

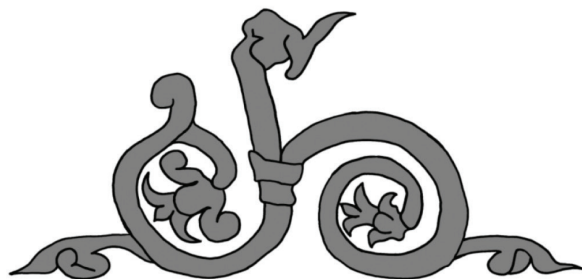
ZIRIDAVA  
STUDIA ARCHAEOLOGICA

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MUSEUM ARAD

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# The Archaeological Site of Felnac “Complexul Zootehnic” (Arad County). Discussions on the Late Bronze Age Settlement and Cemetery\*

Victor Sava

**Abstract:** Archaeologists from the Arad Museum have investigated over time numerous sites in the Lower Mureş Basin. Nevertheless, many of these field surveys, rescue excavations or systematic excavations have not been published. This is also the case of the significant multi-layer site of Felnac “Complexul Zootehnic”. The site came to archaeological attention ever since 1971, with the stray discovery of certain bronze artifacts and ceramic pots, all dated to the Late Bronze Age. Subsequently, the site benefited from one archaeological survey (1972) and three excavation campaigns (1975–1977). Though the Bronze Age discoveries from this site have often been mentioned in the archaeological literature, most of them have remained unpublished. A large part of the artifacts found by chance in the beginning of the 1970s has been published recently, but some of the artifacts discovered then have remained unpublished. This was also the case of the Bronze Age discoveries made during the excavations. I have thus decided to take up again the discussion of the discoveries dated to the Late Bronze Age by publishing the artifacts identified during the excavations coordinated by Mircea Zdroba and Mircea Barbu. By consulting the entire documentation in the archive of the Museum of Arad that relates to this excavation, I have attempted to provide a comprehensive perspective over the entire site.

**Keywords:** Lower Mureş Basin, archaeological excavation, Late Bronze Age, cemetery, settlement.

## Introduction

Field archeology in Arad began in the first half of the 19<sup>th</sup> century. The first excavation that can be considered to be archaeological in nature was performed by the locals from Pâncota; in 1847 they have “investigated” the ruins of the medieval monastery on “Dealul Cetății”<sup>1</sup>. Since then, the region of Arad has benefited from numerous field surveys and archaeological excavations, in the beginning coordinated by amateurs<sup>2</sup> and then by specialists such as M. Roska, D. Popescu, I. H. Crişan, E. Dörner<sup>3</sup>, M. Zdroba, M. Barbu and G. P. Hurezan<sup>4</sup>. Besides those mentioned in the lines above, one should also note stray finds such as gold hoards or bronze deposits<sup>5</sup>.

Among the stray finds discovered over time one can discuss the artifacts recovered in 1971 during the construction of the zootechnical complex in the eastern part of the settlement of Felnac. The rescued artifacts, consisting of several weapons and jewelry made of bronze, but also of ceramic pots dated to the Late Bronze Age, have been donated to several museums. Several years later, a team from the museum in Arad has led a rescue excavation but 200 m north of the zootechnical complex. The excavation coordinated by M. Zdroba and M. Barbu has led to the identification of a settlement that was contemporary to the stray finds made in 1971.

\* English translation: Ana M. Gruia.

<sup>1</sup> Hügel 1999, 5; Heitel 2006; Vasiliev, Hügel 1999; Hügel *et al.* 2012, 7. The site is today known in specialized literature as Pâncota “Cetate” or „La Mănăstire”.

<sup>2</sup> One must mention that some amateur archaeologists have performed small test trenches or field surveys until around 2000; for a brief history of the researches performed by amateurs see Sava, Ardeleanu 2009, 23–24; Sava 2010a, 129.

<sup>3</sup> For a presentation of the investigations performed by E. Dörner see Sava 2010b, 53–55; Bader 2015.

<sup>4</sup> A history of archaeological researches performed on the territory of the present-day county of Arad can be found in Hügel 1999; Hügel *et al.* 2010; Hügel *et al.* 2012.

<sup>5</sup> I shall just mention the gold hoards from Firiteaz (Mozsolics 1973, 194; Taf. 78–79; 80/1–5) and Sântana (Dörner 1960, 472; Mozsolics 1973, 208, Taf. 104–105; Rusu *et al.* 1996, 15; Rusu *et al.* 1999, 143), and the bronze deposits Pecica II (Petrescu-Dîmboviţa 1977, 101–102, pl. 169/5–18; 170–175; 176/1–23; Kemenczei 1991), Pecica IV (Petrescu-Dîmboviţa 1977, 102, pl. 176/29–33; 177; 178/1) and Sâmpetru German (Petrescu-Dîmboviţa 1977, 107; pl. 186/17–18; 187).

Though the metal artifacts discovered on that occasion have been published and some discussions on the character of this site have been included in the literature, the Late Bronze Age site in Felnac “Complexul Zootehnic” has not been yet analyzed in all its complexity. The fact that until now the discoveries made there have not been the focus on an exhaustive study has generated some confusion in the specialized literature. I shall just mention that this confusion has led to the amusing situation in which no less than nine different names have been employed in the relevant literature for the site known under the toponym of “Complexul Zootehnic”.

The museum in Arad has coordinated over time numerous excavations that envisaged important archaeological sites for both the region of the Lower Mureș and the entire Intra-Carpathian area. The site under discussion here, Felnac “Complexul Zootehnic”, is among the referential ones. Just like in numerous other cases, the excavations from Felnac have partly remained unpublished<sup>6</sup>. The entire lot of artifacts discovered by chance in 1971 during the construction of the zootechnical platform has been recently published<sup>7</sup>. I have thus decided to take up again the discussion of the discoveries from the Late Bronze Age discovered on this site by publishing the artifacts identified during the excavations led by Mircea Zdoba and Mircea Barbu. The present study mainly focuses on the researches performed on this site, but it also includes discussions on the context of discoveries, in those cases where the documentation allowed such an initiative.

By consulting the entire documentation in the archive of the Museum of Arad that relates to this excavation, I have attempted to provide a comprehensive perspective over the entire site. At the same time, for better accuracy of the information but also in order to provide a brief excursus into the history of archaeology in Arad I have decided to transcribe in the end of the article the excavation reports and technical reports belonging to each archaeological campaign in Felnac.

### Site location

The “Complexul Zootehnic” archaeological site from Felnac is located in the piedmont plain of Romania’s Câmpia de Vest. Today, the site can be found approximately 800 m north-east-east from the margin of the municipality of Felnac, on the left side of the road leading from Felnac to Arad (Fig. 1–2)<sup>8</sup>.

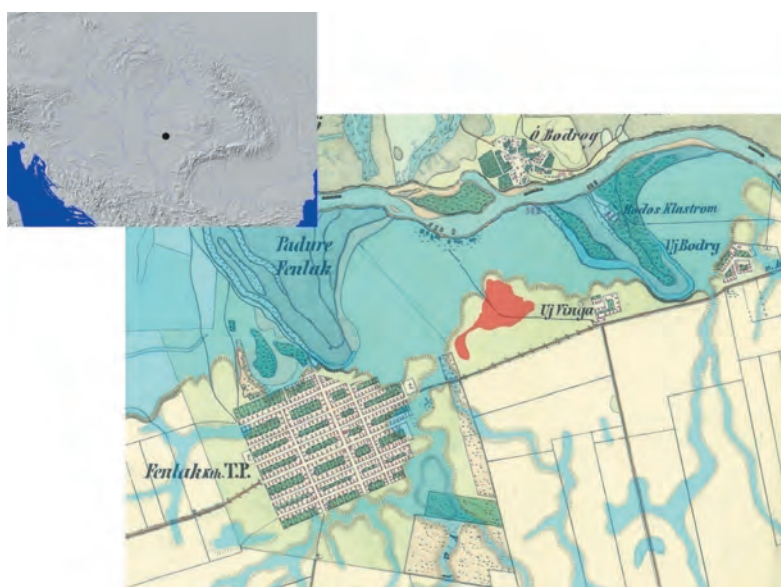


Fig. 1. Map from the middle of the 19<sup>th</sup> century, with the location of the site (marked in red) and the reconstruction of the floodable area (in blue).

<sup>6</sup> A brief excavation report envisaging the 1975 campaign has been published so far (Zdoba, Barbu 1976), one study of the discoveries dated to the First Iron Age (Sava 2011) and one dealing with certain discoveries from the Early Middle Ages (Mărginean, Băcuet-Crișan 2015).

<sup>7</sup> Kacsó 2015.

<sup>8</sup> K. Kacsó also mentions the fact that the site “La Vii” is located 1 km north-west from the center of the settlement of Felnac (Kacsó 2015, 23, fig. 1). Taking into consideration the fact that the toponym “La Vii” refers to the same location as “Complexul Zootehnic”, one must note that in Kacsó 2015 the site is incorrectly localized.



The field surveys performed over the last years have led to the exact localization of the site, on the first terrace of River Mureș. The terrace is high and has the shape of a peninsula entering deep into the floodable meadow of the river. One can also note that the site is protected against floods as the area it occupies is higher than the rest of the terrace. As Austrian topographic maps also indicate, none of the riverbeds of Mureș have affected the integrity of the site (Fig. 1).

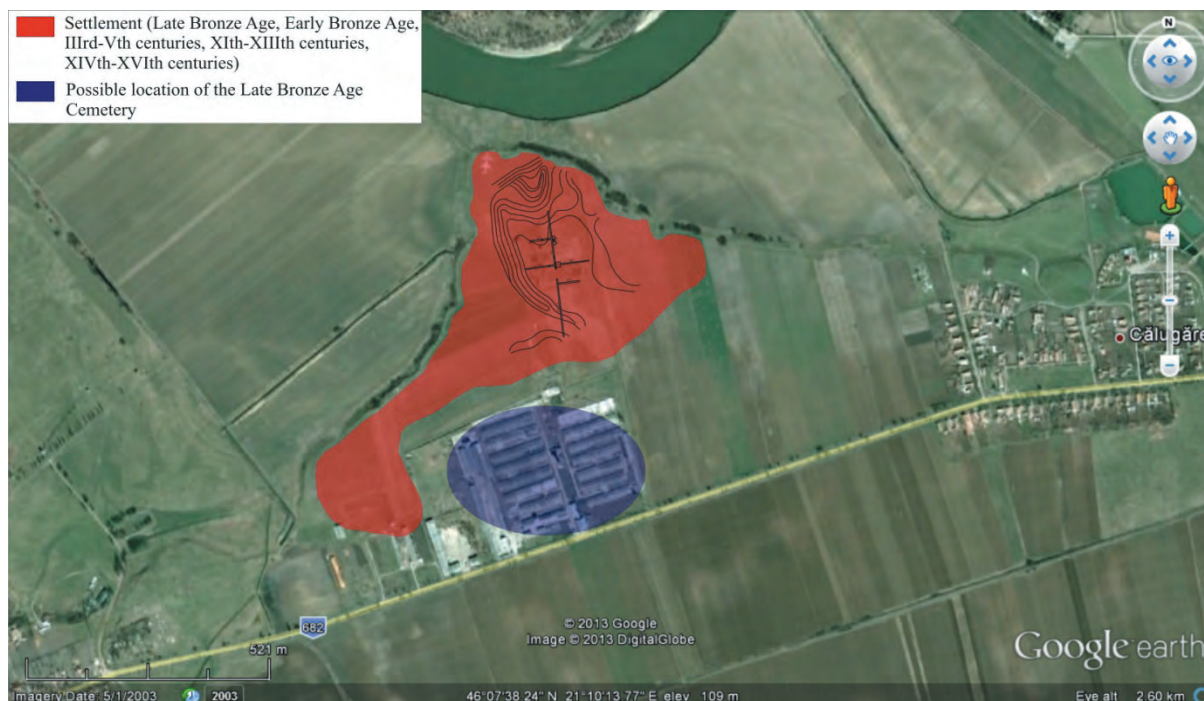


Fig. 2. Satellite photograph of the settlement Felnac “Complexul Zootehnic” and the presumed location of the Late Bronze Age cemetery (adapted from Google Earth).

## History of research

The start of works for the construction of the zootechnical platform in Felnac has led to the discovery, in 1971, of several artifacts. A large part of them were donated to the museum in Arad by S. Cociuba; other artifacts were donated to the museums in Oradea, Baia Mare and Zalău. The museum in Arad has received five bracelets (Inv. Nos. 14906–14910) (Pl. 1/2–6), three pins (Inv. Nos. 14911–14913) (Pl. 2), one dagger (Inv. No. 14915) (Pl. 1/1)<sup>9</sup>, six cups (Inv. Nos. 14919–14925) (Pl. 4), all dated to the Late Bronze Age, but also a brooch (Inv. No. 14914) and three pots (Inv. No. 14916–14918) that date to the third-fifth century. Several fragmentary jars and pottery fragments were donated in the same year to the museum in Baia Mare. One must mention that it was I. Klement who donated the artifacts from Felnac to the museums in Baia Mare and Oradea<sup>10</sup>. Thus, the collection of the museum from Baia Mare includes a large bitronconic pot decorated with four prominences (Inv. No. 836A) (Pl. 3/8a–8b), one fragment from a cooking pot with a relief girdle (lacking an Inv. No.) (Pl. 3/2), one jug (Inv. No. 836) (Pl. 3/6), one cup with heightened handle (lacking an Inv. No.) (Pl. 3/7), fragments from an undecorated dish (lacking an Inv. No.) (Pl. 3/1)<sup>11</sup>, one handle (lacking an Inv. No.) (Pl. 3/3) and two pot bases (lacking an Inv. No.) (Pl. 3/4–5) besides six other atypical pottery fragments (also lacking Inv. Nos.). Several years later, in 1975, I. Crișan donated to the museum in Zalău a bracelet and the upper part of a pin (both were recorded under Inv. No. 17/1975)<sup>12</sup>. According to the items' record files in the museum from Zalău, they were “discovered in 1972–1973 in Felnac, Arad County, on the

<sup>9</sup> One must mention that in Kacsó 2015, 24, no. 16 the dagger is published with an erroneous inventory number (Inv. No. 14195); in the collection of the Museum of Arad the item has the Inv. No. 14915 and not 14195.

<sup>10</sup> Kacsó 2015, 25.

<sup>11</sup> In Kacsó 2015, 24, no. 18, Fig. 3/7 the pottery fragments illustrated here on Pl. 3/1, 3, 5 are represented as part of the same container.

<sup>12</sup> Bejinariu 2003, pl. I/3–4.

territory of the inter-cooperatist (swine) complex besides fragments made of ceramic and bronze and pots at the depth of 1.2 m<sup>13</sup>. Besides the already mentioned artifacts one must enumerate two pins, two other bracelets and a heart-shaped pendant (Inv. Nos. 5783–5786, 8750) preserved in the collection of the museum in Oradea<sup>14</sup>.

Due to the stray finds described above, in 1972 the archaeology team of the museum in Arad, consisting of E. Dörner, M. Zdroba and M. Barbu, rescued a series of artifacts dated to the Late Bronze Age, the third-fifth century and the eleventh-twelfth century<sup>15</sup>. Preserved documentation indicates that they performed archaeological surveillance during the excavation of trenches for the construction of a water purification station (Fig. 3–5). The surveillance has led to the drawing of a situation plan and drawings of certain pit profiles. Unfortunately, according to this plan one cannot identify the area where the surveillance took place. The plan mentions the fact that “hallstatt-type”, fourth-century and medieval pottery fragments were recovered, together with a fragment from a bracelet? made of bronze that could not be determined chronologically<sup>16</sup>. As previously mentioned, besides the situation ground plan I was also able to consult the profile drawings of 13 pits. Among them, only one could be associated with the archaeological material; this was pit A, from the trench labeled II, inside which archaeologists discovered several pottery fragments dated to the third-fifth century.

