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ŚWIĘTE 11: CEMETERY OF THE CORDED
WARE CULTURE

ABSTRACT

The rescue excavations at site 11 in Święte, Radymno Commune, Jarosław District, were conducted prior to the construction of the A4 motorway. Thirteen Corded Ware culture (CWC) features, including eleven graves, were discovered. The Final Eneolithic cemetery was placed in the neighbourhood of FBC graves, possibly at megalithic tombs. Most of the CWC graves have a niche construction – typical of the Lesser Poland funerary rite. The furnishings found in these features are characteristic of Subcarpathia as are inventories from nearby sites in the Lower San Valley and Rzeszów Foothills. Their typo-chronological assessments point to the younger phase of the CWC. Ceramic artefacts include vessels finding analogies in the assemblages of the Middle Dnieper culture and the cultures of the steppe/forest-steppe of the North-Western Black Sea Area. Among the latter is the spectacular find of a round-base pot from Feature 1149B. A series of five dates estimate the origins of the Święte cemetery graves at the interval of 2530-2375 BC.

Key words: Final Eneolithic, Corded Ware culture, Lesser Poland, funerary rite

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The archaeological excavation at site 11 in Świątę, Radymno Commune, Jarosław District (AZP 106-84/110)¹ was conducted in 2010 in respect to the construction of the A4 motorway by Narnia-Archeo-Archgeo (heads of research: Aleksandra Łukaszewska and Łukasz Łukaszewski). The area under study measured 374.12 ares, which revealed a settlement and cemetery of the Funnel Beaker culture (FBC) as well as a cemetery of the Corded Ware culture (CWC) – made up of 13 features (including 11 graves). Moreover, few traces of a Bronze Age settlement were recorded (Tarnobrzeg group, Lusatian culture), relics of intensive settlement from the Early Roman period and fortifications from the First World War.

The site is situated about 3 km south of Radymno, in the south-eastern part of the Sandomierz Basin, of the Lower San Valley [Kondracki 1988], which forms the border from the east of the loess upland of the Rzeszów Foothills and occupies the prominent western edge of the San meadow terrace (Fig. 1). The difference in altitude between the terrace edge and the Holocene river valley measures 12 m. The absolute height of the area stays between 200 and 202 m above sea level. The site

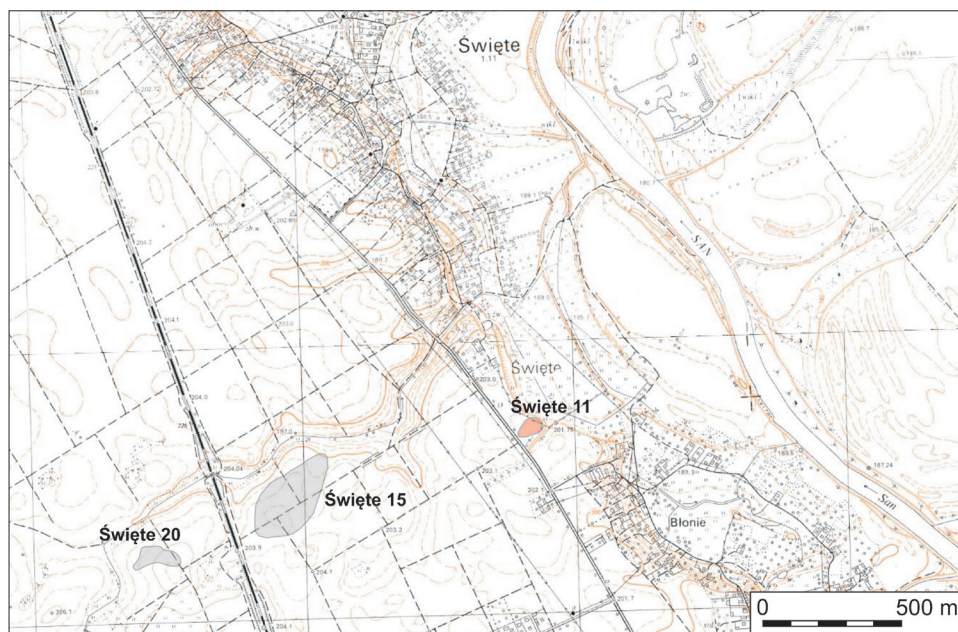


Fig. 1. Location of site 11 in Świątę, Radymno Commune, Jarosław District

¹ Site 25 in Sośnica (AZP 106-84/111), from the east bordered on site 11 in Świątę – was investigated during parallel rescue excavations (Fig. 2), where alas, no materials corresponding to the subject matter under discussion were found.

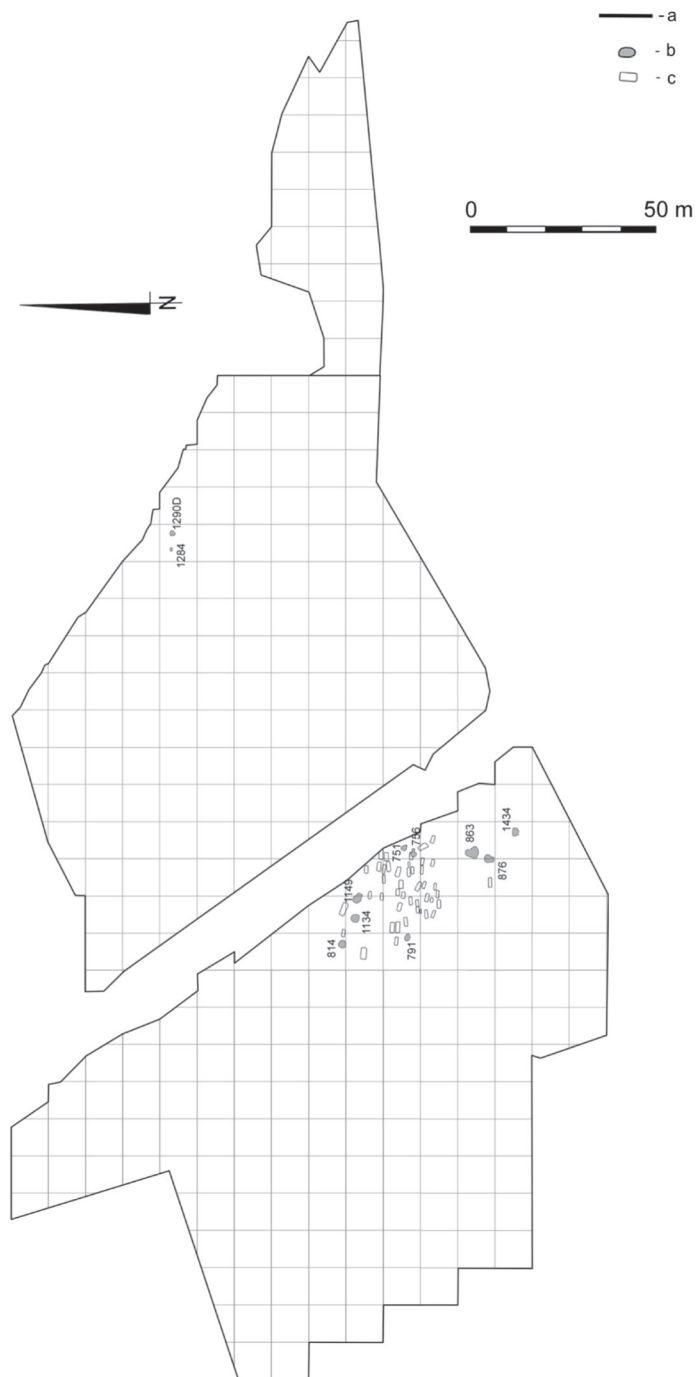


Fig. 2. Święte, site 11. Plan of the area under research, marked with graves from the CWC and FBC. a – limit of excavation, b – graves of the CWC, c – graves of the FBC

in question takes up the base of the meadow terrace headland, which is delimited by a marked 10 m cut from the north. The area under investigation is characterised by a micro-undulation of relief, manifested by the occurrence of periodic stream dissections and no-drainage hollows [Reder, Stępniewski 2011].

This is a clearly prominent place, one overlooking the immediate surroundings. The uppermost accrued layers here are made of typical carbonate loess of a light-coloured, grey-yellow hue, several metres thick. Święte, site 11, out of the Final Eneolithic cemetery complex, is situated closest to the San valley. Perhaps this is related to the accumulation of more numerous finds of a ceremonial-funerary character than on the two other sites here [nos. 15 and 20: Janczewski *et al.* 2018; Dobrakowska, Włodarczak 2018].

The CWC graves were discovered in two zones of the site (Fig. 2). In the western zone, a cemetery made up of 11 features was situated in the area previously occupied by a FBC cemetery. Some 90 m away to the east, on the border of the area under investigation, two features were found (nos. 1284 and 1290D), most likely constituting a fragment of another grave cluster – a part of which was already beyond the border of the planned construction project and therefore was not investigated.

1. DESCRIPTION OF GRAVES

Grave 751²

Dating	–		
Construction type	Niche	Number of burials	0
		Sex	–
Dimensions of niche (m)	1.5 x 1.1	Age	–
		Orientation	–
Depth (m)	0.85	Deviation	–
Niche orientation	NW-SE	Placement of head/body/lower limbs	–
		Lower limbs	–
		Upper limbs	–

² Legend for symbols used in Tables:

Placement of head/body/lower limbs: R – right side, L – left side, U – supine (face up).

Lower limbs: see Włodarczak 2006: 58, Fig. 31: B i 60, Table 13.

Upper limbs: see Włodarczak 2006: 58, Fig. 31: A.

Feature with a niche construction. The entrance pit was placed south-east and was close to a rectangle in shape, leading to the niche through a steep threshold. Its fill was homogenous and grey-brown in colour. The niche was most likely oval in shape and its fill, dark brown earth washed up from the direction of the entrance

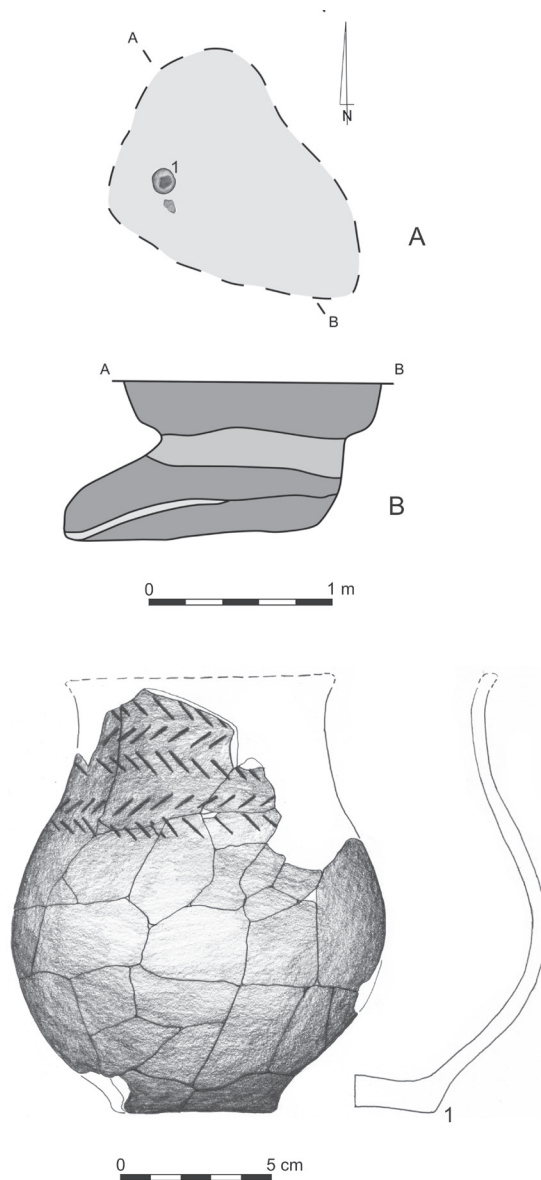


Fig. 3. Święte, site 11. Grave 751: A – plan at the level of its bottom, B – vertical profile, 1 – inventory. Drawing by M. Podsiadło



Fig. 4. Święte, site 11. Grave 751. Vertical profile of niche. Photo by A. Olszewski

pit (Fig. 3: B; 4). A crushed vessel was found at the bottom of the niche, though no bones of the burial were found (Fig. 3: A).

Inventory:

1. Bipartite, S-shaped beaker. It was decorated on the neck and in the upper part of the belly with sparsely placed incisions, creating a herringbone pattern. The upper part of the neck was not preserved. The base was marked and concave. Dimensions: preserved height – 14.0 cm, diameter of belly – 12.4 cm, diameter of base – 5.4 cm. Fig. 3: 1.

Grave 756A

Dating	–		
Construction type	Niche	Number of burials	2
		Sex	1. ? 2. ?
Dimensions of niche (m)	1.85 x 1.35	Age	1. ? 2. 7-8 years
		Orientation	1. N-S? 2. S-N?
Depth (m)	0.6	Deviation	1. ? 2. ?
Niche orientation	N-S	Placement of head/ body/lower limbs	1. ? 2. ?
		Lower limbs	1. ? 2. ?
		Upper limbs	1. ? 2. ?

The entrance pit was rectangular in shape with ovoid corners and found on the eastern side of the niche (Fig. 6). Its excavation disturbed the eastern part of grave 756 (FBC). The shaft led to the niche through a distinct narrowing (corridor – Fig. 5; 6). The niche was oval in shape and its fill was clearly darker than the sediment in the entrance pit, consisting in the main of dark-brown soil with a high concentration of humus (Fig. 6). Only a few teeth and small bone fragments from the remains of the burials were preserved, making the reconstruction of how the deceased were placed impossible. On the basis of the location of the teeth, it is possible to assume that the deceased were placed in an antipodal manner – their heads directed north and south (Fig. 5: A).

Inventory:

1. A broad-mouth vessel with a short neck ('Brzezinki' type). Decorated in the upper part with incisions, creating two and a half herringbone motifs and a horizontal zigzag. The base was not marked and concave. Dimensions: height – 10 cm, lip diameter – 8.8 cm, belly diameter – 12.4 cm, base diameter – 5.4 cm. Fig. 5: 1.

2. Belly fragment of a small thin-wall beaker. The base was not marked and flat. Dimensions: belly diameter – 5.5 cm, base diameter – 2.6 cm. Fig. 5: 2.

3. Poorly fired vessel, destroyed in the course of exploration.

4. Blade tool made of eastern cretaceous flint, light grey hue, damaged in the distal part. Retouched regularly and steeply along the entire length of both sides. Dimensions: 52 × 14 × 4 mm. Fig. 5: 3.

