ANALECTA

ARCHAEOLOGICA RESSOVIENSIA

VOLUME 19 RZESZÓW 2024

ISSN 2084-4409 | DOI: 10.15584/anarres

ANALECTA

ARCHAEOLOGICA RESSOVIENSIA

ANALECTA

ARCHAEOLOGICA RESSOVIENSIA

VOLUME 19 RZESZÓW 2024

FUNDACJA RZESZOWSKIEGO OŚRODKA ARCHEOLOGICZNEGO

Uniwersytet Rzeszowski
Kolegium Nauk Humanistycznych
Instytut Archeologii

WYDAWNICTWO UNIWERSYTETU RZESZOWSKIEGO

Abstracts of articles from Analecta Archaeologica Ressoviensia are published
in the Central European Journal of Social Sciences and Humanities
Analecta Archaeologica Ressoviensia is regularly listed in ERIH PLUS, CEJSH and ICI

Graphic design, typesetting
DOROTA KOCZĄB

Technical editor
EWA KUC

Cover design
JULIA SOŃSKA-LAMPART

ISSN 2084-4409 DOI:10.15584/anarres

2150

Editor's Address

INSTITUTE OF ARCHAEOLOGY
RZESZÓW UNIVERSITY
ul. Moniuszki 10, 35-015 Rzeszów, Poland
e-mail: iarch@univ.rzeszow.pl
Home page: www.archeologia.rzeszow.pl

THE UNIVERSITY OF RZESZÓW
PUBLISHING HOUSE
ul. prof. S. Pigonia 6, 35-959 Rzeszów, Poland
tel. 17 872 13 69, tel./fax 17 872 14 26
Home page: https://wydawnictwo.ur.edu.pl

RZESZÓW ARCHEOLOGICAL
CENTRE FUND
ul. Moniuszki 10, 35-015 Rzeszów, Poland
email: froa@froa.pl
Home page: www.froa.pl/

First edition, A4 format, 19 publishing sheets, 21,5 printing sheets, order no. 104/2024
Printed and binded: The University of Rzeszów Printing House

ANALECTA
ARCHAEOLOGICA RESSOVIENSIA
Volume 19 / Rzeszów 2024
ISSN 2084-4409
DOI: 10.15584/anarres

Contents

ARTICLES

REVIEW

ANALECTA
ARCHAEOLOGICA RESSOVIENSIA
Volume 19 / Rzeszów 2024
ISSN 2084-4409
DOI: 10.15584/anarres

Seweryn Rzepecki[1], Lucyna Domańska[2]

DOI: 10.15584/anarres.2024.19.2

[1] Institute of Archaeology, University of Gdańsk, Bielańska 5, 80-851 Gdańsk, Poland;
e-mail: rzepecki@poczta.onet.pl; ORCID: 0000-0002-8101-0686

[2] Institute of Archaeology, University of Lodz, G. Narutowicza 65, 90-131 Łódź, Poland;
e-mail: lucynad@uni.lodz.pl; ORCID: 0000-0002-9978-8306

On the Edge. Relics of LBK Settlement at the Site of Kruszyn 3, Commune Włocławek (Household A)

Abstract

Rzepecki S., Domańska L. 2024. On the Edge. Relics of LBK Settlement at the Site of Kruszyn 3, Commune Włocławek (Household A). *Analecta Archaeologica Ressoviensia* 19, 21–39

The aim of the article is to present the LBK sources recorded in the northern part of the site of Kruszyn 3, commune Włocławek. A special feature of the site is its location on the edge of the Kuyavia Lake District and the Płock Basin. The former was intensively settled in the Early Neolithic, while the latter was anecumene. The complex of finds described in the article consists of the remains of a house, outbuildings, a relatively numerous pottery assemblage and less numerous flints, stone tools, and animal bone remains. The entire site dates to phase II (Music-Note Phase) of the LBK in Kuyavia.

Keywords: Linear Pottery culture, LBK, Kuyavia, settlement, longhouses, Neolithic

Received: 25.07.2024; **Revised:** 11.08.2024; **Accepted:** 01.10.2024

Introduction

The significance of the border between the Kuyavia Lake District and the Płock Basin can probably be expressed in dozens of ways. In an environmental sense, both of these lands form ecumenes with such clearly contrasting features that they have been reflected in folk toponomastics (the so-called Black and White Kuyavia; Szmyt 2013, further literature there). The Kuyavia Lake District is characterised by a flat, sometimes wavy moraine plateau, sometimes wavy and interspersed with drainless depressions, made of heavy boulder clay. In the vicinity of Kruszyn, lessive soils have developed on this substrate, potentially providing a habitat for mixed and deciduous forests (primarily oak-hornbeam). In contrast, the bottom of the Płock Basin in the vicinity of the site discussed in this text is covered by sandy and biogenic sediments. Soils from the group of podzolic soils predominate here (including rusty, podsolic ones), which are a potential habitat for poor, continental forests. The boundary between these two "worlds" is clearly separated by a high (c. 20 m) slope descending from the moraine plateau towards the bottom of the Płock Basin (Twardy and Forysiak 2010). Within its area there is, inter alia, the site of Kruszyn 3, commune Włocławek (Fig. 1–2). Other nearby settlements of Linear Pottery Culture (LBK) are located in a similar manner, located at the sites of Nowa Wieś 8, Kruszyn 10 (Siciński *et al.* 2016; Płaza 2021), Kruszyn 11 and Kruszyn 13. They were all located at the edge of the area occupied by stable LBK settlement forms – both on a regional scale and in the perspective of this culture as a whole (Pyzel 2010; 2017; 2021a; 2021b; cf. Brigand *et al.* 2022; Marciniak *et al.* 2022).

In the case of Kruszyn 3, two features (wells) from the site have been presented so far (Rzepecki 2014). The aim of the following text is in turn to characterise the relics of LBK activity (household A) recorded on the northern edge of the site (Fig. 3). They represent a clearly demarcated, isolated concentration of finds from the Early Neolithic.

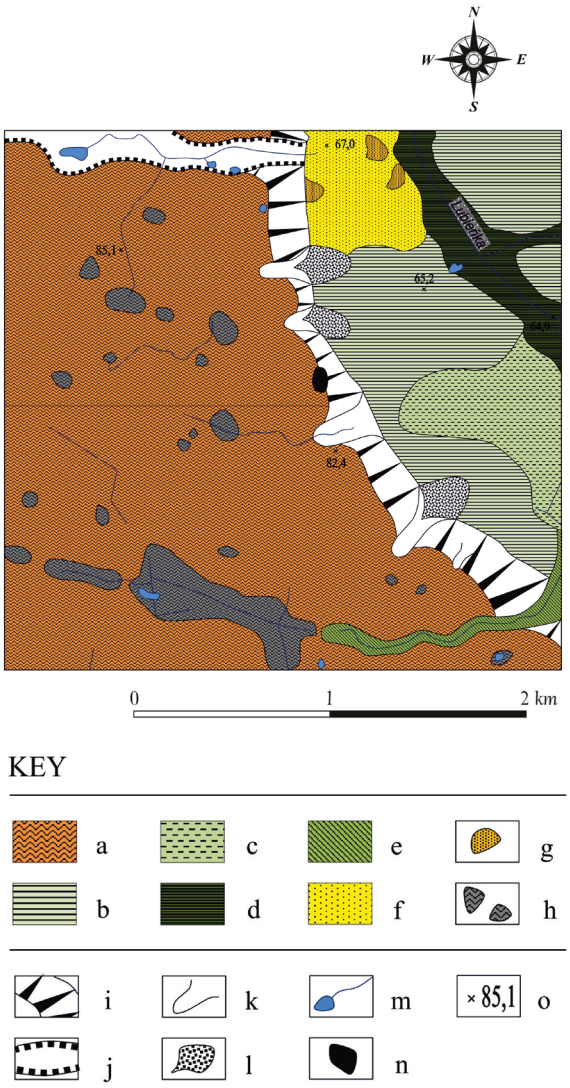

Fig. 1. Kruszyn 3, commune Włocławek. Geomorphological sketch of the site vicinity.

Key: a – undulating and in places flat morainic plateau, b – bottom of the Płock Valley, c – fluvial terrace of the Lubieńka River, d – bottom of the Lubieńka river valley, e – bottom of the subsidiary valley, f – aeolian sand covers, g – aeolian hillocks, h – depression without outflow, i – more important slopes, j – subglacial channel, k – synclines and denudation valleys, l – accumulative cones at the mouth of the valleys, m – lakes, ponds, rivers, n – Kruszyn 3 site, o – elevation points (m above sea level) (after: Twardy and Forysiak 2010).

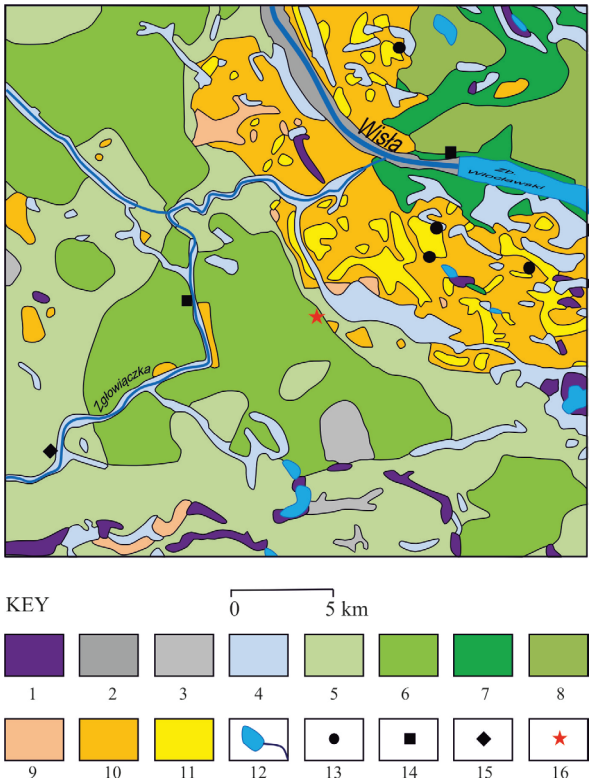

Fig. 2. Potential natural vegetation of the eastern part of the Kujawy Lake District and the Płock Basin.

