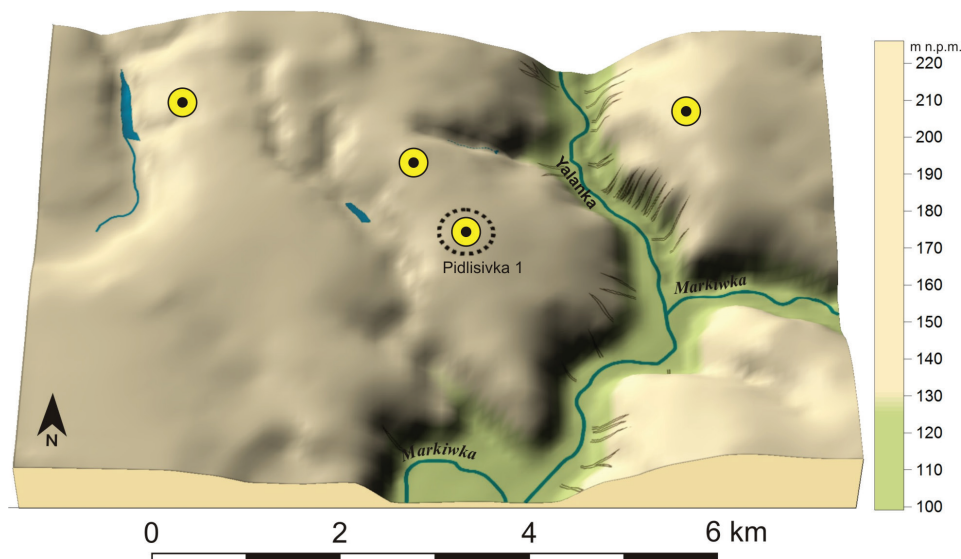


Fig. 2. Pidlisivka, Yampil Region. The elevation model of the immediate surroundings of site 1 and the location of neighbouring barrows (yellow dots). After Makohonienko, Hildebrandt-Radke [2014], revised

mentioned above, concerning taxonomic classifications, for a broader treatment *see* Ch. 4)<sup>1</sup>.

#### 1. TOPOGRAPHY AND THE BARROW MOUND: MORPHOMETRY, STRATIGRAPHY AND SCATTER PATTERN OF FEATURES

The investigated feature is part of the *Yampil barrow complex*, which has been excavated since 1984 [Potupczyk, Razumov 2014; Koško *et al.* (Ed.) 2014] (Fig. 1). The 1985 field expedition headed by B.N. Lobay found that it was part of a barrow cluster (a hypothetical ceremonial centre) located between the villages of Severynivka and Pidlisivka. Barrow 1, located close to Pidlisivka, stands on a high plateau, on the right bank of the Yalanka River, northwest of its confluence with the Markivka River, a tributary of the Dniester, 7.0 km away from the Dniester valley (Fig. 2).

<sup>1</sup> Personal considerations have prevented Dr. Serhiy M. Razumov from taking part in the work of this team of experts.

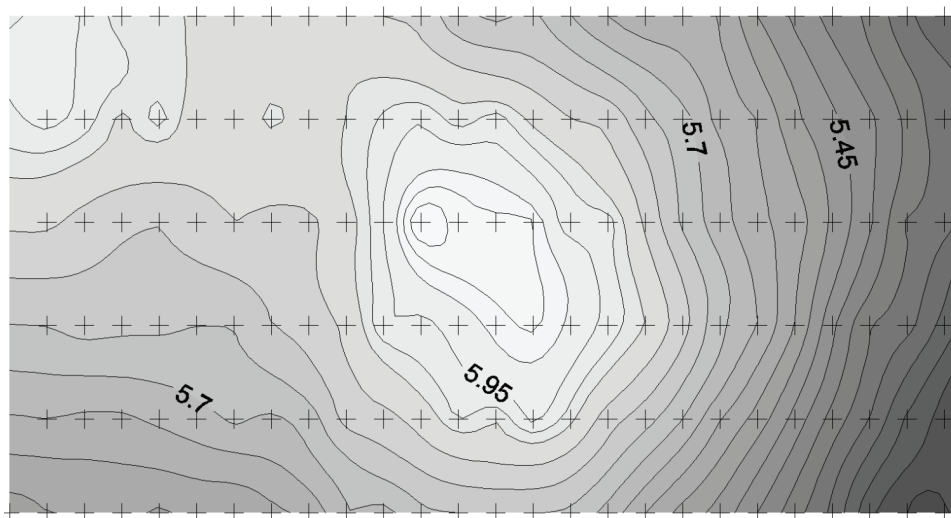


Fig. 3. Pidlisivka, Yampil Region. Barrow 1. Site elevation plan

The excavations were carried out with mechanical equipment which dug parallel trenches oriented W-E. To capture mound stratigraphy, mound profiles were documented by keeping four baulks<sup>2</sup>.

When the excavations began, the barrow was a rather poorly marked landform (Fig. 3) situated on the slope edge of a small watercourse valley, a tributary of the Dniester. Advanced mound levelling off, in relation to its original height, must have been caused by intensive tillage using very deep ploughing. Furthermore, within the mound, considerable damage was caused by trenches dating back to the Second World War, which greatly hamper the understanding of the original stratigraphy of the barrow mound (features 1/2, 1/3 and 1/14).

The recorded maximum height of the barrow stayed below 1.0 m in relation to the surrounding terrain. The recordable diameter of the mound along the W-E axis was about 30.0 m. The outline of the mound in horizontal projection was oval, elongated along the NE-SW axis. The mound contour was marked by a circular ditch of a considerable width from 4.5 (in the NW part) to 7.0 m (in the E course) (Fig. 4).

Vertical observations were hampered by numerous animal burrows. So strong a deformation of cultural strata due to the action of animals and plants finds no analogy in the investigations by the present authors on the Polish Lowland. It suggests that these barrows constituted special loci where biological activity was concentrated [Sudnik-Wójcikowska *et al.* 2013].

<sup>2</sup> For a broader discussion of the method see Koško, Razumov 2014.

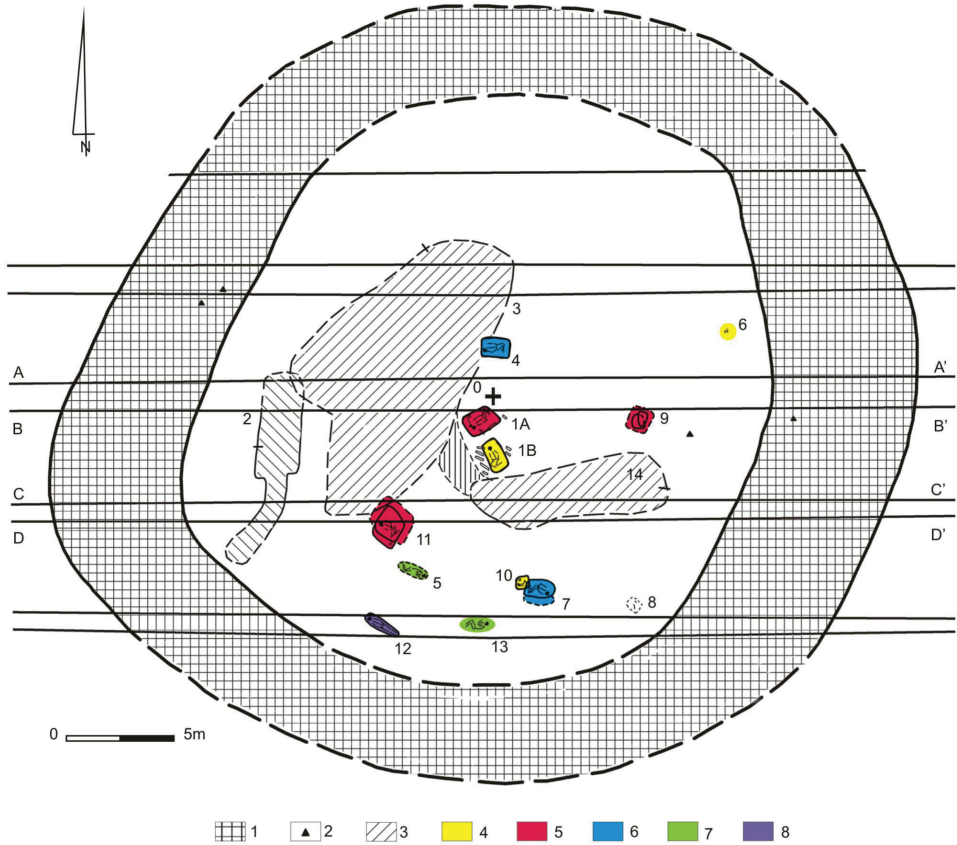


Fig. 4. Pidlisivka, Yampil Region. Plan of barrow 1. 1 – barrow ditch; 2 – pottery shards; 3 – modern damage; 4 – features linked to the Encolithic; 5 – features linked to the Yamnaya culture; 6 – features linked to the Catacomb culture; 7 – features linked to the Babyno culture; 8 – Iron Age feature