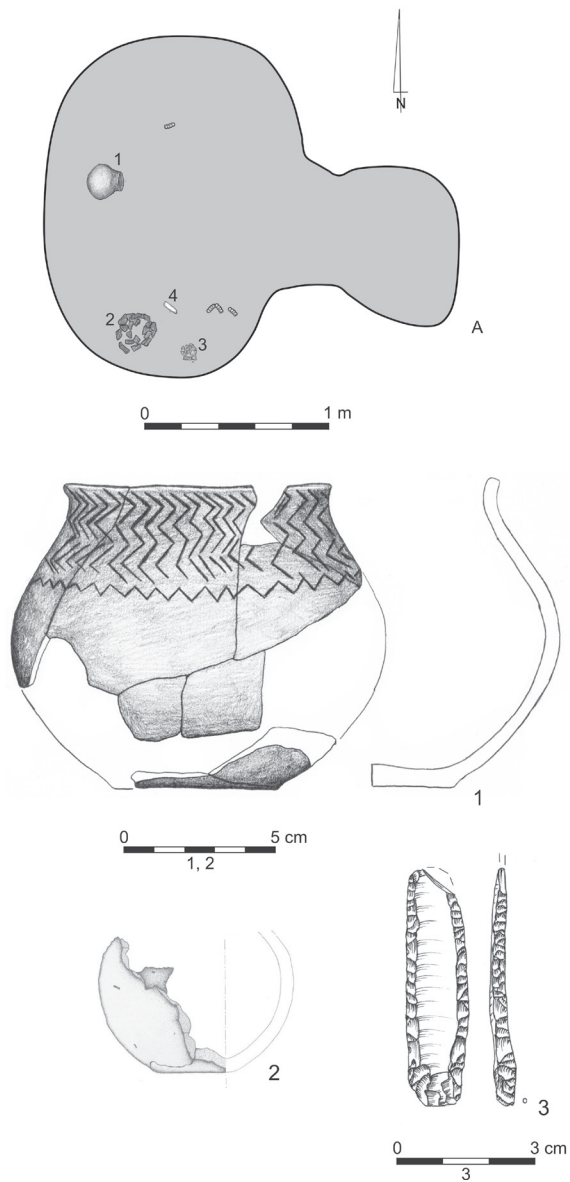


Fig. 5. Święte, site 11. Grave 756A: A – plan of the grave at the level of the bottom, 1-3 – inventory. Drawing by M. Podsiadło, A. Dzedzic



Fig. 6. Święte, site 11. Part at the bottom of the entrance pit and niche of grave 756A. Photo by A. Olszewski

Grave 791

Dating	–		
Construction type	Niche	Number of burials	1
		Sex	Female?
Dimensions of niche (m)	1.9 x 1.7	Age	>20 years
		Orientation	NW-SE
Depth (m)	0.8	Deviation	22°
Niche orientation	NW-SE	Placement of head/body/lower limbs	R/R/R
		Lower limbs	6
		Upper limbs	?

The entrance pit (not documented during investigations) was found on the south side of the niche, which is clearly shown by the photograph of the grave

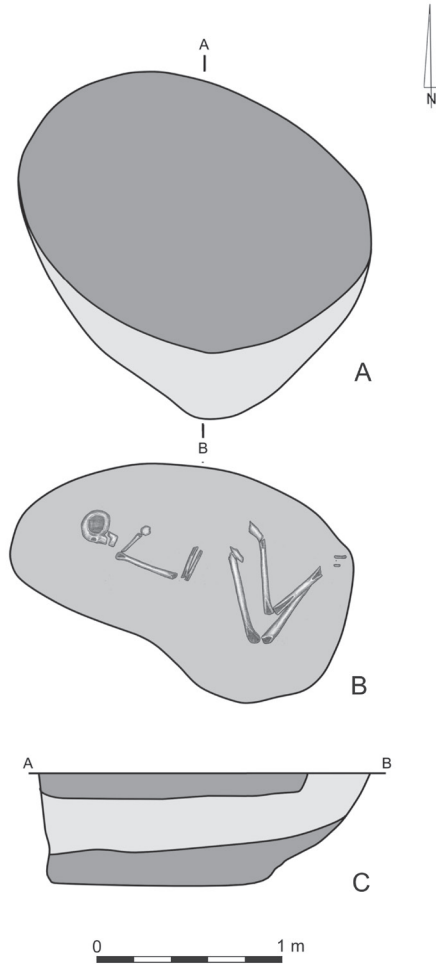


Fig. 7. Święte, site 11. Grave 791: A – plan at the level of discovery, B – vertical profile of the niche. Drawing by M. Podsiadło

profile (Fig. 8). The fill of the niche was homogenous, dark brown, lighter in colour than the entrance pit fill – as in feature 756A. The burial lay on the bottom of the feature (Fig. 7: B). The poor state of preservation of bones does not allow for a definite determination of sex and age of the deceased. No grave goods.



Fig. 8. Święte, site 11. Grave 791. Vertical profile of the niche and entrance corridor. Photo by A. Olszewski

Grave 814

Dating	–		
Construction type	niche	Number of burials	1
		Sex	?
Dimensions of niche (m)	2.0 x 1.95	Age	40-50 years
		Orientation	?
Depth (m)	1.0	Deviation	?
Orientation of pit	W-E	Placement of head/body/lower limbs	?
		Lower limbs	?
		Upper limbs	?

The entrance pit was not recorded. On the basis of the vertical profile of the feature (Fig. 9: C) it can be said that it was situated south of the niche. The fill of the feature was made up of a layer of dark humus earth and a parcel of yellow loess. Its character indicates that the ceiling collapsed after only the base part was covered by a thin layer of earth washed up from the entrance corridor. At the bottom of the feature, one bone and one tooth were found – belonging to an individual aged *maturus*, sex unidentified (Fig. 9: B).

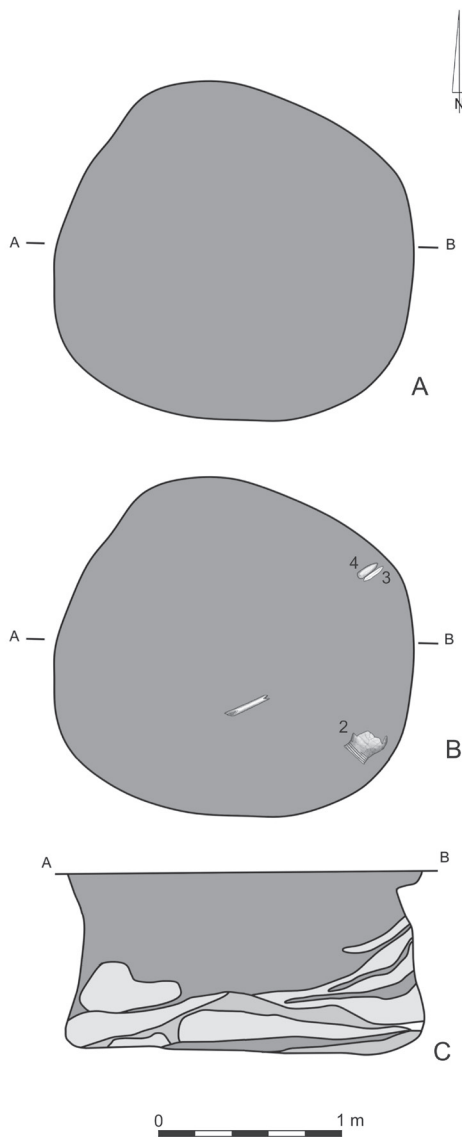


Fig. 9. Święte, site 11. Grave 814: A – plan at the level of discovery, B – burial level, C – vertical profile of the niche. Drawing by M. Podsiadło

Inventory:

1. A small S-shaped beaker. Decorated in the upper part of the belly with 4-5 widely-spaced Z-twisted impressions of a thick cord. The base was not marked and flat. Dimensions: height – 7.8 cm, lip diameter – 6.5 cm, belly diameter – 6.5 cm, base diameter – 4.0 cm. Fig. 10: 1.

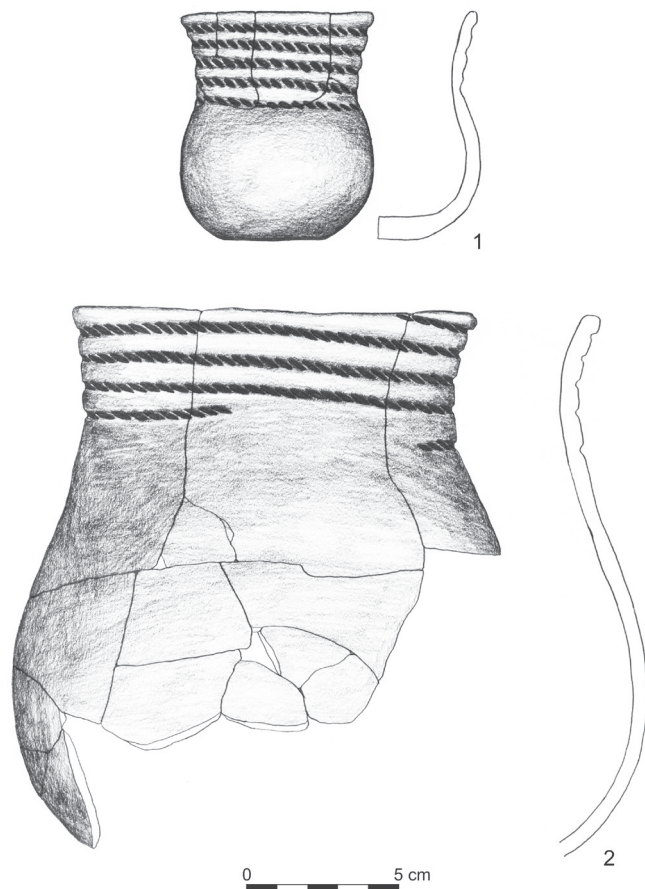


Fig. 10. Święte, site 11. Grave 814: 1-2 – inventory. Drawing by M. Podsiadlo

2. Partially preserved, large S-shaped beaker. Decorated in the upper part of the neck with four widely-spaced Z-twisted impressions of a thick cord. The bottom was not preserved. Dimensions: preserved height – 17.8 cm, lip diameter – 13.2 cm, belly diameter – approx. 16.8 cm. Fig. 10: 2.

3. Bifacial axe made of Volhynia flint. Formed by regular chipping of flakes from the side edges onto both main surfaces. Smoothed out at the blade and side edges. The back part has clear sheen signs left by the haft. One of the main surfaces is naturally wind eroded. Dimensions: length – 84 mm, width of blade – 37 mm, width of butt – 30 mm, thickness – 14 mm. Fig. 11: 3.

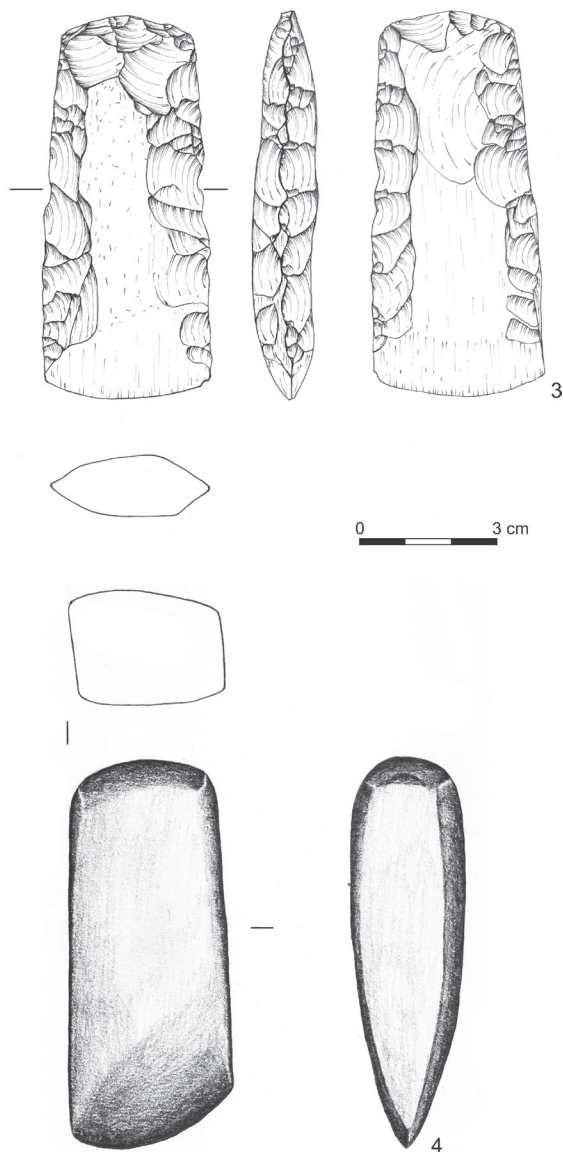


Fig. 11. Święte, site 11. Grave 814: 3-4 – inventory. Drawing by A. Dziezic, M. Podsiadło

4. Rectangular axe made out of siltstone (striped, beige and greenish)³. The blade is asymmetrical. Convex butt. Flat side surfaces, by way of the natural shape of concretion. Dimensions: length – 85 mm, width of blade – 39 mm, Measurements of butt – 31 × 23 mm, thickness – 26 mm. Fig. 11: 4.

³ Description of flintstone materials by Dr. Lucjan Gazda, Lublin University of Technology.



Fig. 12. Święte, site 11. Grave 814: vertical profile of the niche. Photo by A. Łukaszewska

Grave 863A

Dating	–		
Construction type	niche	Number of burials	1
		Sex	?
Dimensions of niche (m)	1.6 x 1.0	Age	40-50 years
		Orientation	?
Depth (m)	0.5	Deviation	?
Orientation of pit	W-E	Placement of head/body/lower limbs	?
		Lower limbs	?
		Upper limbs	?

The grave was identified in the northern part of a vast depression described as ‘feature 863’ (Fig. 13: A). This could have been created as a result of the collapse of niches 863A and 863B located nearby, constituting most likely, elements of separate graves. The entrance pit was not documented. Judging by the shape of the niche and the way relics were placed in it, it may have been situated south or south-east, in part above the niche of grave 863B. The main part of the fill of the feature contained dark brown earth (Fig. 13: B). At the bottom, there were discovered only

fragments of long bones of the burial (adult individual) as well as furnishings in the form of a vessel and stone axe (Fig. 14: A).

Inventory:

1. S-shaped beaker. Decorated on the neck and on the upper part of the belly with nine rows of Z-twisted impressions of a cord. The bottom not marked and flat. Dimensions: height – 14.6 cm, lip diameter – 9.7 cm, belly diameter – 13.9 cm, base diameter – 5.8 cm. Fig. 14: 1.

2. A slimmer rectangular axe made of siltstone. Fashioned out of a pebble, taking advantage of the natural shape of side surfaces (smoothed out only in the butt portion). The main surfaces are smoothed out along the entire length. The blade is clearly asymmetric. The butt is rectangular and slightly tapered. Dimensions: length – 16.0 cm, width of blade – 2.7 cm, width of butt – 2.3 cm, thickness – 3.4 cm. Fig. 14: 2.

Grave 863B

Dating	–		
Construction type	niche	Number of burials	1
		Sex	F
Dimensions of niche (m)	1.35 x 1.25	Age	20-30 years
		Orientation	NE-SW
Depth (m)	0.9	Deviation	25°
Orientation of pit	W-E?	Placement of head/body/lower limbs	?/U/L
		Lower limbs	6
		Upper limbs	G

The entrance pit was not documented. Most likely it was situated south-east of the niche (Fig. 13: A). A three-layer fill testifies to the collapse of the niche ceiling onto the burial level already buried under earthen material washed out from the direction of the entrance; Fig. 13: C). Its upper part was made up of dark humus earth, while in the middle part the presence of parcels of yellow loess was recorded. The poorly preserved burial of a female aged 20-30 lay at the bottom of the niche (Fig. 15: A; 16).

Inventory:

1. A small two-handled amphora preserved only partially, decorated on the belly with a vertical herringbone motif. The bottom was marked and flat. Dimensions: height – 7.6 cm, lip diameter – 4.0 cm, belly diameter – approx. 8.5 cm, base diameter – 3.9 cm. Fig. 15: 1.