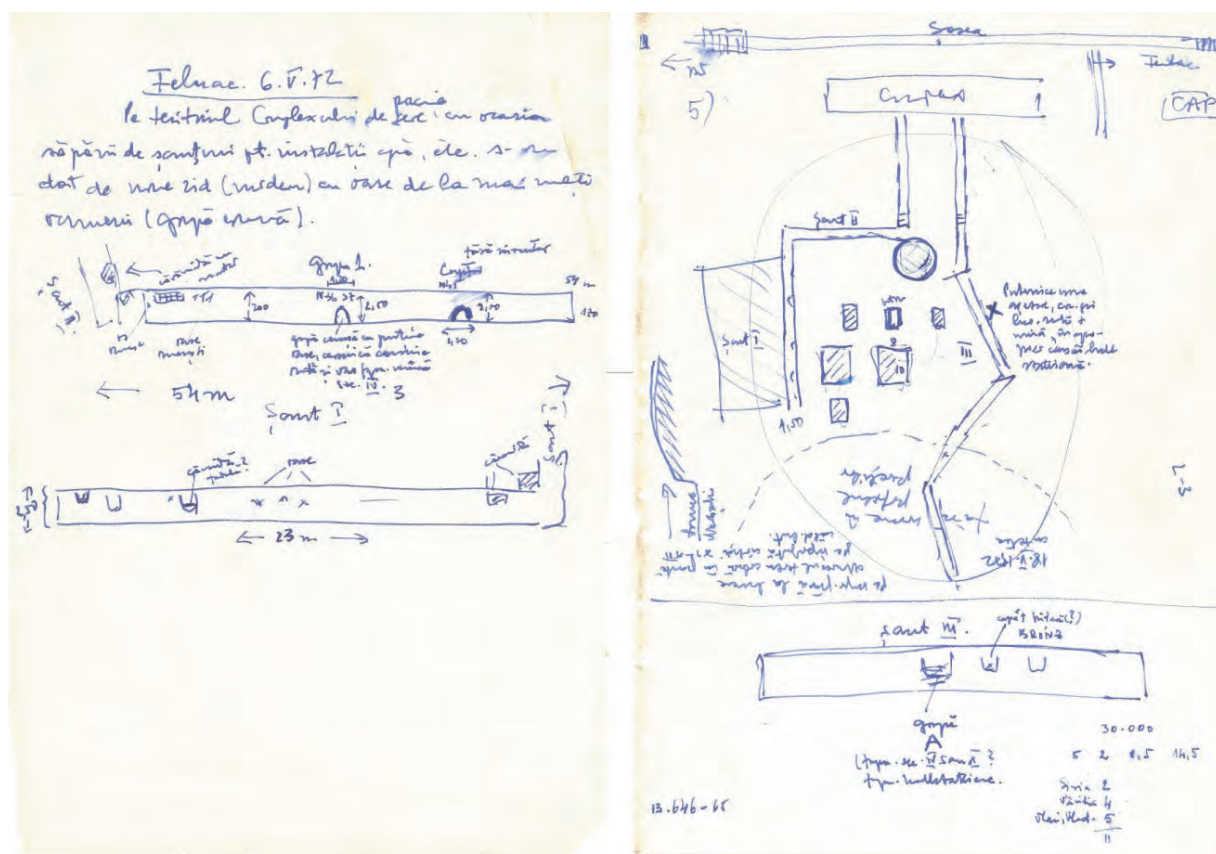


Fig. 3. Original documentation of the investigation performed in 1972.

<sup>13</sup> Bejinariu 2003, nota 2.

<sup>14</sup> Kacsó 2015, fig. 2/1, 4, 8–9; 3/4.

<sup>15</sup> The plan mentions the date 18. 05. 1972, more than likely the date when the documentation was compiled and the surveillance performed. From the note sent by E. Dörner to the Institute of Archaeology in Bucharest one knows that the works performed then have also led to the discovery of “Sarmatian graves dated to the 3<sup>rd</sup>–4<sup>th</sup> century A.D. with inventories consisting of beakers, beads, bronze bracelets and brooches etc”. I was unable to identify the inventories of these graves in the collection of the Museum of Arad.

<sup>16</sup> Among these artifacts, in the collection of the museum from Arad one also finds a lot of pottery items dated to the third-fifth century recovered from a large-size pit, probably the one labeled A (Inv. Nos. 15027–15117; 15141–15168) and several pottery fragments from the 11<sup>th</sup>–13<sup>th</sup> century (Inv. Nos. 15118–15140; 15169–15183).



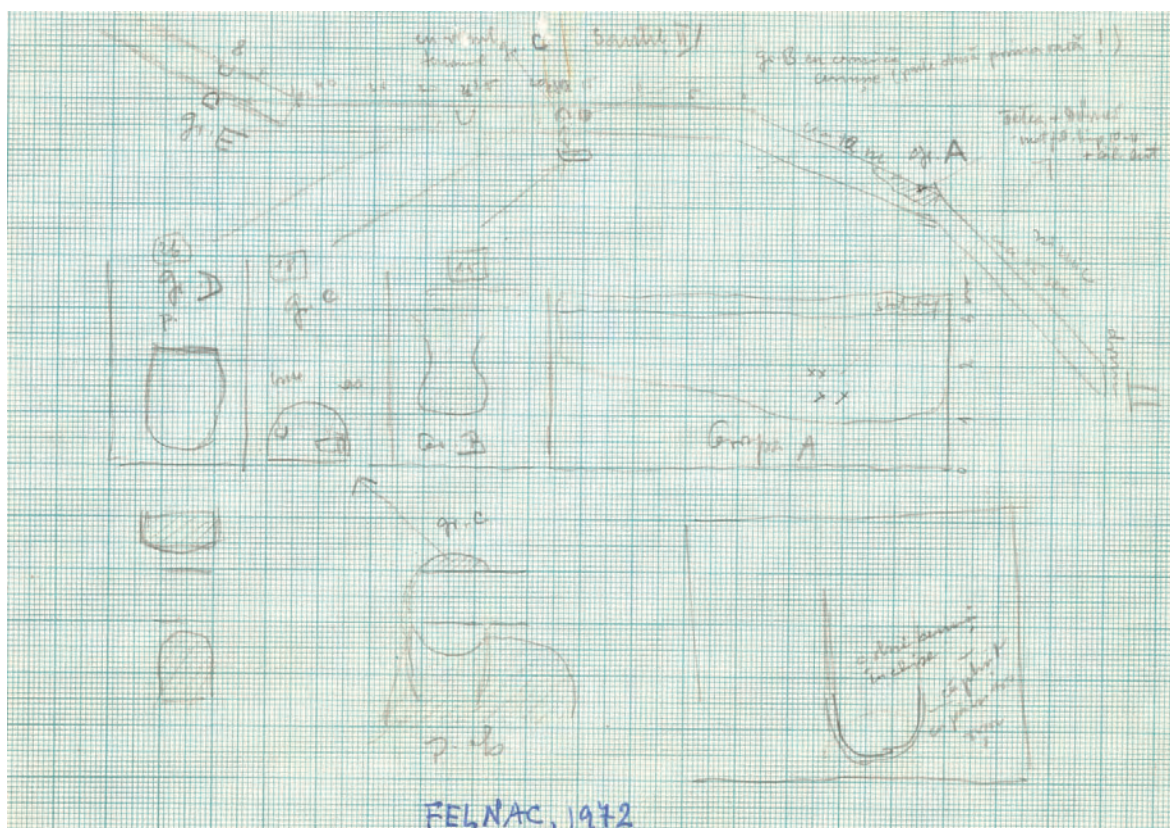


Fig. 4. Original documentation of the investigation performed in 1972.

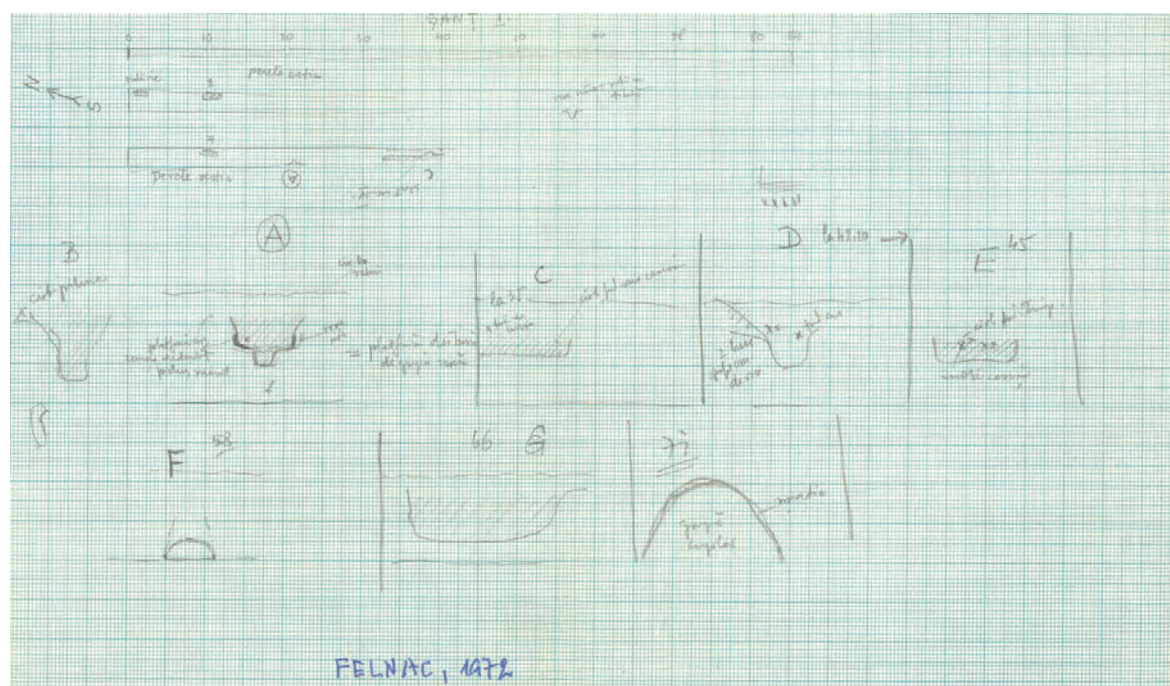


Fig. 5. Original documentation of the investigation performed in 1972.

Several years later, in 1975, M. Zdroba and M. Barbu initiated a rescue excavation campaign determined by works for the construction of a water purification station 200 m north of the platform of the zootechnical complex. The excavation that extended for a period of three years (1975–1977<sup>17</sup>) brought to light an important multi-stratum site.

<sup>17</sup> In a previous article I expressed the erroneous view that excavations on this site also extended during 1978 (Sava 2011, 83–84). The same error can be found in Kacsó 2015, 23. According to the preserved documentation (scientific report and



Over the three archaeological campaigns (1975–1977) specialists have opened six trenches (S1-S5; S1-III) and four surfaces (A-D) (Fig. 6). Information regarding the ground plan of the excavations, its stratigraphy and some of the more important discoveries has been extracted from the on site documentation (excavation diary, excavation reports completed in the end of each campaign and drawings of the excavated trenches) preserved in the archive of the Archaeology Department of the Museum of Arad.

According to the excavation diary kept by M. Zdroba the works started on July 14th 1975 with the marking out of trench S1. This magistral trench was oriented along the north-south axis and it was intended to section the promontory; its initial dimensions were  $52 \times 1.5$  m<sup>18</sup>. Due to the identification of a medieval pit-house, the section was extended by 4 m.

The identification of a pit-house, labeled B1, in grid cells 2–4 of trench S1<sup>19</sup> has led to the opening of surface A, on the eastern side of S1, 0.30 m away from the trench. In order to allow for the identification of the contour of dwelling B1 the surface initially measured  $4 \times 1.5$  m and was subsequently enlarged by 1 m on the southern side and by 1.5 m on the eastern side, reaching the final length of 7 m and the width of 5 m.

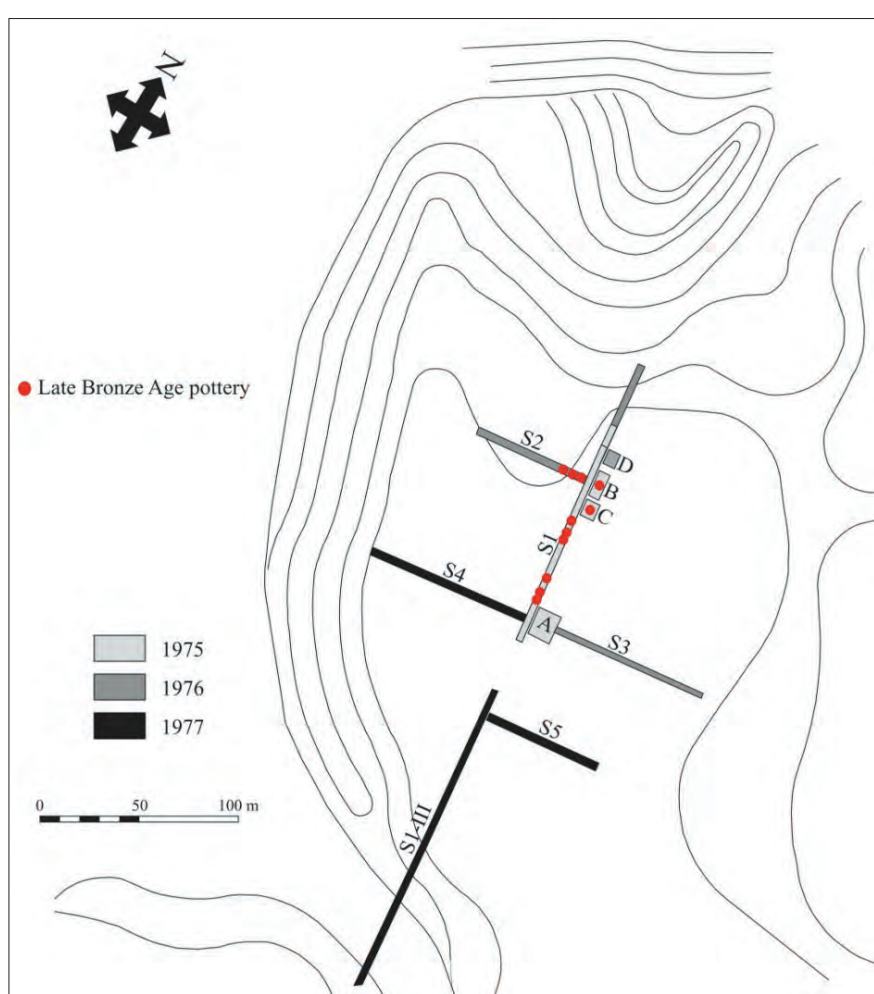


Fig. 6. General plan of the excavations, with the identification of the areas where Late Bronze Age pottery was discovered.

list of organization activities for the 1978 campaign), the team intended to continue the excavations in 1978 as well, but eventually failed to do so.

<sup>18</sup> These dimensions of S1 can be found both in the original report and in Zdroba, Barbu 1976, 48. The excavation diary mentions the fact that initially the trench measured 40 m in length and 1.5 m in width and was eventually extended by 4 m and then probably by 8 more meters. The drawings of the profile and ground level of trench S1 confirm the dimensions of  $52 \times 1.5$  m.

<sup>19</sup> The excavation diary and report locate dwelling B1 by grid cells 3–4 and in Zdroba, Barbu 1976, 48 “by meter 2”. The dwelling located by grid cells 2–4 does not feature in the western profile of S1. Zdroba, Barbu 1976 present the discoveries made in S1 meter by meter and in the excavation diary and report the authors of the excavation use the term grid cell (the grid was marked out on the eastern side of the section in units of 2 m; thus 1 grid cell=2 linear meters).

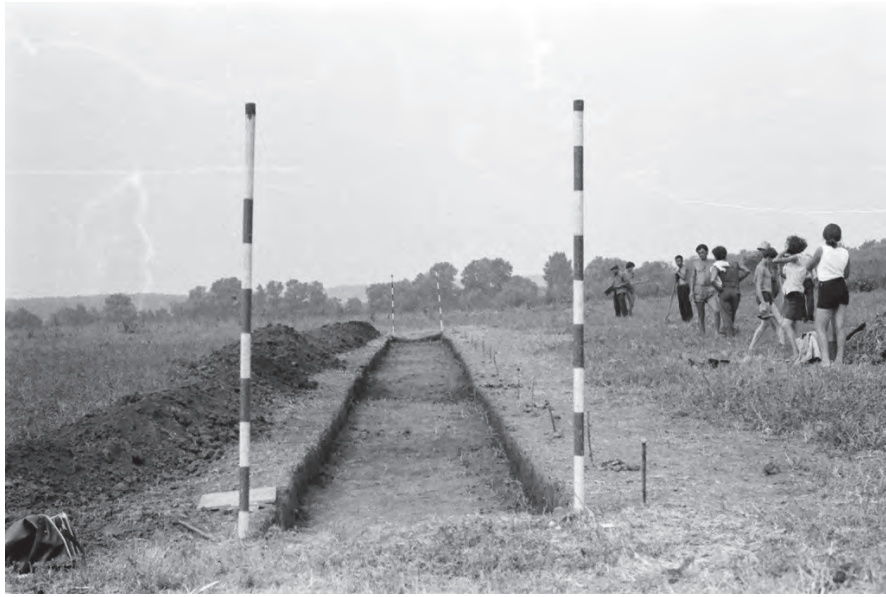


Fig. 7. Aspects during the 1975 excavation campaign.