Documentation and the descriptions of feature profiles were produced for each baulk (Fig. 5). They showed that stratigraphy was repeated across the mound. The first layer consisted of surface soil and was 0.3-0.4 m thick. The layer making up the mound can be described as unleached humus of an intensively black-brown colour containing clay and warp. The layer marking the barrow ditch had a similar consistency, but the humus was clearly darker than the mound layer. The parent rock was made up of clearly brighter unleached humus of a brown colour with a high clay content, the consistency of which was comparable to that of loess. The scatter pattern of sub-barrow features shows that burials are clustered to form a small cemetery strongly disturbed later by modern excavations (features 1/2, 1/3 and 1/14) of a relatively large area. The feature distribution is consistent with the three distinguished phases of barrow use.

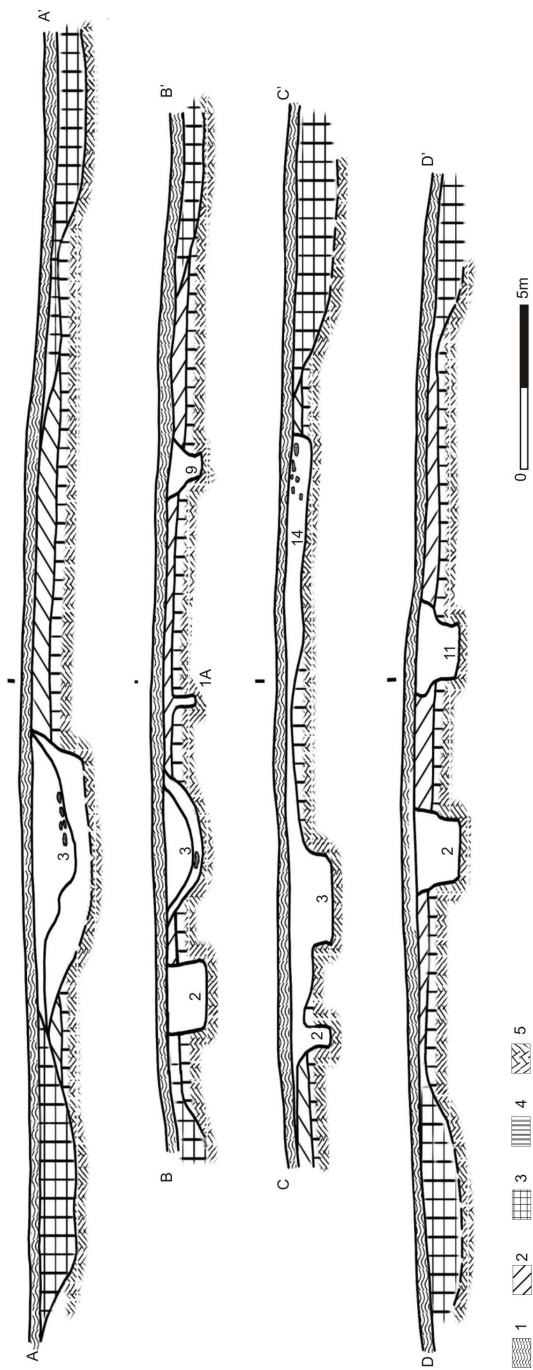


Fig. 5. Pidlisivka, Yampil Region. Profiles of barrow 1. 1 – surface soil; 2 – barrow mound; 3 – fill of barrow ditch; 4 – original ground level; 5 – yellow loess

In the surface soil and mound layers, flint artefacts were discovered (dated mostly to the Upper Palaeolithic) and single pottery fragments from the Eneolithic/Bronze Age: five Tripolye culture (TC), phase CII ones, three Yamnaya culture (YC) ones, three 'Late Bronze Age' ones, one 'Early Iron Age' item and one 'Early Middle Ages' item.

Advanced mound erosion and wartime destruction prevent researchers from making a certain and detailed reconstruction of mound construction phases. Under the central portion of the mound, two graves were exposed: 1/1A and 1/1B. West of them, at a depth of 0.3-0.4 m from today's ground level, the remains of a yellow loess spill 0.1 m thick was found to be seriously disturbed by modern excavations (features 1/2, 1/3 and 1/14). Originally, it must have been crescent-shaped.

Within the barrow mound, another nine graves were exposed: 1/4, 1/5, 1/7, 1/8, 1/9, 1/10, 1/11, 1/12 and 1/13, as well as a sacrificial pit – a *trizna* (feature 1/6). The features named so far are identified with the Eneolithic, YC, Catacomb culture (CC) ? and the Babyno culture (BC). Grave no. 1/12 – excluded from further analyses – is dated to the Iron Age [Goslar *et al.* 2015].

## 2. FUNERAL FEATURE STRUCTURE AND FURNISHINGS

As mentioned earlier, due to modern terrain deformations, no stratigraphic description of the barrow mound is available. This narrows down the subject matter of this chapter to the questions of feature structure and funerary rites recorded within features. The absence of a clear stratigraphic description is also reflected in the reinterpretation of taxonomic classification of excavated graves against the assumed stages of necropolis development (*see* Chapters 3 and 4)<sup>3</sup>.

All the anthropological data included in the descriptions below come from the separate publication [Lytvinova *et al.* 2015], while in the case of archaeozoological data, the assessments by O. Zhuravlov [2014] have been used.

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<sup>3</sup> Already after completing a team re-analysis of the preliminary approach to the Pidlisivka typo-chronology of ritual practices [preliminary approach Koško *et al.* 2014; for accepted re-analysis = hypothesis 'a', *see* Ch. 3 and 4], which resulted also in completing a series of corrections to 'archaeological-taxonomic components' in specialist anthropological and chronometric publications [Lytvinova *et al.* 2015; Goslar *et al.* 2015], we received the very fortunate offer of an auto-correction from Prof. V.I. Klochko. This has been introduced to the paper included in this volume of BPS (= hypothesis 'b') as an offer of possible further research into Podolia ritual practices.

*Feature 1/1A*

Culture	Yamnaya		
Dating	Poz-38529: 4195 ± 35 BP; Poz-39214: 4080 ± 40 BP (human bone); Poz-52423: 4190 ± 35 BP (wood) [burial 1Aa] Ki-16673: 3720 ± 60 BP; Ki-16892: 3895 ± 70 BP (human bone); Poz-52424: 4082 ± 35 BP (wood) [burial 1A]		
<b>Grave pit</b>		<b>Burial</b>	
Structure type	Pit	Sex	1. ? 2. Male
Number of burials	2	Age	1. 7-8 years 2. 30-40 years
Size at the level of discovery	1.6 × 1.1 m	Orientation	1. SE-NW 2. SW-NE
Size at the level of the bottom	1.45 × 1.15 m	Deviation	1. 0° 2. 22° S
Depth	1.0 m	Arrangement of head	1. On the left side 2. Face up
Pit orientation	SW-NE	Arrangement of trunk	1. On the left side 2. Supine
Deviation	19° N	Upper limbs	1. G 2. B
Distance from barrow centre		Lower limbs	1. 2/1 2. 5
Azimuth		Ochre	1. Heavy sprinkling of the bottom and burial bones 2. Substantial layer on the feature bottom and bones
Wooden roofing	+	Presence of mat	1. – 2. +
Roofing element orientation	?	Animal bones	–
Other structural elements	–	Ritual objects	1. Ochre lump 2. –
Comments			

The central grave (?) for the assumed younger mound, identified with the YC. The pit was rectangular and had rounded corners. It was found to contain two burials.

- At a depth of 0.8 m, at the NW corner, the remains of a child aged 7-8 years lay sprinkled with red ochre (burial 1Aa). It lay crouched on the left side. Underneath the bones, crimson ochre was sprinkled and a lump of such ochre 4.0-5.0 cm in diameter and 1.0 cm thick lay at the skull. Between the left upper limb and the chest, fragments of charred wood were discovered. Under skull and shin bones, fragments of wooden slats were found (Figs. 6: A, 7: 1, 8).