2. Fragments of a large amphora (four-handled?). Fig. 15: 2.

3. A tool on a regular flake made of Volhynia cretaceous flint, damaged in the

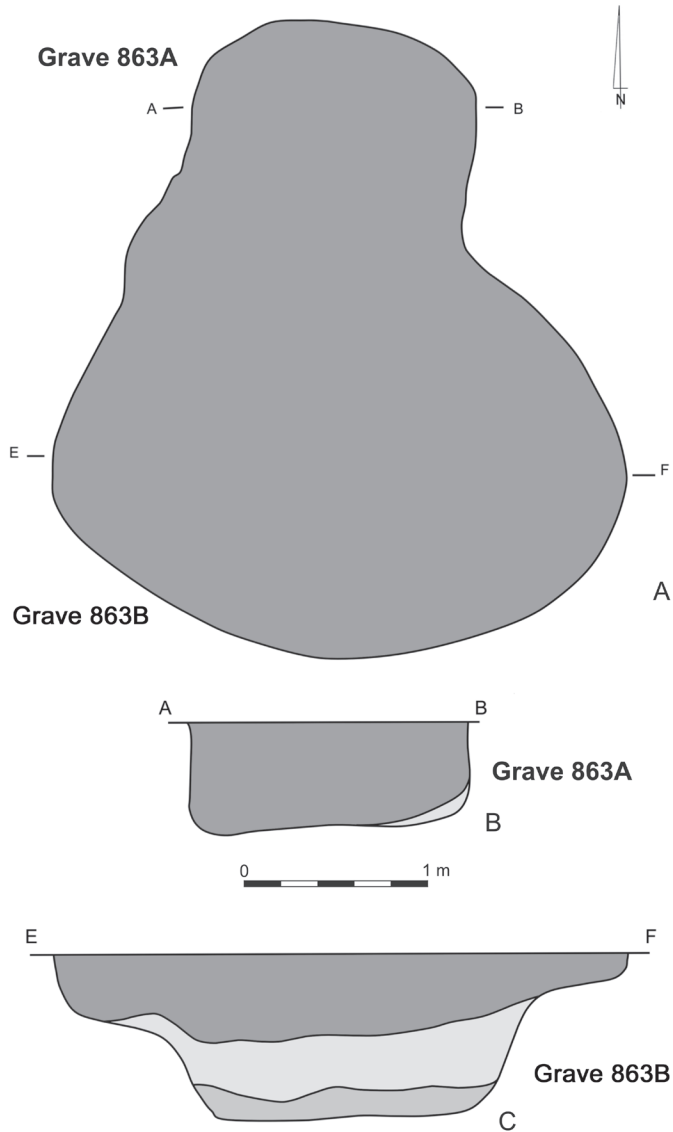


Fig. 13. Święte, site 11. Graves 863A and 863B: A – discovery level of features, B – vertical profile of Grave 863A, C – vertical profile of Grave 863B. Drawing by M. Podsiadło

distal part. Along the entire length of both edges, a regular half-steep retouch that extends deeply onto the scar surface. Dimensions: $65 \times 15 \times 7$ mm. Fig. 15: 3.

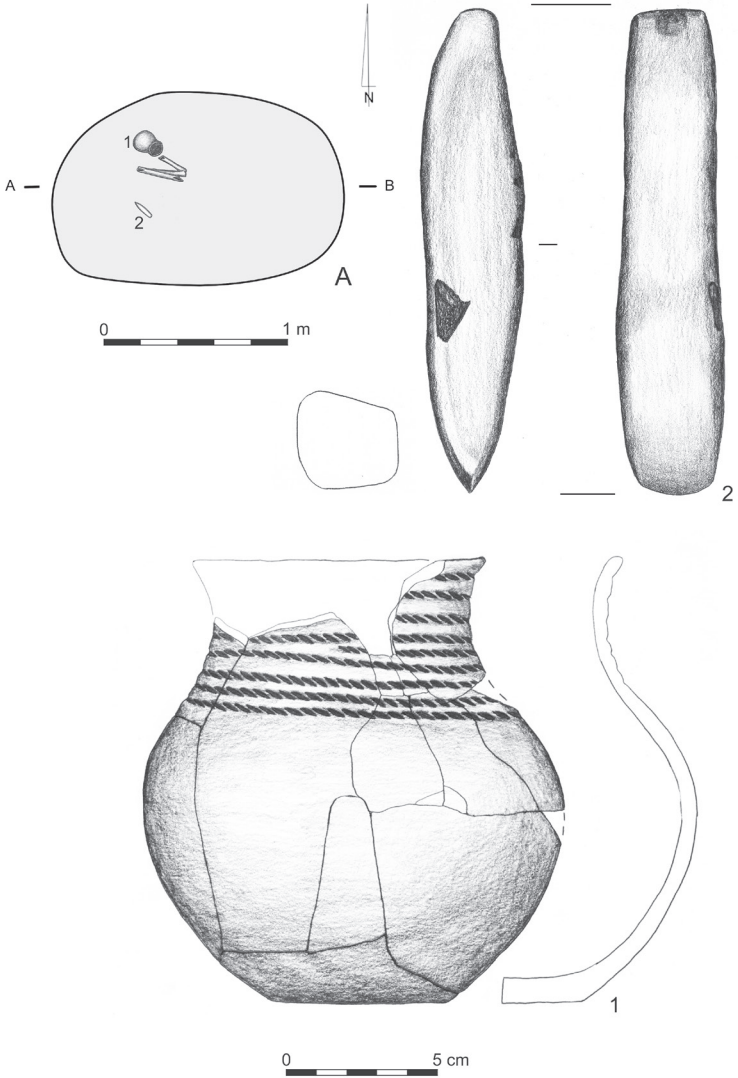


Fig. 14. Święte, site 11. Grave 863A: A – burial level, 1-2 – inventory. Drawing by M. Podsiadło

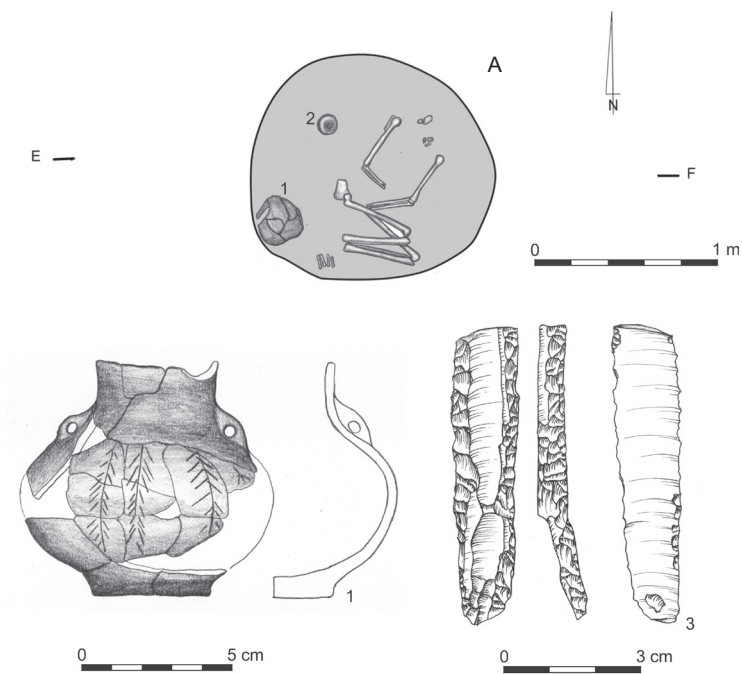


Fig. 15. Święte, site 11. Grave 863B: A – burial level, 1-3 – inventory. Drawing by A. Dziedzic, M. Podsiadło



Fig. 16. Święte, site 11. Grave 863A: burial level. Photo by M. Dobrzyński

Grave 876

Dating	Poz-90875: 3890±35 BP, 2460-2340 BC		
Construction type	niche	Number of burials	1
		Sex	M
Dimensions of niche (m)	2.0 x 1.5	Age	30-35 years
		Orientation	W-E
Depth (m)	1,2	Deviation	0°
Orientation of pit	W-E	Placement of head/ body/lower limbs	R/U/R
		Lower limbs	3
		Upper limbs	H

The entrance pit (1,15 x 0.85 m) was situated on the south side (Fig. 17: A). Its bottom was only somewhat higher than that of the niche (Fig. 17: B, C). The fills of both parts of the grave were similar and made up of in the main, dark brown earth. A well preserved skeleton of an adult male lay on the bottom in the northern part of the niche (Fig. 17: D). All of the furnishings lay by the bones of the pelvis and upper limbs.

Inventory:

1. A small S-shapes beaker, with a funnel-like lip. Decorated on the neck and on the upper part of the belly with uneven incisions, creating two and a half herringbone motifs. The base is marked and somewhat concave. Dimensions: height – 8.5 cm, lip diameter – 8.3 cm, belly diameter – base diameter – 5.7 cm. Fig. 18: 1.

2. A large S-shaped beaker, decorated on the neck with three bands of incised herringbone. The base not marked and flat. Dimensions: height – 19.7 cm, lip diameter – 11.2 cm, belly diameter – 15.4 cm, base diameter – 6.8 cm. Fig. 18: 2.

3. A small rectangular axe made of Świeciechów flint. Polished at the cutting edge. The cutting edge is symmetrical and arched. Irregular sides formed by chipping from the side of butt and one edge. Edges corrected by crushing or ‘punching’. Part of one of these is covered in cortex. The butt is quadrangular, not tapered. Dimensions: length – 6.4 cm, cutting- edge width – 3.1 cm, butt width – 2.5 cm, thickness – 1.9 cm. Fig. 18: 3.

4. A regular knife flake insert made of eastern cretaceous flint of a light grey colour. Retouched at the edge, steeply, along the entire length of the sides. Dimensions: 50 × 23 × 5 mm. Fig. 18: 4.

5. A damaged chisel made of a cow’s radius – broken off near the proximal epiphysis. The surface is highly smoothed. Dimensions: preserved length – 13.8 cm, cutting-edge width – 1.5 cm, width near the epiphysis – 2.2 cm. Fig. 18: 5.

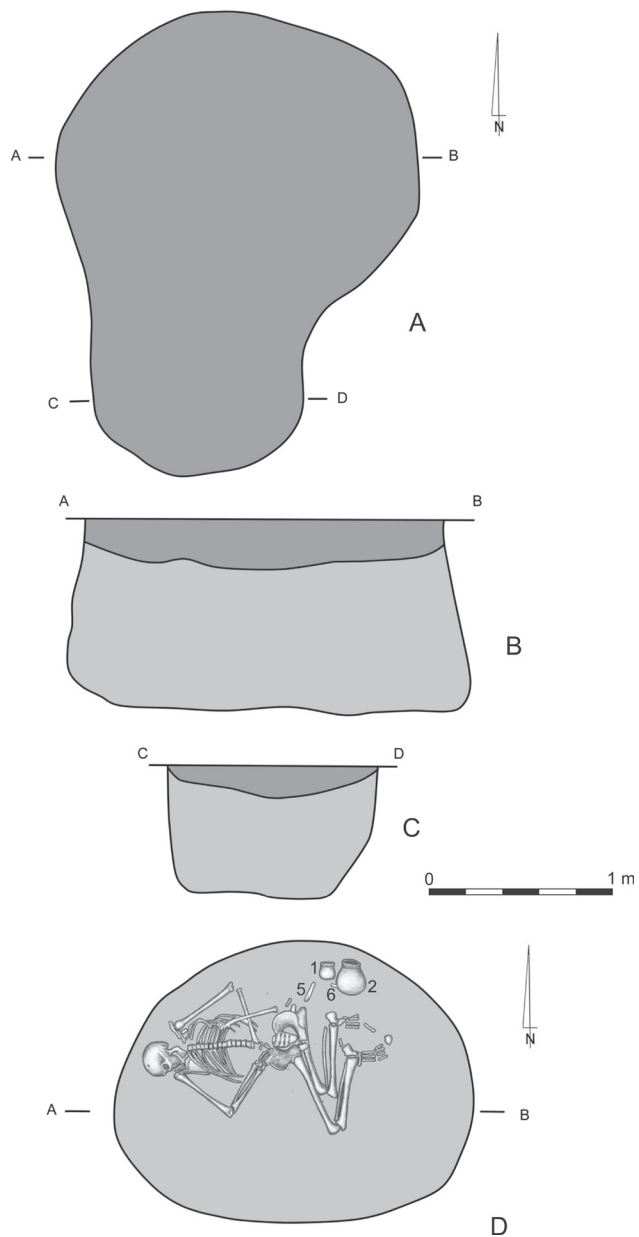


Fig. 17. Święte, site 11. Grave 876: A – plan at the level of discovery, B – vertical profile of the niche, C – vertical profile of the entrance pit, D – burial level. Drawing by M. Podsiadło

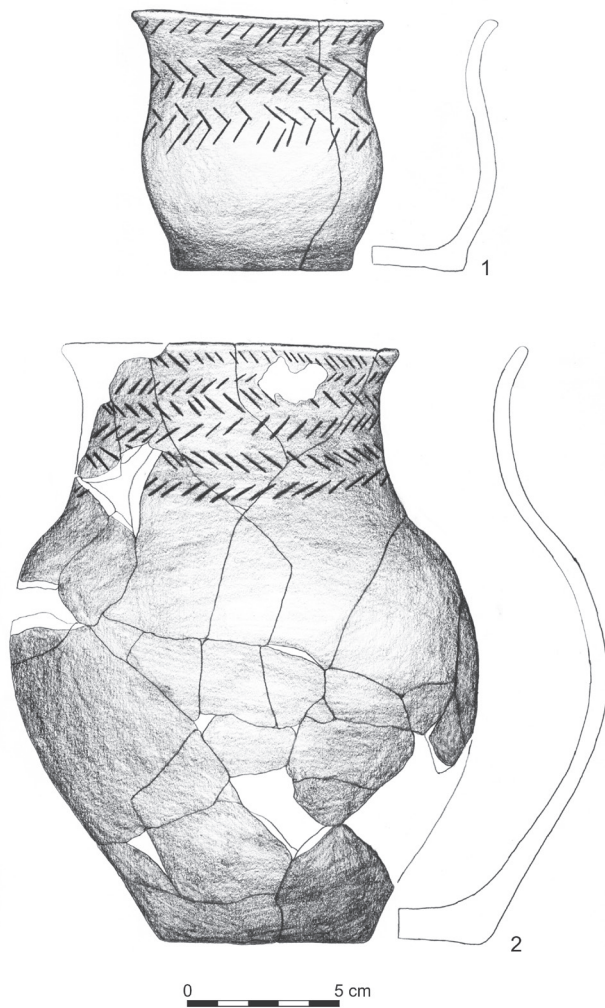


Fig. 18. Święte, site 11. Grave 876: 1-2 – inventory. Drawing by M. Podsiadło

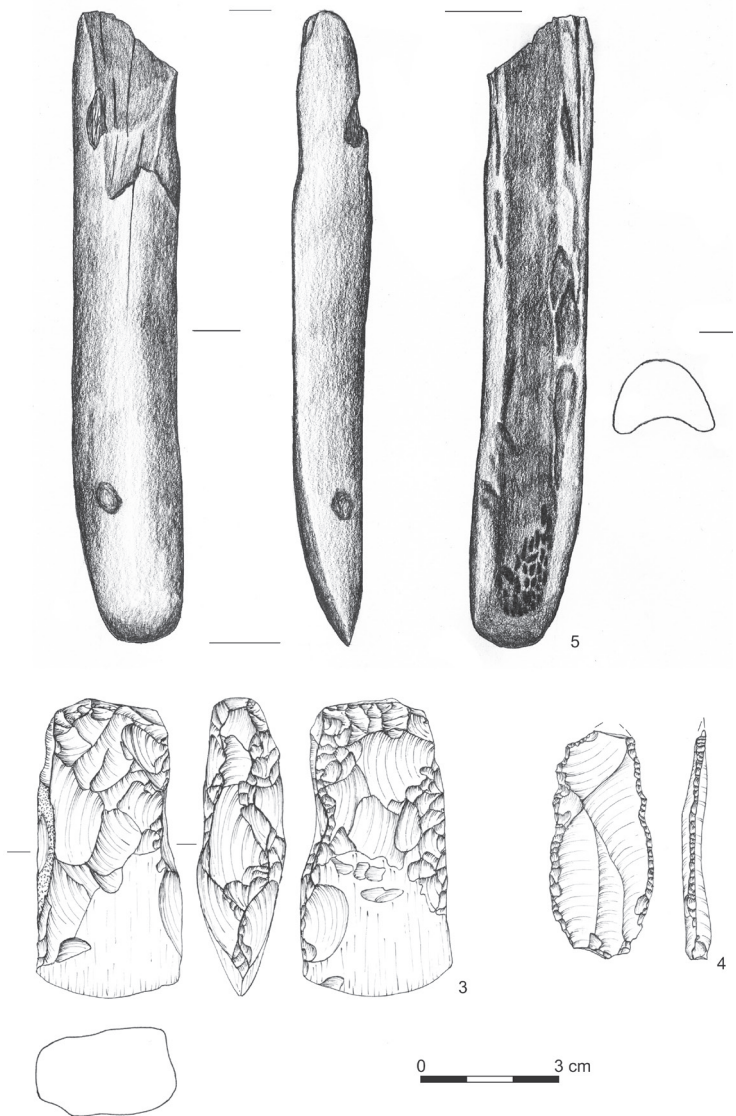


Fig. 19. Święte, site 11. Grave 876: 3-5 – inventory. Drawing by A. Dzedzic, M. Podsiadło



Fig. 20. Świąte, site 11. Grave 876: burial level. Photo by M. Dobrzyński

Grave 1134

Dating	Poz-90877: 4020±30 BP, 2573-2490 BC		
Construction type	niche	Number of burials	1
		Sex	M
Dimensions of niche (m)	2.1 x 2.1	Age	25-30 years
		Orientation	SW-NE
Depth (m)	1.5	Deviation	13°
Orientation of pit	W-E	Placement of head/body/lower limbs	R/U/R
		Lower limbs	2
		Upper limbs	C?