Fig. 8. Aspects during the 1975 excavation campaign.

In order to identify the eastern side of the pit-house labeled B2, the archaeological team opened surface B, 0.3 m south of S1, measuring  $7 \times 2.5$  m<sup>20</sup>. The surface was located near the grid cells 18–22 or meters 37–44 of section S1. Subsequently, the identification of a third-fifth-century pit by grid cells 16–17 has led to the opening of surface C, in order to delimit the entire feature. Thus the surface opened between grid cells 16–18 or meters 21–34 measured  $3 \times 3.30$  m<sup>21</sup>.

The excavations performed in 1976 started with the extension of trench S1 northwards by 22 m until the edge of the high terrace of River Mureş. Trench S2 was subsequently opened on the western side of trench S1, oriented east-west and measuring  $31 \times 1.5$  m<sup>22</sup>. Trench S3 was opened perpendicular to the eastern side of surface A, oriented east-west, with the dimensions of  $18 \times 2$  m<sup>23</sup>. Surface D was

<sup>20</sup> Zdroba, Barbu 1976, 48 and the excavation report mention that the surface measured  $7 \times 3$  m, but on the ground level profile it measures  $7 \times 2.5$  m.

<sup>21</sup> Zdroba, Barbu 1976, 48 and the excavation report mention that the surface measured  $3 \times 5.30$  m, but on the ground level profile and in the excavation diary it measures  $3 \times 3.30$  m.

<sup>22</sup> The excavation report mentions the fact that the trench measured  $22.5 \times 1.5$  m; but according to both the diary and the drawing of the trench its dimensions were  $31 \times 1.5$  m.

<sup>23</sup> In the excavation diary M. Zdroba writes that trench S3 initially measured  $17 \times 2$  m and was to be extended eastwards by probably 1 m. Unfortunately, the drawing of this trench has not been preserved in the archive of the Museum of Arad.

opened on the northern side of surface B, 2 m from it, measuring  $3 \times 2$  m<sup>24</sup>; the surface was located in this area in order to allow for the uncovering of an oven the edges of which had been identified in 1975.



Fig. 9. Aspects during the 1975 excavation campaign.

As one can discover from the excavation diary, the 1977 works were performed throughout the entire month of October. The archaeologists initially wanted to prolong trench S1 towards the southern part of the plateau, but due to the agricultural cultures the plan could not be implemented. Trench S1-III was thus opened 25–30 m south-west from S1, along the latter, measuring 23 m in length and 1.5 m in width<sup>25</sup>. Trench S4 was also excavated during this campaign, perpendicular to the western side of S1, by surface A. Trench S4 was set out 0.75 m from the western profile of trench S1 and measured 12 m in length and 1.5 m in width. A last trench, S5, was oriented east-west, perpendicular to the eastern side of S1-III and measuring  $10 \times 2$  m.



Fig. 10. Aspects during the 1976 excavation campaign.

<sup>24</sup> These dimensions feature in the report of the 1976 excavation; the technical report written for the continuation of the excavations in 1977 mentions that surface D measured  $4 \times 4$  m.

<sup>25</sup> On the drawing of the profile and ground level of section S1-III, it features with the length of 22.5 m.





Fig. 11. Aspects during the 1976 excavation campaign.

From a stratigraphic perspective, the excavations performed between 1975 and 1977 have revealed a site with several archaeological layers. The best documented stratigraphic situation was identified in the case of the eastern and western profiles of surface B. One can note there the following sequence: vegetal layer between 0–0.10/0.15 m, medieval layer I (fourteenth–sixteenth century) between the depth of -0.10/0.15 and -0.50/0.55 m, medieval layer II (eleventh–thirteenth century) between the depth of -0.50/0.55 and -0.80/0.90 m, and the layer of the Second Iron Age (probably third–fifth century) between -0.80/0.90 and -1.30/1.40 m. Another trench where the archaeological layers were correlated to the chronological realities is S1, where only three layers were documented: 0–0.20/0.25 m, vegetal layer; -0.20/0.25–0.95/1.00 m, medieval layer; -0.95/1.00–1.50/1.60 m the layer corresponding to the Second Iron Age<sup>26</sup>.

Besides the artifacts and features corresponding to the archaeological layers mentioned above (third–fifth century, eleventh–thirteenth century and fourteenth–sixteenth century), the excavations have also revealed pottery fragments from the Late Bronze Age (LBA II-III/Bz. D-Ha. A1) and from the First Iron Age (Gornea-Kalakača pottery). The deposition layers corresponding to the prehistoric discoveries were strongly disturbed by subsequent habitations and thus could not be documented stratigraphically.

By studying the documentation compiled during the three archaeological campaigns I could easily note that the 1975 campaign was by far the best documented. During it the team collected the most numerous artifacts and recorded the most numerous archaeological contexts. The archaeologists have thus identified and documented one pit that contained Late Bronze Age pottery (stage BD-HA1), two pit-houses, four pits, one hearth and an agglomeration of pottery from the Second Iron Age, probably from the Dacian Era? One must mention two other pits that were dated to the 3<sup>rd</sup>–5<sup>th</sup> centuries and two pit-houses, three pits and one vaulted oven from the Middle Age. At the same time, during the excavations the team has also uncovered a grave that was dated to the seventh–eighth century<sup>27</sup>. Besides these features, one can also mention three hearths, an agglomeration of bones and three spots with traces of burning that could not be attributed to any chronological horizon.

An abstract of the publications regarding this site and of the confusions related to it has already been published<sup>28</sup>. For this reason I shall just present here some general observations. As one can easily note by carefully reviewing the literature, this site has caused a great number of discussions in

<sup>26</sup> The drawings of the profiles of the other trenches do not associate the deposition layers and their chronology. The excavation reports and diary do not clarify the issue of stratigraphy; in the reports the authors briefly mention the chronology of some discoveries, while stratigraphy is not discussed in the diary.

<sup>27</sup> Mărginean, Băcuț-Crișan 2015.

<sup>28</sup> Sava 2011, 83–84.

archaeological works<sup>29</sup>. Unfortunately, due to the absence of a comprehensive report of the excavations at “Complexul Zootehnic”, there were several confusions among researchers. The most striking difference in archaeological publications is the fact that archaeologists use various toponyms to indicate the same site – “Complexul Zootehnic” (Fig. 12).

<b>Author</b>	<b>Toponym</b>
Zdroba, Barbu 1976	„complexul zootehnic”
Petrescu-Dâmbovița 1977	„grajduri pentru porci”
Pădurean 1985	„Vechi mal al Mureșului, la Nord de sat”
Pădurean 1990	„La Tăietură”
Kacsó 1992, 2015	„La Vii”
Pădurean 1993	„în apropierea Complexului Porcine”
Gumă 1993, 1995, 1997	„La Tăietură” „La Vii”
Chirilă <i>et al.</i> 1999	„La Vii” „fostul teren al C.A.P.”
Bejinariu 2003	„La Vii”
Luca 2005, 2006, 2010	„La Vii” „La Tăietură” „terenul fostului C.A.P.” „la 1 km NV de sat, pe o terasă”
Sava 2011	„Complexul Zootehnic”
Mărginean, Băcuț-Crișan 2015	„Complexul Zootehnic”

Fig. 12. Development of the toponym “Complexul Zootehnic”.

### Description of the artifacts

One can state that the majority of the pottery illustrated in this study has gone through reduction firing and this rendered the fragments dark gray, light gray or black in color. At the same time, oxidation firing has rendered the pottery red brick-red or brick-red. As for the temper materials employed, the majority of the pottery contained sand and in few cases sand grains. Regarding the surface treatment, polished slip, both on the inside and outside of the pots, predominates; the other techniques consist of slip only applied to the outer surface and burnishing.

The typological analysis of the pottery discovered during the excavations performed in Felnac “Complexul Zootehnic”, but also of the pots found by chance in the beginning of the 1970s reveals certain characteristics typical to several chronological horizons. The earliest pottery fragments discovered on this site seems to be the one illustrated on Pl. 7/1; 11/4. The fragments can belong to Early-Middle Eneolithic. Other pottery fragments decorated with incisions (Pl. 3/7; 4/2, 5; 7/1, 8/3; 9/1–2) belong to the first chronological stage of the Late Bronze Age (LBA I/Bz. B-C), possibly to the late stage of the Middle Bronze Age. Another part of the illustrated pottery fragments, mainly decorated with grooves (Pl. 4/1, 6; 6/1; 7/2–6, 8; 9/7; 10/4) belong to stage LBA II-III (Bz. D-Ha. A1). The other pottery fragments decorated mainly with alveoli girdles (Pl. 3/2; 9/3–4) or different types of prominences (Pl. 3/8; 8/2; 9/6; 10/3, 5; 11/1, 3, 8) are common to the entire Late Bronze Age in the Lower Mureș Basin.

Besides the pottery discovered during the excavations performed by M. Zdroba and M. Barbu I also chose to illustrate (Pl. 1–2; 4) and describe in details the artifacts donated by S. Cociuba to the museum in Arad in 1971. This is due to the fact that until now the bronze items have been precariously illustrated, some drawings do not match the reality and available descriptions are incomplete. As for the ceramic pots discovered on this occasion and preserved at the Museum of Arad, they have not been

<sup>29</sup> Zdroba, Barbu 1976; Petrescu-Dâmbovița 1977, 93, pl. 142/9–17; Pădurean 1985, 34; Pădurean 1990, 142; Pădurean 1993, 22, Pl. IV/4, 6; Kacsó 1992; Gumă 1993, 166, 289; Gumă 1995, 103; Gumă 1997, 54, 61; Chirilă *et al.* 1999; Bejinariu 2003; Luca 2005, 152–154; Luca 2006, 108–109; Luca 2010, 108–109; Sava 2011; Mărginean, Băcuț-Crișan 2015; Kacsó 2015.



published so far. I also chose to illustrate the pottery discovered on this occasion but preserved in the collection of the museum in Baia Mare (Pl. 3).

1. *Bracelet* (CMA<sup>30</sup>, Inv. No. 14906, Pl. 1/4a–4b), made of bar rectangular in section, wide, with thinned ends. The outer part is decorated with five parallel, horizontal ribs, with the central one in higher relief. A small perforation was made on one side of the bar. The traces of casting are very discrete as the item was well finished. Light green patina is preserved on the largest part of its surface and a small part of the ribs area is golden yellow in color. Length: 16.9 cm, inner diameter: 6.6 × 4.92 cm, outer diameter: 7.2 × 5.42 cm, width: 1.52 cm, thickness: 0.42 cm, weight: 34.2 gr.

2. *Bracelet* (CMA, Inv. No. 14907, Pl. 1/2a–2b), similar to item no. 1. More than half of the item is preserved. The bracelet is well finished. By the breaking point the item is slightly outwardly bent. Light green patina is preserved over most of the item's body and in the rest it is golden yellow in color. Length: 11. cm, inner diameter: 5.7 cm, outer diameter: 6.44 × 4.5 cm, width: 1.58 cm, thickness: 0.4 cm, weight: 21 gr.

3. *Bracelet* (CMA, Inv. No. 14908, Pl. 1/3a–3b), made of bar round in section, becomes narrower towards the margin and has the ends close together. The outer part is decorated thus: vertical concentric incisions at the end, groups of horizontal, zigzag incisions on both sides towards the centre, followed by vertical incisions and then by zigzag incisions, with a row of vertical incisions in the middle. The item is well finished. On one side one notes a series of scratch marks that seems to have been made ever since Prehistory. On most of the body the patina is dark green, in some areas oxidized; where no patina has been preserved, especially on the inside, the item is golden yellow in color. Length: 17.6 cm, inner diameter: 5.08 × 4.22 cm, outer diameter: 6.4 × 5.58 cm, thickness: 0.8 cm, weight: 45.6 gr.

4. *Bracelet* (CMA, Inv. No. 14909, Pl. 1/5a–5b), made of a bar lozenge in section, with the ends gradually thinner. The outer side is decorated through the following combination: vertical incisions at the ends, flanked on the inside by four incision straps, two on each side, placed at an angle, with a row of vertical incisions in the middle. The item is well finished. On one side one can note, in two places, slight deteriorations caused by the modern handling of the item. The patina is light green in color, but in some areas the bracelet is golden yellow. Length: 17.7 cm, inner diameter: 6.02 × 4.6 cm, outer diameter: 7.12 × 5.4 cm, width: 0.8 cm, thickness: 0.68 cm, weight: 33.8 gr.

5. *Bracelet* (CMA, Inv. No. 14910, Pl. 1/6a–6b), made of a bar that is round in section and with the ends close together, thinned gradually. Undecorated. The light green patina is preserved over restricted areas, while the rest of the bracelet is strongly oxidized. Length: 15.3 cm, inner diameter: 4.7 × 4.2 cm, outer diameter: 5.6 × 5.1 cm, thickness: 0.5 cm, weight: 15.6 gr.

6. *Pin* (CMA, Inv. No. 14911, Pl. 2/2a–2b) with bitronconic head<sup>31</sup>. The upper part of the head is decorated with an incision that follows the contour of the margin and the lower part displays two parallel incisions placed at the meeting with the body. The upper part of the body is decorated with a row of slightly oblique incisions; under it one can note four oblique zigzag incisions that are poorly visible. On the bitronconic head the item displays cast marks. The patina is dark green and in some areas the item is oxidized. Length: 18.4 cm, diameter of the head: 1.2 cm, thickness: 0.6 cm, weight: 21.6 gr.

7. *Pin* (CMA, Inv. No. 14912, Pl. 2/3a–3b), with disk-shaped head. The body is strongly bent. Under the disk-shaped head the pin is decorated with two groups of horizontal incisions. The items' body is broken slightly below the ornament. One side of the head has been flattened ever since Prehistory; a bit above the breaking area one notes an empty area where the item has been broken and welded. The body of the pin displays asperities, especially in the upper part. The dark green patina shows oxidized traces. Length: 29.5 cm, diameter of the body: 2.2 cm, thickness: 0.72 cm, weight: 52 gr.

8. *Pin* (CMA, Inv. No. 14913, Pl. 2/1a–1b), similar to the item at no. 7. The body of the pin is broken in three pieces. The disk-shaped head shows traces of imperfect casting. The pin is slightly better finished than pin no. 7. The patina is dark green and some areas are strongly oxidized. Length: 31.2 cm, diameter of the head: 2.28 cm, thickness: 0.68 cm, weight: 52.6 gr.

9. *Dagger* (CMA, Inv. No. 14915, Pl. 1/1a–1b). On the blade one can note three ribs, two laterally placed, following the contour of the blade, and the third central. The side ribs are very flat, but the

<sup>30</sup> Arad Museum Complex.

<sup>31</sup> In Kacsó 2015, fig. 2/5 the pin Inv. No. 14911 is incompletely illustrated, without the row of four obliquely placed zigzag incisions located under the concentric, slightly oblique rows of incisions.

median one is in strong relief. The tip of the dagger is broken and by the breaking point the item is slightly bent. A large part of the hilt is broken and only one of the three rivet holes has been entirely preserved, with the rivet inside it. The blade is well sharpened but very worn; on one side, towards the tip, it displays a narrow hit mark. The item is well finished. The patina is dark green, but there are areas where golden yellow color predominates. Total length: 14.5 cm, blade length: 14.3 cm, blade width: 3.64 cm, thickness: 0.4 cm, weight: 49 gr.

10. *Cup* (CMA, Inv. No. 14919, Pl. 4/3a–3b), with heightened handle, flared rim and globular body; undecorated; fabric tempered with sand, reduction firing, of very good quality, very dark grayish brown in color, polished. Diameter of the mouth:  $7.1 \times 7$  cm; maximum diameter of the belly:  $7 \times 6.8$  cm; thickness: 0.5 cm.