- Immediately underneath the above burial, the skeleton of an adult male (grave 1A) lay crouched, supine on the pit bottom. The skeleton bones and pit bottom were heavily sprinkled with crimson ochre (Fig. 6: B, 7: 2, 8).



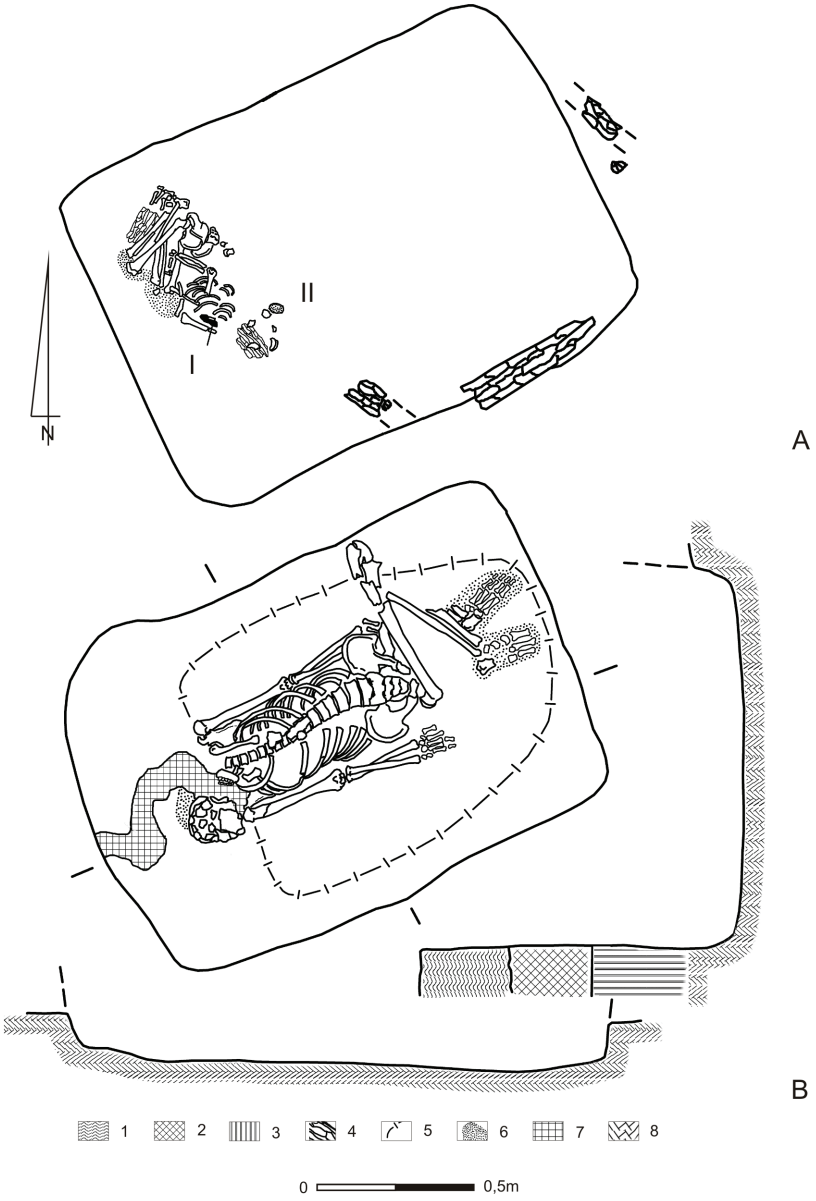


Fig. 6. Pidlisivka, Yampil Region, barrow 1. Plans and profile of feature 1/1A. A – level of higher burial (1Aa): I – charcoals; II – lump of ochre. B – level of lower burial (1A): horizontal plan of the burial 1Aa. 1 – surface soil; 2 – barrow mound; 3 – original ground level; 4 – wood remains; 5 – outline of mat; 6 – ochre; 7 – animal burrow; 8 – yellow loess

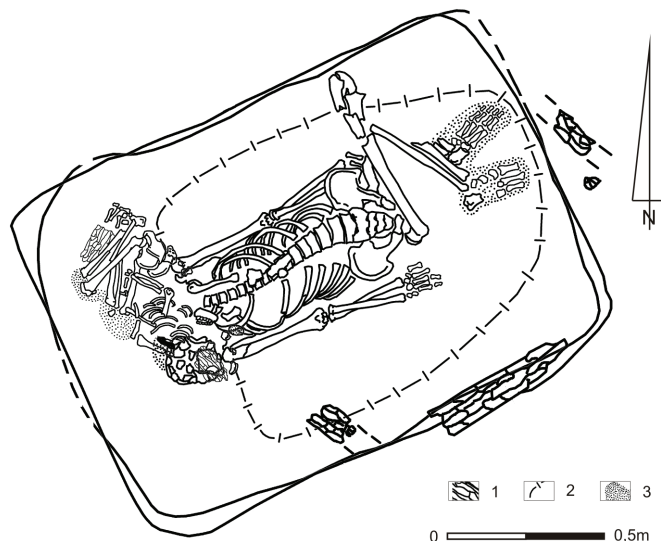


Fig. 7. Pidlisivka, Yampil Region, barrow 1. Plan of feature 1/1A: 1 – joint representation of two burials. 1 – wood remains; 2 – outline of mat; 3 – ochre

### *Feature 1/1B*

Culture	Eneolithic		
Dating	Ki-16674 3680 ± 90 BP (human bone)		
<b>Grave pit</b>	<b>Burial</b>		
Structure type	pit	Sex	Male
Number of burials	1	Age	22-25 years
Size at the level of discovery	1.75 × 0.9 m	Orientation	NW-SE
Size at the level of the bottom	1.45 × 0.7 m	Deviation	20° N
Depth	1.4 m	Arrangement of head	Face up
Pit orientation	NW-SE	Arrangement of trunk	Supine
Deviation	18° E	Upper limbs	B
Distance from barrow centre	1.78 m	Lower limbs	5/3
Azimuth	0°	Ochre	+?
Wooden roofing	+	Presence of mat	+
Roofing element orientation	Oblique or longitudinal	Animal bones	–
Other structural elements	–	Ritual objects	Flint flake
Comments			



1



2

Fig. 8. Pidlisivka, Yampil Region, barrow 1. Grave 1/1A: 1 – burial 1/1Aa; 2 – burial 1/1A

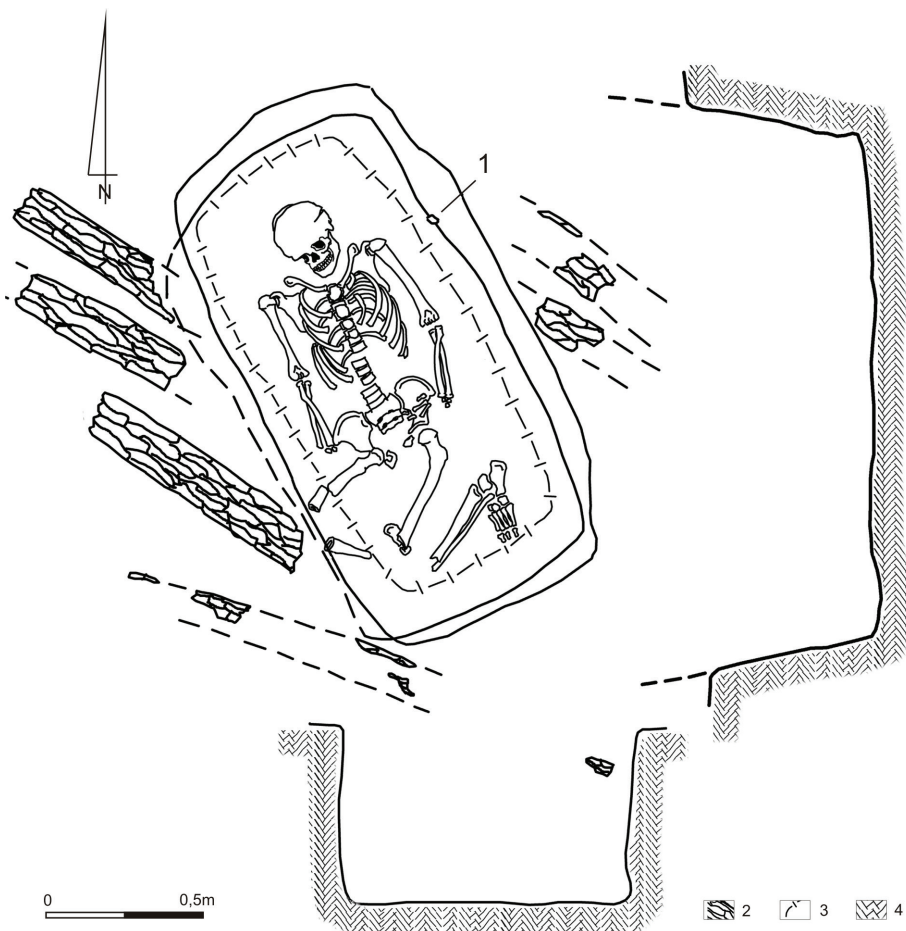


Fig. 9. Pidlisivka, Yampil Region, barrow 1, grave 1/1B. Horizontal and vertical projections of feature. 1 – flint flake; 2 – wood remains; 3 – outline of mat; 4 – yellow loess