The entrance pit was not documented. Most likely it faced south. From the east, the niche was disturbed by the excavation of feature 1136 dated to the period of Roman period. (Fig. 21: A, B). The multi-layer fill indicates a collapse of the niche ceiling directly onto the level of the burial. The bottom of the feature was only

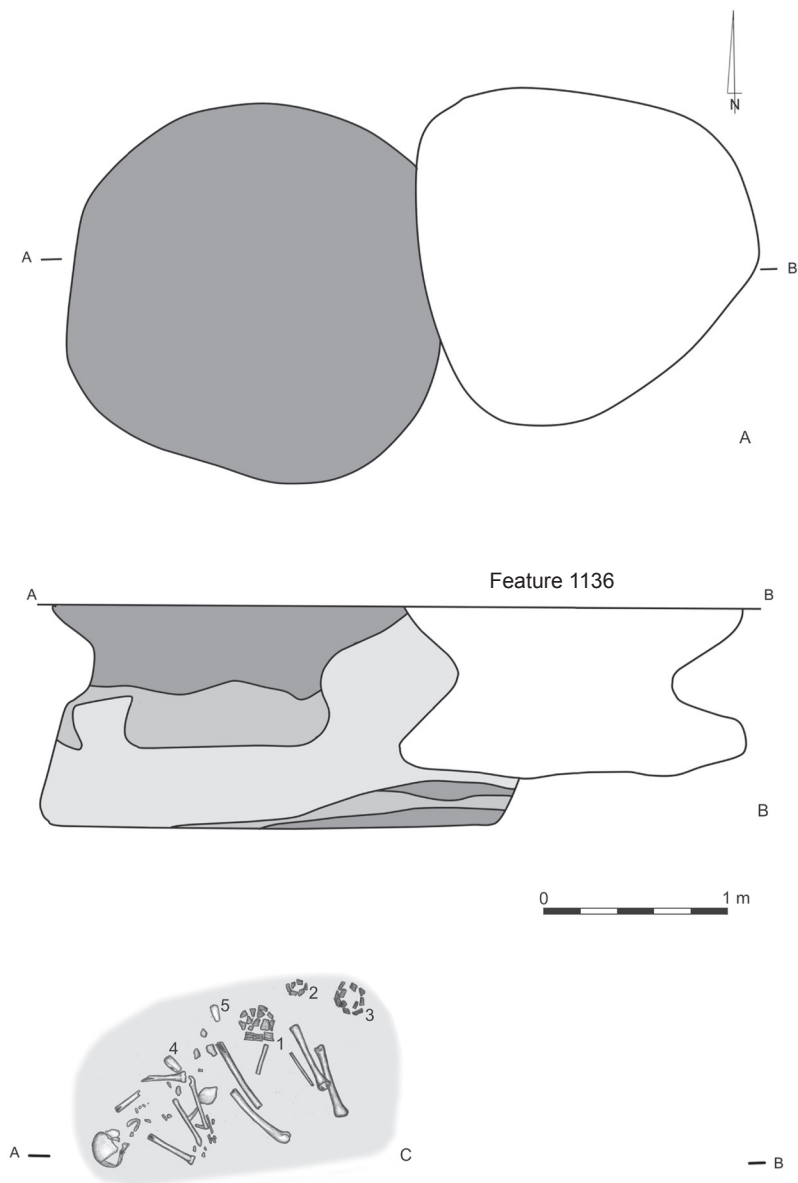


Fig. 21. Święte, site 11. Grave 1134: A – plan at the level of discovery, B – vertical profile of the niche, C – burial level. Drawing by M. Podsiadło

partially covered by a thin layer of dark brown earth washed up from the direction of the entrance. Higher up, large parcels of yellow loess were present. The ceiling part contained a fill depression created above the niche ruins, filled with a homog-

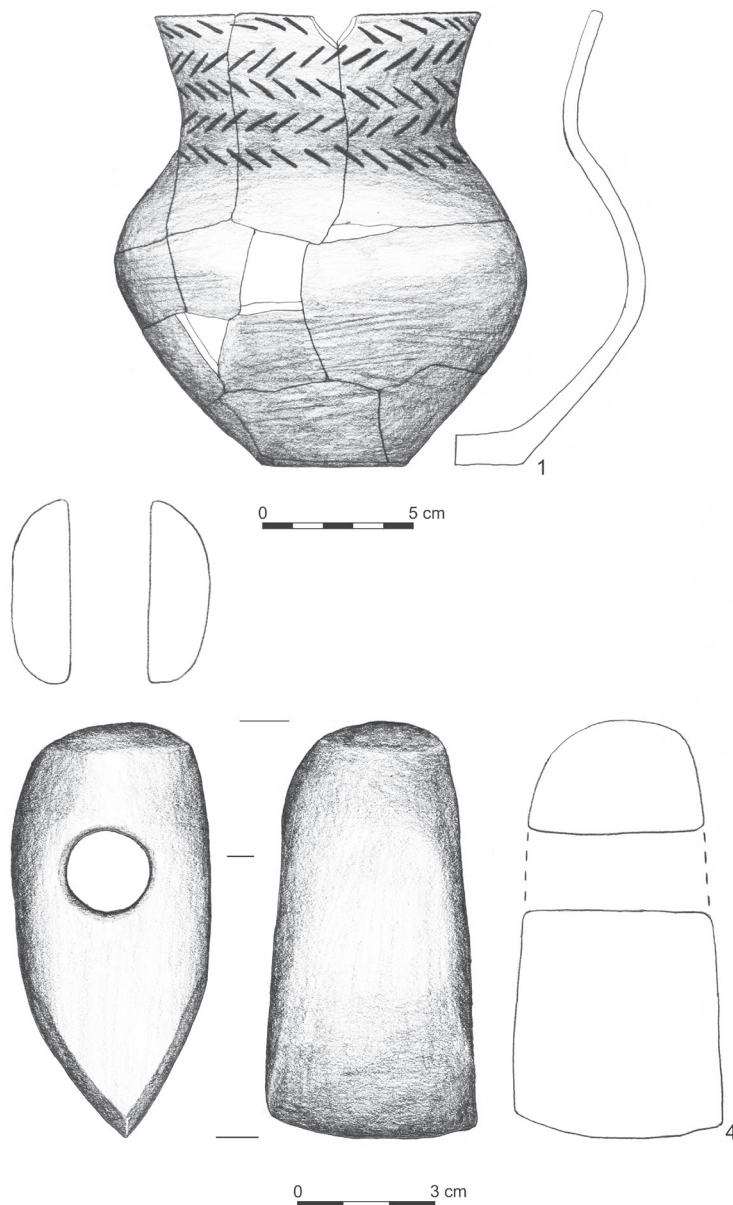


Fig. 22. Święte, site 11. Grave 1134: 1, 4 – inventory. Drawing by M. Podsiadło

enous dark brown sediment. The poorly preserved burial lay on the bottom in the northern part of the grave (Fig. 21: C; 24). Furnishings were placed between the remains of the deceased and the northern niche wall.

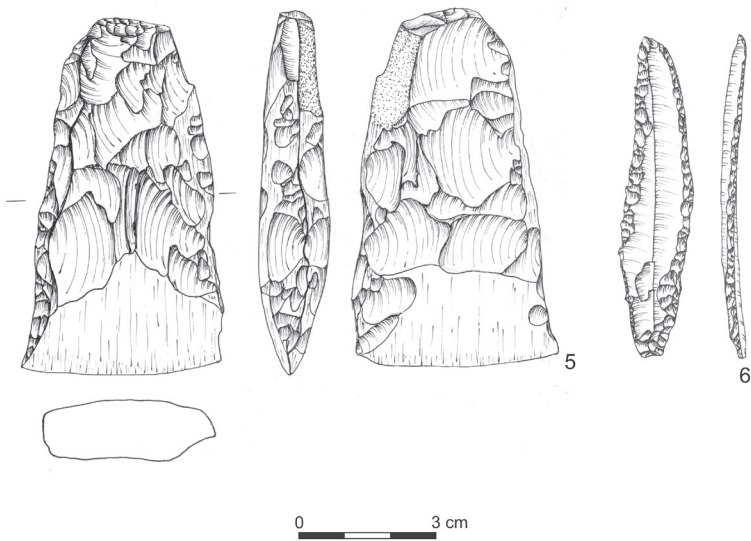


Fig. 23. Święte, site 11. Grave 1134: 5-6 – inventory. Drawing by A. Dziedzic



Fig. 24. Święte, site 11. Grave 1134: burial level. Photo by A. Łukaszewska

Inventory:

1. Beaker with a clearly pronounced funnel neck, decorated with incisions creating two and a half motifs of a horizontal herringbone. The bottom is not marked and flat. Dimensions: height – 15 cm, lip diameter – 10.8 cm, belly diameter – 13.7 cm, base diameter – 4.8 cm. Fig. 22: 1.

2. Vessel not preserved (destroyed during exploration)⁴.

3. Vessel not preserved (destroyed during exploration).

4. Battle-axe made of fine-crystalline igneous rock, probably diabase (opinion of Dr. Lucjan Gazda, Lublin University of Technology). Polished thoroughly on the side surfaces at the cutting-edge, roughly only on the remaining parts. The cutting edge is somewhat asymmetrical and worn. The upper and lower surfaces are flat. The butt is rounded with traces of numerous strikes. The opening drilled on one side. Dimensions: length – 8.9 cm, cutting-edge width – 4.6 cm, butt width – 3.3 cm, thickness – 4.2 cm, opening diameter – 1.9–2.0 cm. Fig. 22: 4.

5. A flat rectangular axe made of Volhynia flint. Polished at the cutting-edge and lightly on side edges. The sides are formed by series of chippings of small flakes from one of the sides. The cutting-edge is asymmetrical and the butt is tapered. On one of the main surfaces, at the butt – a natural cortical cover. Dimensions: length – 7.8 cm, cutting-edge width – 4.5 cm, butt width – 2.2 cm, thickness – 1.5 cm. Fig. 23: 5.

6. A dagger blade form made of eastern cretaceous flint. Made on a slender, regular blade with asymmetrical bent edges ('flame'). Retouched regularly, flatly and half-steeply along the entire length of both sides. Dimensions: 70 × 15 × 4 mm. Fig. 23: 6.

Grave 1149A

Dating	Poz-90884: 3925±35 BP, 2473-2348 BC; Poz-109990: 3905±30 BP, 2466-2346 BC; Poz-42368: 3710±35 BP, 2190-2036 BC		
Construction type	niche	Number of burials	1
		Sex	M
Dimensions of niche (m)	2.8 x 1.9	Age	60-65 years
		Orientation	S-N
Depth (m)	0.95	Deviation	20°
Orientation of pit	NE-SW	Placement of head/body/lower limbs	R/U/R
		Lower limbs	2?
		Upper limbs	A

⁴ In the opinion of investigators, vessels 2 and 3 were not fired and for this reason disintegrated in the course of exploration. The presence of vessels of unfired clay has not been recorded in the Lesser Poland CWC so far. However, it is recorded quite often in Catacomb culture graves [Kaiser 2003: 115-120].

The ceiling of the grave was disturbed by a gas pipeline trench. The entrance pit was south-east of the niche (Fig. 25: A). The corridor led horizontally towards the niche. The multi-layer nature of the niche fill testifies to its destruction being caused by the collapse of the ceiling (Fig. 25: B, C). The poorly preserved burial

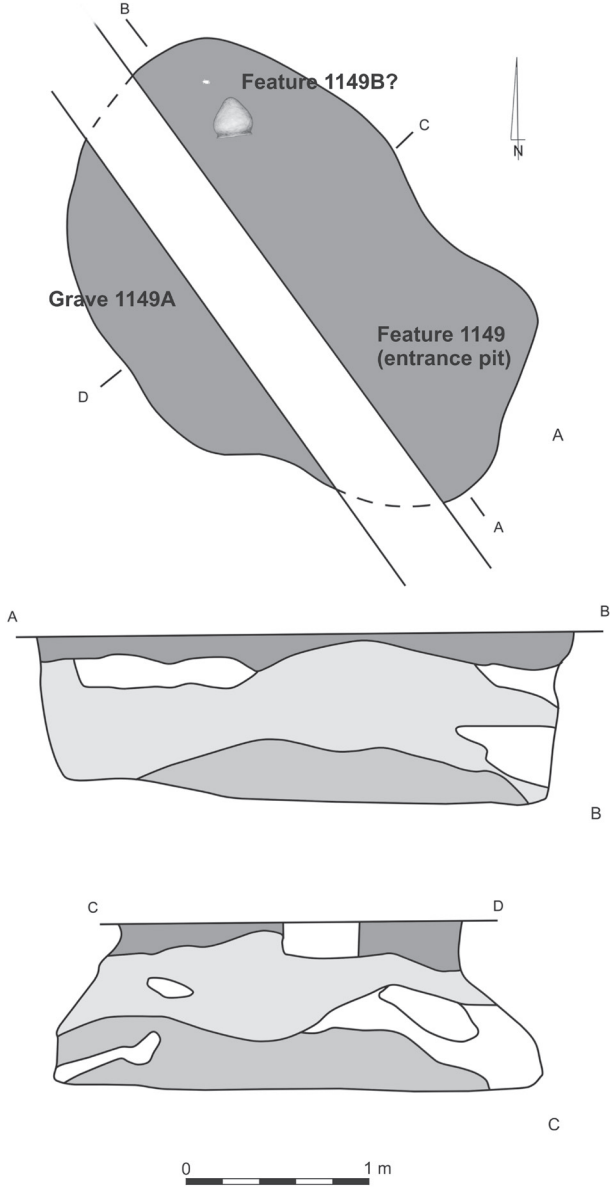


Fig. 25. Święte, site 11. Grave 1149A: A – plan at the level of discovery, B-C – vertical profiles of the grave. Drawing by M. Podsiadło

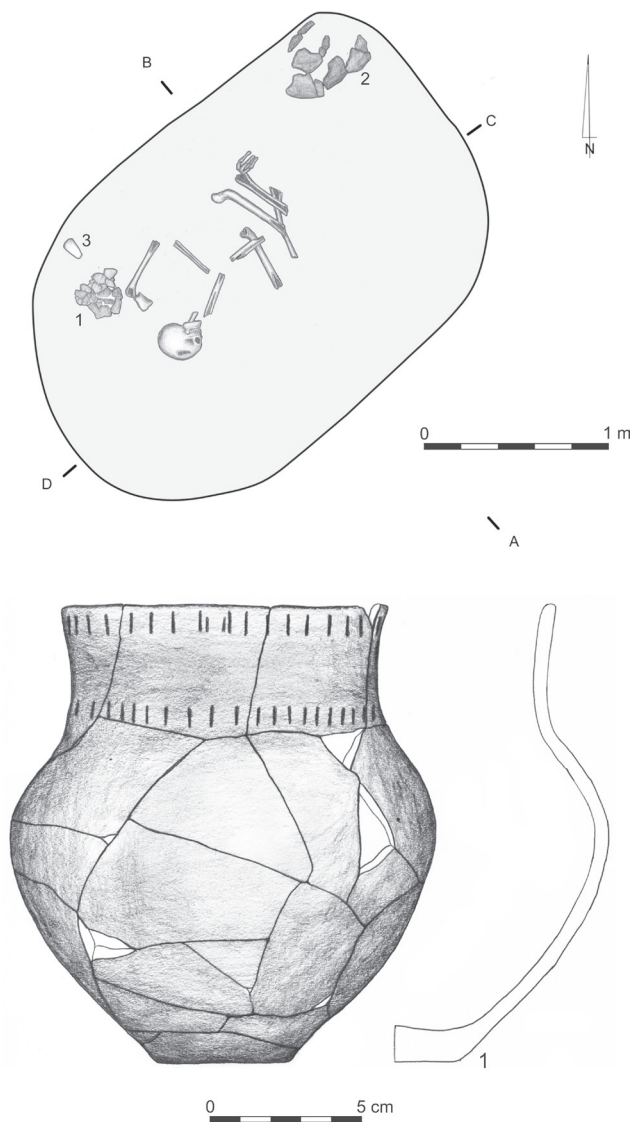


Fig. 26. Święte, site 11. Grave 1149A: A – burial level, 1 – inventory. Drawing by M. Podsiadło

lay on the bottom in the north-western part of the grave (Fig. 26: A; 28). Furnishings were placed by the shoulder of the deceased and the bones of the lower limbs.