11. *Cup* (CMA, Inv. No. 14920, Pl. 4/2a–2c), with heightened handle, flared rim and globular body; only a small part of the handle has been preserved; decorated with four vertical incisions under the handle; fabric tempered with sand, reduction firing, of very good quality, very dark gray in color, polished. Diameter of the mouth:  $7.1 \times 7$  cm; maximum diameter of the belly:  $7 \times 6.8$  cm; thickness: 0.5 cm.

12. *Cup* (CMA, Inv. No. 14922, Pl. 4/5a–5b), with heightened handle, flared rim and bitronconic body; one part of the upper section has been restored; decorated with rows of vertical incisions alternating with vertical prominences on the upper part of the body; fabric tempered with sand, good quality reduction firing, gray color, polished. Diameter of the mouth:  $5.9 \times 6.1$  cm; maximum diameter of the belly:  $7.7 \times 7.3$  cm; thickness: 0.4 cm.

13. *Cup* (CMA, Inv. No. 14921, Pl. 4/1a–1b), with heightened handle, flared rim and bitronconic body; handle missing, decorated on the belly with small vertical grooves alternating with circular prominences, while a horizontal row consisting of three narrow grooves is placed under the rim; fabric tempered with sand, oxidation firing on the outside and reduction firing core, good quality firing, reddish yellow on the outside, gray on the inside, burnished. Diameter of the mouth:  $9.6 \times 10$  cm; maximum diameter of the belly:  $9.8 \times 9.7$  cm; diameter of the base: 2.4 cm; thickness: 0.5 cm.

14. *Cup* (CMA, Inv. No. 14923, Pl. 4/6a–6b), flared rim, long neck, bitronconic belly, umbo-shaped base; the handle and a good part of the upper part are missing; decorated on the belly with small vertical grooves and a horizontal row of three narrow grooves under the rim; fabric tempered with sand, oxidation firing on the outside and reduction firing on the inside, very good quality firing, reddish yellow outside, gray inside, burnished. Approximate mouth diameter: 7 cm; maximum belly diameter:  $8.4 \times 8.1$  cm; diameter of the base: 2.4 cm; thickness: 1.5 cm.

15. *Cup fragment* (CMA, Inv. No. 14924, Pl. 4/4), with heightened handle, flared rim, long neck and bitronconic belly; undecorated; only one piece of the upper body and the handle are preserved; fabric tempered with sand, good quality reduction firing, gray color, burnished. Length: 7.2 cm; width: 5.1 cm; thickness: 1.2 cm.

## Discussions

In archaeological literature, the first mention of the stray finds dated to the Late Bronze Age from Felnac “Complexul Zootehnic” features in the corpus dedicated to the bronze deposits on the territory of Romania compiled by M. Petrescu-Dîmbovița<sup>32</sup>. On the basis of data available at that time, M. Petrescu-Dîmbovița catalogued the discovered artifacts as part of a deposit of the Cincu-Suseni series, thus to stage Ha. A1<sup>33</sup>. On the basis of the analysis of the entire lot of artifacts discovered during the excavations for the foundation of the zootechnical complex, preserved in four museums,

<sup>32</sup> Petrescu-Dîmbovița 1977, 93, pl. 142/9–17. Data was taken over in other publications as well, among which Chirilă *et al.* 1999, 67–68, nos. 2–3, Bejinariu 2003, 68.

<sup>33</sup> M. Petrescu-Dîmbovița mentions the following items as part of the deposit: one dagger, five bracelets, three pins and two pieces of raw bronze (Petrescu-Dîmbovița 1977, 93). According to M. Petrescu-Dîmbovița the artifacts mentioned from Felnac have the following inventory numbers: 14904–14913 and 14915. One must mention that these are the items preserved at the Museum of Arad. By consulting the inventory ledger of the Archaeology Department of the Museum of Arad one notes that inventory numbers 14904 and 14905 represent two iron slug pieces discovered during E. Dörner's excavation in Curtici “La Plopi” and belong to the 3<sup>rd</sup>–5<sup>th</sup> century. Thus the pieces of raw bronze, in fact pieces of slug, were discovered in Curtici and not in Felnac besides the mentioned bronze items.

the interpretation of the above mentioned bronze artifacts<sup>34</sup> as part of a deposit can no longer be supported.

Overall, the stray finds discovered during the construction of “Complexul Zootehnic” seem rather to be funerary inventories, as other publications also argue<sup>35</sup>. In this context one must mention the testimony of one of the workers who have discovered the artifacts: we recovered “large pots full of ash and bones among which there were objects made of bronze”<sup>36</sup>. On the basis of the identified artifacts and of analogies in the area one can state<sup>37</sup>, with some caution, that both incineration and inhumation were employed in the cemetery from Felnac “Complexul Zootehnic”.

Taking into account the fact that these artifacts were discovered by chance and no corresponding observations are available, categorical statements on the topic must be regarded with due skepticism. Still, existing evidence converge to the opinion that the construction works of the zootechnical complex in Felnac have disturbed a Late Bronze Age cemetery.

As for the dating of the artifacts discovered by chance and implicitly of the cemetery, the topic has already been discussed<sup>38</sup>. I will just mention that the cemetery in Felnac “Complexul Zootehnic” is dated to a wide chronological interval, *i.e.* Late Bronze Age (LBA I-III/Bz. B-Ha. A1).

The excavations performed by M. Zdroba and M. Barbu during three campaigns in the area of the water purification station located ca. 250 m north of the buildings of the zootechnical complex have led to the identification of traces of a settlement dated to the end of the Bronze Age. The preserved documentation indicates that habitations subsequent to the Bronze Age have disturbed the depositions corresponding to this period. The only archaeological feature that can be dated to the Bronze Age is a large pit, partially identified in surface B. One can also mention Late Bronze Age pottery fragments discovered in the archaeological layers corresponding to the third-fifth, eleventh-thirteenth and fourteenth-sixteenth century.

By analyzing the entire documentation I have noted that actual references to the prehistoric discoveries only feature in the excavation diary; the few references label the finds generally as being of the “Hallstatt-type”. In these conditions the clear chronological determination of prehistoric contexts becomes almost impossible. One must mention the fact that only the excavation diary for year 1975 includes mentions of the discovered prehistoric pottery. As one can easily observe these mentions are lacunal and the stratigraphic context is missing: “in surface A, at -0.55, we found fragments of cauldrons, Hallstatt-type pottery and one knife blade”; “in surface B at -0.70 m one fragment from a fish-trey” or “in S1, grid cell C24 at -0.80 we found a fish frying plan”.

It becomes apparent that the available documentation has not been very useful in identifying certain contexts that might have belonged to the Prehistoric Era. Still, the preserved documentation also includes a series of ground and profile drawings of the excavated archaeological units. Thus, on the drawings of the profiles and ground level of surface B the authors have illustrated the only prehistoric pit recorded during the excavations (Fig. 13)<sup>39</sup>. The two profiles of surface B suggest that the pit became visible around the depth of 1.05 m; at the same time the inner depth of the pit varied between 1.08 and 0.30 m. Its width and length cannot be determined since the feature has not been documented in the surface ground drawing; the latter drawing only illustrates part of the pit, preserving ash and burning traces. As for the dating of the pit, the information is unclear. The drawing made in 1975 indicates that the pit belongs to the “Hallstatt” Era. Still, by corroborating the documented stratigraphy with the pottery discovered in surface B at the depth of 1.30 – 1.40 m (Pl. 9/1–2), the pit rather seems to belong to the Middle Bronze Age, maybe Late Bronze Age I.

The field surveys performed in 2008, 2013 and 2015 have allowed me to delimit the approximate

<sup>34</sup> See in this chapter the catalogue of bronze artifacts, nos. 1–5, 7–9, 13.

<sup>35</sup> Kacsó 1992, 97; Sava, Andreica 2013, 63, footnote 51; Kacsó 2015, 25.

<sup>36</sup> Kacsó 1992, 97, 25.

<sup>37</sup> For the close area one can mention the following bi-ritual cemeteries: Pecica “Sit 14” (Sava, Andreica 2013, 52; Sava, Deac 2016), Tápé (Trogmayer 1975), and Szentes “Nagyhegy” (Nagy 2005, 7–8). For Eastern Hungary one mentions the bi-ritual cemetery from Tiszafüred (Kovács 1975), Egyek (Kovács 1966, 66), Rákócziálva (Kovács 1966, 66), Mezőcsát (Kovács 1975, 41).

<sup>38</sup> Petrescu-Dâmbovița 1977; Kacsó 1992; Bejinariu 2003; Kacsó 2015.

<sup>39</sup> The ground drawing of surface B marks only the area inside the pit where burning and ashes have been identified; one can note (Fig. 13) that the edges of this area and other details have not been represented on the drawing.

area covered by the multi-stratum site in “Complexul Zootehnic” (Fig. 2)<sup>40</sup>. Over the entire northern side of the site the archaeological depositions follow the contour of the terrace and on the southern side pottery fragments have been identified until ca. 50/100 m from the precinct of the “Complexul Zootehnic”<sup>41</sup>. An area where few pottery fragments could be collected was identified towards the south-west, at some distance from the site’s maximum concentration of archaeological material. In approximate dimensions, one can say that the north-south axis of the site extends over 450 m and its east-west axis over 650 m. One must also keep in mind the fact that most of the Late Bronze Age shards were discovered on the northern side, where the terrace enters deepest into the floodable meadow. Naturally, pottery fragments from this era were discovered over the entire surface of the site. Besides Bronze Age pottery we have also identified gray fragments from wheel-thrown pots that can be dated to the third-fifth century; the latter were found in small numbers, but evenly spread over the entire surface of the site. During the surveys we have identified many eleventh-thirteenth-century pottery fragments, especially on the north-eastern and eastern sides.

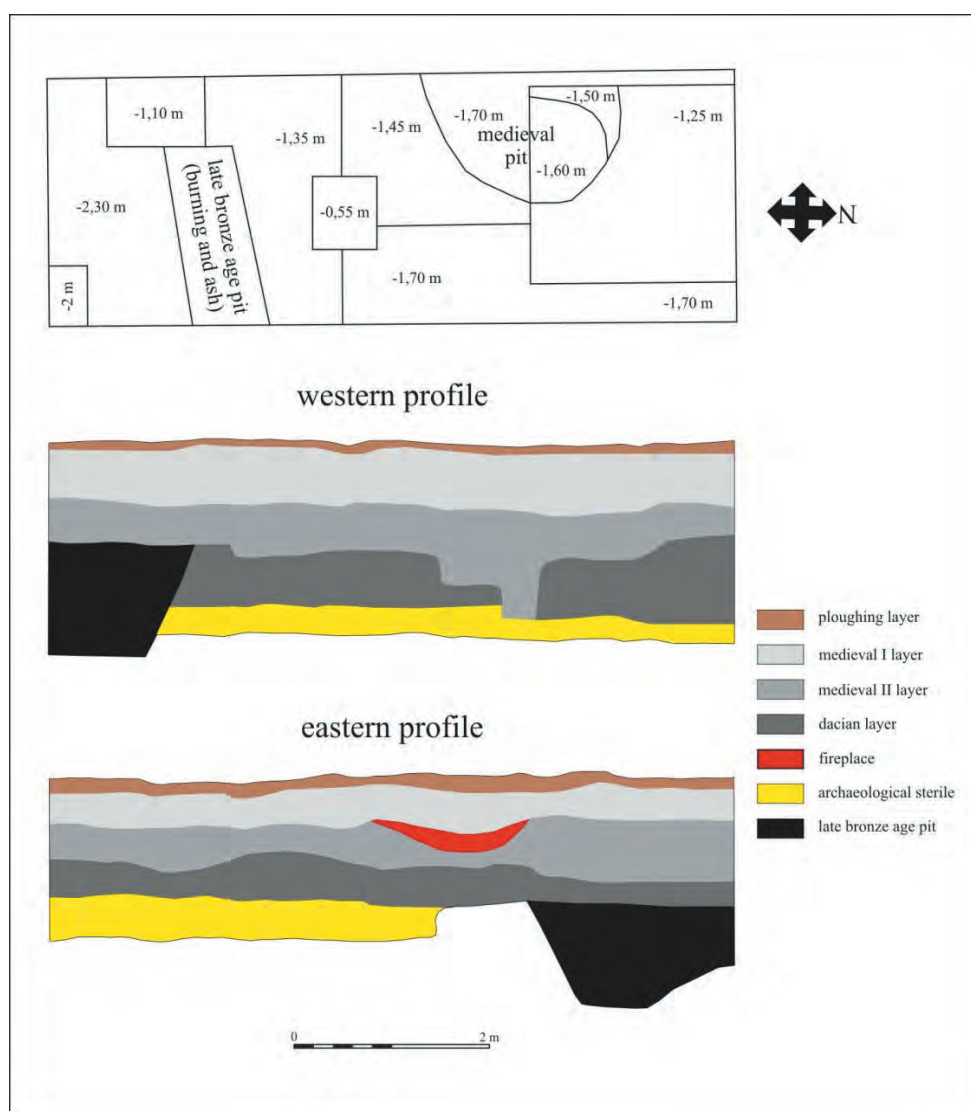


Fig. 13. Drawing of surface B.

<sup>40</sup> The field surveys have been performed together with George Pascu Hurezan and Dr. Florin Mărginean.

<sup>41</sup> Nevertheless, the brief documentation preserved in the archive of the Museum of Arad regarding the archaeological surveillance performed in 1972 during the construction of certain buildings on the platform reveal the discovery of artifacts and pits that contained pottery belonging to Late Bronze Age, the third-fourth century and the eleventh-thirteenth century. Despite the fact that no pottery fragments were identified at ground level around the zootechnical platform, the documentation compiled in 1972 very clearly indicates the fact that the multi-stratum site also extends under the zootechnical complex.



The analysis of the distribution of Late Bronze Age pottery discovered during the 1975–1977 excavations coordinated by M. Zdroba and M. Barbu indicates that such artifacts were only identified in trenches S1 and S2 and in surfaces B and C (Fig. 6). The mentioned trenches have been located towards the northern edge of the plateau, thus one can easily note that Late Bronze Age artifacts have not been found in the central part. This slightly bizarre situation was also encountered in the case of the discoveries from the First Iron Age.<sup>42</sup> The fact that pottery fragments from the Bronze Age only featured in the area indicated above can have a series of explanations. The most plausible is some error in the collection system of the archaeological material during the 1976 and 1977 excavations. The situation has been noted for all of the site's chronological horizons.

In the beginning of 2013 the extension of the construction of a company on the old platform of the zootechnical complex, consisting in the excavation of five pits (2 × 5 m) for the erection of the support pillars of a hangar, required archaeological surveillance. The new hangar was built in the south-western corner of the zootechnical complex platform. The excavation works did not lead to the discovery of archaeological vestiges, so one can state that the multi-stratum settlement was not affected, at least in this area, by the constructions of the zootechnical complex. The same industrial construction was extended in 2015 and the archaeological surveillance has again failed to identify archaeological vestiges.

Besides the already discussed discoveries one can also mention four bronze artifacts (one button, one fragment from a tanged knife and two saw blades) recently published and considered to have been part of a deposit<sup>43</sup>. According to data presented by C. Kacsó the artifacts were acquired by the museum in Oradea together with those from Felnac "Complexul Zootehnic". The author mentions that the deposit consisting of the four artifacts and the dagger illustrated on Pl. 1/1 were found on the same site. Naturally the presented data must be regarded with due caution, since no piece of information on the context of discovery is available.

## Conclusions

Based on the analysis performed on the stray finds and of the discoveries made during the systematic excavation, one can state that the site in Felnac "Complexul Zootehnic" represents a benchmark in the research of the Late Bronze Age in the Lower Mureş region. Unfortunately, the stray finds unearthed on various occasions or the systematic excavations performed do not provide an overview picture of this archaeological site. By studying the bronze artifacts, the few pots and the limited quantity of information available on the context of the discoveries one can state that the zootechnical platform in Felnac has disturbed a Late Bronze Age cemetery. A contemporary settlement is located in close proximity of the cemetery, but data are also precarious. The three archaeological campaigns performed for the construction of the water purification station have led to the identification and documentation of a single prehistoric archaeological feature; it can be dated, with due caution, to the Middle Bronze Age or the first stage of the Late Bronze Age.