The central grave under a hypothetical Eneolithic (= older) mound. In the opinion of V.I. Klochko, the feature may also be considered representative of the YC: as situated in the central portion of a hypothetical ‘Yamnaya’ (= younger) mound. The pit was rectangular and had rounded corners. The roofing was made of wooden planks, lying obliquely to the longer axis of the grave. On the grave bottom, the skeleton of a mature man lay supine, crouched, with the knees originally raised upwards. Underneath the burial, the remains of a mat bearing the traces of ochre have survived. In the pit fill, on the remains of wooden roofing, a flint flake was found (Fig. 9).

1. Flake of Cretaceous Dniester flint. Dimensions:  $4.0 \times 3.5 \times 0.8$  cm.

*Feature 1/4*

Culture	Catacomb?		
Dating	Ki-16675: 3810 ± 80 BP (human bone)		
<b>Grave pit</b>		<b>Burial</b>	
Structure type	niche?	Sex	?
Number of burials	1	Age	11-12 years
Size at the level of discovery	1.25 × 0.9 m	Orientation	W-E
Size at the level of the bottom	1.2 × 0.9 m	Deviation	0°
Depth	1.4 m	Arrangement of head	Face to the right?
Pit orientation	W-E	Arrangement of trunk	Supine
Deviation	0°	Upper limbs	F
Distance from barrow centre	3.45 m	Lower limbs	6
Azimuth	10°	Ochre	Traces
Wooden roofing	Small fragments in the fill	Presence of mat	+
Roofing element orientation	?	Animal bones	–
Other structural elements	–	Ritual objects	Lump of ochre above left shoulder
Comments	About 0.20 m above the chest, a patinated flint flake was found (an Upper Palaeolithic one?).		

The grave was situated north of the barrow centre and linked to the CC (?) or the Eneolithic. In horizontal projection, it was subrectangular. Its arched walls formed a kind of a semi-niche in the western portion of the grave. On the bottom, a child skeleton lay supine, crouched. At the left arm, a lump of ochre was discovered (Fig. 10).

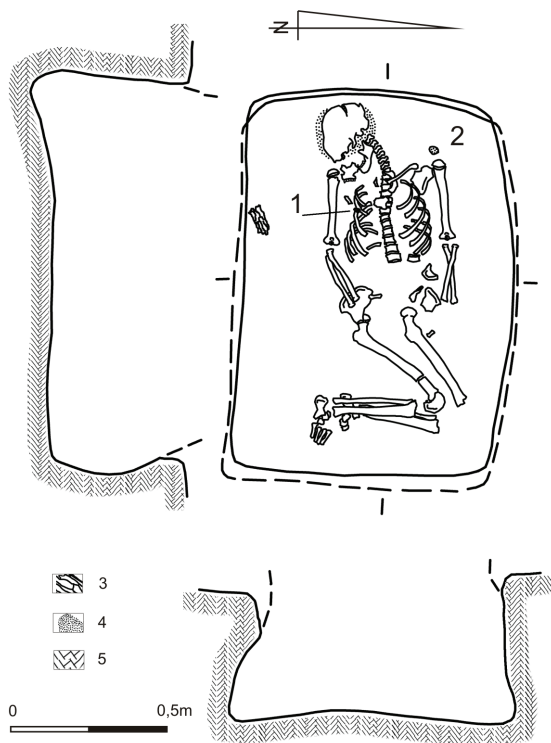


Fig. 10. Pidlisivka, Yampil Region, barrow 1, grave 1/4. Horizontal and vertical projections of feature. 1 – flint flake; 2 – lump of ochre; 3 – wood remains; 4 – ochre; 5 – yellow loess

### *Feature 1/5*

Culture	Babyno		
Dating	Ki -16677: 4170±90 BP; Ki -16893: 4130±35 BP; Poz-38530: 3430±35 BP (human bones)		
<b>Grave pit</b>		<b>Burial</b>	
Structure type	Pit/niche?	Sex	Male
Number of burials	1	Age	30-35 years
Size at the level of discovery	1.5 × 0.5 m	Orientation	SE-NW
Size at the level of the bottom	?	Deviation	19° E
Depth	About 0.60 m	Arrangement of head	On the left side
Pit orientation	SE-NW	Arrangement of trunk	On the left side
Deviation	21° E	Upper limbs	D

Distance from barrow centre	7.62 m	Lower limbs	6
Azimuth	208°	Ochre	–
Wooden roofing	–	Presence of mat	+
Roofing element orientation		Animal bones	28 small fragments of indeterminate species
Other structural elements	–	Ritual objects	–
Comments			

The grave was sunk in the southern portion of the mound. The pit outline could not be traced – judging by the shape of a mat placed on the bottom it was presumably oval. The feature structure may have included a semi-niche (analogous to that in feature 7). On the bottom, the skeleton of an adult male lay crouched on the left side. On its left forearm, small fragments of animal bones were found (Fig. 11).

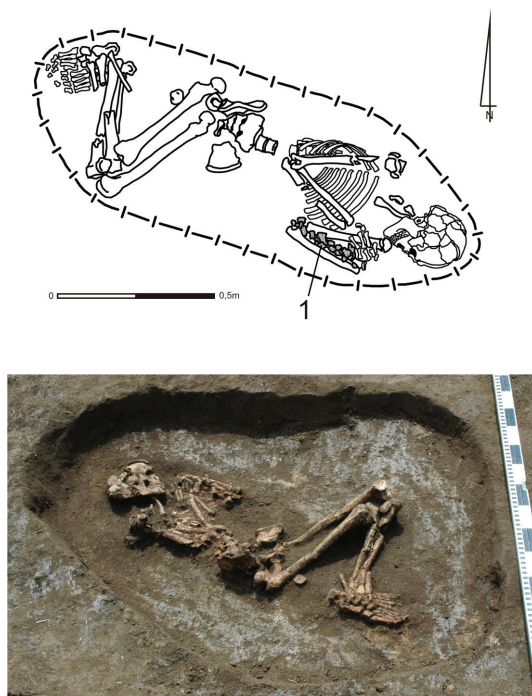


Fig. 11. Pidlisivka, Yampil Region, barrow 1, grave 1/5. Horizontal projection of burial. 1 – animal bones

## Feature 1/6

Culture	Eneolithic?
Dating	
Structure type	<i>trizna</i>
Size at the level of discovery	0.8 × 0.8 m
Size at the level of the bottom	0.8 × 0.8 m
Depth	≈ 0.7 m
Pit orientation	?
Deviation	?
Distance from barrow centre	12.0 m
Azimuth	65°
Animal bones	11 fragments (cattle, male)
Ritual objects	–
Comments	

A concentration of cattle bones discovered in the eastern portion of the barrow (11 fragments belonging to a single male individual). The bones may have been deposited in a small pit sunk into the original ground level (Fig. 12:1).