Inventory:

1. S-shaped beaker, embellished on the edges of the neck with rows of vertical and uneven incisions. The base is slightly marked and flat. Dimensions: height –

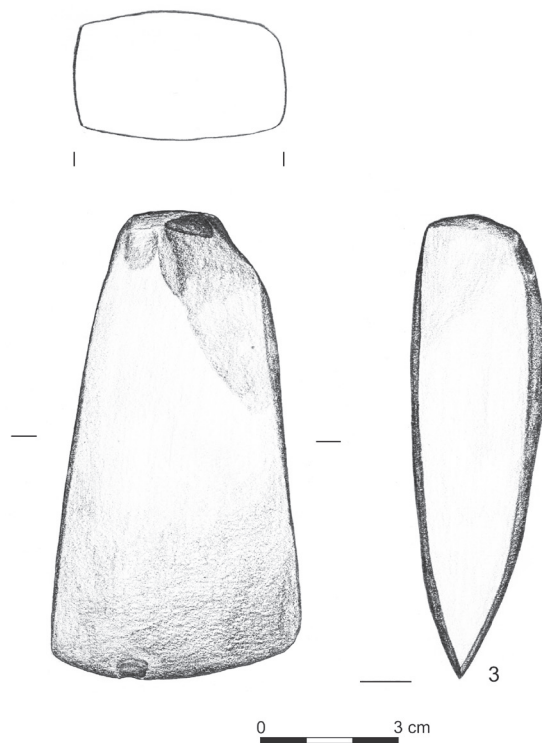


Fig. 27. Święte, site 11. Grave 1149A: 3 – inventory. Drawing by M. Podsiadło

15.1 cm, lip diameter – 10.8 cm, belly diameter – 14.0 cm, base diameter – 4.4 cm. Fig. 26: 1.

2. Amphora – because of its poor state of preservation could not be reconstructed.

3. Rectangular stone axe made of beige siltstone. Polished carefully along the entire length of all surfaces. Cutting edge somewhat asymmetrical. Quadrangular butt, damaged by striking of a flake. Dimensions: length – 103 mm, cutting-edge width – 55 mm, butt width – 22 mm, thickness – 30 mm. Fig. 27: 3.

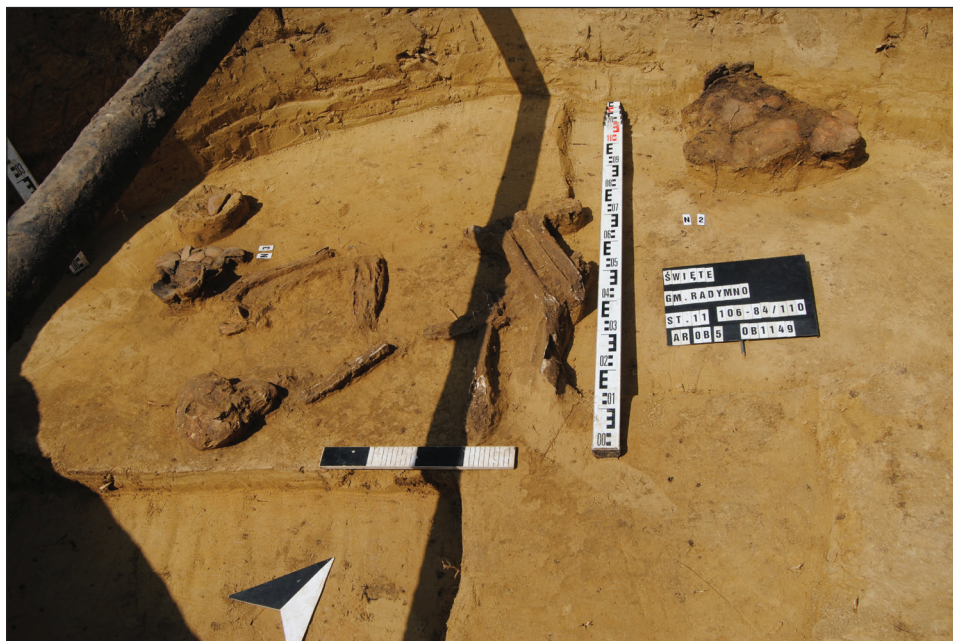


Fig. 28. Świątę, site 11. Grave 1149A: burial level. Photo by A. Łukaszewska

Feature 1149B

In the north-eastern part of the niche fill of grave 1149A, at a depth of 0.2 m, a vessel placed upside down was found preserved in its entirety (Fig. 25: A). Nearby, a fragment of a flint tool was also discovered. The outline of the pit could not be traced. Most likely, it was disturbed as a result of the niche ceiling collapsing.

Inventory:

1. A broad-mouth pot preserved in its entirety, with a low neck and sides tapering towards the rounded base. The lip rim is decorated with uneven incisions. Dimensions: height – 19.9 cm, lip diameter – 18 cm, belly diameter – 19.9 cm. Fig. 29: 1.

2. The proximal part of a tool on an irregular macro-blade made of Volhynia cretaceous flint, partially cortical. Regular edge retouch along almost the entire length of the left edge. Most likely a re-deposit associated with the FBC. Dimensions: 71 × 35 × 9 mm. Fig. 29: 2.

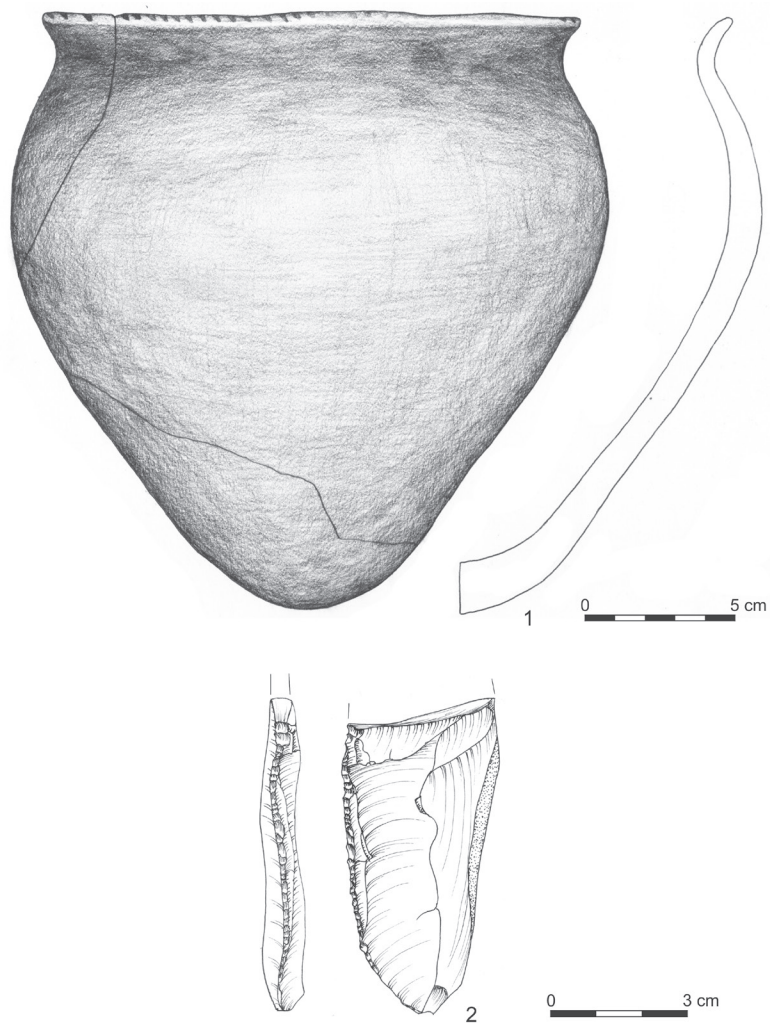


Fig. 29. Święte, site 11. Feature 1149B: 1-2 – inventory. Drawing by A. Dziedzic, M. Podsiadło



Fig. 30. Święte, site 11. Feature 1149B: round-bottom vessels. Photo by P. Włodarczak

Feature 1284

Dating	–		
Construction type	pit	Number of burials	0
		Sex	–
Dimensions of niche (m)	0.7 x 0.5	Age	–
		Orientation	–
Depth (m)	0.2	Deviation	–
Orientation of pit	W-E	Placement of head/ body/lower limbs	–
		Lower limbs	–
		Upper limbs	–

A small depressed pit filled with homogenous dark-brown sediment (Fig. 31: A, B). On its bottom, a small poorly preserved vessel was found (Fig. 31: C). No burial bones were discovered.

Inventory:

1. A small S-shaped beaker embellished in the upper part with five rows of Z-twisted cord impressions. The base is not marked and flat. Dimensions: height – 8.0 cm, lip diameter – approx. 6.0 cm, belly diameter – 7.8 cm, base diameter – 4.1 cm. Fig. 31: 1.

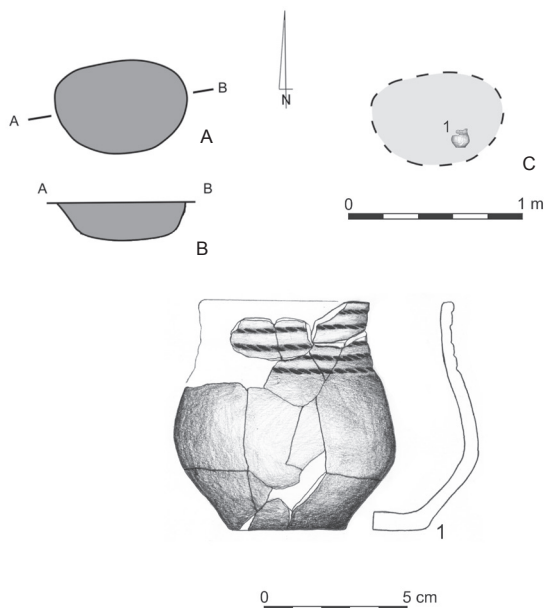


Fig. 31. Święte, site 11. Feature 1284: A – plan at the level of c, B – vertical profile, C – burial level, 1 – inventory. Drawing by M. Podsiadło

Grave 1290D

Dating	–		
Construction type	niche?	Number of burials	1
		Sex	M
Dimensions of niche (m)	1.75 x 1.35	Age	25-30 years
		Orientation	W-E
Depth (m)	1.2	Deviation	0°
Orientation of pit	W-E	Placement of head/body/lower limbs	R/R/R
		Lower limbs	1/2
		Upper limbs	B

The feature was identified at a depth of 1 m, within the pit complex, designated as the shared number 1290. The recorded depth, shape and arrangement of the burial indicate that this was a grave with a niche construction. The entrance (not documented, destroyed most likely by a feature from the Roman period) was located on the south side. The niche was oval in shape (Fig. 32: A). Its fill was heterogeneous: consisted of dark brown earth and yellow loess. The burial lay on the bottom of

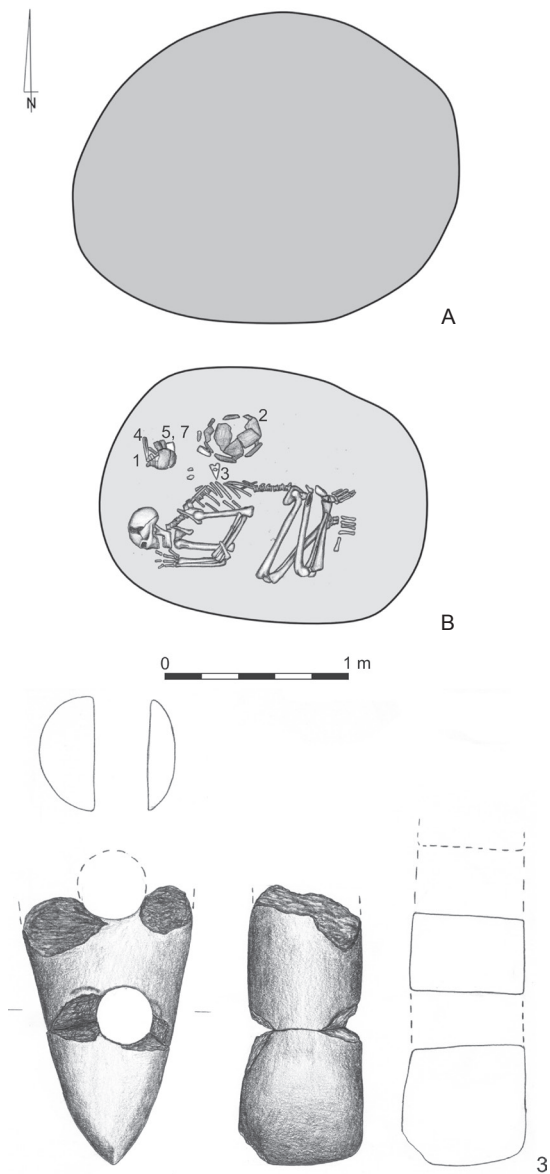


Fig. 32. Święte, site 11. Grave 1290D: A – plan at the level of discovery, B – burial level, 3 – inventory. Drawing by M. Podsiadło

the feature (Fig. 32: B; 36). Furnishings were placed behind the deceased's back. A chisel and a small flint axe were discovered inside a beaker.

Inventory:

1. S-shaped beaker, embellished on the neck with 10 rows of Z-twisted cord impressions. The base somewhat marked and concave. Dimensions: height – 14.2 cm, lip diameter – 9.9 cm, belly diameter – 12.9 cm, base diameter – 5.1 cm. Fig. 33: 1.

2. Large, four-handled undecorated amphora. The handles were placed symmetrically in the upper part of the belly near the root of the neck. The base not marked, partially preserved. Dimensions: height – 29.7 cm, lip diameter – approx. 16 cm, belly diameter – approx. 35 cm, base diameter – approx. 7 cm. Fig. 33: 2.

3. Wedge-shaped battle-axe of gabbro or diabase – fine-crystalline igneous rock (opinion of Dr. Lucjan Gazda, Lublin University of Technology). Represents a re-working of an older form, broken at the level of the opening (of a large diameter – over 29 mm), whose walls were preserved in the newly formed butt. The older form had most likely a slender, rhomboid shape – indicative of the ‘old-corded’ type. After the re-working the axe has a wedge shape. The cutting edge is symmetrical, a cross-section is oval and the main surfaces are slightly convex. The opening is drilled from one side. Dimensions: length – 8.9 cm, cutting-edge width – 3.9 cm, butt width (=maximum width) – 5.8 cm, thickness – 3.8 cm. Fig. 32: 3.