Key: 1 – Central European alder forest (*Carici elongatae*), 2 – lowland, riverside willow-poplar forests in the zone of periodic floods (*Salici-Populetum*), 3 – lowland, riparian elm-oak forest of water-ground habitats outside the river flood zone (*Ficario Ulmetum*), 4 – lowland alder and ash-alder forests of water-ground habitats, periodically slightly marshy (*Circaeo Alnetum*), 5 – Central European oak-hornbeam forests, Kujawy variety, poor series (*Galio silvatici-Carpinetum*), 6 – as above, fertile series, 7 – subcontinental lime-oak-hornbeam forests, Central Polish variety, poor series (*Tillo Carpinetum*), 8 – as above, fertile series, 9 – oak forests (*Potentillo albae-Quercetum typicum*), 10 – continental mixed forests (*Pino-Quercetum*), 11 – continental, inland pine forests in a complex of fresh forest (*Peucedano-Pinetum*), dry forest (*Cladonio-Pinetum*) and moist forest (*Molinio-Pinetum*), the "Sarmatian" variety, 12 – standing and flowing waters, 13 – continental marsh forest (*Vaccinio uliginosi-Pinetum*), 14 – natural and semi-natural calciphilous and xerothermic grasslands, the so-called steppe grasslands (*Festucetalia vallesiacae*), 15 – coastal and inland salt pan communities (*Thero Salicornietea*), 16 – Kruszyn 3 site (after: Twardy and Forysiak 2010).

1. Building and pits

Before proceeding to the main part of the analysis, it is worth noting that the immediate hinterland of the site has been anthropogenically transformed quite significantly, which was particularly intensively influenced by modern processes of agrotechnical denudation resulting in the "blurring" of small elements of the terrain relief (Twardy and Forysiak 2010). The remains of LBK activity from Kruszyn 3 were also adversely affected by the settlement of the area by people of the Lusatian culture. Overall, however, against the site as a whole, the relics of household A discussed here are relatively well preserved.

A total of 10 postholes and 11 pits were documented within household A (Tab. 1).

Table 1. Kruszyn 3, commune Włocławek. Household A – characteristics of non-portable features. Function: A – posthole, B – pit. Shape: C – oval, D – circular, E – irregular. Cross-section: F – trough-shaped, G – irregular trough-shaped. Fill: H – homogeneous grey and/or light grey humus, I – two-layered in a horizontal pattern (1 – layer of grey humus, 2 – layer of dark grey humus with scattered charcoals)

Feature no.	Function	Shape	Length (cm)	Width (cm)	Depth (cm)	Cross-section	Fill
A18	B	C	560	464	92	F	I
A19	B	D	410	320	90	G	I
A20	B	C	590	262	90	G	I
A21	B	C	540	230	128	G	H
A22	B	C	370	130	52	G	H
A23	B	C	240	120	38	G	H
A24	B	C	376	160	30	F	H
A25	B	C	524	390	120	G	I
A36	A	C	40	46	26	F	H
A37	A	C	46	40	14	F	H
A38	A	C	56	56	12	F	H
A39	A	C	46	44	8	F	H
A40	A	C	44	34	24	G	H
A61	B	C	128	88	21	F	H
A62	B	E	126	112	16	F	H
A63	B	E	179	132	28	F	H
A64	A	D	32	26	5	F	H
A65	A	E	52	38	14	F	H
A66	A	D	30	26	4	F	H
A67	A	D	60	56	11	F	H
A68	A	E	156	64	16	F	H

The postholes (A36–A40, A64–A68) were preserved in the buttress parts, their average depth being only 13 cm. Almost all of them had a circular or oval floor plan (30–50 cm diameter) and a trough-like profile and homogeneous fill. The posthole marked A68 stands out against this background – it has a clearly elongated shape and is 156 cm long. It is likely that this is a remnant of a more complex (albeit undocumented in cross-section) arrangement associated with the repair (replacement) of the pole. The discovered postholes are probably related to the functioning of a longhouse oriented N-S. Its approximate dimensions should be estimated at approximately 8 × 25 m. This assessment is based on the features of the distribution of pits flanking the hypothetical walls of the building. In general, however, the poor state of preservation of the feature does not allow it to be included in discussions of the characteristics of LBK longhouses (cf. Czerniak 2019).

The identified pits (A18–A25, A61–A63) form a fairly diverse group. Although they have an average depth of approximately 64 cm, the median depth is only 52 cm. The shallower features (16–52 cm) are characterised by oval shapes and single-layered fills (Fig. 3). As a rule, small amounts of finely fragmented ceramic cullet were recorded (a dozen or so pieces), here feature

Fig. 3. Kruszyn 3, commune Włocławek. Localization of LBK features and households.
Key: a – postholes, b – pits, c – well (drawn by S. Rzepecki).

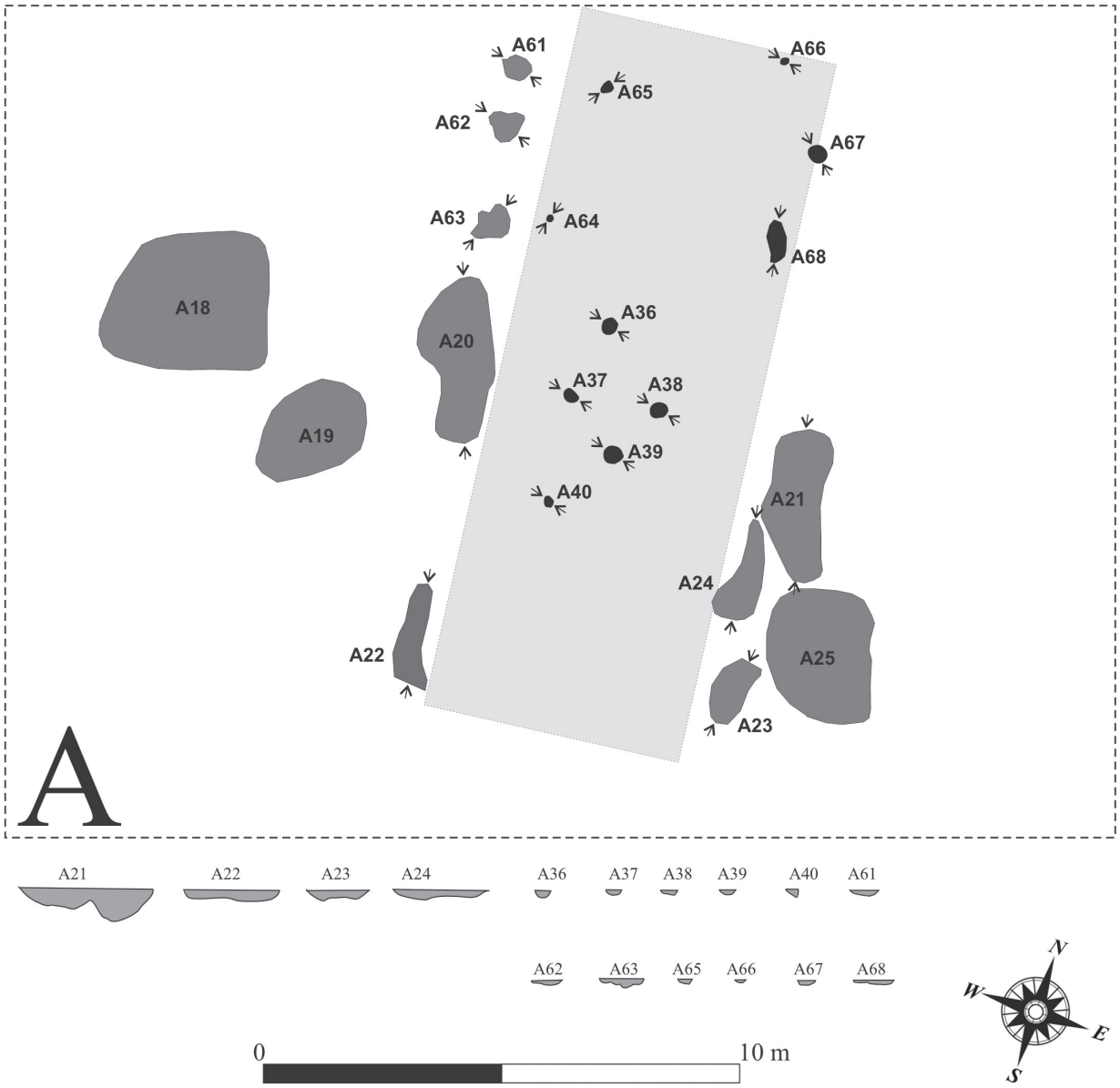

Fig. 4. Kruszyn 3, commune Włocławek. Household A (drawn by S. Rzepecki).

A22 stands out in this respect, with 45 sherds (cf. Tab. 2). On the other hand, deeper features (above 90 cm) were recognised as more or less regular circles or ovals with single or double-layered fills (Fig. 3–4). It is worth paying attention to features A18–A20 and A25 (Fig. 4). They are distinguished by horizontally two-layered fills. A total of approximately 85% of the LBK shreds discovered within pit A were recorded in their bottom parts. Furthermore, the excavated pottery is relatively well-preserved (on average, one sherd weighed approximately 10 g; cf. Tab. 2), suggesting that in this case these are primary waste deposition sites, which is unlikely in the case of pits A21, A23, A24, A61–A63.

All of the features described above had irregular bottoms, which corresponds well to the characteristics of clay pits. After clay extraction, some of these were used as waste pits (ash, pottery, flints, post-consumption residues). This diagnosis is particularly relevant for features: A18–A22 and A25.