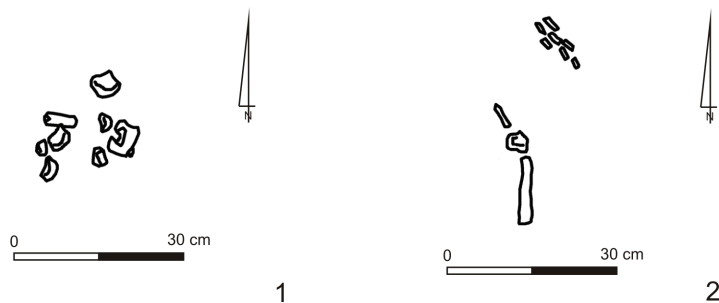


Fig. 12. Pidlisivka, Yampil Region, barrow 1. 1 – Horizontal projection of feature 1/6; 2 – Horizontal projection of feature 1/8



*Feature 1/7*

Culture	Catacomb?		
Dating	Poz-38531: 4120 ± 35 BP (human bone)		
<b>Grave pit</b>		<b>Burial</b>	
Structure type	Niche?	Sex	Male
Number of burials	1	Age	25-30 years
Size at the level of discovery	?	Orientation	SE-NW
Size at the level of the bottom	1.35 × 0.95 m	Deviation	19° E
Depth	1.1 m	Arrangement of head	On the left side
Pit orientation	W-E	Arrangement of trunk	Supine
Deviation	9° S	Upper limbs	C
Distance from barrow centre	8.32 m	Lower limbs	2
Azimuth	159°	Ochre	–
Wooden roofing	–	Presence of mat	–
Roofing element orientation		Animal bones	Fragment of deer shoulder bone
Other structural elements	–	Ritual objects	–
Comments			

The grave was sunk in the southern portion of the mound, identified with the CC or – in V.I. Klochko's approach – Eneolithic placed in the catacomb structure excavation. In the upper portion, its outline could not be traced. The lower portion formed a semi-niche and was oval in horizontal projection. On the bottom, the skeleton of a mature male lay contracted on its side. Among the remains of the chest, a deer shoulder bone was discovered (Fig. 13).

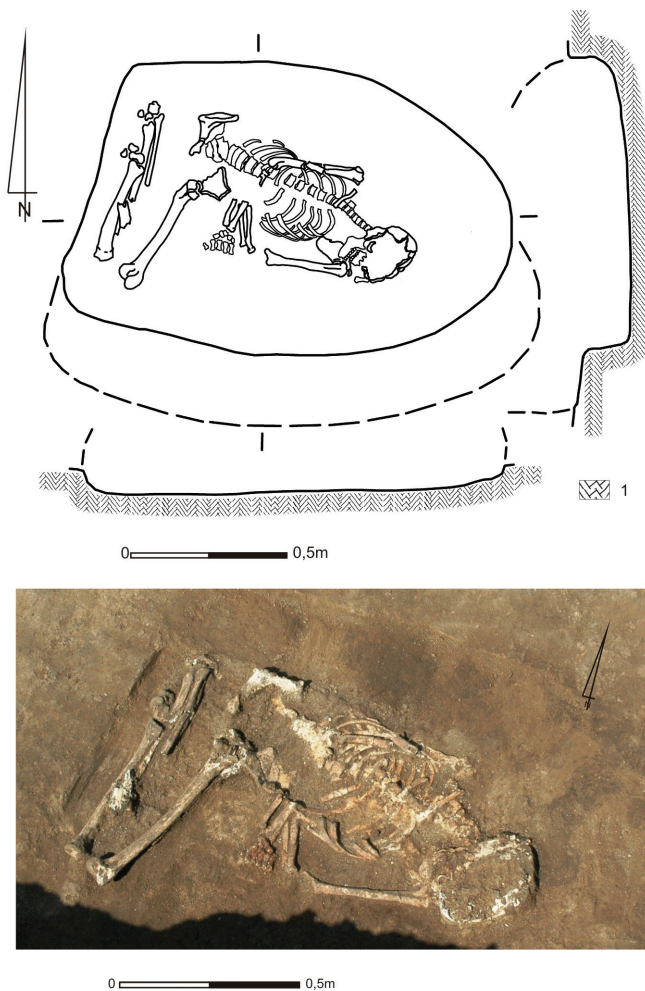


Fig. 13. Pidlisivka, Yampil Region, barrow 1, grave 1/7. Horizontal and vertical projections of feature. 1 – yellow loess

### *Feature 1/8*

Culture			
Dating			
<b>Grave pit</b>		<b>Burial</b>	
Structure type	Pit?	Sex	?
Number of burials	1	Age	1-6 years
Size at the level of discovery	0.8 × 0.8 m	Orientation	?

Size at the level of the bottom	–	Deviation	?
Depth	1.5 m	Arrangement of head	?
Pit orientation	?	Arrangement of trunk	?
Deviation		Upper limbs	?
Distance from barrow centre	11 m	Lower limbs	?
Azimuth	138°	Ochre	–
Wooden roofing	–	Presence of mat	–
Roofing element orientation		Animal bones	–
Other structural elements	–	Ritual objects	–
Comments			

The grave was exposed on the SE edge of the mound. The pit outline could not be captured. It was found to contain disarticulated fragments of a child skeleton, in the *Infans I* age bracket (Fig. 12:2).

*Feature 1/9*

Culture	Yamnaya?		
Dating			
<b>Grave pit</b>		<b>Burial</b>	
Structure type	Pit	Sex	?
Number of burials	1	Age	Below 1 year
Size at the level of discovery	?	Orientation	N-S?
Size at the level of the bottom	0.8 × 0.55 m	Deviation	?
Depth	≈ 2.15 m	Arrangement of head	?
Pit orientation	N-E	Arrangement of trunk	?
Deviation	?	Upper limbs	?
Distance from barrow centre	7.47 m	Lower limbs	?
Azimuth	83°	Ochre	–
Wooden roofing	+	Presence of mat	+
Roofing element orientation	Longitudinal	Animal bones	–
Other structural elements	Stone cover	Ritual objects	–
Comments	In the fill: a patinated flint flake was found (an Upper Palaeolithic one)		

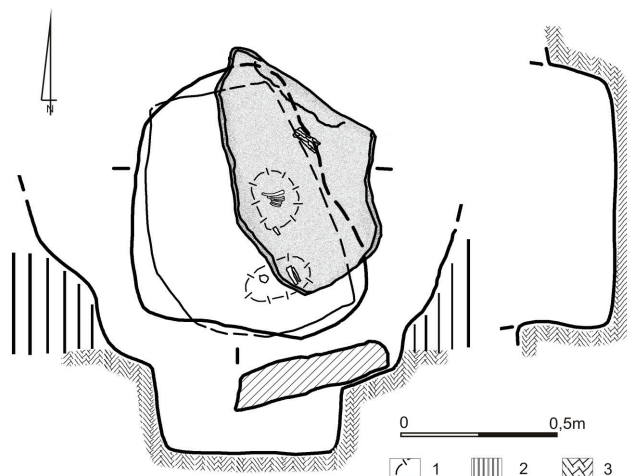


Fig. 14. Pidlisivka, Yampil Region, barrow 1, feature 1/9. Horizontal and vertical projections. 1 – outline of mat; 2 – original ground level; 3 – yellow loess

The feature was sunk into the eastern portion of the mound. The pit had an irregular, subrectangular shape. At a depth of about 0.85 m, there was a step leading to the grave chamber. The step supported roofing consisting of a large stone slab measuring  $0.80 \times 0.45 \times 0.10$  m and longitudinally oriented wooden elements underneath it. The grave chamber was regular, rectangular in shape with vertical walls. The bottom extended 0.35 m below the step level. The fill was found to hold single bones of a child in the *Infans* I age. The feature may have been secondarily disturbed (robbed?) already in prehistoric times (Fig. 14).

#### Feature 1/10

Culture	Eneolithic		
Dating			
Grave pit		Burial	
Structure type	Pit	Sex	?
Number of burials	1	Age	Below 9 months
Size at the level of discovery	$0.7 \times 0.7$ m	Orientation	W-E
Size at the level of the bottom	$0.6 \times 0.35$ m	Deviation	$0^\circ$
Depth	0.5 m	Arrangement of head	?
Pit orientation	W-E	Arrangement of trunk	On the left side
Deviation	$7^\circ$ N	Upper limbs	?
Distance from barrow centre	7.89 m	Lower limbs	?
Azimuth	$164^\circ$	Ochre	+

Wooden roofing	Traces of wood in the fill and on the pit bottom	Presence of mat	+
Roofing element orientation	Longitudinal	Animal bones	-
Other structural elements	-	Ritual objects	Pot, flint flake, lump of ochre
Comments			



Fig. 15. Pidlisivka, Yampil Region, barrow 1, grave 1/10. Horizontal and vertical projections of feature. 1 – flint flake; 2 – ceramic vessel; 3 – lump of ochre; 4 – outline of mat; 5 – yellow loess



Fig. 16. Pidlisivka, Yampil Region, barrow 1, grave 1/10. Horizontal projection of feature

The grave was unearthed in the southern portion of the mound (sub-barrow?). The pit was rectangular, almost square. Its fill was found to hold the elements of wooden roofing oriented W-E. On the bottom, the poorly preserved skeleton of a child lay crouched on the left side. At its head, in the NW corner of the pit, a pot (1) was found and at the bones of the chest – a flint flake (2). Furthermore, at the waist, a lump of bright red ochre (3) was discovered. Traces of sprinkling with an analogous colorant were recorded on foot bones (Fig. 15, 16).