4. Rectangular axe of calcareous gaize. Polished along the entire length of all sides. The cutting edge is somewhat asymmetrical. Fig. 34: 4.

5. Small, bifacial axe of Volhynia flint. Polished at the cutting-edge and other edges. Tapered butt, linear and clearly smoothed. The main surfaces are formed by series of flake chippings from the side of edges and the butt. In the butt part, a fragment of a cortical surface can be seen. Dimensions: length – 52 mm, cutting-edge width – 31 mm, butt width – 21 mm, thickness – 14 mm. Fig. 34: 5.

6. Tool on a small irregular flake of a blade of erratic cretaceous flint, somewhat patinated. Retouched at the edge steeply and half-steeply along the entire length of both edges. On the scar surface, a fragment of cortical surface is noticeable. Dimensions: 44 × 16 × 8 mm. Fig. 35: 7.

7. Chisel of a cattle radial bone (*Bos taurus*)⁵. Dimensions: length – 16.0, cutting-edge width – 1.4, epiphysis width – 2.5 cm. Fig. 35: 8.

8. Distal epiphysis of a sheep metacarpal bone (*Ovis aries*). Perhaps a fragment of a tool (awl?). Dimensions: preserved length – 4.7 cm, width at the epiphysis – 2.6 cm. Fig. 35: 6.

⁵ Description of species courtesy of Danuta Makowicz-Poliszot.

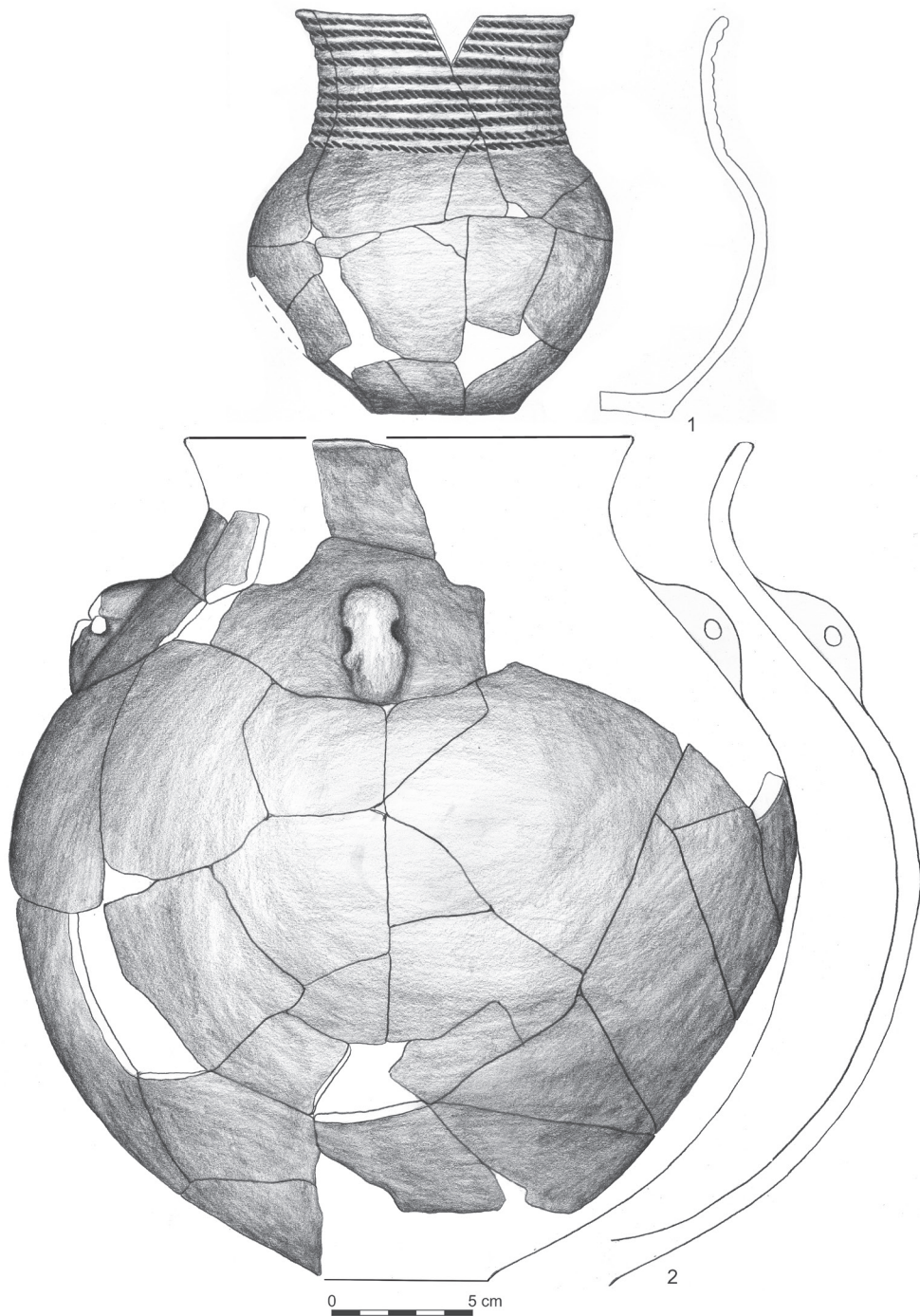


Fig. 33. Święte, site 11. Grave 1290D: 1-2 – inventory. Drawing by M. Podsiadło

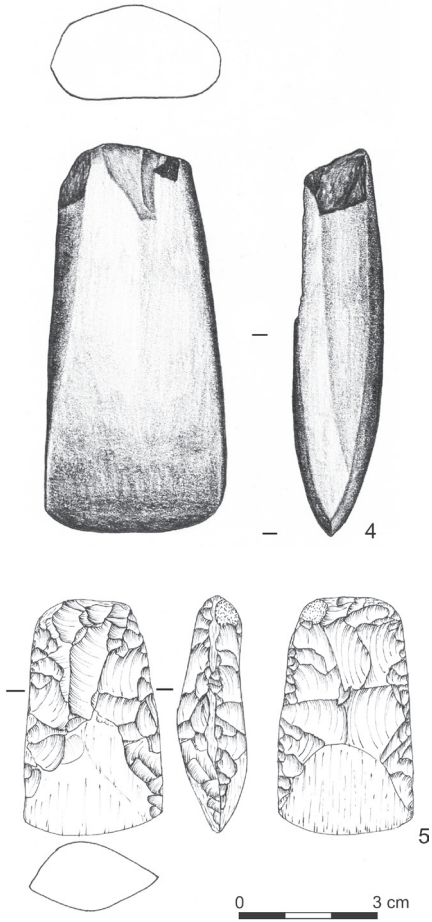


Fig. 34. Święte, site 11. Grave 1290D: 4-5 – inventory. Drawing by A. Dzedzic, M. Podsiadło

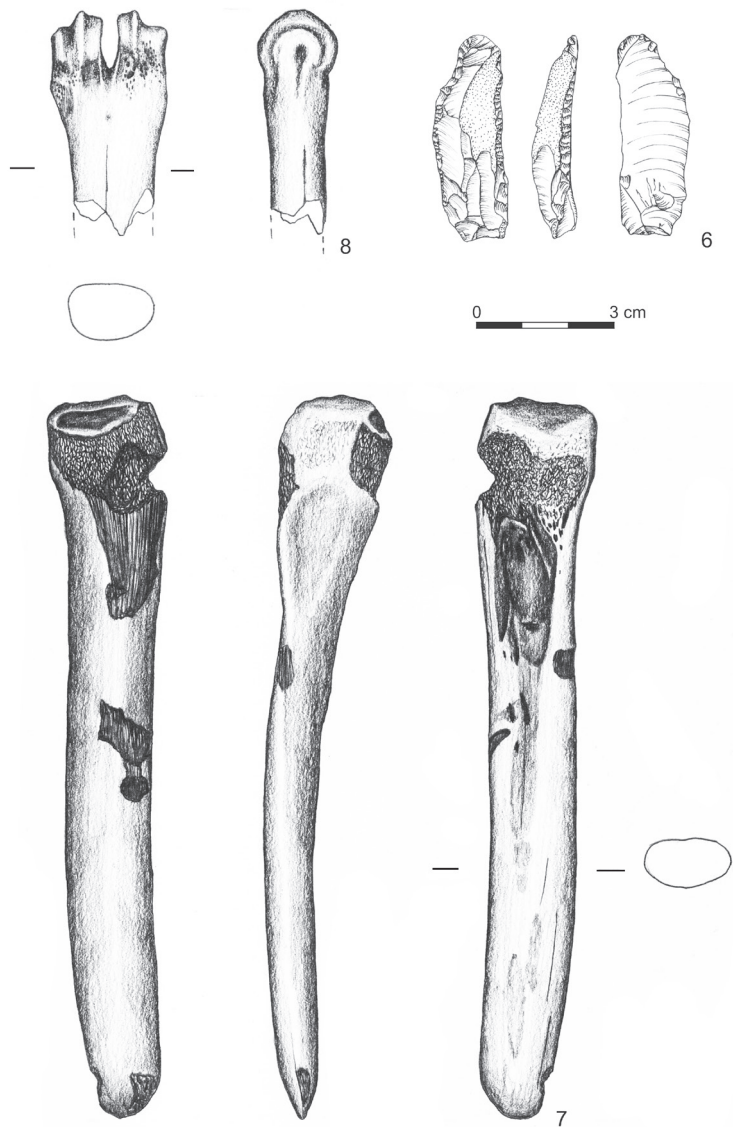


Fig. 35. Święte, site 11. Grave 1290D: 6-8 – inventory. Drawing by A. Dziezic, M. Podsiadło

Grave 1434

Dating	–		
Construction type	?	Number of burials	1
		Sex	F
Dimensions of niche (m)	2.0 x 1.7	Age	40-50 years
		Orientation	E-W?
Depth (m)	0.6	Deviation	?
Orientation of pit	W-E	Placement of head/ body/lower limbs	?/L?/?
		Lower limbs	?
		Upper limbs	?

The construction of the feature, on account of its fragmentary preservation and unclear documentation cannot be established. On account of its relatively small depth, it is possible that this was a simple pit grave. Most of its fill was made up of homogeneous dark-brown earth. At the bottom, the poorly preserved remains of a burial were found: a skull and fragments of long bones. The exact placement of the deceased is difficult to determine. Grave goods included four vessels.

Inventory:

1. S-shaped beaker, embellished in the upper part with seven rows of Z-twisted cord impressions. The base is marked and somewhat concave. Dimensions: height – 15.1 cm, lip diameter – 9.1 cm, belly diameter – 12.5 cm, base diameter – 6.2 cm. Fig. 37: 1.

2. A small broad-mouth beaker, S-shaped, embellished with three rows of Z-twisted cord impression and circular pinpoints grouped into rectangles. The bottom is not marked and concave. Dimensions: height – 5.9 cm, lip diameter – 9.5 cm, belly diameter – 9.6 cm, base diameter – 6.2 cm. Fig. 37: 2.

3. S-shaped beaker, embellished on the neck with incisions, creating a pattern of loosely scattered motifs of vertical herringbone. The base in the form of clearly marked foot, somewhat concave. Dimensions: height – 10.4 cm, lip diameter – 12.2 cm, belly diameter – 11.6 cm, base diameter – 6.1 cm. Fig. 37: 3.

4. Fragments of a poorly preserved large beaker. The vessel is decorated on the neck with at least seven rows of horizontal, Z-twisted cord impressions. The base is not marked and flat.

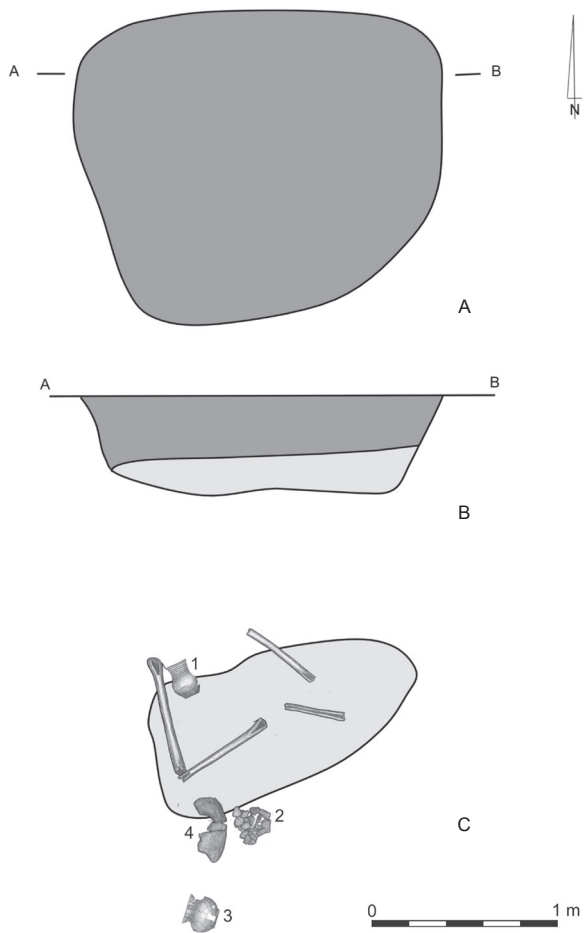


Fig. 36. Święte, site 11. Grave 1434: A – discovery level, B – vertical profile, C – burial level.
Drawing by M. Podsiadło

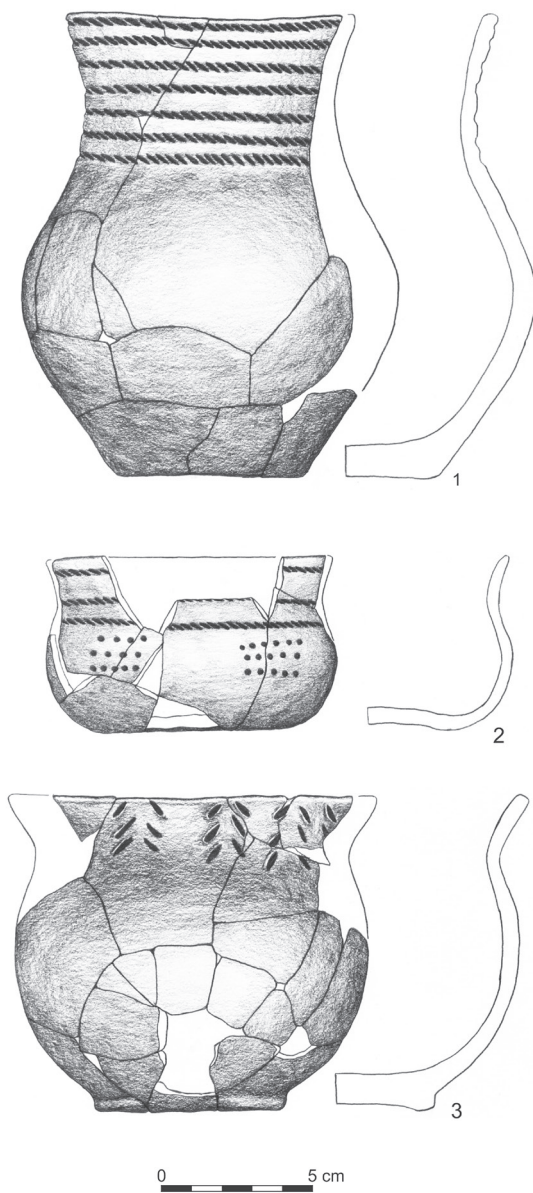


Fig. 37. Święte, site 11. Grave 1434: 1-3 – inventory. Drawing by M. Podsiadło

Table 1

Święte, site 11. Technology of ceramic ware from CWC graves

Grave no.	Vessel type	Figure	Wall thickness [cm]	External surface		Internal surface		Admixture			Fracture	Comments
				Colour	Finish	Colour	Finish	Type	Amount	Size		
751	beaker	3: 1	0.5	light brown	even, mat	grey	even, mat	ceramic potsherd	medium	< 3 mm	one-coloured, grey	
756A	vessel	5: 1	0.3-0.4	light brown	even, mat	grey brown	even, mat	ceramic potsherd	small	< 2 mm	one-coloured, grey	
756A	beaker?	5: 2	0.3-0.4	light brown	even, mat	light brown	even, mat	-	-	-	one-coloured, light brown	interior surface – highly worn
814	beaker	10: 1	0.5	brown	even, mat	grey brown	even, mat	stone potsherd, ceramic potsherd	medium	< 5 mm	one-coloured, grey	
814	beaker	10: 2	0.5	light brown	even, mat	light brown	even, mat	stone potsherd	medium	< 5 mm	one-coloured, grey	
863A	beaker	14: 1	0.5	brown	even, mat	brown	even, mat	ceramic potsherd	large	< 3 mm	one-coloured, grey	
863B	amphora	15: 1	0.4	light brown	even, mat	light brown	even, mat	ceramic potsherd	small	< 2 mm	one-coloured, light brown	interior surface lightly worn
863B	amphora	-	1.0	light brown	even, mat	light brown	even, mat	ceramic potsherd	small	< 3 mm		
876	beaker	18: 2	0.5	orange brown	even, mat	grey	even, mat	ceramic potsherd	small	< 2 mm	one-coloured, grey	interior surface highly and deeply worn
876	beaker	18: 1		light brown	even, mat	light brown	even, mat	ceramic potsherd	medium	< 3 mm	?	
1134	beaker	22: 1	0.5	light brown	even, mat	light brown	even, mat	ceramic potsherd	medium	< 3 mm	one-coloured, dark grey	both surfaces deeply worn