2. Pottery

Seven hundred and nine fragments of LBK pottery, weighing a total of 6,794 g were discovered within household A (Tab. 2). The features of the harvesting

Table 2. Kruszyn 3, commune Włocławek. Household A – LBK artefacts source register

Feature no.	Pottery (quantity)	Pottery (weight in g)	Average weight of 1 pottery fragment (g)	Flint artefacts	Stone artefacts	Daub	Bones	Comments
A18	305	3,286	10.77	3	1		24	Poz-40681: 6180 ± 40 BP Poz-40682: 6180 ± 40 BP
A19	171	1,820	10.64	4		6	8	
A20	113	995	8.8	2				
A21	35	130	3.71	3			20	
A22	45	320	7.11	47		4	39	
A23	11	43	3.9			7		
A24	2	6	3	2				
A25	16	176	11	2				
A61	3	4	1.33					
A62	6	9	1.5					
A63	2	5	2.5					
TOTAL	709	6,794			1	17		

Table 3. Kruszyn 3, commune Włocławek. Percentage of technological groups of the LBK pottery

Feature	IA	IB	IC	ID	IIA	IIB	IIIA	IIIB	coars	fine
A18	26.89%	0.00%	1.64%	0.00%	6.89%	1.31%	61.64%	1.64%	36.72%	63.28%
A19	42.69%	0.00%	0.66%	0.00%	1.97%	0.66%	27.87%	0.98%	45.97%	28.85%
A20	48.67%	0.00%	0.33%	0.00%	0.98%	0.00%	17.38%	0.33%	49.98%	17.70%
A21	42.86%	0.00%	0.66%	0.00%	0.33%	0.00%	5.57%	0.00%	43.84%	5.57%
A22	46.67%	0.33%	0.98%	0.00%	0.33%	0.33%	5.90%	0.00%	48.63%	5.90%
household A	36.77%	0.15%	1.94%	0.00%	4.78%	1.05%	53.96%	1.35%	44.69%	55.31%

technology were developed following the proposals of Joanna Pyzel (2010; 2019a). Briefly speaking, it assumes the separation of several basic recipes for losing weight of pottery mass. For coarse pottery ("kitchen" and "storage"), these are technology groups IA (plant admixture), IB (grog+plant admixture), IC (sand admixture, sometimes with grog), ID (grog admixture), IIA (sand+plant admixture), IIB (sand admixture). Fine pottery ("table"), on the other hand, is characterised by the absence of pronounced admixtures (IIIA) or admixture of sand (IIIB). Details of the proportion of each type of recipe are provided in Table 3.

Although the collection in question is quite heavily damaged, several types of vessels can nevertheless be recognised in it. These include: pots in the shape of a section of a sphere (globular pots; e.g. Fig. 7: 1–2; 8: 1), necked vessels (flasks; e.g. Fig. 8: 1; 8: 9; 11: 1), bowls (e.g. Fig. 8: 7) and sieves. Fragments of probably two such vessels were recognised in feature A22 (Fig. 10: 2–3).

While the features related to the technology and morphology of vessels are not very diagnostic in terms of chronology, the situation is different in terms of decoration. A total of 119 decorated fragments were

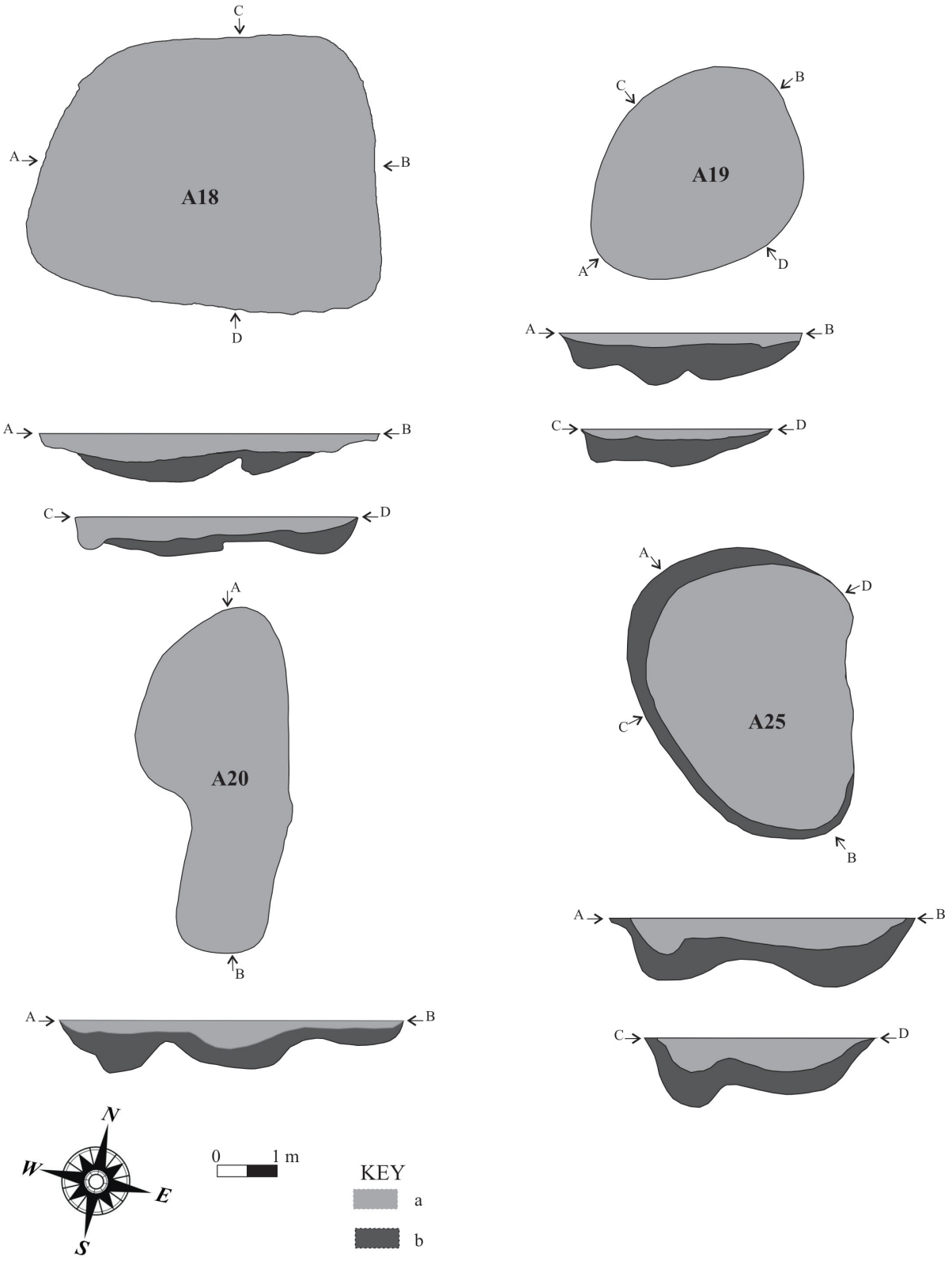

Fig. 5. Kruszyn 3, commune Włocławek. Cross-sections of the pits.
Key: a – layer of grey humus, 2 – layer of dark grey humus with scattered charcoals (drawn by M. Pochylski and S. Rzepecki).

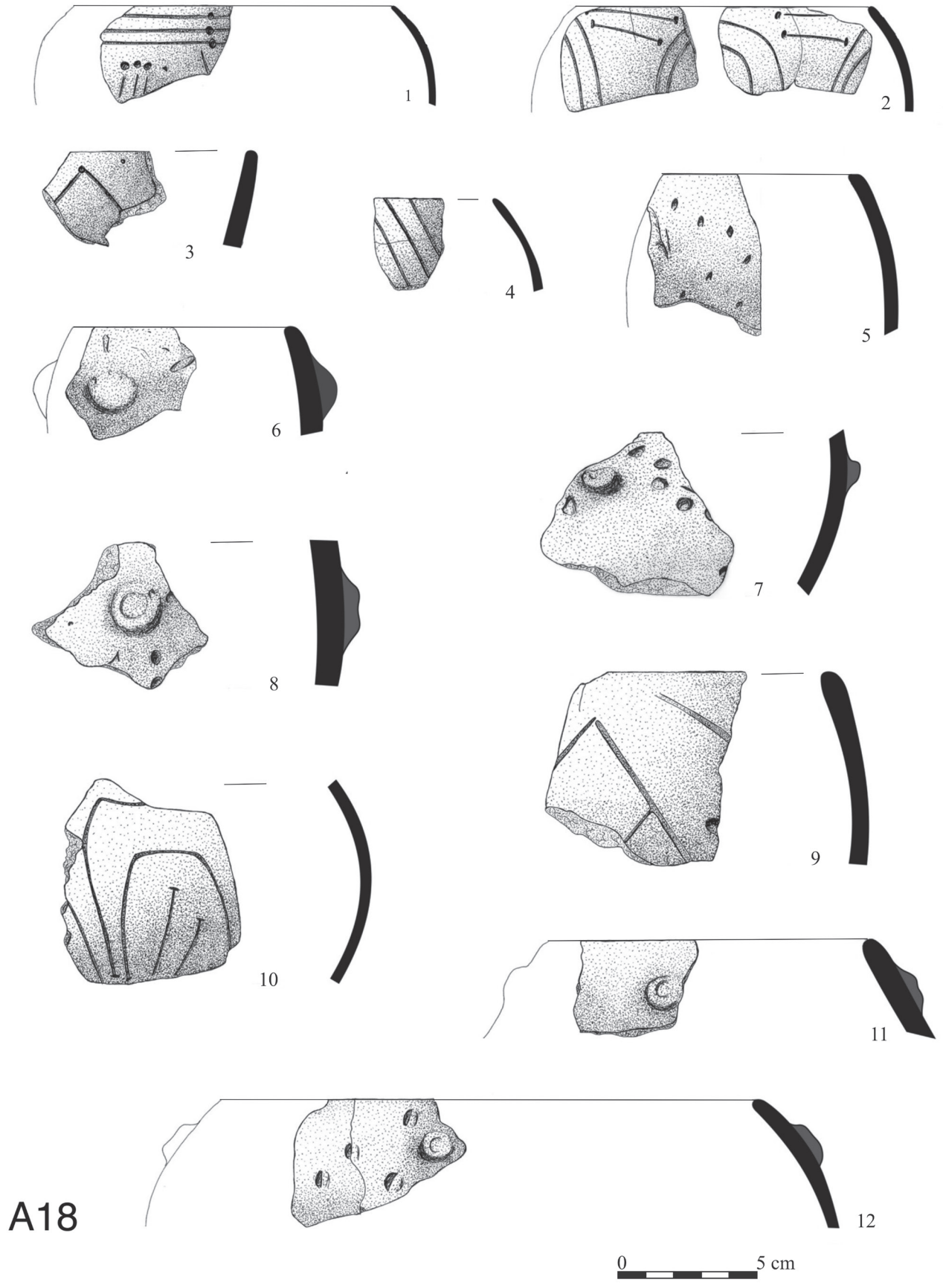

Fig. 6. Kruszyn 3, commune Włocławek. Selection of typical artefacts (drawn by M. Pochylski and S. Rzepecki).