In order to resume the point, I mention that from a chronological perspective the most numerous pottery fragments identified during the systematic excavations belong to stage LBA II-III (Bz. D-Ha. A1). Besides these works have also revealed the preservation of some pottery fragments decorated with incisions or circular impressions that might indicate an earlier habitation, possibly from LBA I (Bz. B-C). As already mentioned, the cemetery discovered on this spot belongs to the same chronological stage, LBA I-III/Bz. B-Ha. A1. Considering the wide chronological determination of both cemetery and settlement, one must not exclude the contemporaneity of the two archaeological objectives.

<sup>42</sup> Sava 2011, 84–85.

<sup>43</sup> Kacsó 2015, 30–31, fig. 4/6–9.

## Annexes

Arad County Museum  
No. 1782/15.XI.1972

To

The Institute of Archaeology Bucharest  
I. C. Frimu St. 11

In answer to your address No. 3269/1972 we hereby send the following note for the chronicle of archaeological excavations performed in 1972:

### 3. Felnac (Arad County)

Long and deep trenches were dug in the eastern end of the municipality on a plateau behind the Swine Complex, located between the road and the high bank of the Mureș, for the setting of a water purification station. On site investigations and the rescue of a rich archaeological material have led to the identification of the following certain traces of settlements or graves belonging to several eras: 1. Hallstatt-type layer with small pots and bronze jewelry objects (bracelets, long pins etc.) 2. Garbage pits from the fourth century A.D. filled with ashes and two categories of pottery fragments: wheel-thrown, gray and hand-modeled, blackish brown; 3. Sarmatian graves from the third-fourth century A.D. with inventories consisting of beakers, beads, bracelets, bronze brooches etc.; 4. Pits from a settlement from the Early Feudal Period, with animal bones and pottery dated to the tenth-thirteenth century A.D. (including fragments of clay pails). Research team: Egon Dörner, Mircea Zdroba, Mircea Barbu.

Author of the note: Egon Dörner

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## Archaeological research preliminary report

### Felnac archaeological excavation site

The team consisted of Mircea Zdroba and Mircea Barbu from the Arad County Museum. The 1975 excavations represent the beginning of lengthy researches in an archaeological station that stretches from the 1<sup>st</sup>–2<sup>nd</sup> century A.D. until the 14<sup>th</sup> century.

The archaeological station is located on the border of the municipality of Felnac, 1 kilometer north-west [*sic!*] from its center, on a terrace that rises to ca. 200 meters above River Mureș.

Researches in Felnac started in 1972 with a field walk in the area of the Zootechnical Complex the foundations of which were being dug at the time.

On that occasion we have rescued reconstructable and fragmentary pottery materials that have led to the identification of a settlement with several habitation levels.

During the first stage we have marked out trench S1, oriented north-south over a distance of 52 meters. The grid was performed on the eastern side of the section. The trench measured 1.5 meters in width. We also opened squares A, B, C with the size of 7 × 5 m, 7 × 3 m and 3.5 × 3 m.

The layer of virgin soil was found at an average depth of 1.80 m.

Chronologically, the oldest culture layer belongs to the Classical Dacian Civilization (1<sup>st</sup> century B.C. – 1<sup>st</sup> century A.D.). In this layer we discovered fragments of storage pots decorated with alveoli girdles, fragments of Dacian fruit bowls and Dacian cups. Strong traces of burning and adobe became apparent in the area of grid cells 2–4. Surface A was marked out because of this, with the dimensions of 7 × 5 meters. Inside this square we have identified traces of adobe and a hearth; we also managed to identify the contours of a pit-house that was ovoidal in shape.

Then came a layer of ceramic material characteristic to the 3<sup>rd</sup>–4<sup>th</sup> century A.D. from which we recovered bluish gray ceramic material made on the potters' wheel. Inside surface C, measuring 3.5 × 3 meters we have identified a 3<sup>rd</sup>–4<sup>th</sup> century A.D. pit with characteristic pottery and we managed to record a footed pot.

The largest part of the recovered archaeological materials can be chronologically included to the period of the seventh-eleventh century. We also found pot fragments and rims characteristic to the 7<sup>th</sup> century. To this category of pots one can include an item rescued during field walking, from a pit that seems to have been that of an oven. The pot's rim is much accented. Under the rim there is a decoration consisting of horizontal lines and under it there is a frieze of stylized vegetal elements. It seems that the pot fulfilled a ritual function.

To the same century one can also date a grave discovered on the eastern side of surface A. The grave was

discovered at the depth of 1.10 meters. It is oriented east-west; the head oriented to the east facing west. As funerary inventory, an iron buckle was identified in the area of the pelvis. Near the head, on the left side, we found a 7<sup>th</sup> century pot similar to the pots from Avar graves.

Traces of a ninth-tenth-century dwelling were identified in the area of grid cells 9–21 and in surface B. We recovered rich pottery materials with decoration consisting of striations and waves typical to the Dridu Culture. A storage pit and remains of an oven were found in close proximity of the pit-house in question.

Out of the discovered pottery material we mention an impressive number of pottery fragments of clay pails, chronologically belonging to the 11<sup>th</sup>–12<sup>th</sup> century.

We also found a 14<sup>th</sup>–15<sup>th</sup> century dwelling that intersected the 9<sup>th</sup>–10<sup>th</sup> century pit-house in the northern part. Two lozenge-shaped arrow heads from the 12<sup>th</sup>–14<sup>th</sup> century were discovered near this medieval dwelling. As pottery material we note the discovery of two pot rim fragments characteristic to the fifteenth century.

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Arad County Museum

### Archaeological research preliminary report

Station: Felnac

Campaign: 1975

Team: Mircea Zdroba and Mircea Barbu

Character of research: lengthy

#### A. Data on the station

##### a. Station location

The archaeological station is located on the border of the municipality of Felnac, 1 km north-west [sic!] from its centre, on a terrace that rises to ca. 200 m above River Mureş.

##### b. History of researches

The station was discovered during a field research performed in 1972 by a team from the museum consisting of Mircea Zdroba, Mircea Barbu and Egon Dörner. On this occasion, in the area if the zootechnical complex the foundations of which were being excavated at the time, they discovered pottery materials modeled by hand or on the potters' wheel. One notes the Dacian pottery fragments dated to the 1<sup>st</sup> century B.C. and the 1<sup>st</sup> century A.D., blackish brown and decorated with alveoli girdles and knobs. The team has also collected fragments dated to the 3<sup>rd</sup>–4<sup>th</sup> century. They have also recovered a pot typologically dated to the seventh century, decorated with striations under the rim and below them with a leaf-shaped motif.

##### c. The nature of the station

The archeological station includes settlements that extend from the 1<sup>st</sup> century B.C. – 1<sup>st</sup> century A.D. to the 13<sup>th</sup>–14<sup>th</sup> century. The lengthy use of the settlement is due to the fact that in old times the course of the Mureş ran in the close proximity of the promontory, ensuring the water supply and more efficient defense.

##### d. The settlement's stratigraphy and chronology

The excavations performed in the summer of 1975 have confirmed the existence of several strata of material culture. In the vegetal layer we found varied pottery fragments. Chronologically the oldest culture layer belongs to the Classical Dacian Civilization, 1<sup>st</sup> century B.C. – 1<sup>st</sup> century A.D. In this layer the team found fragments of storage pits decorated with alveoli girdles, fragments of fruit bowls and Dacian cups. It was followed by a layer with pottery material characteristic to the 3<sup>rd</sup>–4<sup>th</sup> century.

The largest part of the recovered archaeological materials is chronologically dated to the period of the seventh-eleventh century.

##### e. Presentation of the excavations' ground plan

Trench S1 was initially opened, oriented north-south, with the length of 52 m. In width the trench measured 1.5 m. The grid was performed on the eastern side of the section, every 2 meters. Surfaces A, B and C were also opened, measuring 7 × 5 m, 7 × 3 m, 5 × 3 m. The virgin soil layer was found at an average depth of 1.70/1.80 m.

#### B. Description of the discoveries according to strata and levels

##### a. Important elements of systematization and habitation

Trench S1, in the area of grid cells 2–4, has revealed traces of adobe and burning and a hearth. Due to this the team marked out surface A and managed to identify a pit-house-type dwelling that was ovoidal in shape. Another hearth was found inside the hut. In the same area archaeologists recovered an impressive quantity of Dacian pottery dated to the 1<sup>st</sup> century B.C. – 1<sup>st</sup> century A.D. In surface C and in the trench they have identified a pit containing pottery from the 3<sup>rd</sup>–4<sup>th</sup> century. A 9<sup>th</sup>–10<sup>th</sup> century dwelling was found in the area of grid cells

19–20 and in surface B. We recovered a rich pottery material with decorations consisting of striations and waves characteristic to the Dridu Culture.

To the seventh century one can also date a grave discovered on the eastern side of surface A at the depth of -1.10 m. It is oriented east-west, with the head towards the east, facing west. As funerary inventory, an iron buckle was identified in the area of the pelvis. Near the head, on the left side, we found a seventh-century pot similar to the pots from Avar graves.

b. Brief description according to strata and levels

The Dacian stratum contained an impressive number of storage pots, fruit bowls and cups. They are made of grayish brown fabric decorated with alveoli girdles and knobs. In the restoration lab of the museum specialists have started to restore a large pot / storage pot found in close proximity of the Dacian hut. The third-fourth-century pottery fragments are wheel-thrown, made of gray fabric.

The pots that belong to the 7<sup>th</sup>–11<sup>th</sup> century have stressed rims, while striations and waves can be noted as part of their decoration. From the same period archaeologists found 11<sup>th</sup> century clay pails, some of which have already been restored at the museum.

### C. Conclusions

From a scientific perspective, the 1975 campaign in Felnac has confirmed the existence of a settlement with several habitation layers from the 1<sup>st</sup> century B.C. until the 14<sup>th</sup> century. For the future, archaeological excavations will have to prove the existences of an extended settlement on this promontory. It is very important that for the first time in our county specialists have identified a 9<sup>th</sup> century Dridu-type settlement of the autochthonous Romanian population.

For the patrimony of the museum, the excavations have provided material that can be used, after restoration, in the museum's temporary exhibitions. Archaeological works are hindered for the largest part of the year by agricultural cultures.

### D. Graphic and photographic documentation

The situation plan, profiles and detailed ground plans, together with the photographs, are stored at the County Museum. The topographic plan has not yet been performed due to the lack of a topographer.

### E. Valorization of the discoveries

Will be performed by the introduction of the restored materials in permanent exhibitions and by publishing a scientific work at the completion of the excavations in Felnac.

### F. Protection operations

There have been as yet no cases that required rescue operations and *in situ* conservation operations of the archaeological vestiges.

### G. Legal documentation hand in

The entire excavation documentation is preserved at the Museum of Arad.

### H. Place of object preservation

The objects found during the excavation are kept at the Arad County Museum.

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Arad County Museum

## Archaeological research preliminary report

Station: Felnac

Campaign: 1976

Team: Mircea Zdroba and Mircea Barbu

Character of researches: lengthy

### A. Data on the station

#### a. Location of the station

The archaeological station is located on the border of the municipality of Felnac, 1.5 km north-east [sic!] from the village centre, on a terrace at ca. 200 m above River Mureş.

#### b. History of research

The station was discovered through field surveys performed in 1972 by a team from the museum consisting of Mircea Zdroba, Mircea Barbu and Egon Dörner. On that occasion, in the area of the zootechnical complex the foundations of which were being excavated, they discovered pottery fragments, modeled by hand or wheel-thrown, and fragments of grinding stones. They noted Dacian pottery fragments dated to the 1<sup>st</sup> century B.C. – 1<sup>st</sup> century A.D., blackish brown in color, decorated with alveoli girdles and knobs. They have also collected



fragments dated to the 3<sup>rd</sup>–4<sup>th</sup> century. On that occasion they have also recovered pottery fragments that from a typological perspective belonged to the seventh century A.D.

*c. Nature of the station*

The archaeological station includes habitations that extended from the period of the 1<sup>st</sup> century B.C. – 1<sup>st</sup> century A.D. until the 13<sup>th</sup>–14<sup>th</sup> century. The lengthy use of the settlement is due to the fact that in old times the river flowed right by the promontory and this ensured the water supply and at the same time more efficient defense.

*d. The settlement's stratigraphy and chronology*

The 1976 excavations were performed in continuation of those during 1975 and have reconfirmed the existence of several strata of material culture.

The oldest culture stratum from a chronological perspective belongs to the Classical Dacian Civilization, 1<sup>st</sup> century B.C. – 1<sup>st</sup> century A.D. From this period the team recovered numerous fragments of storage pits decorated with alveoli girdles, fragments of fruit bowls and Dacian cups and spindle weights. The excavations performed so far and the field surveys point to the existence of a large Dacian settlement.

The 1976 excavations have also identified traces of habitation from the 3<sup>rd</sup>–4<sup>th</sup> century, with numerous pottery fragments characteristic to this era.

The 1976 excavations have also led to the identification of numerous archaeological materials that are chronologically dated to the seventh-twelfth century.

*e. Presentation of the excavations plan*

During the first stage of the 1976 campaign we have extended trench S1 northwards by 22 meters, until near the promontory's edge. In width the section measured 1.5 m and the grid was performed on its eastern side, every two meters. The average depth of the section was 1.70–1.80 m.

Trench S2 was then marked out on the western side of trench S1, oriented east-west and perpendicular to the first trench. Trench S2 measured 22.5 m in length and 1.5 m in width. Its average depth measured 1.50–1.60 m.

It was opened in order to find the settlement traces on the north-western side of promontory. The grid of trench S2 was performed on the southern side, every two meters.

The excavations of the 1976 campaign continued with the marking of trench S3.

Trench S3 was opened on the eastern side of surface A, performed in 1975. This section measured 18 m in length and 2 m in width. It was oriented along the east-west direction. The grid was performed on the southern side, from the west, near the square, to the east. The trench could not be longer due to agricultural cultures. The average depth of this trench was of ca. 1.80 m. Surface D, measuring 3 × 2 m and with an average depth of 1.60 m, was opened on the northern side of surface B, 2 m away from it.

**B. Description of the discoveries according to strata and levels**

*a. Important elements of systematization and habitation*

The contour of a Dacian-type hut was identified in the continuation of trench S1, in the area of m 54–m 57, in the western wall of the trench.

The bottom of the hut is ca. 1.90 m from the current ground level. Hand-modeled pottery fragments from the 1<sup>st</sup> century B.C. – 1<sup>st</sup> century A.D. were found both inside and outside the hut.

A Dacian-type hearth was found in trench S2, in the area of grid cells nos. 5–6, at the depth of 1.20 m. Two storage pits from the fourteenth-fifteenth century were found in the area of grid cells 4–6. The bottoms of the pits are located approx. 2.5 meters from the current ground level.

One grave pit from the seventh century became apparent in trench S3, in the end of grid cell 1 and in grid cell 2, at the depth of – 1.30 m. A large part of the grave was in the northern profile of the trench. The grave is oriented east-west, with the head towards the east and the face and legs towards the west. It is the second grave discovered during the two excavation campaigns. A jar-type pot from the seventh century was found near the head, on its left side, similar to the pot discovered in the grave excavated in 1975. The contours of two Dacian-type huts, similar to the one mentioned above, were identified in section and profile in trench S3, in the area of grid cells 2–3 and 6–7.

Surface D was opened in order to allow for the excavation of an oven the edge of which has been identified during the 1975 campaign. The oven was located near the ninth-tenth century hut that had been dug out in 1975. Typologically, the oven belongs to the "baking oven" type, also encountered in other Dridu-type settlements.

*b. Brief description according to strata and levels*

A large number of fragments from storage pots, Dacian cups and spindle weights were found in the culture layer that belongs to the Classical Dacian Civilization. They are made of grayish brown fabric and their decoration consists of alveoli girdles and knobs. In the composition of the fabric one also notes micaceous sand. A fishing hook was found near the hut in trench S1.

The team also discovered pottery materials dated to the third-fourth century. These were made on the potters' wheel out of very well fired gray fabric.

The pottery is dated to the period of the seventh-twelfth century and is rather varied. Near the grave

archaeologists discovered the jar-pot discussed under heading e. Several pot rims from the same era were also discovered.