1149A	beaker	26: 1	0.4-0.5	brown	even, mat	light brown	even, mat	ceramic potsherd	small	< 1 mm	one-/two-coloured, dark grey/dark grey-light brown	both surfaces highly worn
1149A	amphora	–	0.8	light brown	even, mat	dark grey	even, mat	ceramic potsherd	small	< 2 mm		both surfaces highly worn
1149B	pot	29: 1	0.8	brick red	even, mat	grey brown	even, mat	stone potsherd	large	< 2 mm	one-coloured, grey/brick red	interior surface deeply worn
1284	beaker	31: 1	0.4-0.5	light brown	uneven, mat	light brown	uneven, mat	ceramic potsherd	small	< 3 mm	one-coloured, grey	
1290D	beaker	33: 1	0.4	light brown	even, mat	light brown	even, mat	ceramic potsherd	small	< 3 mm	one-coloured, dark grey	external surface worn In the lower part of the body
1290D	amphora	33: 2	0.7-0.8	brick red	even, mat	brick red	even, mat	ceramic potsherd, stone potsherd	medium	< 5 mm	one-/tri-coloured, brick red/brick red, grey-brick red	both surfaces worn, external more so
1434	beaker	37: 1	0.5-0.6	light brown	even, mat	light brown/grey	even, mat	ceramic potsherd	small	< 4 mm	one-coloured, dark grey	surfaces lightly worn
1434	beaker	37: 2	0.4	light brown	even, mat	light brown	even, mat	ceramic potsherd, sand, bones?	medium	< 3 mm	one-coloured, dark grey	
1434	beaker	37: 3	0.5	brown	even, mat	brown	even, mat	ceramic potsherd	small	< 3 mm	two-coloured, grey brown	
1434	beaker	–	0.6-0.7	brown	even, mat	dark grey	even, mat	ceramic potsherd	small	< 3 mm	one-coloured, dark grey	

2. DISCUSSION

At site 11 in Święte one of the largest, and most significant in terms of research, cemeteries was discovered on the loess hills of the Rzeszów Foothills and Lower San Valley. It was part of a concentration of Final Eneolithic funerary sites situated on the edge of the San Valley – together with cemeteries from sites 15 and 20 in Święte [Janczewski *et al.* 2018; Dobrakowska, Włodarczak 2018] and 7 in Skołoszów [Rybicka *et al.* 2017]. At present, it is the easternmost cluster of CWC funerary finds within the Polish part of the Subcarpathia zone. This most likely is a consequence only of the state of research at present, for the presence of numerous cemeteries of this culture ought to be expected further east, in the part of the Przemyśl region, as suggested by single funerary finds, including ones from Przemyśl (site 81) [Koperski 1973] and Siedliska [Demetrykiewicz 1898], as well as numerous stray finds [see above all, stone battle-axes: Kośmider 2003; 2004]. The grave concentration under discussion from the vicinity of Jarosław – Radymno should therefore be linked with a broader zone rich in CWC cemeteries, located in the Polish Subcarpathia, also embracing lesser known parts of western Ukraine [Sulimirski 1968]. It should be noted that further east, archaeological sites are, however, associated foremost with barrows. The association of this connection with the state of research is though an obvious one. The majority of finds with their provenance from there is dated to the period before World War II and connected with the stage of a particular interest in barrow cemeteries. This state of affairs is also reflected in the lack of niche graves on the Western Ukrainian part of the Upper Dniester drainage basin, characteristic of the Lesser Poland (Małopolska) CWC, as well as of the sites under discussion here.

Located in the Lower San Valley, the cemetery complex in Święte and Skołoszów is part of the broader concentration of CWC sites in the eastern part of the Rzeszów Foothills (together with sites 5 and 6 in Szczytna, 24 and 27 in Mirocin, 26 in Chłopice and the barrow in Morawsko). The nearby barrow sites from the Dynów Foothills (Średnia and Wola Węgierska) should be considered part of the above group – despite of certain distinct traits of the ceramic ware discovered there [Machnik 1998; 2001; 2011].

The CWC graves from site 11 in Święte do not form concentrations indicative of their location within barrows, which was suggested in earlier preliminary assessments of the nature of the cemetery in question [Olszewski 2011a; Koško *et al.* 2012]. The layout of graves does not suggest that they used to be located in mounds: they are too far apart and their main axes are not appropriately oriented (axes of graves forming a single cluster should converge on the centre of a hypothetical mound). The presence of barrows is ruled out also by the lack of features that – because of their construction – could be considered ‘central graves’. Meanwhile, the types of discovered niche graves indicate that they date back to the

second half of the 3rd millennium BC, i.e. the time when neither in Lesser Poland nor on North Pontic steppes, were barrows built anymore, but at best burials within earlier mounds were practised (see comments on chronology below).

Burials were located in two zones: the majority in the western part and only two (features 1284 and 1290D) – in the eastern part. In the former, the distance between graves was rather large from around 5 to 20 m. This is more than in the case of burial concentrations in the Kraków-Sandomierz group [Włodarczak 2006: 47, 48], but similar to the nearby cemeteries: in Szczytna (sites 5 and 6) [Hozer *et al.* 2017: Fig. 5], Mirocin (site 24 and 27) [Machnik *et al.* 2019: 14, ryc. 3] and site 15 in Święte [Janczewski *et al.* 2018: 96, Fig. 2]. Such a distribution excludes planning in the establishment of cemeteries as well as weakens the possibility of indicating relations (blood ties and group ones) between particular burials. On account of such large distances, at the site under discussion, it is difficult to distinguish with certainty smaller concentrations of graves. It might well be the case that there are three, created by (a) features 814, 1134, 1149A and 1149B, (b) features 751 and 756A as well as (c) features 863A, 863B, 870 and 1434. Feature 791 is located outside of these three concentrations.

The CWC graves were located where a cemetery of the FBC ‘classic phase’ had previously been situated. The materials originating with it [Olszewski 2011b] indicate that its establishment arose around the middle of the 4th millennium BC and therefore approximately a thousand years earlier than Final Eneolithic graves. The nearby site 7 in Skołoszów is a similar case, where CWC graves 620 and 1268 were dug at the front of the megalithic FBC long-barrow [Rybicka *et al.* 2017: 117, Fig. 6]. Also on site 6 in Szczytna, the CWC cemetery was located in an area neighbouring in the west on a FBC sepulchral space, containing at least one earthen-timber barrow [Król *et al.* 2014]. An analysis of the plan of the site [Hozer *et al.* 2017: Fig. 5] shows that directly west of the CWC cemetery, there were more FBC barrows (at least four). These were reduced structures associated with features from the Western Lesser Poland loess upland (Małżyce, sites 30-31 or part of barrows in Słonowice).

The presence of Middle Eneolithic barrows at the site in Święte would appear to be also likely – considering the placement of CWC graves in the eastern part of the zone occupied by FBC features (at the front of the megaliths?). This situation has been documented in Lesser Poland, where niche graves have been excavated most often from the eastern side of FBC barrows, among others at the sites in Kichary Nowe, Malice Kościelne, Niedźwiedź, Małżyce (site 30, barrow 2), Rudno Górne and Zagaje Stradowskie [Tunia, Włodarczak 2016]. It should be concluded that the ceremonial funerary centres, created by concentrations of FBC timber-earth barrows, around the middle of the 3rd millennium BC, became the traditional place of establishing the cemeteries of the younger CWC phase. Interestingly enough, sites of this type have not yielded graves associated with the older CWC phase.

At cemetery in Święte – similar to other sites from the Rzeszów Foothills – the niche construction of graves dominated (10 out of 13 features found). In three cases (graves 756A, 876 and 1149A) a particular type of the construction was found – with a deep entrance pit, whose floor was at a level similar to the niche bottom. At present, it is already possible to conclude that this type of niche grave is characteristic of cemeteries from Subcarpathia, as it was documented also at sites 5 and 6 in Szczytna, 24 and 27 in Mirocin, 7 in Skołoszów as well as 15 in Święte (well preserved construction: grave 405A) [Janczewski *et al.* 2018: 107, Fig. 12]. This type of grave also appears in barrows from Sokal Ridge as well as Złota culture cemeteries (dated earlier than the site in Święte – to the first half of the 3rd millennium BC). It does not, however, appear in the area of the Kraków-Sandomierz CWC group.

The construction characteristic of the last-mentioned area – with a clear threshold between the entrance and the niche – was only found in grave 751 (Fig. 4). Another trait characteristic of Subcarpathia is a subrectangular shape of the niche floor, recorded in grave 1149A (Fig. 26: A). Model examples of such features come from cemeteries at sites 24 and 27 in Mirocin [Machnik *et al.* 2019].

A trait typical of niche graves with a horizontal or somewhat angled entrance leading to the niche is a clear separation of these two elements of the grave by means of a relatively long and narrow corridor (*dromos*). At site 11 in Święte this was documented in feature 756A (Fig. 5: A; 6). Regional differences in the construction of niche graves, documented for Lesser Poland, can also be seen in the area of the Catacomb culture. Closest to Lesser Poland, in the concentration of sites of this culture on the upper Prut (Northern Moldova), there can be found also both main types of construction; with a threshold or with a long *dromos* [Kaiser 2003: 50, Table 1].

The pit nature construction was found only in the case of feature 1284 – a small shallow depression, where a ceramic vessel was found. An interpretation of its function is difficult. One possibility is its funerary function (burial of a small child, whose remains decomposed) or that of a sacrificial pit ('offering – *trizna*'). The latter possibility is indicated in the further part of this work also for the find of a round-bottomed pot over a niche grave – grave 1149A, marked as 'feature 1149B'. In the case of grave 1434, however, on account of the extent of its destruction, it is difficult to describe the nature of its construction. Though it cannot be ruled out that it may have been a pit – because of its shallowness. It can be said therefore that in the documentation of our Lesser Poland graves of the younger CWC phase, burials of adults in simple pits are indeed exceptions.

Another trait characteristic of graves in the Święte cemetery is the principle of their orientation; the entrance is often from the south. This particular characteristic also finds an analogy in other sites of the Rzeszów Foothills. It has also been frequently recorded in the Sokal Ridge cemetery [Machnik *et al.* 2009: catalogue]. In the case of the Kraków-Sandomierz area, the placement of the grave with an

entrance from the east is decidedly in the majority – more rarely, from the south-east. In the case of the site under discussion, it cannot be ruled out that graves were orientated not only in respect of the points of the compass, but also in respect of the above-mentioned (possibly existing) FBC barrows. It is possible, however, also to contend that the principle of orientating the niche grave was motivated by the desire to continue the principles of placing the deceased in a fashion characteristic of the older phase of the CWC – according to the west-east axis. With the orientation of the niche to the north-south axis, in graves secondarily sunk in barrows, the bodies were laid similarly to burials in central graves connected with the older phases of the CWC.

The positioning of the deceased in the majority of cases is typical of the Lesser Poland CWC: supine with lower limbs flexed at an acute angle and turned to the side. Only one burial of an adult male from grave 1290D, lying on his right side, departs from this standard. The odd few examples of burials relating to a side position also appear on neighbouring sites (among others Święte, site 15, grave 408; site 20, grave 43; Szczytna, site 6, grave 150). Other cases of differing orientations among burials are north-south – two cases, north-west-south-east – one, north-east-south-west – two and west-east – three. It can be said therefore that there is a lack of a so-called standard as is the case with the cemeteries of the Kraków-Sandomierz group. It may well be possible that this is a consequence of the genetic differentiation of features, though it was not possible to establish simple correlations (e.g. between the construction type of the grave and the manner of orientating the deceased). The significance therefore of these results is not great due to the small sample size – as many as in four cases no burial bones were discovered in features or indeed, the remains of the deceased were in such a state of decomposition that it proved impossible to determine how the individual had been placed.

As in the case of other CWC cemeteries, furnishings were discovered in the overwhelming majority of graves. Feature 791 however, is an exception – burial of an adult (female?) without any gifts and certainly linked with the CWC on account of the presence of a characteristic niche construction. Almost always, the deceased was furnished with ceramic vessels and the main base type was beakers. Similar to the Kraków-Sandomierz group, adult burials were subject to the practice of enriching the ceramic ware inventory by adding to the standard large or medium dyadic beaker another, clearly smaller, also bipartite vessel (graves 814 and 876). Unipartite straight-walled beakers ('flower-pot-shaped') – characteristic of assemblages from western Lesser Poland however, were not present. In this context, the inventory of grave 1434 breaks the so-called classic principle of ceramic ware furnishings, which contains as many as four beakers of various types. Single burials with a greater number of vessels were also discovered, however, at other sites nearby: in grave 405A from site 15 in Święte [Janczewski *et al.* 2018], grave 4 from site 6 in Szczytna [Hozer *et al.* 2017: 44, Fig. 24] and grave 54 from site 24 in Mirocin [Machnik *et al.* 2019: 20-31].

Amongst the group of beakers, vessels of large or medium dimensions clearly dominate. They are S-profiled, have a globular belly and are placed in type IV in the categories of Lesser Poland CWC ceramic ware [Machnik 1966: 27, 28; Włodarczyk 2006: 14]. These are embellished in two ways: with numerous horizontal rows of cord impressions (almost always Z-twisted) or incisions creating a herringbone motif. This style is different than in the Kraków-Sandomierz group, where beakers with a small funnel neck, markedly separated from the belly, constitute a numerous group (type V). In addition, there is a lack of elaborated ornamentation that is characteristic of Western Lesser Poland, where the horizontal cord impressions are accompanied by various kinds of ‘geometric’ motifs such as triangles, zigzags, chevrons or vertical bands of impressions and/or incisions.

Of particular interest in the case of the above discussed assemblage is the separate occurrence of cord and herringbone ornamentation in graves. This is analogous to other nearby sites, such as Szczytna (sites 5 and 6) as well as in Mirocin (sites 24 and 27). It is also worth noting the subtle difference in technological characteristics of vessels ornamented with an incised herringbone motif and cord impressions – as confirmed by a petrographic analysis [Rauba-Bukowska 2018]. This argues in favour of the presence of various traditions of ceramic ware manufacture at site 11 in Święte and, most likely, also in the entire micro-region.

In four graves, amphorae constituted an element of furnishings. In three cases, these were artefacts with handles placed on the upper edge of the belly and therefore in a characteristic way of vessels of the younger phase of the CWC in Lesser Poland (it was not possible to reconstruct the fourth form – from feature 1149A). Two vessels – from features 863B and 1290D – are examples of large, classic amphorae of type II, known in larger number from the graves of the Kraków-Sandomierz group. The emergence of new materials has resulted in recognising these forms as typical of the entire Lesser Poland region as well as a good indicator for the younger phase of the CWC.