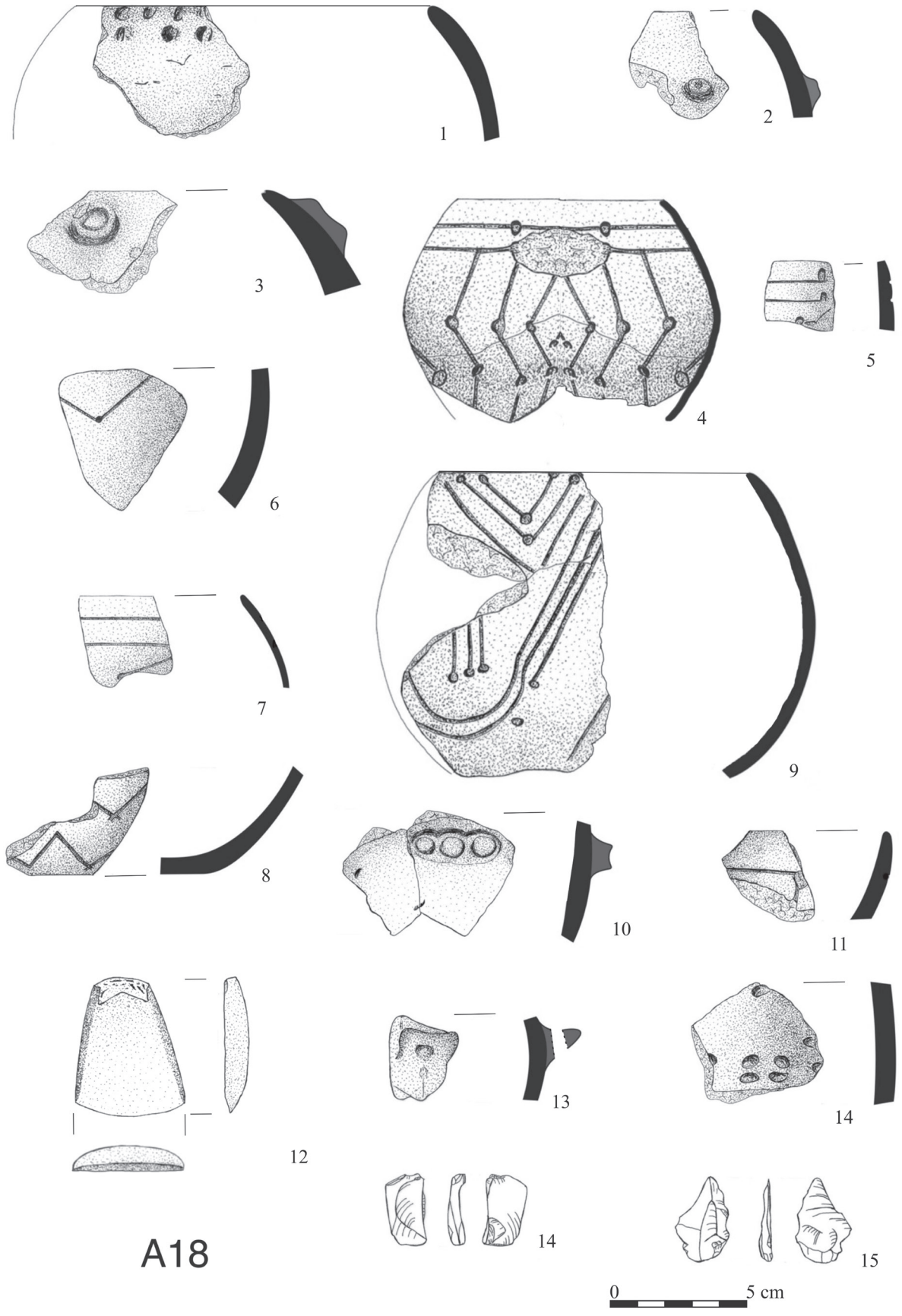

Fig. 7. Kruszyn 3, commune Włocławek. Selection of typical artefacts (drawn by M. Pochylski and S. Rzepecki).

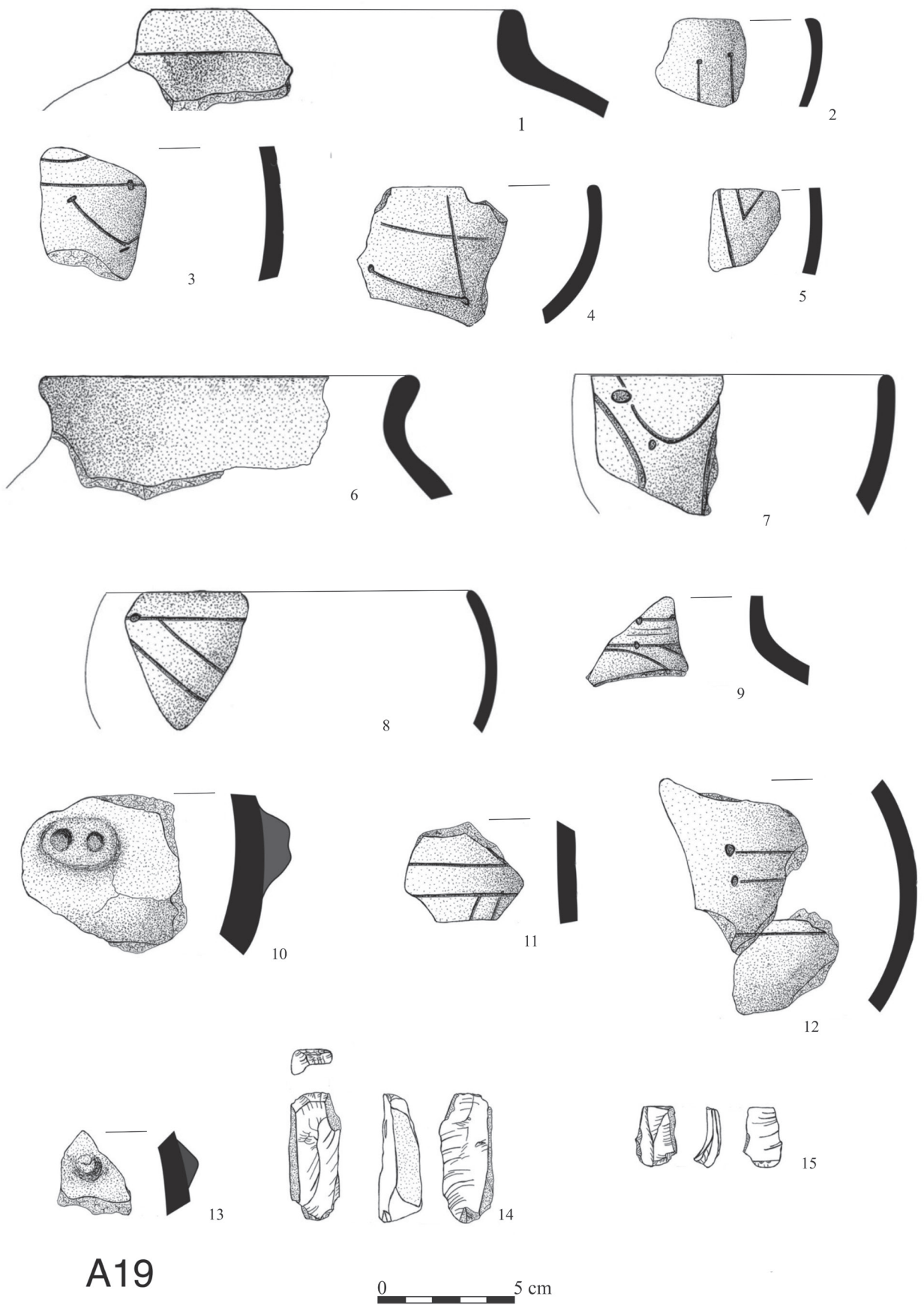

Fig. 8. Kruszyn 3, commune Włocławek. Selection of typical artefacts (drawn by M. Pochylski and S. Rzepecki).