For the period of the 9<sup>th</sup>–10<sup>th</sup> century, the team has recovered pottery fragments similar to the ones from the 1975 campaign, displaying decorations consisting of striations and wavy lines. A great number of pottery fragments from clay pails and pot rims were discovered; such elements are dated to the second half of the 11<sup>th</sup> century – first half of the 12<sup>th</sup> century.

### **C. Conclusions**

The 1976 campaign in Felnac has led to the on site delimiting, in the north-western part of the promontory, of the extended settlement with several layers of habitation, from the first century B.C. until the 14<sup>th</sup> century. The 1976 excavations have enriched archaeological knowledge on the 9<sup>th</sup>–10<sup>th</sup> century settlement of the Romanian population. Future researches are aimed at extending the excavations in this settlement, finding the cemetery corresponding to the Dridu-type settlement and recovering archaeological material from this period.

For the museum's patrimony, the excavations have provided materials that can be used in the exhibition activity of the museum.

### **D. Graphic and photographic documentation**

The situation plan, profiles and details profiles and the topographic plan sketch, together with the photographs, have been handed in at the Arad County Museum.

### **E. Valorization of the discoveries**

Will be performed by the introduction of the restored materials in the exhibitions organized by the museum, by publishing preliminary notes and by completing a scientific work at the conclusion of the excavations.

### **F. Protection operations**

There have been as yet no cases that required rescue operations and *in situ* conservation operations of the archaeological vestiges.

### **G. Legal documentation hand in**

The entire excavation documentation is preserved at the Museum in Arad.

### **H. Place of object preservation**

The objects found during the excavations are kept at the Arad County Museum.

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Arad County Museum  
Archaeological station Felnac  
"Complexul Zootehnic"

1976 Archaeological Excavation Report

## **Explanatory report**

The archaeological station of Felnac is located in the border of the municipality of Felnac, 1 km north-east from the village centre, on a terrace ca. 200 m above the current course of River Mureş.

The researches began with field surveys performed in 1970–1972, when varied pottery fragments, from the Iron Age until the 14<sup>th</sup>–15<sup>th</sup> century, were recovered during excavations for the foundations of the zootechnical complex.

Excavations were first performed in 1975 by the Arad County Museum. During the first stage the team has opened a trench measuring 52 m in length and 1.5 m in width, labeled S1. Three surfaces were also opened, labeled A, B, C.

The excavations were continued in 1976 with the extension of trench S1 by 30m towards the north. Two more trenches were opened, S2 and S3; the first measured 32 m in length and 1.5 m in width, while the second measured 18 m in length and 2 m in width. Due to the fact that an oven became apparent in the profile of trench S1, specialists opened surface D that measured 4 × 4 m.

The performed excavations have confirmed the existence of an archaeological station with multiple stratigraphy.

According to the excavations performed in that area, the oldest culture layer belongs to the Classical Dacian Civilization (1<sup>st</sup> century B.C. – 1<sup>st</sup> century A.D.).

From this era archaeologists have discovered fragments of storage pots decorated with alveoli girdles, fragments of Dacian fruit bowls and cups and spindle weights. From the same era as well the team has identified two huts, one of which also contained a hearth.

Chronologically the subsequent culture layer belongs to the 3<sup>rd</sup>–4<sup>th</sup> century and from this period we have recovered pottery material that displays Roman influences.

The largest part of the archaeological material collected during the excavations can be dated to the period of the 7<sup>th</sup>–11<sup>th</sup> century.

To the 7<sup>th</sup> century one can date two graves, oriented east-west (with the head towards the east). The inventory of the graves consists of jar-pots found near the head on the left side and in one of the graves, on the pelvis, archaeologists found an iron buckle.

Numerous archaeological traces from the 9<sup>th</sup>–10<sup>th</sup> century were found over a large part of the excavations. Inside the sections and squares the team has identified two pits from the ninth-tenth century, with a rich ceramic material decorated with striations and waves, typical to that period over an extended area of the country. Near one of the dwellings we discovered a "baking-type oven" excavated in the greenish yellow soil (clay). One of the huts also contained a hearth. Numerous pottery fragments decorated with striations and waves over their entire body were discovered in the filling soil of the huts and near them.

We mention the fact that the excavation has revealed 14<sup>th</sup>–15<sup>th</sup> century habitation traces. We found traces of dwellings from this era and two storage pits near them, containing pottery fragments from the same era.

The research is autonomous, led by Mircea Zdroba and Mircea Barbu from the Arad County Museum.

Due to the richness of the archaeological material and of the special stratigraphy of the station in Felnac we believe that the continuation of the archaeological excavations is useful.

For the excavation to be performed in 1977 we have prepared the situation plan of the objective and the excavation ground plan for 1977.

### **Plan of Organizational Measures**

#### **A. Distribution of tasks among partners (institutions)**

The excavation is autonomous and all tasks are the responsibility of the Arad County Museum.

- Financing of the excavations and conservation works (A. Demian-chief accountant)
- Responsibility with technical-material supplies (Eduard Ivanof and E. Crîlov)
- Responsibility with wrapping measures, temporary storage, transportation and definitive storage (M. Zdroba, M. Barbu and Gh. Hîrcăianu)
- Financing of expenses connected to the scientific personnel and valorization expenses (A. Demian)
- Museum processing (Mircea Barbu, Mircea Zdroba)
- Responsibility with topographic survey measures, preservation and conservation (V. Cațavei, Gh. Hîrcăianu).

#### **B. Structure of the scientific and technical team**

The excavation is performed over a rather extended area and the sum of 7000 lei has been provisioned. Ca. 10 workers will be employed. The works will be coordinated by Mircea Barbu and Mircea Zdroba.

Photographs will be taken by team members and Gh. Hîrcăianu will process the bone material.

V. Cațavei will perform the topographic surveys.

#### **C. The common reference system – the code**

- Topographic code; F.1977.C.Z.
- Immobile discoveries codes
  - F.1977 C.Z. S.4 car.1-car-15/I
  - F.1977 C.Z. S.1 car.1-car-15/I
- Mobile discoveries codes
  - F.1977 C.Z. S.4 car.1-car-15/M
  - F.1977 C.Z. S.1 car.1-car-15/M

#### **D. Site management**

- Labor force will be ensured by hiring workers from the municipality and through the voluntary participation of pupils from the general school in Felnac.
- The scientific personnel will be lodged in the municipality.
- The discoveries will be temporarily stored in a room at the Zootechnical Complex.
- Primary conservation and restoration will be made on site by cleaning the archaeological vestiges and, if needed, ensuring the primary reconstruction of the items.

### **Research and conservation program**

#### *Distribution according to annual campaigns*

A. During this year we shall mark out a trench labeled S4, measuring 30–40 m in length and 2 m in width, perpendicular to the western side of trench S1. S4 will be perpendicular to the middle of surface A and will be thus in continuation of trench S3 in 1976. Also, trench S1 opened in 1975 will be extended southwards by approximately 30–40 m. These sections will be opened in order to allow for the identification of the habitation traces in the area.

B. Excavation period: 10 July – 1 August

C. Processing of the discoveries: Primary cleaning of the objects found during the excavations.

Restoration will be subsequently performed at the museum's restoration lab and at the zonal restoration center during the fourth trimester 1977.

The drawing of the items, plans and profiles will be performed until December 1st 1977.

Estimate:

#### **A. Technical estimate**

Necessary tools:

- 1 measuring tape 20 m – 120 lei
- 1 measuring tape 10 m – 75 lei
- 2 measuring tapes 2 m – 50 lei

Necessary materials:

- black and white films 6 pieces – 87 lei
- 1 color film – 45 lei
- 10 paper sack – 25 lei
- plastic bags 100 pieces – 40 lei
- paper bags 100 pieces – 25 lei
- 2 cotton wool packs – 12 lei

#### **B. Economical estimate**

Total cost of tools – 245 lei

Total cost of materials – 235 lei

Total cost of work force– 7000 lei

Traveling expenses specialists– 700 lei

#### **C. Drawn items**

Situation plan of the objective, scale 1:500

Detail plan of the excavations scale 1:50 and 1:20

Compiled by: MirceaBarbu

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Arad Museum County

### **Archaeological research preliminary report**

Station: Felnac "Complexul Zootehnic"

Campaign 1977

Team: Mircea Barbu, Mircea Zdroba

Character of the research: lengthy

#### **A. Data on the station**

##### *a. Location of the station*

The archaeological station is located on the border of the municipality of Felnac, between the village centre and the settlement of Călugăreni, 1.5 km north-east from the village centre.

It is located on a terrace rising ca. 200 m above the southern bank of River Mureș.

##### *b. History of research*

The station was discovered through field surveys performed in 1972 by Egon Dörner, Mircea Barbu and Mircea Zdroba. On that occasion, in the area of the zootechnical complex the foundations of which were being excavated, they discovered pottery materials, modeled by hand or wheel-thrown, and fragments of grinding stones. In the excavations for the foundations, in the profiles, they have noted household refuse pits and storage pits etc. They noted pottery fragments belonging to the Classical Dacian Era (1<sup>st</sup> century B.C. – 1<sup>st</sup> century A.D.), blackish gray in color, decorated with alveoli girdles and knobs. Pottery fragments dated to the 3<sup>rd</sup>–4<sup>th</sup> century were also found.

On that same occasion they have also recovered pottery fragments that from a typological perspective belonged to the second half of the first millennium.

Since 1975 the museum in Arad has started performing archaeological excavations in the area.

##### *c. Nature of the station*

The archaeological station includes habitations extended from the period of the 1<sup>st</sup> century B.C. – 1<sup>st</sup> century A.D. until the 13<sup>th</sup>–14<sup>th</sup> century. The lengthy use of the settlement is due to the fact that in old times river Mureș flowed right by the promontory and this ensured the water supply and at the same time more efficient defense

We mention the fact that Bronze and Iron Age archaeological materials were discovered in other spots in the borders of Felnac.

*d. The settlement's stratigraphy and chronology*

The 1975–1976 excavations, continued by those performed in 1977, have reconfirmed the existence of several strata of material culture.

The oldest culture stratum identified through the excavations belongs from a chronological perspective to the Classical Dacian Civilization (1<sup>st</sup> century B.C. – 1<sup>st</sup> century A.D.) Both performed excavations and field surveys point to the existence of an extended Dacian settlement. From this period the team has identified dwellings, hearths and has recovered a large quantity of archaeological material: especially pottery.

From this period the team recovered numerous fragments of storage pits decorated with alveoli girdles, fragments of fruit bowls and Dacian cups and spindle weights. The excavations performed so far and the ground researches indicate the existence of a large Dacian settlement.

The 1977 excavations have also reconfirmed the existence of a 3<sup>rd</sup>–4<sup>th</sup> century settlement.

The excavations performed last autumn have also led to the identification of numerous archaeological vestiges that are chronologically dated to the 7<sup>th</sup>–11<sup>th</sup> century.

*e. Presentation of the excavations plan*

Last year's campaign started with the marking out and opening of a new sector in trench S1 started ever since 1975.

The section was extended towards the south. Due to certain agricultural works, a trench of 25–30 m was left unexcavated, followed by section S1-III that measured 23 m in length and 1.5 m in width. The average depth of the section was of 1.60 m.

Then, in continuation of last year's works, we have opened trench S4. It was marked out and dug out in the area of surface A and trench S1 performed in 1975. Trench S4 was opened perpendicular to them, oriented east-west. It started at 0.75 m from the western bank of trench S1 and measured 12 m in length and 1.5 m in width. The average depth was of 1.80 m.

This year's campaign ended with the opening of trench S5. This section is perpendicular to trench S1-III in the area of surface A, at the ends of which we found Roman-type materials. It was marked out on the eastern side of trench S1-III and measured 10 m in depth and 2 m in width. Its average depth was of 1.60 m. In the case of all three sections, the grid was performed every two meters.

**B. Description of the discoveries according to strata and levels**

Based on the stratigraphic observations and the collected material one can conclude that the following culture layers were identified in trench S1-III. Along the entire trench we have identified a habitation layer from the Classical Dacian Civilization Era (1<sup>st</sup> century B.C. – 1<sup>st</sup> century A.D.). The layer has revealed a rich archaeological material, especially pottery.

One notes the large storage pots decorated with rather massive knobs and alveoli girdles.

We also found spindle weights and one weight fragment from a loom.

In trench S5, in the level corresponding to the Classical Dacian Civilization, besides the pottery material the excavations have also revealed a large fishing hook.

The subsequent layer that was well identified in the section belongs to the period of the 3<sup>rd</sup>–4<sup>th</sup> century. It seems that two pits identified in trench S5, towards its end, also belong to this period. We also believe that several Roman pottery fragments, among which one notes a beautiful *terra sigillata* fragment, belong to the same period, especially to the third century.

A hearth was found in trench S1-III, also dated to the third-fourth century era.

Through the excavations, archaeologists also noted in the performed trenches a culture layer that belongs to the era from the end of the first millennium (9<sup>th</sup>–10<sup>th</sup> century). For this period we have recovered pottery fragments that display striations and waves as decorative elements.

The performed excavations have led to the discovery of a large number of clay pail fragments and of some well profiled pot rims with angular decoration, dated to the 11<sup>th</sup> century-first half of the 12<sup>th</sup> century.

**C. Conclusions**

The 1977 excavations from Felnac, together with the results of the excavations from last years, have demonstrated the existence of a large Dacian settlement from the Classical Era in the north-western part of the promontory.

They have also confirmed the fact that the promontory was inhabited during the 3<sup>rd</sup>–4<sup>th</sup> century. One should note that in this context we started to find Roman-type materials as well (luxury and common pottery fragments).

The 1977 excavations have enriched the archaeological data on the 9<sup>th</sup>–10<sup>th</sup> century settlement that belonged to the Romanian population.

Future excavations aim at extending the researches regarding the classical Dacian settlement and the one dated to the 9<sup>th</sup>–10<sup>th</sup> century; intending to recover as much archaeological material from these periods as possible in order to enrich the museum's patrimony.



**D. Graphic and photographic documentation**

The situation plan, profiles and details profiles and the topographic plan sketch, together with the photographs, have been handed in at the Arad County Museum.

**E. Valorization of the discoveries**

Will be performed by the introduction of the restored materials in the archaeology exhibition of the museum. Popularizing articles on the excavations will be published in local media. Preliminary notes will also be published, we mention that a preliminary report of the 1975 excavations has already been published in *Ziridava* VI, the annual of the museum in Arad.

A monograph work will be written at the completion of the excavations.

**F. Protection operations**

There have been as yet no cases that required rescue operations and *in situ* conservation operations of the archaeological vestiges.

**G. Legal documentation hand in**

The entire excavation documentation is preserved at the County Museum in Arad.

**H. Place of object preservation**

The objects found during the excavations are kept at the storage of the Ancient History Department and at the conservation and restoration laboratory of the museum.

Mircea Barbu

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Arad County Museum

Project of archaeological excavations 1978

Archaeological station  
Felnac "Complexul  
Zootehnic"

**Explanatory report**

The archaeological station of Felnac is located on the border of the municipality of Felnac, 1 km north-east from the village centre, on a terrace ca. 200 m above the current course of the Mureş.

The researches began in 1970–1972, when pottery fragments belonging to several archaeological periods, from the Iron Age until the fourteenth-fifteenth century were recovered during the construction of tanks and pipes of the purification plant.

Systematic excavations started with the 1975 archaeological campaign; the works were led and financed by the M.J.A.<sup>44</sup> During the first stage of the works the team has opened trench S1 measuring 52 m in length and 1.5 m in width. Three surfaces, labeled A, B, C were also opened due to the materials discovered in this trench.

The excavations were continued in 1976 with the extension of trench S1 towards the north. Two more trenches were opened, S2 and S3; the first measured 32 m in length and 1.5 m in width, while the second measured 18 m in length and 2 m in width. Due to the fact that an oven became apparent in the profile of trench S1, specialists opened surface D. The surface measured 4 × 4 m.

According to the excavations performed during these archaeological campaigns, the oldest layer of material culture belongs to the Classical Dacian Civilization (1<sup>st</sup> century B.C. – 1<sup>st</sup> century A.D.). Archaeologists have discovered fragments of storage pots decorated with alveoli girdles, fragments of Dacian fruit bowls and cups and spindle weights. Two dwellings, one of which also contained a hearth, belong to the same period.

Fragmentary pottery material was recovered from the 3<sup>rd</sup>–4<sup>th</sup> century.