In terms of technology, the above-discussed assemblage is rather homogenous (Table 1). The technology of tempering the ceramic mass with an admixture of crushed ceramics here clearly dominates. Vessels usually have both surfaces even and mat. As a matter of rule they were fired with a limited access to oxygen as a result of which their sides are coloured in various shades of brown. In some cases the use of crushed stone is noteworthy (two beakers from grave 814 as well as an amphora from grave 1290D). Ceramic mass with an admixture of crushed bones, in the case of the small beaker from grave 1434 (Fig. 37: 2) can be considered exotic [Rauba-Bukowska 2018]. These types of ingredients were identified for the first time in the Lesser Poland CWC circle.

In grave 756A there was found a broad-mouth, S-profile vessel with a low neck, embellished with herringbone and zigzag incisions (Fig. 5: 1). Such a form is atypical of grave inventories of the Lesser Poland CWC. It does however, find analogy in similarly ornamented vessels from the site at Side (western Ukraine)

interpreted as a camp [Machnik *et al.* 1997: 12, Fig. 8]. Its stylistic similarity with vessels considered to belong to the ‘Brzezinki type’ attracts attention. One example is a form from barrow VI in Brzezinki closely resembling the artefact from Święte [Machnik 1966: Table XXIII: 1a].

Moreover, the broad-mouth vessel type is also present in the barrows of the Upper Dniester CWC, such as those in Kołokolin and Komarów [Sulimirski 1968: Pl. 6: 3, 4, 20; 7: 6]. Their emergence in the upper Dniester region most likely was linked to cultural relations between that region and one occupied by the settlement of the late phase of the Yamnaya culture and Catacomb culture [Bratchenko 2001: 23, 24]. Other broad-mouth forms, pointing to connections with the above-described style, were also found in two other graves from Święte: feature 1434 from site 11 (Fig. 37: 3) as well as feature 431 from site 15 [Janczewski *et al.* 2018: 121, Fig. 25: 1] – only as an exception are they, however, present in the assemblages of the Kraków-Sandomierz group [Żerniki Górne, grave 141: Kempisty, Włodarczak 2000: 103, Fig. 67: 1]. Low broad-mouth beakers and small vessels having vase proportions (‘Brzezinki’ type) are found first and foremost in the eastern part of Lesser Poland, where there appear also close relations to the manufacture of ceramic ware of the Middle Dnieper culture [among others Machnik 1999; 2014].

The round-base vessel from feature 1149B [Koško *et al.* 2018] was found in a stratigraphic context difficult to define – over the niche of grave 1149A. It cannot be ruled out that it was placed in the pit, whose outline was untraceable in the depression fill that was left after the niche collapsed. Feature 1149B, therefore, could have been both older or younger than grave 1149A. However, its connection with the CWC cemetery must be considered highly likely. This is so because at site 11 in Święte, no materials were found either from the Early Bronze Age (Mierzanowice culture) or the period directly preceding the Final Eneolithic. This reduces the possibility of cultural and/or chronological connections to relations with the younger phase of the Lesser Poland CWC.

The vessel may have come from a grave destroyed during the collapse of niche 1149A or (more likely) a small sacrificial pit (*trizna*). Small pits of this type, characteristic of barrow communities of the steppe circle, are recorded also in the context of the Lesser Poland CWC, most often at FBC barrows or megalithic tombs [Jarosz *et al.* 2009: 293] – where single vessels such as small beakers were found. Most likely, feature 1284 was such a pit. Another interpretation of the discovery of the round-base pot is dissociating it from the cemetery and connecting it to a separate settlement episode, e.g. a campsite from the Final Eneolithic or Early Bronze Age. However, this appears unlikely due to the absence of any other traces that could document such a phase of site settlement.

It is possible therefore to establish a connection between feature 1149B and the Final Eneolithic cemetery. Moreover, its close relation to grave 1149A cannot be excluded on account of the fact of other CWC features being further away

(the closest – grave 1134 – was some 5 metres away). A strong counter argument against such a relation, however, is location of pit 1149B exactly above the niche of grave 1149A. It should be noted that with respect to Lesser Poland Final Eneolithic cemeteries, there are no known examples of the disturbance of places above the niches of burials by digging successive graves, or indeed other types of features (this might have eventuated in the collapse of the crypt ceiling, which most clearly was avoided). For this reason, it is therefore more probable that a preparation of the niche of grave 1149A took place under the earlier shallow pit 1149B.

It is also well-nigh possible that the vessel was originally placed on the ground surface, over the niche of grave 1149A. After the collapse of the niche, the vessel would have been shifted to the resultant depression, filled subsequently by slow alluvial sedimentation. Furnishings deposited over a grave have not been recorded as yet in the case of Lesser Poland niche graves. They are, however, documented for nearby barrow burials from the Dynów Foothills [Machnik, Sosnowska 1996: 11; 1998: 9]. The deposition of objects outside the grave chamber is also recorded for the burials of the Yamnaya culture and the Catacomb culture in the North-West of the Black Sea region.

The above comments indicate that the ceramic ware assemblages from graves in Święte – apart from special cases of imports – present production consistent with the circle of the local groups of the younger phase of the Lesser Poland CWC. In this context of particular note are subtle differences in comparison with neighbouring cemeteries in Szczytna and Mirocin. First and foremost, there is the style of beakers and the absence of vessels with a funnel or cylindrical clearly marked neck (type V), including those known as the ‘Szczytna type’ [Hozer *et al.* 2017: 86]. The appearance of a pot from Early Bronze Age cultures from the Black Sea region in feature 1149B suggests a search for analogies to areas situated east of Lesser Poland. In this context it is important to distinguish in the above mentioned assemblage of vessels those of broad-mouth beakers and small vase-like forms of the Brzezinki type that indicate stylistic inspirations from the late phase of the Yamnaya culture circle and foremost, Catacomb culture. Such vessels are also present in the Upper Dniester CWC, which inclines one towards linking materials from Święte with this particular region.

In comparison with cemeteries from other Lesser Poland areas, the assemblages of tools from CWC graves at site 11 in Święte are extremely modest – comprising single objects. The categories of goods discovered, however, are typical of the Subcarpathia zone, as well as of all of Lesser Poland. There are rather numerous flint axes and Carpathian rocks, various types of flint blade tools as well as single bone chisels and awls. Equally modest, are the assemblages from the neighbouring site 15 in Święte. Neither site has offered a discovery of any male burial that was richly furnished in a so-called toolkit – as indeed was the case in the neighbouring site at Skołoszów [grave 620; Rybicka *et al.* 2012; 2017: 125, Fig. 15], or at the sites in Szczytna and Mirocin.

The specific nature of the tool assemblage at site 11 in Święte lies in the types of axes. These have been made of two categories of raw material: Carpathian rocks and Volhynia flint, characteristic of the area under discussion and documented at the Rzeszów Foothills as well as at the Dynów Foothills. Here, there is a clear difference of technology determined by the choice of raw material. Rectangular axes of non-standardized forms, in the main thick ones, were made of Carpathian marl and clastic rock. On the other hand, Volhynia flint was used for the production of flat rectangular or bifacial axes, where the clear dominance of the latter is noteworthy. Bifacial tools are encountered only on a few occasions in the Kraków-Sandomierz group, but in a greater number in the inventory of Sokal Ridge [Libera 2009: 291]. Relics from Święte are characterised by a painstaking means of manufacture based on preparing regular edges and surfaces by series of chippings of small flakes.

Among the group of axes made of Carpathian rocks, there dominate tools made of siltstone (tools from graves 814, 863A and 1149A). Some of the specimens clearly showed differences in the use of raw material variety. According to Lucjan Gazda from the Lublin University of Technology (author of petrographic expert opinion), one of the axes was made of slightly calcareous gaize, whose closest deposits are found on the Lublin Upland. Notably, each of the four tools has different proportions. In three cases, these were determined by the shape of the worked rock fragment. Only the axe from grave 1149A boasted a regular rectangular form with a rectangular transverse profile – one formed through a complete working for the purposes of a normalised, widely disseminated type (Dobrakowska, Włodarczak 2018: Fig. 7: 7, 8). The large tool from grave 863A (Fig. 14: 2), on the other hand, has chisel-like proportions not encountered previously, while the tool from grave 814 (Fig. 11: 4) has a rather specific, highly asymmetrical cutting edge. Several other axes from Subcarpathia exhibit the same trait [Mirocin, site 24, feature 112; Machnik *et al.* 2019: 52, ryc. 28: 3].

The inventory from grave 876 contained a rectangular axe made of Świeciechów flint. In terms of raw material, form and technology of tool manufacture, it is analogous to forms occurring in great number among the grave assemblages of the Kraków-Sandomierz group, on the left bank of the Vistula. It is representative of highly frequent there so-called SF (small, flat) variations [Budziszewski, Włodarczak 2011: 58, Abb. 4]. At site 11 in Święte, however, this is the only example made of a raw material from the eastern periphery of the Świętokrzyskie Mountains. Importantly, in all of the concentration of features located by the San (cemeteries in Święte and Skołoszów), only one other Świeciechów flint flake was found (grave 431A from site 15 in Święte) as well as a flint blade tool from this raw material (grave 620 from site 7 in Skołoszów).

The role of eastern Świętokrzyskie flints in this region declines therefore clearly – even in comparison with the nearby cemeteries of the Rzeszów Foothills (Mirocin, Szczytna), lying to the west. Such a general picture it may be argued, attested to also in the above analysis of ceramic ware sources, points to the declining

strength of relations between the communities of the CWC from the surrounds of Święte with the regions of western Lesser Poland. On the other hand, the role of flint imports from Western Ukraine increases. Similar raw material relationships are also visible in the northern part of Lesser Poland. In the eastern part of the Nałęczów Plateau there clearly dominate Świętokrzyskie flint goods [Borowska *et al.* 2016: 301-302], while in concentrations of graves lying further to the east, Volhynia flint dominates (in Sokal Ridge or Roztocze). One would be justified to conclude therefore that there indeed was a co-occurrence of ‘eastern’ types of ceramic ware vessels with inventories that showed the prevalence of flint goods from eastern cretaceous flints.

In six features there were found single flint blade tools, where the dating of a retouched macro-blade fragment (Fig. 29: 2) to the period of the Final Eneolithic would appear to be doubtful. Most likely this is a redeposit associated with the FBC phase at the site under discussion. The remaining tools present various types of knife forms typical of CWC Lesser Poland manufacture. All were made of various types of Volhynia flint. In features 876 and 1290D, there were found regular knife inserts (Fig. 19: 4; 35: 6), representing the most frequently found type in graves dated to the younger phase of the CWC [Włodarczak 2006: 31; 2008: 285-288]. An element of furnishings relating to the burial from grave 1134 was a regular blade dagger-like form (Fig. 23: 6), made using typical Final Eneolithic technology on a slender, asymmetric blade (‘flame-like’) [Valde-Nowak 2000]. Such tools constitute a characteristic element of furnishings for male burials [Włodarczak 2008: 291, 292]. The last two forms were damaged by the breaking of distal fragments (Fig. 5: 3; 15: 3). In all probability these were either dagger forms or strike-a-lights. One of these – from grave 863B – was found in the burial of a female, though the precise place of this discovery was not recorded. Hitherto these types of tools from Lesser Poland constituted part of grave furnishings only for male burials.

The inventory of bone tools is also rather modest, containing two chisels and a fragment of an awl. These objects were discovered in male burials, in the richest inventory coming from the site under discussion (grave 1290D) as well as the somewhat less generous assemblage from grave 876. Relying on analogies from other Lesser Poland sites, it is also possible to conclude that these were tools associated with the production of flint objects.

With the lack of flint arrowheads, the only elements of weaponry are the stone battle-axes discovered in two male burials, which present late typological forms: type H (grave 1134 – Fig. 22: 4) as well as type I (grave 1290D – Fig. 32: 3) [Włodarczak 2006: 35, 36]. In this context of particular note is the wedge form from grave 1290D, which is a reworking of an older, massive battle-axe, most likely rhomboid in the main profile. Initially, the specimen undoubtedly belonged to the group of battle-axes made in the style of the older CWC phase (Lesser Poland types A-C), as testified also by its oval cross-section. This connotation means that

the battle-axe from grave 1290D can be placed in a different category, one of older forms [Libera, Sobieraj 2016: 444]. It should be noted, however, as a result of its reworking, the axe took on a short wedge form and thus in accord with the dominant trend in the younger phase of the CWC. The imperative of a particular style, one based on a preference for short, oval forms had in all likelihood a significant impact on the reworking of the damaged form. Taking into account the relatively late dating of grave 1290D (2455-2297 BC), the long and multi-generational cycle of exploiting stone battle-axes should also be noted, which also underlines the symbolic dimension of their possession.

The absolute chronology of the CWC cemetery in Święte is based on a series of five ¹⁴C dates, obtained for bones found in human burials [Włodarczak 2018: Table 1]. On their basis, the age of the finds under discussion was defined for the years in the period 2530-2375 BC, which corresponds to the younger phase of the CWC in Lesser Poland. This result is in accord with the assessment of typology, style and technology presented above of relics constituting the respective components of grave furnishings as well as the meaning of the traits of funerary rituals (construction of graves and ways of depositing the dead). As far as construction of graves from Święte is concerned, they differ from Late Eneolithic/beginnings of Final Eneolithic (Złota type) features and find analogies in materials of the younger phase of the CWC as well as the 'classic' Catacomb culture.

Further analogies are also found in the stylistic description of materials discovered: ceramic ware, stone battle-axes and flint relics as well as the means of furnishing the dead with grave goods (co-occurrence of elements such as vessels, weapons and toolkits that constitute richer assemblages than in the case of the older CWC phase). As in the case of other Lesser Poland regions, it is difficult to propose the precise chronological position of particular assemblages belonging to the younger phase – within a general interval of about 2600-2400/2300 BC. Attempts at providing more detail rely usually on the presence in the materials of this period of either 'old-corded' elements (pointing to an older stage) or Early Bronze Age ones (pointing to a late stage). The assemblages from Święte alas, lack both the one and the other, in presenting a picture of 'classic' style of the CWC younger phase.

3. SUMMARY

The cemetery from site 11 in Święte presents one of the richest assemblages of finds for the purposes of research on funerary rituals of CWC communities in the Subcarpathia area. Data gained on particular features is, for various reasons,

incomplete. Nonetheless, they constitute an important impetus for studies on the question of the late phase of the Final Eneolithic in this particular region. The discovery of a pot on this site, representing an indisputable import from the milieu of the Catacomb culture (possibly late phase of the Yamnaya culture), is relevant to the discussion on the connections of Lesser Poland and the North Pontic area, conducted hitherto first and foremost in respect of examining the provenance of niche graves [Włodarczak 2014].

The discovery of an imported vessel as well as the particular traits of the remaining ceramic ware relics point to the affiliation of materials from the site in Święte to the broad borderland with the North Pontic Area, covering foremost the areas east of Lesser Poland – in the Upper Dniester basin. In this context, the research results gained from the analysis of stable strontium isotopes identifying allochthons in the population from Święte have been highly suggestive, ones indicating the possibility of their origin from the western parts of Ukraine [Belka *et al.* 2018]. The significance of cultural relations with lands east of Lesser Poland has also been indicated with the identification in grave inventories of relics boasting traits connected to the Middle Dnieper culture [Machnik, Pilch 1997]. The presence therefore of ties with the cultures of the steppe/forest-steppe points to the multi-directional origin of the Lesser Poland communities of the CWC late phase.

On the relatively small area of the Rzeszów Foothills, Lower San Valley as well as Dynów Foothills, small differences between particular cemeteries can be seen with respect to the details of funerary rituals and characteristics of relics found. In all probability, they reflect genetic differentiation among Final Eneolithic populations.

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