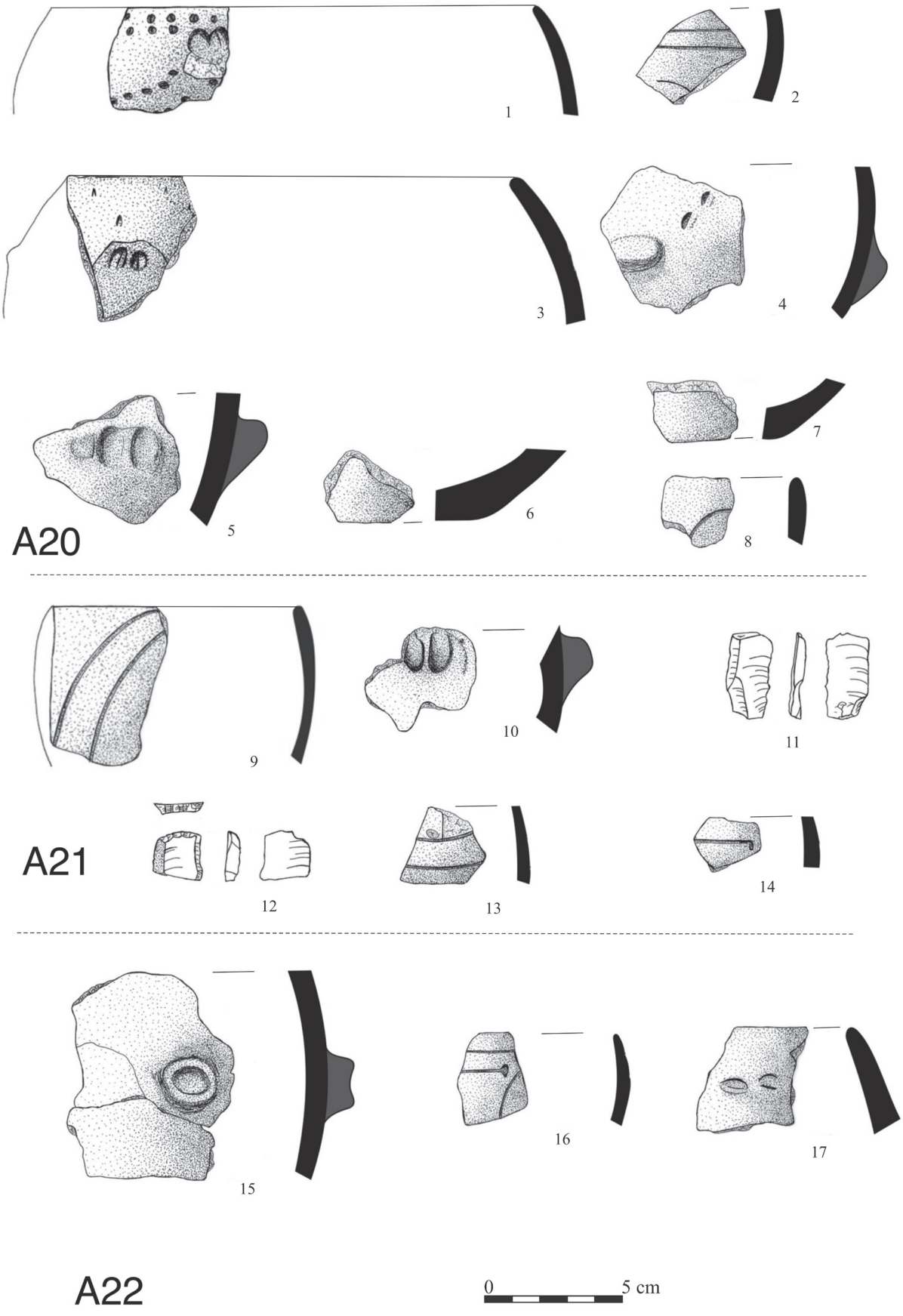

Fig. 9. Kruszyn 3, commune Włocławek. Selection of typical artefacts (drawn by M. Pochylski and S. Rzepecki).

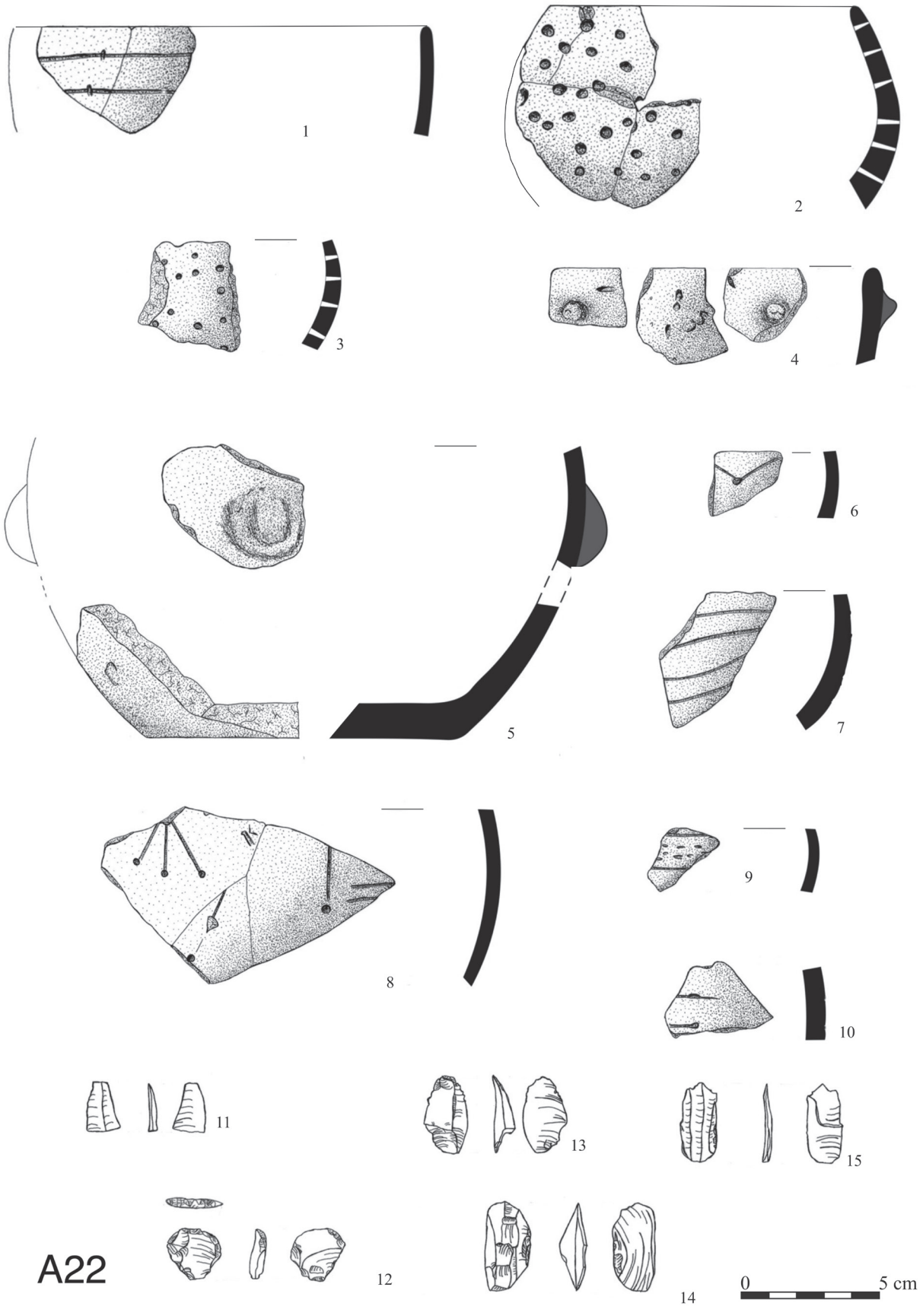

Fig. 10. Kruszyn 3, commune Włocławek. Selection of typical artefacts (drawn by M. Pochylski and S. Rzepecki).

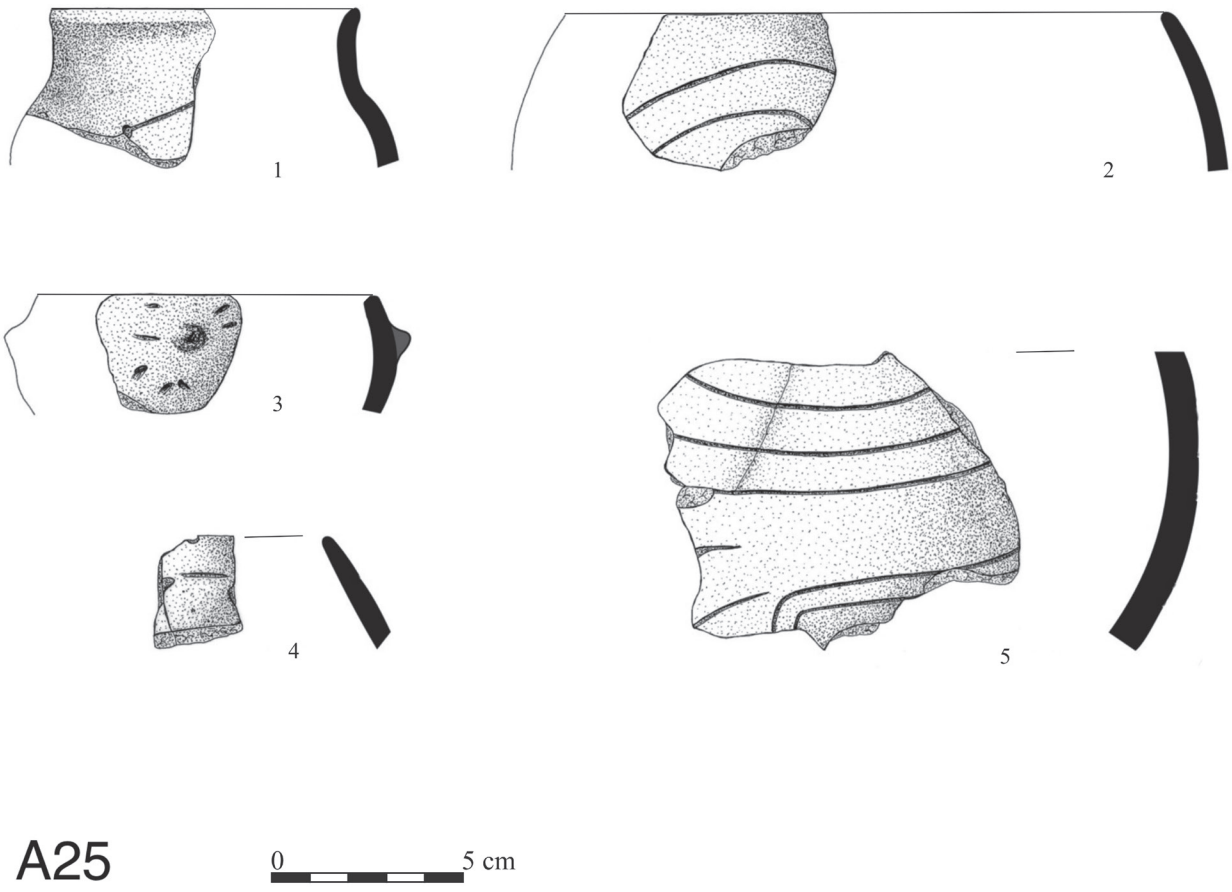

Fig. 11. Kruszyn 3, commune Włocławek. Selection of typical artefacts (drawn by M. Pochylski and S. Rzepecki).

recorded. Mainly decorations in the form of knobs were recognized on the coarse vessels. They were recorded on a total of 26 sherds (e.g. Fig. 6: 6; 7: 2; 9: 4; 10: 4–5). Sometimes they had finials folded inward (e.g. Fig. 6: 8; 6: 12; 7: 3; 9: 5; 9: 10; 9: 15). Less frequently, i.e. in 19 cases, ornaments made with a finger and/or fingernail were recognised (e.g. Fig. 6: 12; 7: 1; 7: 4). In individual specimens, there were fragments of vessels decorated with rows of oval impressions (Fig. 9: 1) or short and wide cuts (Fig. 11: 3).