*Grave goods*

1. S-profiled pot with a flat bottom. The outer surface is even, mat with broad (0.2-0.3 cm) traces of burnishing. The ceramic body contains temper of crushed ceramics. Uneven firing. Dimensions: height: 13.0 cm, lip diameter: 11.7 cm, belly diameter: 12.0 cm, bottom diameter: 7.5 cm (Fig. 15: 2).

2. Flint flake. Dimensions: 3.7 × 3.3 × 1.3 cm (Fig. 15: 1).

3. Discoidal lump of bright red ochre 5.0 cm in diameter and up to 2.0 cm thick (Fig. 15: 3).

*Feature 1/11*

Culture	Yamnaya		
Dating	Ki -16676: 3690 ± 80 BP; Poz-81793: 4085 ± 30 BP (human bone)		
<b>Grave pit</b>		<b>Burial</b>	
Structure type	Pit	Sex	Male
Number of burials	1	Age	35-40 years
Size at the level of discovery	1.55 × 1.4 m	Orientation	NW-SE
Size at the level of the bottom	1.35 × 1.15 m	Deviation	0°
Depth	2.40 m	Arrangement of head	On the right side
Pit orientation	NW-SE	Arrangement of trunk	Supine
Deviation	5° S	Upper limbs	I?
Distance from barrow centre	6.59 m	Lower limbs	5
Azimuth	227°	Ochre	–
Wooden roofing	+	Presence of mat	+
Roofing element orientation	Perpendicular	Animal bones	–
Other structural elements	–	Ritual objects	–
Comments	At the level of the step, in the S corner of the pit, an Upper Palaeolithic core was discovered.		

The grave was sunk in the SW portion of the barrow. In its upper portion, the pit was subrectangular. At a depth of about 1.70 m, there was a step leading to the grave chamber and supporting wooden roofing. In the S corner of the step, at the level of the roofing, a (Upper Palaeolithic) flint core lay. On the chamber bottom, the skeleton of an adult male rested supine, crouched. A cluster of his bones was revealed in the northern portion of the chamber – they had been moved due to the activity of animals (Figs. 17, 18).

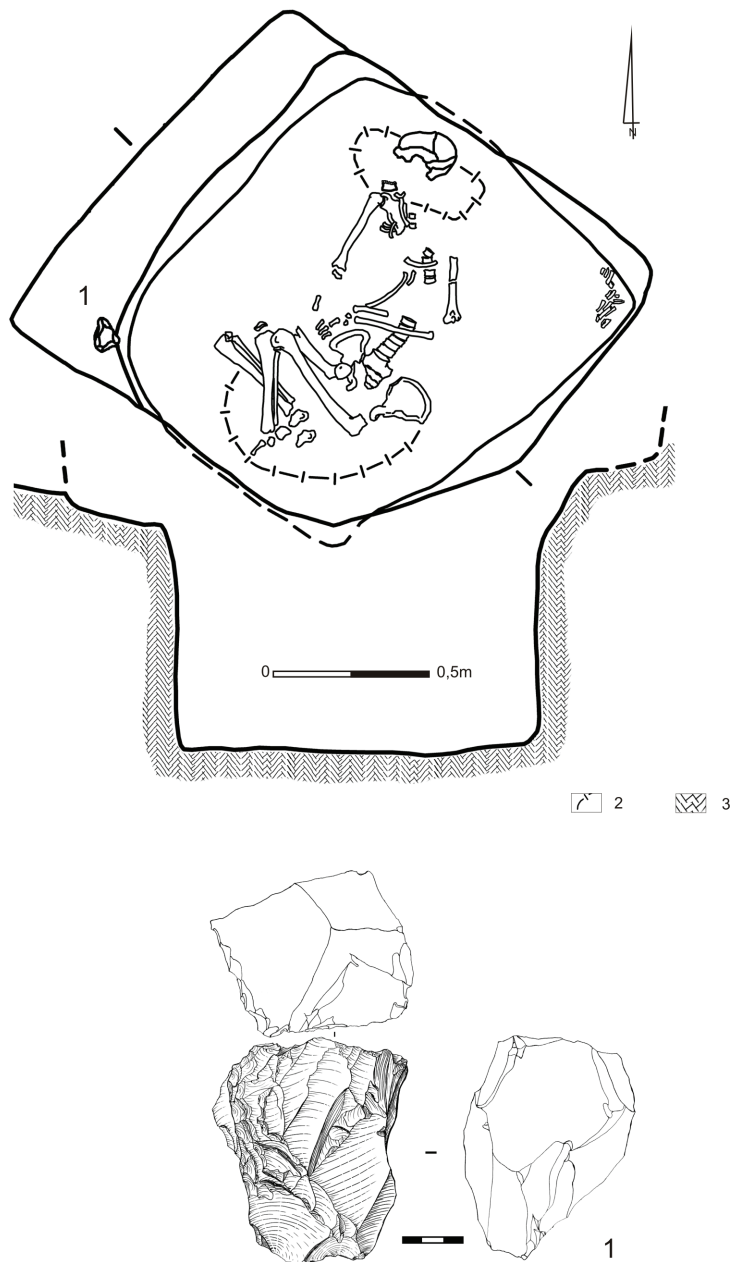


Fig. 17. Pidlisivka, Yampil Region, barrow 1, grave 1/11. Horizontal and vertical projections of feature. 1 – Upper Palaeolithic flint core; 2 – outline of mat; 3 – yellow loess





Fig. 18. Pidlisivka, Yampil Region, barrow 1, grave 1/11. Horizontal projection of burial

*Feature 1/13*

Culture	Babyno		
Dating			
<b>Grave pit</b>		<b>Burial</b>	
Structure type	Pit?	Sex	Female
Number of burials	1	Age	25 years
Size at the level of discovery	?	Orientation	E-W
Size at the level of the bottom	?	Deviation	?
Depth	?	Arrangement of head	?
Pit orientation	SE-NW	Arrangement of trunk	On the right side
Deviation	22° S	Upper limbs	D?
Distance from barrow centre	9.69 m	Lower limbs	1
Azimuth	181°	Ochre	–

Wooden roofing	–	Presence of mat	–
Roofing element orientation		Animal bones	–
Other structural elements	–	Ritual objects	–
Comments			

The grave was sunk into the southern edge of the mound. Its roofing was made of a limestone slab, rhomboid in shape and measuring  $0.6 \times 0.22 \times 0.06$  m. The pit outline could not be traced against the background of mound strata. Most likely, it was oval in shape. On the pit bottom, the skeleton of a mature female lay crouched on the right side (Fig. 19).

*Evidence from outside of features*

In the southern portion of the barrow, stray human bones were found, most likely coming from ploughed-away graves or burials disturbed by modern excavations. The state of preservation of these bones suggests that they came from Late Bronze Age burials. They belonged to an *juvenis* individual. Additionally, four cluster of animal bones were found: those of a pig, cow and horse. Their link to the building of mounds by Eneolithic and YC communities seems probable.