To the 7<sup>th</sup> century we have attributed two graves, oriented east-west. The inventory of the graves consisted of jar-pots found near the upper part of the skeleton on the left side and in one of the graves, on the pelvis, archaeologists found an iron buckle.

Numerous archaeological traces from the 9<sup>th</sup>–10<sup>th</sup> century were found in both the trenches and the surfaces. The team has discovered two huts with a rich ceramic material decorated with striations and waves. Near one of the dwellings we discovered a "baking-type oven" excavated in the greenish yellow soil. One of the huts also contained a hearth.

We mention the fact that the excavation has revealed 13<sup>th</sup>–15<sup>th</sup> century habitation traces, with two storage pits nearby

<sup>44</sup> Arad County Museum.

The 1977 campaign consisted of the opening of a new sector in trench S1, towards its southern part. Trench S1-III measures 23 m in length and 1.5 m in width, with an average depth of 1.60 m.

Trench S4 was opened in the area of surface A and trench S1, trenches opened in 1975, set perpendicularly, oriented east-west. It started 0.75 m from the southern bank of S1, measuring 12 m in length and 1.5 m in width. Average depth of 1.8 m.

Trench S5 was opened perpendicular to trench S1-III in the area of surface A; the square contained Roman-type materials; the section measured 10 m in length and 2 m in width, the average depth 1.60 m.

Based on the stratigraphic observations and the collected material we have identified a habitation level belonging to the Classical Dacian Civilization (1<sup>st</sup> century B.C. – 1<sup>st</sup> century A.D.).

One notes large fragments from storage pots with decorations consisting of massive knobs and alveoli girdles, spindle weights, loom weights, fishing tools.

Another well documented layer belongs to the period of the 3<sup>rd</sup>–4<sup>th</sup> century, represented by material specific to these centuries, as well as two storage pits.

One notes another culture layer, belonging to the 9<sup>th</sup>–10<sup>th</sup> century, as well as certain pottery materials belonging to the 11<sup>th</sup>–12<sup>th</sup> century.

Future excavations aim at extending the researches of the Classical Dacian and 9<sup>th</sup>–10<sup>th</sup> century and recovering archaeological material from these periods and discovering archaeological materials belonging to other periods.

### **Plan of Organizational Measures**

#### *a. Distribution of tasks among the partners (of the institution):*

- The excavation is autonomous and the tasks are the responsibility of the M.J.A.
- Financing of the excavations and conservation works (A. Demian chief accountant).
- Responsibility with technical-material supplies (E. Ivanof and E. Crilov).
- Responsibility with wrapping measures, temporary storage, transportation and definitive storage (M. Zdroba, M. Barbu and Gh. Iuga).
- Financing of expenses connected to the scientific personnel and valorization costs (A. Demian)
- Museum processing (M. Zdroba, M. Barbu).
- Responsibility with topographic survey measures, preservation and conservation (V. Cațavei and Gh. Iuga)

#### *b. Structure of the scientific and technical team*

- The excavation is performed over an extended area and the sum of 7000 lei has been provisioned. The works will be coordinated by M. Zdroba and M. Barbu.
- Photographs will be taken by team members and G. Iuga will process the bone material.
- V. Cațavei will perform the topographic surveys.

#### *c. The common reference system – the code*

- Topographic code T 1978, C.Z.
- Code of discoveries F 1978 CZ S5 – II car 1 – car 10/L  
F 1978 CZ S4 – IV car 1 – car 10/L
- Code of mobile discoveries F 1978 S5 – II car 1 – car 10/M  
F 1978 S4 – II car 1 – car 10/M

#### *d. Site management*

- Labor force will be ensured by hiring workers from the municipality.
- The scientific personnel will be lodged in the municipality.
- The discoveries will be temporarily stored in a room at "Complexul Zootehnic".
- Primary conservation and restoration will be made on site by cleaning the archaeological material, marking and, if needed, primary recording.

### **Research and conservation program**

#### **A. Distribution according to annual campaigns**

a. During this year we shall open trench S1-IV measuring 20 m in length and 2 m in width, in continuation of trench S1-III. Also, trench S5-II measuring 25 m in length and 2 m in width, in continuation of S5-I.

b. Excavation period: 1 October–15 October.

c. Processing of the discoveries

- Primary cleaning of the objects found during the discoveries.
- Restoration will be performed in the museum's restoration laboratory and that of the zonal restoration center during the fourth trimester of year 1978.
- The drawing of the items, plans and profiles will be performed until December 1st 1978.

**B. Estimate***a. Technical estimate:*

Necessary tools:

- 1 measuring tape 20 m – 120 lei
- 1 measuring tape 10 m – 75 lei
- 2 measuring tapes 2 m each – 50 lei

Necessary materials:

- black and white films – 87 lei
- 1 color film – 45 lei
- 10 paper sacks – 25 lei
- plastic bags – 100 buc.
- paper bags – 100 buc.
- 2 cotton wool packs – 12 lei

*b. Economical estimate*

- Total cost of the tools – 245 lei
- Total cost of the materials – 235 lei
- Cost of the labor force – 7000 lei
- Traveling expenses of the specialists – 800 lei

*c. Drawn items*

Situation plan of the objective, scale 1:500

Detail plan of the excavations scale 1:50 and 1:20

Compiled by M. Zdroba

**Acknowledgements**

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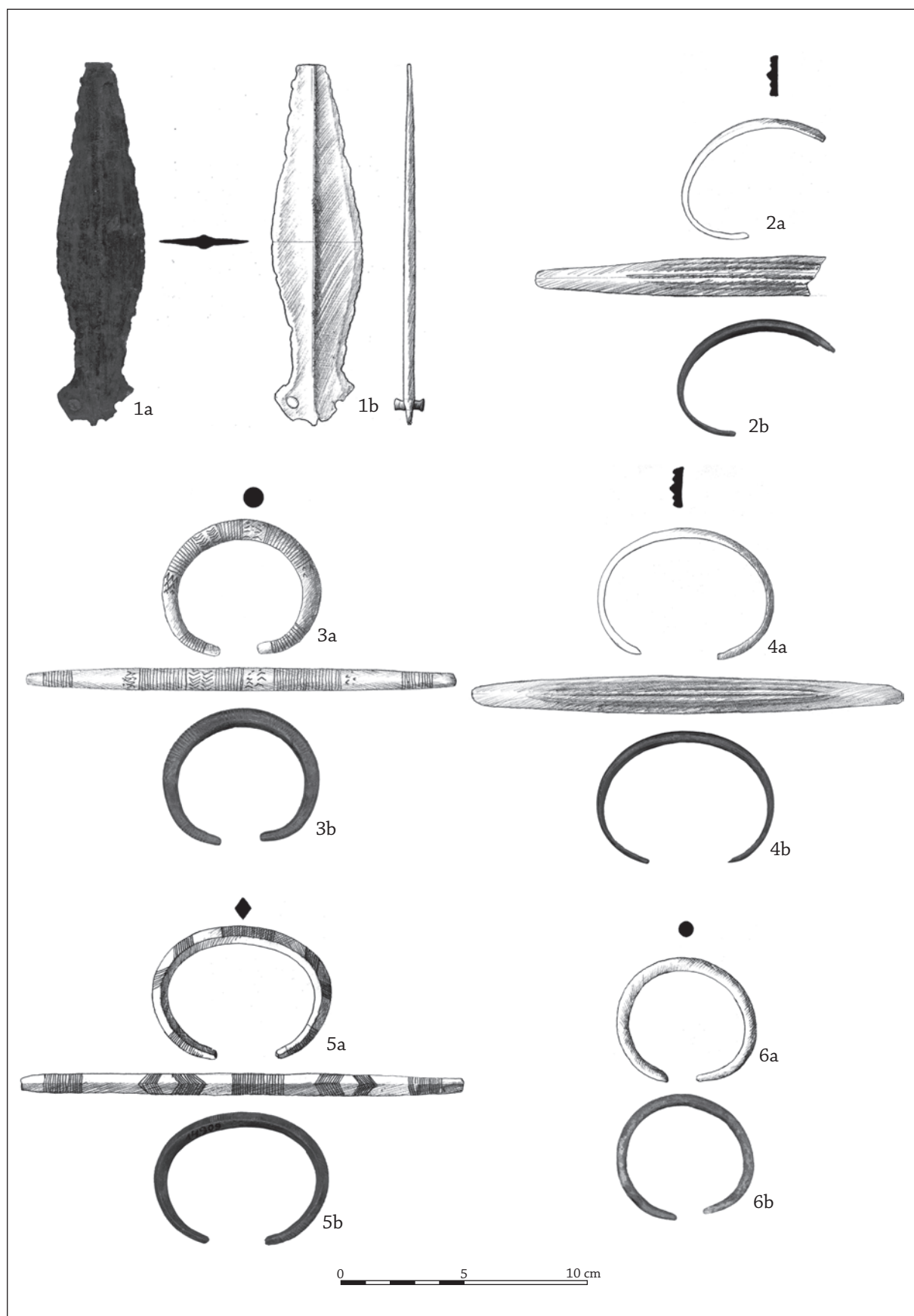


Plate 1. Bronze artifacts. Stray finds, 1971.

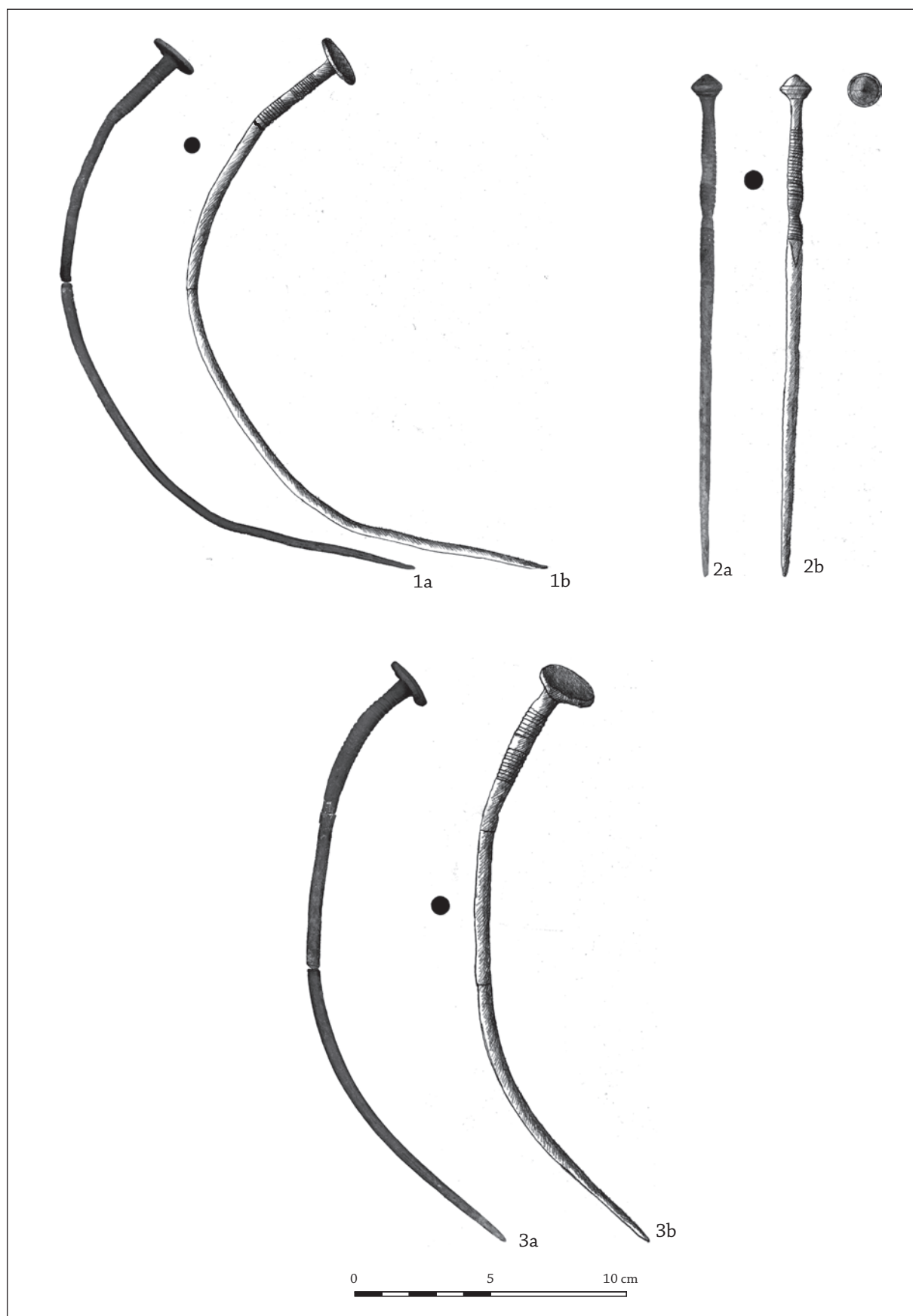


Plate 2. Bronze artifacts. Stray finds, 1971.

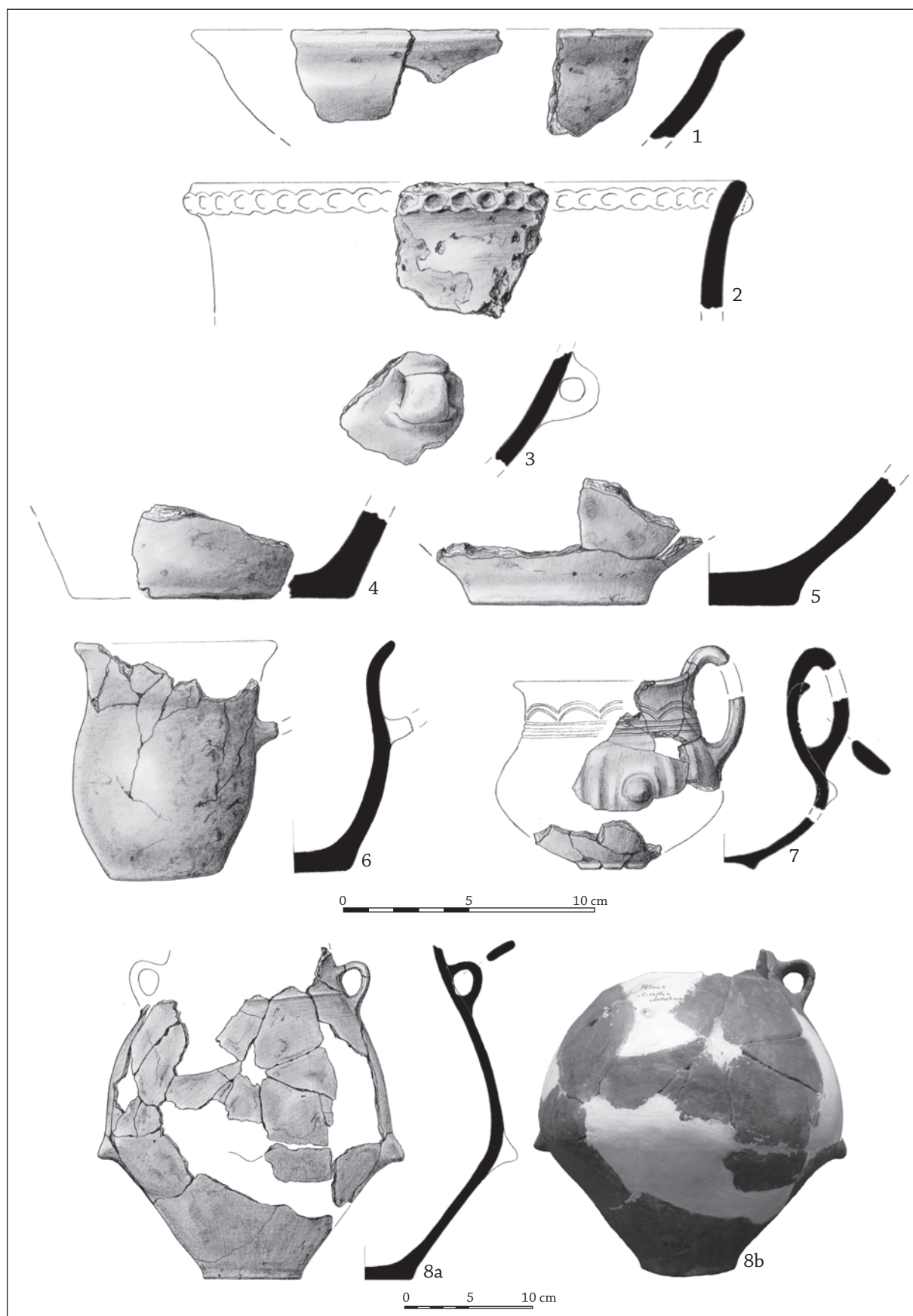


Plate 3. Pottery. Stray finds, 1971.