However, in the analysed collection, the most frequently recorded ornaments were those based on incised lines (70 sherds). Bands composed of two incised lines were most frequently recognised here (e.g. Fig. 6: 2; 9: 9); single incised lines were less frequent (e.g. Fig. 6: 3) or in triple arrangements (e.g. Fig. 6: 1; 7: 9). Incised lines co-occurred with music notes – both small ones and often placed at the bends of the lines (e.g. Fig. 6: 1; 7: 6; 8: 2–4), as well as larger ones (e.g. Fig. 7: 4; 7: 9; 8: 7). In one case, a ribbon ornament filled with punctures was recorded (Fig. 10: 9). The engraved lines usually formed straight and broken ornaments (e.g. Fig. 7: 4; 7: 9; 8: 8), less frequently – wavy ones (e.g. Fig. 6: 2; 6: 10).

The relative chronology of the Kuyavian enclave of the LBK is well recognised thanks to, inter alia, the studies of Lech Czerniak (1994; 2004; 2016), Ryszard Grygiel (2004) and J. Pyzel (2006; 2009; 2010; cf. Marciniak *et al.* 2022). One has to agree with J. Pyzel (2010) that the caesuras between individual phases are fluid and determined intuitively. However, the small proportion of large music notes combined with the high frequency of straight or broken incised lines makes it possible to relate the examined collection to phase IIB of the LBK in the Kuyavia region.

3. Flint artefacts

The exploration of the features attributed to household A yielded a total of 61 flint artefacts (cf. Tab. 2). Unfortunately, this is a small collection and quite trivial in the analytical and interpretative sense. It is dominated by specimens made from chocolate flint (51 pieces), which clearly outweigh Baltic flint (7 pieces). Another

three specimens were burnt to an extent that made it impossible to recognize the raw material.

The general structure of the inventory in question consists of products classified into five categories of flint artefacts. Quantitatively, negative fragments (24 specimens) and burnt fragments (2 specimens) predominate. Among the fragments, the most numerous are chocolate flint specimens (21 pieces), all of them occurred in feature 22.

Seventeen flakes were included in the flakes production group. The majority of them are specimens made of chocolate flint (12 pieces), 4 flakes were made of Baltic flint and 1 specimen was intensively burned. The group of chocolate flint flakes is dominated by cortex specimens. The production of blades group consists of 5 specimens reflected from single-platform cores of chocolate flint. Blades with a width of 14–23 mm predominate (Fig. 9: 11). On the other hand, there were 8 specimens in the exploitation of scaled pieces group, without exception, these are flakes made of chocolate flint.

In the tool group, only an endscraper on a blade (Fig. 9: 12), 2 endscrapers on flakes (Fig. 8: 14; 10: 12) and 2 blades with utility retouch (Fig. 8: 15; 10: 15). All these specimens were made from chocolate flint.

Despite the small size of the examined inventory, a number of features characteristic of the lowland LBK communities can be distinguished (Domańska 2016). These include: (a) the predominance of chocolate flint, (b) the predominance of classical core exploitation techniques, and (c) the predominance of endscrapers and atypical tools in the group of tools.

4. Stones

A low trapezoidal adze made of amphibolite was discovered in feature A18 (Fig. 7: 12). The tool is symmetrical in cross-section, carefully smoothed along its entire length, and bears traces of use.

5. Bones

A total of 91 bones occurred in features associated with household A (cf. Tab. 1; Waszczuk 2010). The vast majority of these (74 pieces) were identified as belonging to domesticated animals. The species affiliation of 17 pieces was not recognised. Fourteen fragments of crushed teeth, 3 fragments of metacarpal bones and 7 fragments of cattle tibia were identified in feature A18. On the other hand, 8 cattle tooth fragments come from feature A19. A special feature of pit A21 was the complete dominance of pig remains (16 rib fragments), accompanied by 4 small bones coming from unknown species. Pit A22 yielded 1 tooth, 21 tooth fragments, 1 fragment of a pelvis and 3 fragments of cattle jaw, as well as 13 small fragments of bones of unrecognized species.

6. Daub

There were isolated lumps of daub in the three features, i.e. A19, A22 and A23.

7. Chronology

Recent work related to Bayesian modelling of radiocarbon dates known for LBK sites from the Kuyavia area has yielded a number of interesting hypotheses (Marciniak *et al*. 2022; Oberc *at al.* 2022). These concern, inter alia: the need to correct the dating of the beginnings and end of the LBK and the hypothetical contemporary nature of materials traditionally classified as phases I–IIB. In the case of phases IIA and IIB, we can probably venture the thesis that these are stylistic rather than chronological differences. The data obtained for household A from the site of Kruszyn 3 supplement the text quoted above in an interesting way.

Two samples from the feature A18 were submitted to the Poznan Radiocarbon Laboratory. Their de-

Table 4. Kruszyn 3, commune Włocławek. Radiocarbon dates

Feature	Material	Lab.	BP	C and N	BC 1 sigma	BC 2 sigma
A18	tibia, cattle	Poz-40681	6180 ± 40	0.1%N 0.9%C	5214–5045 (95.4%)	5177–5141 (23.3%) 5133–5067 (45.0%)
A18	tibia, cattle	Poz-40682	6180 ± 40	0.4%N 1.7%C	5214–5045 (95.4%)	5177–5141 (23.3%) 5133–5067 (45.0%)

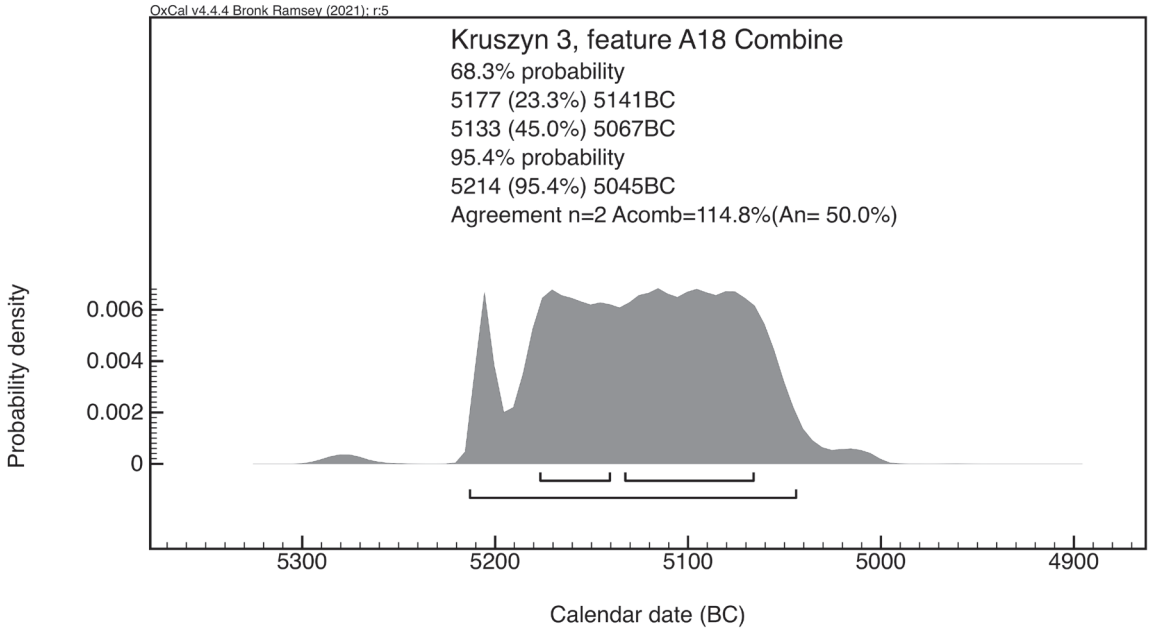

Fig. 12. Kruszyn 3, commune Włocławek. Calibration of radiocarbon dates from feature A18 by the OxCal 4.4.4. package (Bronk Ramsey 2024).

tailed parameters are contained in Table 4. As a commentary, it should be emphasised that the value of both markings should be assessed highly. They were made from animal bones obtained from a context where the likelihood of contamination of the fill was low. It should be added that the combination (Fig. 12) of both dates allows us to conclude that the functioning of household A at the site of Kruszyn 3 should be placed in the period 5214–5045 BC (probability 95.4%), probably in the period 5177–5141 BC (probability 23.3%) or 5133–5067 BC (probability 45%). This corresponds well with the current state of the discussion on the chronology of phase IIB of the LBK in the Kuyavia region (Marciniak *et al.* 2022). In the cited work, the start of phase IIB is modelled at 5295–5155 BC (with 94% probability) and the end at 5145–5155 BC (with 95% probability).

On the Edge. Summary

The above observations require a brief synthesis. However, in order to carry it out, a certain prior declaration is necessary. It addresses the issue of the distinctiveness of the Kuyavian LBK. The issue here is not its source and taxonomic dimension, but one related to identity and a sense of distinctiveness in relation to both hunter-gatherer and Neolithic populations from the South (e.g. Silesia and Lesser Poland). In the case of Mesolithic communities, this is not in doubt, while the problem of the functioning of the local (in the sense: Kuyavian or Lowland) identity of early agricultural communities is debated (Czerniak 1996; Pyzel 2010). It should be added that I understand regionalism here as a correlation between a given society and the territory it inhabits, which triggers ideological attitudes (e.g. political, moral, religious) and shapes the behaviour of territorial communities. What is fundamental here is the recognition of a given area as one's own, the feeling of "being oneself and at home" (Bieniada 2013; Leśniak-Moczuk 2018).