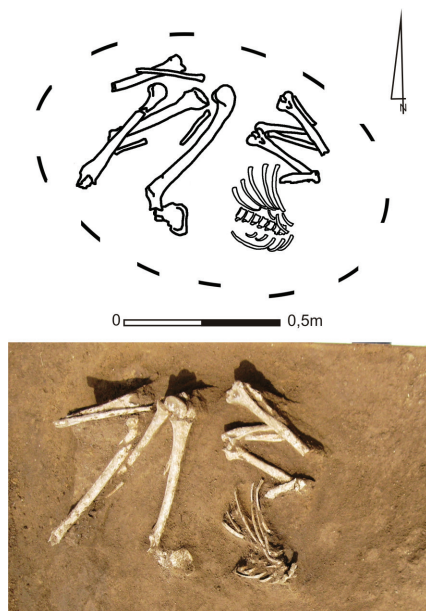


Fig. 19. Pidlisivka, Yampil Region, barrow 1, grave 1/13. Horizontal projection of burial

### 3. STRATIGRAPHIC CONCEPTION AND TYPOCHRONOLOGY OF RITUAL PRACTICES VS. RADIOCARBON CHRONOMETRY

The interpretation of stratigraphy, typochnology of ritual practices and chronometry of barrow 1 in Pidlisivka as outlined below substantially differs from the proposal put forward in the first publication on this site. The revision followed from the re-analysis of sources procured in 2010 and as a result of older excavations in 1984-1993 [Koško *et al.* 2014; Harat *et al.* 2014]. This was inspired by new interpretations concerning the typochnology of ritual practices made while conducting more recent archaeological and chronometric investigations of the *Yampil barrow cluster* (in 2011-2015). These new interpretations were taken up and applied to ‘barrow analyses’ by the researchers working on the project *Podolia as a Cultural Contact Area in the 3rd and in the first half of the 2nd millennium BC* [Klochko *et al.* 2015; 2015a; 2015b; Goslar *et al.* 2015; Ivanova, Toshev 2015a; *see Editor's Foreword* to this volume]. ‘Pidlisivka taxonomic complications’ follow from two kinds of difficulties: (a) archaeometric ones (the absence of a stratigraphic description of the site, which is a result of the advanced devastation of the barrow mound under investigation) and (b) typological and identification ones (atypicality of the manifestations of local ritual practices – this makes this site stand out from the other features investigated by the *Yampil Expedition*).

The burial layout under the central portion of barrow 1 in Pidlisivka suggests that its mound was hypothetically built in two phases and that the older of them dates back to the Late Eneolithic<sup>4</sup>. Such a two-element ‘barrow architecture’ is characteristic also of other *Yampil features*, including barrows from Porogi (3A) and Klembivka (1). It is characterized by arranging mound add-ons around the barrow centre – in connection with – central graves sunk in close proximity. The radiocarbon dates from Porogi 3A (for feature 3A/2) and Pidlisivka (for burial 1/1Aa and wood from grave 1/1A) indicate that the first mound add-on was connected with the YC [Goslar *et al.* 2014: 308, Tab. 4.1: 1].

Under the oldest mound, besides grave 1/1B, there may have also been located feature 1/10. This situation is often encountered on Eneolithic barrow cemeteries where mounds covered more than one feature as, for instance, in barrow 3 from Prydnistryanske [Klochko *et al.* 2015] or barrow 1 from Bursuceni [Yarovoy 1978]. In this context, barrow 2 from Severynivka located nearby deserves a mention in which to the oldest phase, three features are linked [Harat *et al.* 2014: 172-204].

Summing up, the following chronological scheme may be proposed:

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<sup>4</sup> The variant proposed by V.I. Klochko (*see* footnote 3) assumes that a two-phase YC barrow was superimposed on a flat Eneolithic cemetery.

**Stage 1** – Eneolithic barrow. It is linked to graves 1/1B and 1/10 and the first barrow mound. This stage most likely covers also sacrificial pit 6, exposed on the eastern mound edge. Assumed general chronometry: ca. 3000-2800 BC.

**Stage 2** – YC barrow. In this stage, into the central portion of the barrow, grave 1A (with two burials) was sunk. This may have been connected with an add-on and, consequently, a minor enlargement of the barrow. Next, into the mound, graves 1/9 and 1/11 were sunk. Chronometry: ca. 2800-2700 BC for grave 1/1A (central) and ca. 2700-2575 BC for the graves sunk into the younger mound.

**Stage 3** – CC (?) cemetery. Into the barrow mound, graves 1/4 and 1/7 were sunk. These features had a niche/semi-niche character. The taxonomic findings in respect of these features are not certain: they may be Eneolithic graves sunk into the older mound. Chronometry: ca. 2850-2600 BC.

**Stage 4** – BC cemetery. Into the southern mound edge, features 1/5 and 1/13 were sunk. It is probably with this stage that the stray remains discovered in the southern portion of the barrow are connected to; the remains come from a completely ploughed away grave. Chronometry: ca. 1850-1700 BC<sup>5</sup>.

#### 4. TAXONOMIC CLASSIFICATION

The description of the stages of creation and use of the Pidlisivka necropolis takes into account both conceptions ('a' and 'b'), stressing in this way – emphasized in the title – the need for a *discussion about the taxonomic classification* of 'barrow culture' features. We hope, giving precedence to the first conception ('a') in the current interdisciplinary dialogue [Goslar *et al.* 2015; Lytvinova *et al.* 2015], that the two voices can be translated into a programme of an appropriate procedure of empirical verification: a conception of an empirical falsification of both hypotheses.

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<sup>5</sup> An alternative sequence (hypothesis 'b') proposed by V.I. Klochko comprises the following stages:

Stage 1 – a flat Eneolithic cemetery consisting of burials in wide (almost square) pits (feature 10) and catacombs (features 4 and 7).

Stage 2 – YC barrow. In this stage, feature 1A was sunk, above which a small barrow was built.

Stage 3 – the second YC mound, built over feature 1B. Next, into the barrow mound, Late Yamnaya grave 11 was sunk and grave 9 was probably secondarily disturbed.

Stage 4 – BC cemetery. Into the southern mound edge, features 5 and 13 were sunk as well as the third, completely destroyed grave.

The size of barrow 1 in Pidlisivka makes it rank among small features of uncomplicated stratigraphy: without any add-ons, considerably extending the mound, usually dated to the Early Bronze Age. Any detailed findings in this respect, however, are not possible due to the advanced destruction of the feature.

The central burial of the oldest barrow, feature 1B was accompanied by a spill of yellow loess (on the east side) and the remains of wooden roofing located at the original ground level. The pit was rather irregular in shape, subrectangular, and was narrower than the neighbouring excavation of grave 1A. The adult male buried in it had been laid supine with the upper limbs slightly bent at the elbows and extended along the trunk and the lower limbs crouched with the knees turned upwards. Neither the skeleton nor the pit bottom were sprinkled with ochre (only trace amounts of a red colourant were found in the remains of a mat). This ritual is on the one hand close to the YC rite and on the other to the Eneolithic burials of the ‘post-Stog’ type [Ivanova 2015: 282, 283].

The oldest stage may also cover feature 1/10 exposed in the southern portion of the barrow. This was a child burial deeply sunk into yellow loess. Its poorly preserved remains indicated that it had been laid crouched on the left side. The lower limbs were sprinkled with ochre, while grave goods comprised an S-profile pot, placed in a pit corner, at the head of the deceased. This latter trait is characteristic of Middle Dniester rites found in both Eneolithic and Early Bronze milieus. Burials holding S-profile pots in the forest-steppe zone were discovered in feature 1, barrow 2, Varatik, Ryshkany Region [Larina 1989; 72, Fig. 5: 3] and feature 21, barrow 1, Bursuceni, Sîngerei Region [Yarovoy 1978].

#### 4.2. EARLY BRONZE AGE (YAMNAYA CULTURE)

Into the central portion of the mound of the older – Eneolithic – barrow, probably grave 1/1A was sunk as can be judged from its depth, which is clearly smaller than that of feature 1/1B. Its pit only slightly cut into the yellow loess and its bottom extended at a depth of about 0.4 m from the original ground level. Assuming that there was wooden roofing (the elements of which were found in the fill), one has to accept that the original structure must have been deeper. Hence, in the accepted reconstruction, the grave was sunk into the central portion of the older mound [Dergachev 1986: 30, 31, Fig. 3: 2v] and must have entailed an add-on enlarging the barrow (no traces of such an add-on, however, could be captured).

Grave 1/1A was oriented NE-SW or perpendicularly to the longer axis of feature 1/1B. The pit was rectangular in shape and had rounded corners. It was found to hold two burials: one of an adult male and another of a child. The grave, on account of ritual traits (pit structure, orientation and the arrangement of an adult corpse, use of ochre) is associated with the early horizon of the YC. The corpse arrangement is analogous to that found in the graves of the older YC phase in Prydnistryanske 1 and, possibly, barrow 3A in Porohy (partially destroyed burial 3A/2).

Into the barrow mound, some features were sunk that were identifiable on the strength of *ritual dating* as YC graves 1/9 and 1/11, hypothetical CC graves 1/4 and 1/7, BC-related graves 5 and 13, and feature 8 which is hard to identify.