Returning to the LBK community from the Kuyavia area, the colonisation of this region from baseline areas required the identification of ecological "loess analogues" across vast areas of the Lowlands. Moreover, the Kuyavian enclave ("island") was clearly isolated (in a geographical sense) from the hypothetical starting areas for colonisation movements (cf. Czerniak 1996). Covering this space required exceptional and sustained efforts. This alone may have underpinned the emergence of a local identity. Let us not forget, however, that boundaries and identities are not linear in nature, but are (in the phenomenological perspective preferred here) experienced and constituted by the experiences and perceptions of the subject. As Maurice Merlau-Ponty (1962) wrote, boundaries constitute a dynamic space of interaction between the subject and environment, they represent a certain way of experiencing the world (cf. Tilley 1994; 2010). In this approach, the boundaries between radically different environments

define a certain "perceptual threshold" that changes the way we experience the world. The subject confronting a liminal experience is, in a sense, forced to recognize the limits of their own experience, to come into contact with "otherness", their own identity and way of existence. Boundaries force us to structure the image of the world, and crossing them requires reinterpreting it, adapting it to a new horizon of meaning and experiencing a transformation of perception.

The contextuality (here: regionality) of the understanding of the border provides a good justification for limiting further considerations to the area of Kuyavia, i.e. the horizon of "being-in-the-world" analysed here.

The materials discussed in this text from the site of Kruszyn 3 (household A) provide an opportunity to trace some aspects of praxis (in the sense of: Baumann 1973) of everyday life reconstructed for the LBK population (cf. Pyzel 2021b). These relate to the selection of the household location (**a**), the details of buildings and spatial planning (**b**), pottery manufacture (**c**), the use of flint and stone tools (**d**) and the structure of animal husbandry and consumption (**e**).

a. Both the geological structure and the features in terms of lithology, geomorphology and pedology of the site of Kruszyn 3 were typical of the LBK settlers from the Kuyavia region, who erected their houses in the best agricultural areas (Pyzel 2010). It is also worth noting the social context of the location of household A from Kruszyn 3. It is associated with the functioning of a micro-region with a long history of settlement (Kruszyn 10; Siciński *et al.* 2016) and numerous traces of it (Pyzel 2021a). Against this background (the micro-region of Kruszyn), household A is characterised by its unique location – on the edge of the area subject to regular exploitation.

b. When discussing the features of LBK settlements from the area of eastern Kuyavia, J. Pyzel (2021a) suggested the existence of three basic types of spatial organisation of settlements. The first type is made up of houses arranged in a row, in the second case the houses are concentrated around small depressions in the land, and the third type is represented by single houses, whose creation was the result of the spatial expansion of the original highly concentrated villages. Against this background, household A from Kruszyn 3 obviously represents type three. The data for this settlement strongly suggests that this type of spatial organisation was present throughout LBK's local history.

In addition, attention should be paid to the features of the internal organisation of the household. Its axis is formed by a long pillar house situated on a N-S line. Its construction and orientation do not deviate from the norms known from other settlements of the Kuyavian LBK. However, what is noteworthy is the estimated size (approx. 200 m^2) of the establishment. This figure should be treated very cautiously though due to the building's not very good state of preservation. Nevertheless, against the background of the micro-region of Kruszyn, it is exceptionally large (cf. Siciński *et al.* 2016). Of course, even larger features are known from Kuyavia (e.g. Bożejewice 22/23, Łojewo 35; cf. Czerniak 1994; Pyzel 2010). Features from Ludwinów 7 (houses 1–2) and Janowice 2 (Czerniak 2016; Pyzel 2019b) had a similar surface area to the longhouse from Kruszyn 3 (household A) which is discussed here.

Although the state of preservation of the longhouse from Kruszyn does not allow for participation in the discussion on the structural features of the LBK buildings (cf. Czerniak 2019), certain observations can be made. It seems likely that the entrance to the building was located in the south or west wall of the house. Such an assessment is based on the features of the pits flanking the hypothetical walls of the building. All features deeper than the median occurred south of pit A63. In this zone, clusters of four pits were recorded on either side of the building. On the western side these are pits A18–A20, A22, and on the eastern side – A21, A23–A25. Interestingly, the deepest features are distributed almost symmetrically, on an east-west line (A18–A21, A25). However, there is no similar symmetry when it comes to waste deposition patterns. The vast majority (ca. 92%) of pottery was found in features located along the western wall of the longhouse. Similar correlations were noted for flint and stone finds and bone remains. In the latter case, it should also be noted, that in the pits along the western wall of the house only the remains of cattle were found, while on the eastern side – only those of a pig. However, due to the fact that the number of species-identified remains was actually small, it is difficult to draw unambiguous conclusions regarding this regularity.

The concentration of the broadly understood rubbish (e.g. pottery) in the western LBK households known from the Kuyavia region is fairly well recognised (Grygiel 2004; Pyzel 2010; 2019a), although it is difficult to assume that in this case we are dealing with a restrictively observed norm. Rather, it was one of the alternative and acceptable ways of proceeding.

c–d. The pottery (technology, morphology, ornamentation) recovered from the features attributed to the household which is discussed here corresponds well with the characteristics of phase II of the LBK from the Kuyavia region (Grygiel 2004; Pyzel 2010;

Czerniak 2016). The same is true of the few flint and stone artefacts (cf. Kabaciński 2010; Domańska 2016; Szydłowski 2019).

e. The small collection of bones discovered in household A from the site of the Kruszyn 3 is too sparse to reliably present the percentages of individual animal species. However, attention should be paid to the well-confirmed breeding and consumption of cattle and pigs, which does not differ from the current knowledge about the importance of these animals for the local LBK (cf. Marciniak 2005). What is notable, however, is the fact the collection in question does not contain any remains of a goat or sheep. A similar situation was reported in Janowice 2 (Makowiecki 2016).

In conclusion, the above observations can be summed up with a fundamental interpretation: the set of sources discussed in this text constitutes a "miniature" of the early agricultural world reduced to a single household; a canon of "typical" behaviours replicated in a single copy. Both the features of the organisation of the space, the size and shape of the buildings and the daily activities related to food and diet, the use of stone and flint tools and pottery do not differ from the well-documented praxis of the LBK in Kuyavia. I refer here to Bauman's terminology (1973) for a reason. His work presents an inspiring approach to social praxis as a mechanism that organises reality and creates identity and opposition: here/inside *versus* there/outside. The antonyms cited are, of course, only a fragment of a more elaborate sequence of associations "tearing" reality into what is known, safe and the space of everyday activity and interaction, and what is unknown, dangerous and occasionally visited. It is from this perspective that it is fascinating that the "stage" for the manifest declaration of group affiliation (LBK) observed in household A from the site of Kruszyn 3 became the eponymous edge of a well-known ecumene. From the perspective of landscape phenomenology, this is not surprising, but it should significantly influence further considerations regarding the reasons for the breakdown of many aspects of the "practice of being a LBK settler" after crossing the border which is discussed here (cf. Rzepecki 2013). However, this is a topic for another text.

References

Bauman Z. 1973. *Culture as Praxis*. London: Routledge and Kegan Paul.

Bieniada R. 2013. Regionalizm i regionalizacja w definicji. Wybrane problemy teoretyczne. *Kwartalnik Naukowy OAP UW „e-Politikon"* 6, 281–299 (https://cejsh.icm.edu.pl/cejsh/element/bwmeta1.element.desklight-3f280db2-db0e-485d-9ab8-0b963d9d5db5).

Brigand R., Dubouloz J. and Weller O. 2022. Colonization dynamics of LBK farmers in Europe under geostatistics test. *Documenta Praehistorica* 49, 2–45. DOI: 10.4312/dp.49.12

Bronk Ramsey Ch. 2024. OxCal 4.4.4. (https://c14.arch.ox.ac.uk/oxcal/OxCal.html, access: 06.2024).

Czerniak L. 1994. *Wczesny i środkowy okres neolitu na Kujawach. 5400–3650 p.n.e*. Poznań: Instytut Archeologii i Etnologii Polskiej Akademii Nauk.

Czerniak L. 1996. Zagadnienie odrębności kulturowej neolitycznych mieszkańców Kujaw. In A. Kośko, J. Bednarczyk and P. Chachlikowski (eds.), *Z badań nad genezą regionalizmu kulturowego społeczeństw Kujaw* (= *Studia i Materiały do Dziejów Kujaw* 6). Poznań, Kruszwica, Inowrocław: Uniwersytet im. Adama Mickiewicza w Poznaniu, 25–38.

Czerniak L. 2004. Kultury z cyklu ceramiki wstęgowej. In J. Bednarczyk and A. Kośko (eds.), *Od długiego domu najstarszych rolników do dworu staropolskiego*. Poznań: Wydawnictwo Poznańskie, 195–233.

Czerniak L. 2016. Osady społeczności kultur ceramiki wstęgowej. In M. Szmyt (ed.), *Osadnictwo społeczności neolitycznych na stanowisku 2 w Janowicach, woj. kujawsko-pomorskie* (= *Studia i Materiały do Badań nad Późnym Neolitem Wysoczyzny Kujawskiej* 6). Poznań: Wydawnictwo Naukowe UAM, 73–123.

Czerniak L. 2019. Kto mieszkał w długich domach? Próba nowego spojrzenia na możliwości rekonstrukcji domu kultury ceramiki wstęgowej rytej. In M. Szmyt, P. Chachlikowski, J. Czebreszuk, M. Ignaczak and P. Makarowicz (eds.), *Vir Bimaris. Od kujawskiego matecznika do stepów nadczarnomorskich. Studia z dziejów międzymorza bałtycko-pontyjskiego ofiarowane Profesorowi Aleksandrowi Kośko* (= *Archaeologia Bimaris* 5). Poznań: Uniwersytet im. Adama Mickiewicza w Poznaniu, 229–241. (https://repozytorium.bg.ug.edu.pl/fileView.seam?fileName=Czerniak_Lech_Kto_mieszkal_w_dlugich_2019.pdf&entityType=article&fileTitle=Czerniak_Lech_Kto_mieszkal_w_dlugich_2019.pdf+%2F+4+MB+%2F+&lang=pl&fileId=UOGc34989b143304f3499525d03b2d065d8&cid=56344).