Features 1/9 and 1/11 are pits with a step leading to a rectangular grave chamber. In both cases, roofing remains were recorded. Additionally, in feature 9, there was a cover made from wooden logs and a stone slab. An analogous structure was recorded in grave 13 from neighbouring barrow 2 in Severynivka [Harat *et al.* 2014: 198-204]. In neither of Pidlisivka graves were traces of ochre found. Thus, the cultural attribution of features 1/9 and 1/11 is hard to define. A new dating obtained in the Poznań laboratory for grave 1/11 suggests that it was built still in the first half of the 3rd millennium BC and should be linked to YC communities. The corpse arrangement in this feature is consistent with that characteristic of the late YC phase in the *Yampil cluster*, finding a good analogy in the group of burials from barrow 3A in Porohy sunk into the mound of the younger barrow [Klochko *et al.* 2015a].

#### 4.3. MIDDLE BRONZE AGE (CATACOMB CULTURE?)

A younger horizon is set by features 1/4 and 1/7 whose grave chambers had the nature of semi-niches. Entrance pits leading to them were located on the mound edge side. For grave 1/7, a radiocarbon date was obtained, pointing to the first half of the 3rd millennium BC [Goslar *et al.* 2015]. A similar determination was also obtained for an analogous grave in terms of structure and burial arrangement to taxonomically debatable feature 1/5 from Klembivka. These results argue in favour of including Pidlisivka graves 1/4 and 1/7 in the circle of the early CC. These burials, in terms of corpse arrangement (a strongly contracted position) point to connections with examples on the middle Prut River [Kaiser 2003: 40, 43]. Moreover, the <sup>14</sup>C determinations mentioned earlier indicate an age corresponding to the early CC [Bratchenko 2001; Kaiser 2009; Otroshchenko 2013]. So early a date assigned to them, compared to other finds from the Dniester-Danube area, is surprising [Ivanova 2013] and calls for a revision/confirmation by further research.

The study of the structure of graves 1/4 and 1/7 shows that they must have been sunk into the barrow mound because of the reconstructed depth of entrance pits to grave chambers. This, however, does not rule out the possibility of linking them to the older, Eneolithic stage (I – *see* Ch. 3). A radiocarbon determination obtained in the Poznań Laboratory for grave 1/7 makes it possible to associate it also with the final stage of the Late Eneolithic. The presence of catacomb structures in the Eneolithic is confirmed in both Late Tripolye (C/II) cemeteries and barrows representing various ‘steppe’ traditions [Rassamakin 2004: 43, 57, 58]. In turn, a radiocarbon age determined in the Kyiv Laboratory for grave 1/4 demands that it be referred to the second half of the 3rd millennium BC, that is similarly to the majority of other CC graves on the north-western Black Sea Coast [Kaiser 2009: 65, 66; Ivanova 2014: 22].

#### 4.4. LATE BRONZE AGE (BABYNO CULTURE)

In contrast, there are no doubts about associating graves 5 and 13 with the Late Bronze Age (first half of the 2nd millennium BC). Oval pits sunk into the southern mound edge yielded burials lying on their side, crouched, with the upper limbs bent and directed towards the head. Details of their arrangement, however, vary. What attracts attention the most is the greater degree of ‘pulling up limbs’ in grave 13. At the skeletons, no distinctive grave goods were found (only indeterminate animal bones), hence their cultural attribution is uncertain. The obtained radiocarbon measurements suggest a connection with the BC complex.

#### 4.5. FEATURES OF DOUBTFUL TAXONOMIC REFERENCE: STAGE?

Doubts remain, however, as to the age of ‘grave’ 8 (cluster of child bones) and feature 6 (sacrificial pit – *trizna*). The child burial (?), unearthed on the mound edge, must have been connected to the younger stages of barrow use. Whereas the cluster of animal bones (feature 6) could have been related to the oldest stage and then it might have been deposited prior to the construction of the first mound.

## 5. PIDLISIVKA-SEVERYNIVKA CEREMONIAL CENTRE: TOPOGENETIC CLASSIFICATION

The comments below relate directly to hypothesis ‘a’ of the construction and use stages of the Pidlisivka 1 necropolis.

In terms of burial traits, the oldest Pidlisivka 1 features represent an Eneolithic tradition different from the finds recorded so far in the Podolia part of the Middle Dniester Area. There, barrow burials were recorded that showed clear connections to the rites of the ‘Late Tripolye’ Gordinești group (Prydnistryanske 1, barrows I-IV) [Klochko *et al.* 2015], as well as to extended burials (‘post-Mariupol’/Kvitanska – Oknița, Mocra, Timkovo, Krasnoye) [Manzura *et al.* 1992; Kashuba *et al.* 2001-2002; Ostroverkhov *et al.* 1993; Serova, Yarovoy 1987]. Although this rite is dated to a broad time bracket, a large portion of burials assigned to it are dated analogously to the cemeteries of TC phase C/II [recently: Rassamakin 2013; Ivanova 2015]. Grave 1B from Pidlisivka should, however, be included among the burials of the post-Stog tradition, while its structural traits would indicate its rather late date – corresponding to the early YC phase [Ivanova 2015: 282, 283]. Burials of this type (groups II-A according to Y.Y. Rassamakin) [Rassamakin 2004: 39-41] have not been identified in the Dniester-Danube forest-steppe zone until now. Hence, they define another barrow tradition in this zone, next to ‘Late Tripolye’, ‘post-Mariupol’ and ‘Zhyvotilovka-Volchansk’ ones (barrows in Bursuceni, Kosteshti and Varatik), evincing at the same time the diversity of funerary rites at the dawn of the YC barrow ritual. The similar dating of all the types listed here implies the presence of syncretic or transitional assemblages. Encountered similarities result in controversies regarding the classification of particular assemblages to specific Eneolithic and Early Bronze cultural formations. In this context, the dating of the older phase of the Pidlisivka barrow seems absolutely crucial. It is dated to the very beginning of the 3rd millennium BC or similarly to the radiocarbon-dated older stage of barrow 1 in Klembivka (*see* Klochko *et al.* 2015b). It would be thus a younger horizon than the age of the Prydnistryanske 1 barrow complex, having affinities with the Gordinești group.

The above interpretation makes one revise chronological-cultural assessments of some other barrows from the *Yampil cluster* [Ivanova, Toshev 2015a; Ivanova *et al.* 2015]. Eneolithic ritual traits can be also seen in two proximate barrows (1 and 2) in Severynivka – especially in the case of the central grave of barrow 1 [Harat *et al.* 2014: 166-204]. This would evince the existence of a *Pidlisivka-Severynivka Eneolithic barrow concentration as a local ceremonial centre*, another one within the *Yampil barrow agglomeration*.

Less inspiring to make accepted topogenetic approaches more specific, Pidlisivka YC, CC? and BC materials often cause problems when it comes to the fine-tuning of taxonomic-chronological findings. YC features only in certain respects



correspond to finds from other *Yampil cluster* barrows. The module of a ‘classic’ burial from the older phase of this culture was realized only in feature 1A (although even in this case an atypical trait consisted in placing a child burial immediately over the head of an adult individual). The late phase structures (1/9 and 1/11), in turn, are characterized by irregular pits and the absence of traces of ochre use (which is found in almost all YC graves in the *Yampil barrow* agglomeration).

The catacomb structures of graves 1/4 and 1/7 have become the subject of debates whether they belonged to the CC or the late phase of the Eneolithic. These are unique features on the scale of the forest-steppe of the north-western Black Sea Coast, finding only single and not entirely close analogies. Their very presence in Podolia is an important fact to be reckoned with while assessing the length and significance of the ‘catacomb trend’ in the funerary rites of societies settling the area in question in the beginning of the Early Bronze Age.

In the case of the BC, as a topogenetically meaningful trait, burials in semi-niche graves should be considered.

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The new reading of the creation and use of the Eneolithic – ‘Early Bronze’ necropolis in Pidlisivka 1 presented above opens a number of major fields of discussion related to the taxonomic and typochronological classification of Podolia ritual practices followed by ‘barrow culture’ communities (hypotheses ‘a’ and ‘b’ outlined earlier) between 3250 BC and 2500 BC. Unfortunately, it is the chronometry of this period that suffers from a major shortage of meaningful radiocarbon determinations.

The revision trends as sketched above ought to be supported – in the first place – by efforts to make up for the deficiency in available scientific evidence. Moreover, the atypical series of Pidlisivka data, as far as identification purposes are concerned, regarding *Podolia-Yampil ritual practices*, calls for further planned research, including – which is postulated – excavations to broaden our knowledge on the autogenesis of the *Pidlisivka-Severynivka ceremonial centre*.

*Translated by Piotr T. Żebrowski*

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