Domańska L. 2016. *Change and continuity. Traditions of the flint processing from the perspective of the Tążyna river valley*. Łódź: Instytut Archeologii Uniwersytetu Łódzkiego, Fundacja Uniwersytetu Łódzkiego, Łódzka Fundacja Badań Naukowych (https://www.academia.edu/34954427/Change_and_Continuity_Traditions_of_the_flint_processing_from_the_perspective_of_the_T%C4%85%C5%BCyna_river_valley).

Grygiel R. 2004. *Neolit i początki epoki brązu w rejonie Brześcia Kujawskiego i Osłonek*, 1: *Wczesny neolit.*

Kultura ceramiki wstęgowej rytej / The Neolithic and EarlyBronze Age in the Brześć Kujawski and Osłonki Region, 1: *Early Neolithic. Linear Pottery Culture*. Łódź: Muzeum Archeologiczne i Etnograficzne w Łodzi, Fundacja Badań Archeologicznych Imienia Profesora Konrada Jażdżewskiego.

Kabaciński J. 2010. *Przemiany wytwórczości krzemieniarskiej społeczności wstęgowych strefy wielkodolinnej Niżu Polskiego*. Poznań: Instytut Archeologii i Etnologii Polskiej Akademii Nauk. Oddział w Poznaniu.

Leśniak-Moczuk K. 2018. Regionalizm w teorii i praktyce. *Nierówności Społeczne a Wzrost Gospodarczy* 54, 160–169. DOI: 10.15584/nsawg.2018.2.10

Makowiecki D. 2016. Zwierzęce szczątki kostne. In M. Szmyt (ed.), *Osadnictwo społeczności neolitycznych na stanowisku 2 w Janowicach, woj. kujawsko-pomorskie* (= *Studia i Materiały do Badań nad Późnym Neolitem Wysoczyzny Kujawskiej* 6). Poznań: Wydawnictwo Naukowe UAM, 345–356.

Marciniak A. 2005. *Placing Animals in the Neolithic. Social Zooarchaeology of Prehistoric Farming Communities*. London: UCL Press.

Marciniak A., Pyzel J., Krueger M., Lisowski M., Bronk Ramsey Ch., Dunbar E., Barclay A., Bayliss A., Gaydarska B. and Whittle A. 2022. A history of the LBK in the central Polish lowlands. *Praehistorische Zeitschrift* 97(2), 377–408. DOI: 10.1515/pz-2022-2041

Merlau-Ponty M. 1962. *Phenomenology of Perception*. London: Routledge and Kegan Paul.

Oberc T., Czekaj-Zastawny A. and Rauba-Bukowska A. 2022. Radiocarbon dating for the Linear Pottery culture from the territory of Poland – research problems. In M. Grygiel and P. Obst (eds.), *Walking among ancient trees. Studies in honour Ryszard Grygiel and Peter Bogucki on the 45th anniversary of their research collaboration*. Łódź: Fundacja Badań Archeologicznych Imienia Profesora Konrada Jażdżewskiego, 183–212.

Płaza D. K. 2021. Spatial and functional development of the early Neolithic LBK settlement at Kruszyn, site 10, province Włocławek. *Prace i Materiały Muzeum Archeologicznego i Etnograficznego w Łodzi. Seria Archeologiczna* 48, 11–26.

Pyzel J. 2006. Die Besiedlungsgeschite der Bandkeramik in Kujawien. *Jahrbuch des Römisch-Germanischen Zentralmuseums* 53, 1–57. DOI: 10.11588/jrgzm.2006.1.18493

Pyzel J. 2009. Setlement history of the Linear Band Potery culture in Kuyavia. In D. Hofmann and P. Bickle (eds.), *Creating Communities. New Advances in Central European Neolithic Research*. Oxford: Oxbow Books, 71–79 (https://www.academia.edu/1962629/Settlement_history_of_the_Linear_Band_Pottery_culture_in_Kuyavia).

Pyzel J. 2010. *Historia osadnictwa społeczności kultury ceramiki wstęgowej rytej na Kujawach* (= *Gdańskie Studia Archeologiczne. Seria Monografie* 1). Gdańsk: Instytut Archeologii Uniwersytetu Gdańskiego.

Pyzel J. 2017. Field Survey Versus Excavation – Compatibility of Results Illustrated by the Example of Selected Sites from the A1 Motorway in the Włocławek Province, Poland. *Analecta Archaeologica Ressoviensia* 12, 285–298. DOI: 10.15584/anarres.2017.12.16

Pyzel J. 2019a. Analiza technologiczno-stylistyczna ceramiki KCWR. Technological-stylistic analysis of LBK pottery. In J. Pyzel (ed.), *Ludwinowo 7. Osada neolityczna na Kujawach. Ludwinowo 7. Neolithic settlement in Kuyavia* (= *Ocalone Dziedzictwo Archeologiczne* 8). Pękowice, Gdańsk: Wydawnictwo i Pracownia Archeologiczna Profil-Archeo, Wydawnictwo Uniwersytetu Gdańskiego, 47–56. DOI: 10.1553/archaeologia104s323

Pyzel J. 2019b. Organizacja przestrzenna osady KCWR. Spatial organisation of the LBK settlement. In J. Pyzel (ed.), *Ludwinowo 7. Osada neolityczna na Kujawach. Ludwinowo 7. Neolithic settlement in Kuyavia* (= *Ocalone Dziedzictwo Archeologiczne* 8). Pękowice, Gdańsk: Wydawnictwo i Pracownia Archeologiczna Profil-Archeo, Wydawnictwo Uniwersytetu Gdańskiego, 77–146. DOI: 10.33547/ODA-SAH.08.Lud.02.5

Pyzel J. 2021a. Early neolithic Settlement Patterns in the Polish Lowlands – a Case Study of Selected Micro-Regions in Eastern Kuyavia. *Open Archaeology* 2021, 1091–1104. DOI: 10.1515/opar-2020-0173

Pyzel J. 2021b. On the Bandkeramik on the Lower Vistula River. *Sprawozdania Archeologiczne* 73(1), 203–219. DOI: 10.23858/SA/73.2021.1.2545

Pyzel J., Pilarski B. and Cyganiewicz P. 2019. Obiekty nieruchome KCWR. LBK non-portable features. In J. Pyzel (ed.), *Ludwinowo 7. Osada neolityczna na Kujawach. Ludwinowo 7. Neolithic settlement in Kuyavia* (= *Ocalone Dziedzictwo Archeologiczne* 8). Pękowice, Gdańsk: Wydawnictwo i Pracownia Archeologiczna Profil-Archeo, Wydawnictwo Uniwersytetu Gdańskiego, 47–56. DOI: 10.33547/ODA-SAH.08.Lud.02.1

Rzepecki S. 2013. Beside the mainstream. Some reflections on the LBK in Kujavia. *Sprawozdania Archeologiczne* 65, 79–130 (https://www.rcin.org.pl/dlibra/publication/ 74872/edition/54740/content).

Rzepecki S. 2014. Two water wells of the LBK culture from the north part of the site of Kruszyn 3/10, Włocławek commune. *Analecta Archaeologica Ressoviensia* 9, 95–122 (http://repozytorium.ur.edu.pl/handle/item/ 2834).

Siciński W., Płaza D. K. and Papiernik P. 2016. *Ratownicze badania archeologiczne na stanowisku 10 w Kruszynie, pow. Włocławek, woj. kujawsko-pomorskie (trasa autostrady A-1)* (= *Via Archaeologica Lodziensis* 6). Łódź: Fundacja Badań Archeologicznych Imienia Profeso-

ra Konrada Jażdżewskiego, Muzeum Archeologiczne i Etnograficzne w Łodzi (https://nid.pl/dopobrania/OZA2016/Ratownicze-badania-archeologiczne-na-stanowisku10-wKruszynie,pow.W%C5%82oc%C5%82awek,woj.kujawsko-pomorskie(trasa-autostrady-A1).pdf).

Szmyt M. 2013. *Late Neolithic landscapes on the Polish Lowland. People, culture and economy in Kujawy – 4th and 3rd millennia BC* (= *Studien zur Archaeologie in Ostmitteleuropa* 12). Bonn: Dr. Rudolf Habelt GmbH.

Szydłowski M. 2019. Analiza neolitycznych zabytków kamiennych. The analysis of Neolithic stone artefacts. In J. Pyzel (ed.), *Ludwinowo 7. Osada neolityczna na Kujawach. Ludwinowo 7. Neolithic settlement in Kuyavia* (= *Ocalone Dziedzictwo Archeologiczne* 8). Pękowice, Gdańsk: Wydawnictwo i Pracownia Archeologiczna Profil-Archeo, Wydawnictwo Uniwersytetu Gdańskiego, 229–237. DOI: 10.33547/ODA-SAH.08.Lud.06

Tilley Ch. 1994. *A Phenomenology of Landscape, Places, Paths and Monuments*. Oxford: Berg.

Tilley Ch. 2010. *Interpreting Landscapes. Geologies, Topographies, Identities* (= *Explorations in Landsace Phenomenology* 3). Walnut Creek: Left Coast Press.

Twardy J. and Forysiak J. 2010. Przyrodnicze podstawy funkcjonowania osadnictwa na stanowisku archeologicznym Kruszyn 3. In S. Rzepecki (ed.), Opracowanie wyników archeologicznych badań wykopaliskowych przeprowadzonych na stanowisku Kruszyn 3, gm. Włocławek (NR AUT 100), unpublished typescript in the collection of the National Institute of Cultural Heritage of Poland, 5–24.

Waszczuk K. 2010. Analiza zwierzęcych szczątków kostnych ze stanowiska nr 3 w Kruszynie, gm. Włocławek, nr AUT 100. In S. Rzepecki (ed.), Opracowanie wyników archeologicznych badań wykopaliskowych przeprowadzonych na stanowisku Kruszyn 3, gm. Włocławek (NR AUT 100), unpublished typescript in the collection of the National Institute of Cultural Heritage of Poland, 301–335.

FUNDACJA
RZESZOWSKIEGO OŚRODKA
ARCHEOLOGICZNEGO

Uniwersytet Rzeszowski
Kolegium Nauk Humanistycznych
Instytut Archeologii

Wydawnictwo Uniwersytetu Rzeszowskiego