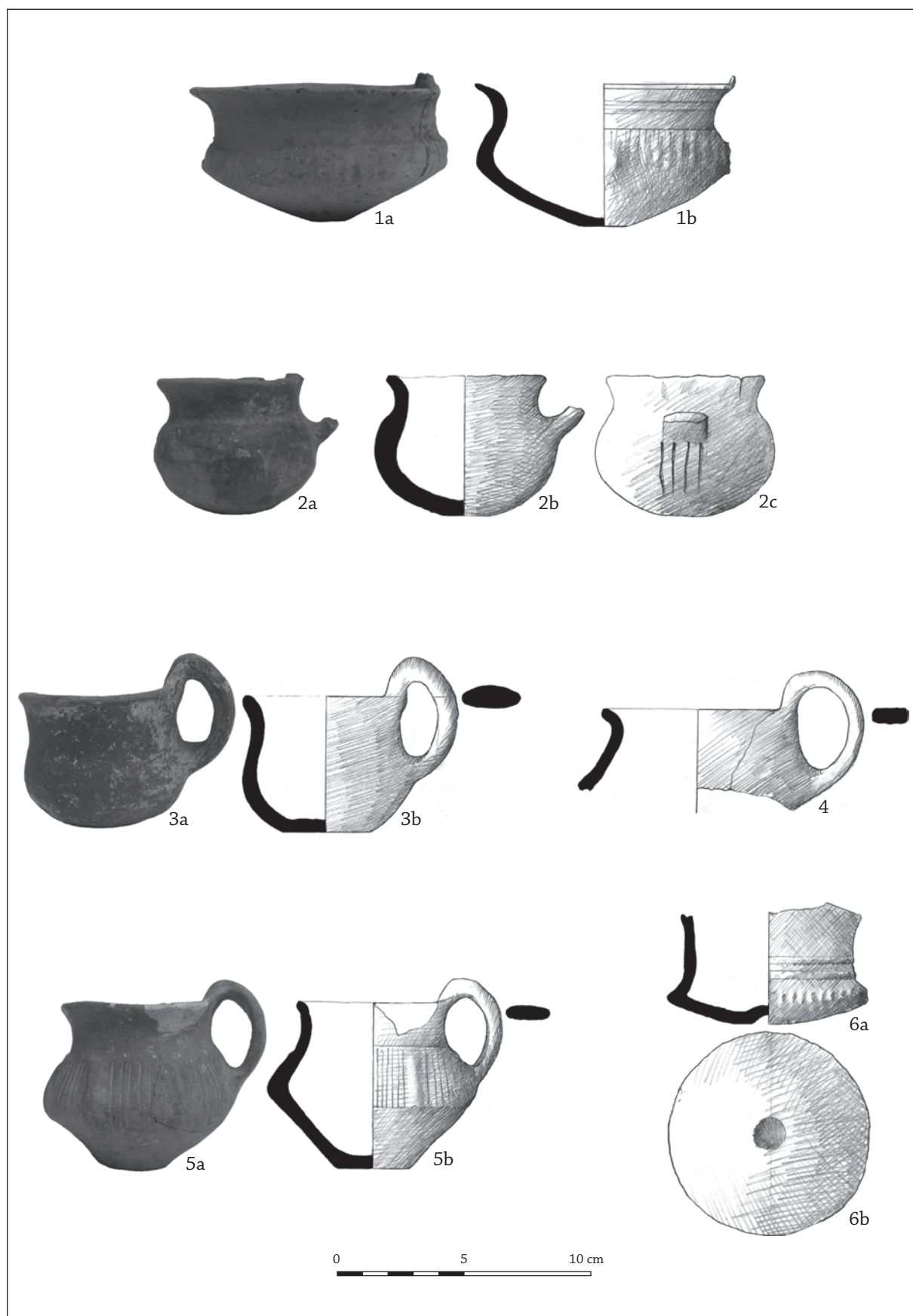


Plate 4. Pottery. Stray finds, 1971.





Plate 5. Pottery. 1975 archaeological campaign. 1. Trench S1, square 8-9; 2. Trench S1, square 22, ▼ 1,30 m; 3. Trench S1, square 15, ▼ 0,90 m; 4-6. Trench S1, square 24, ▼ 0,90.

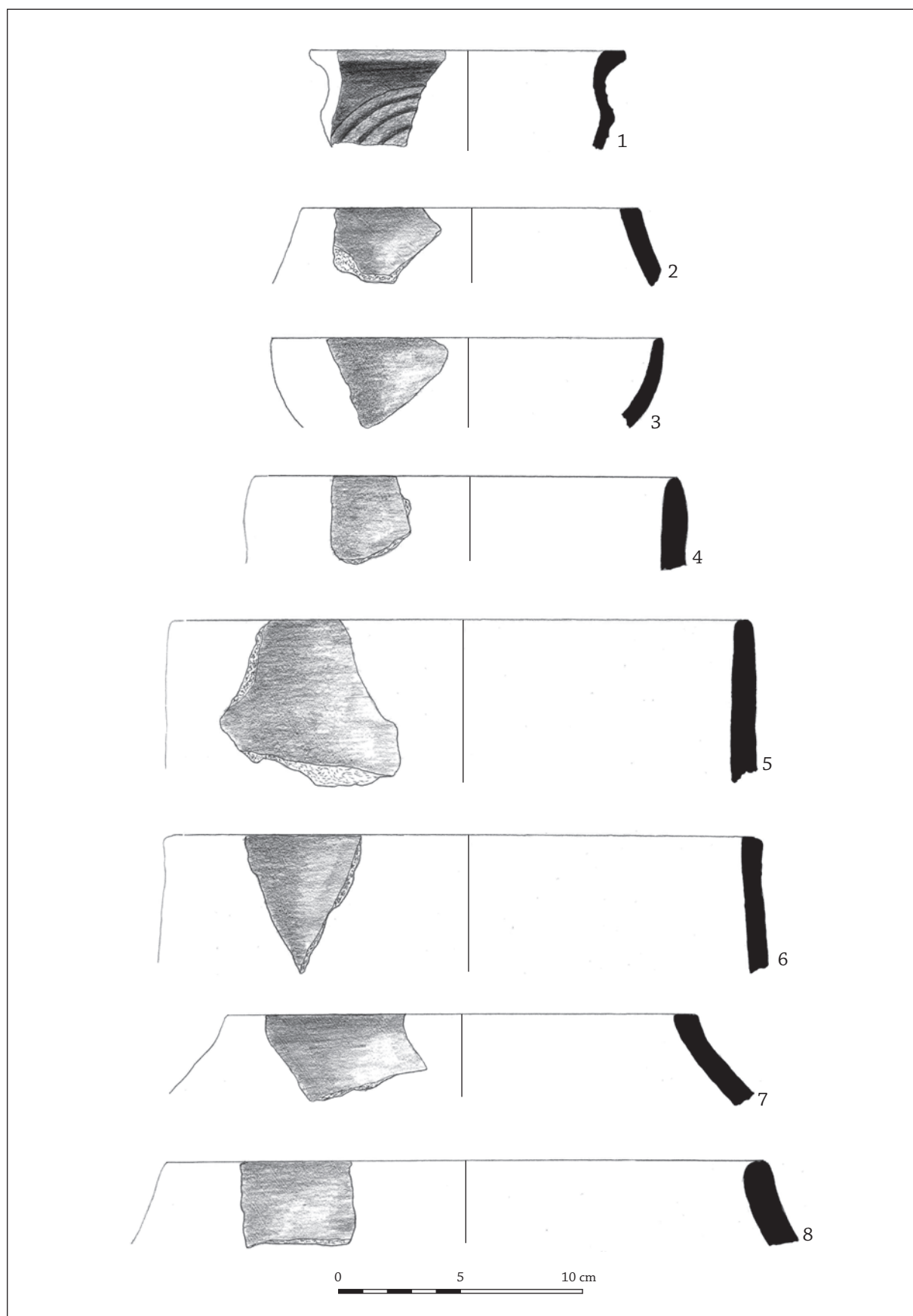


Plate 6. Pottery. 1975 archaeological campaign. Trench S1, square 24, ▼ 0,90.



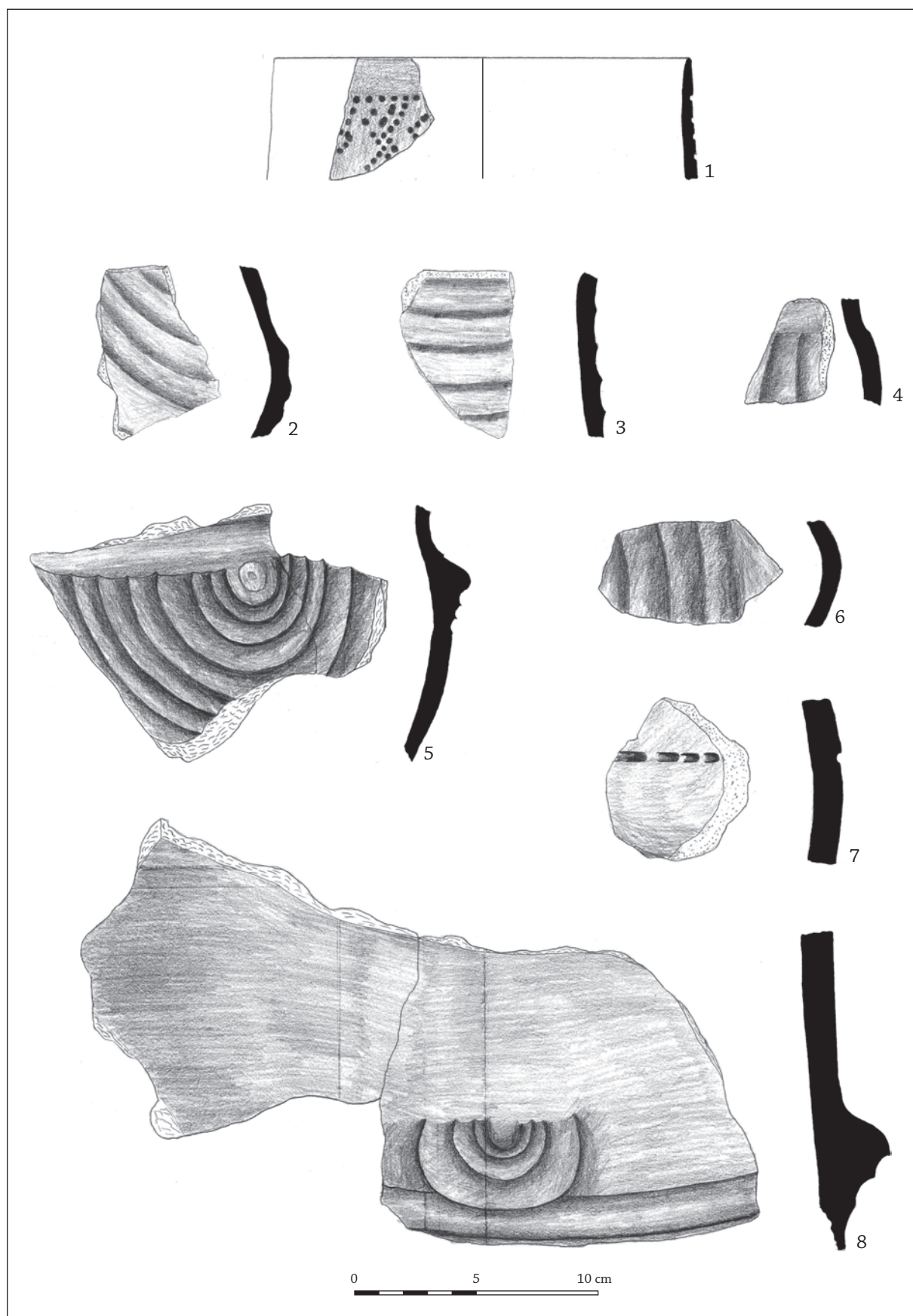


Plate 7. Pottery. 1975 archaeological campaign. Trench S1, square 24, ▼ 0,90.

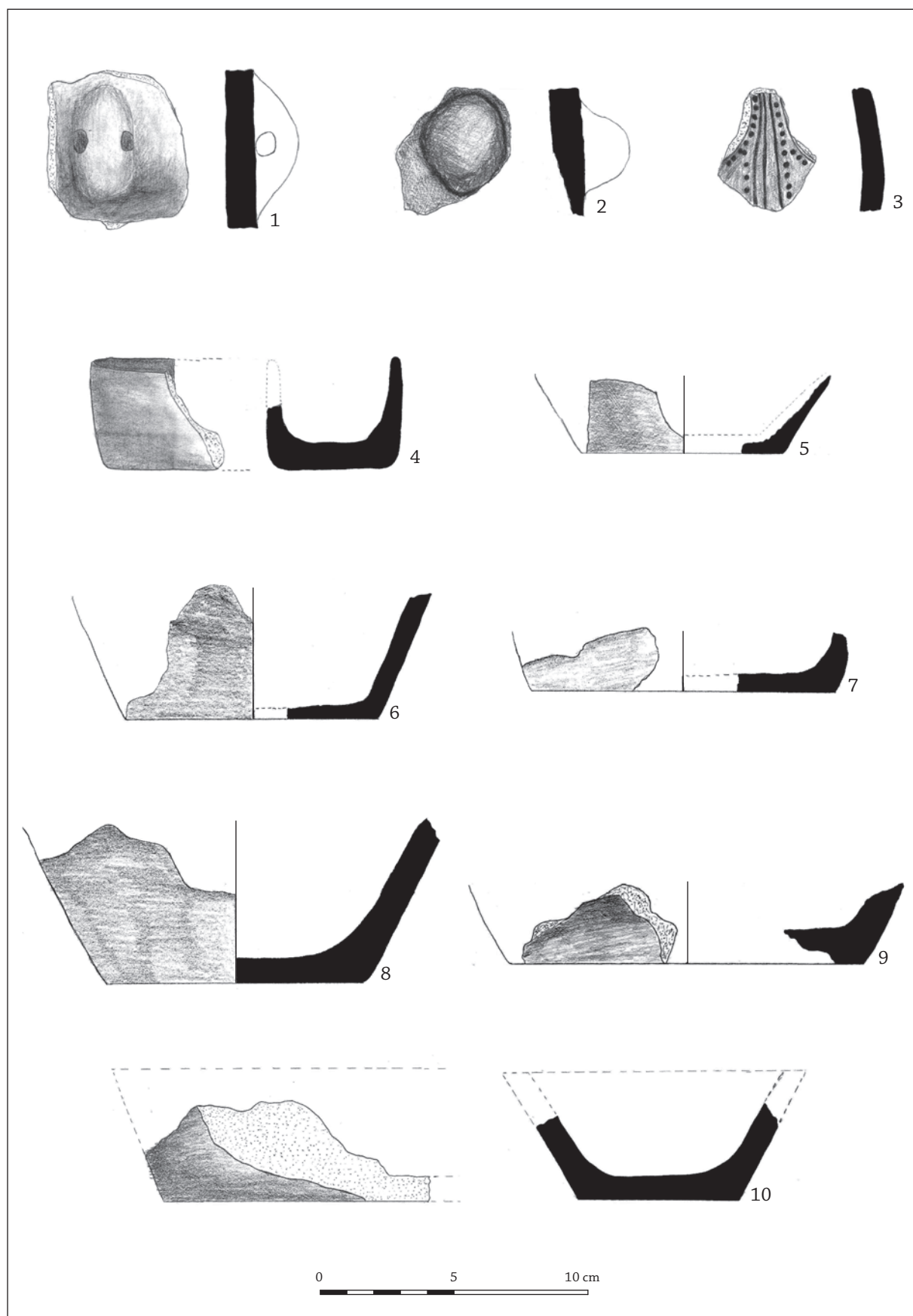


Plate 8. Pottery. 1975 archaeological campaign. 1-9. Trench S1, square 24, ▼ 0,90; 10. Cassette B, ▼ 0,80.

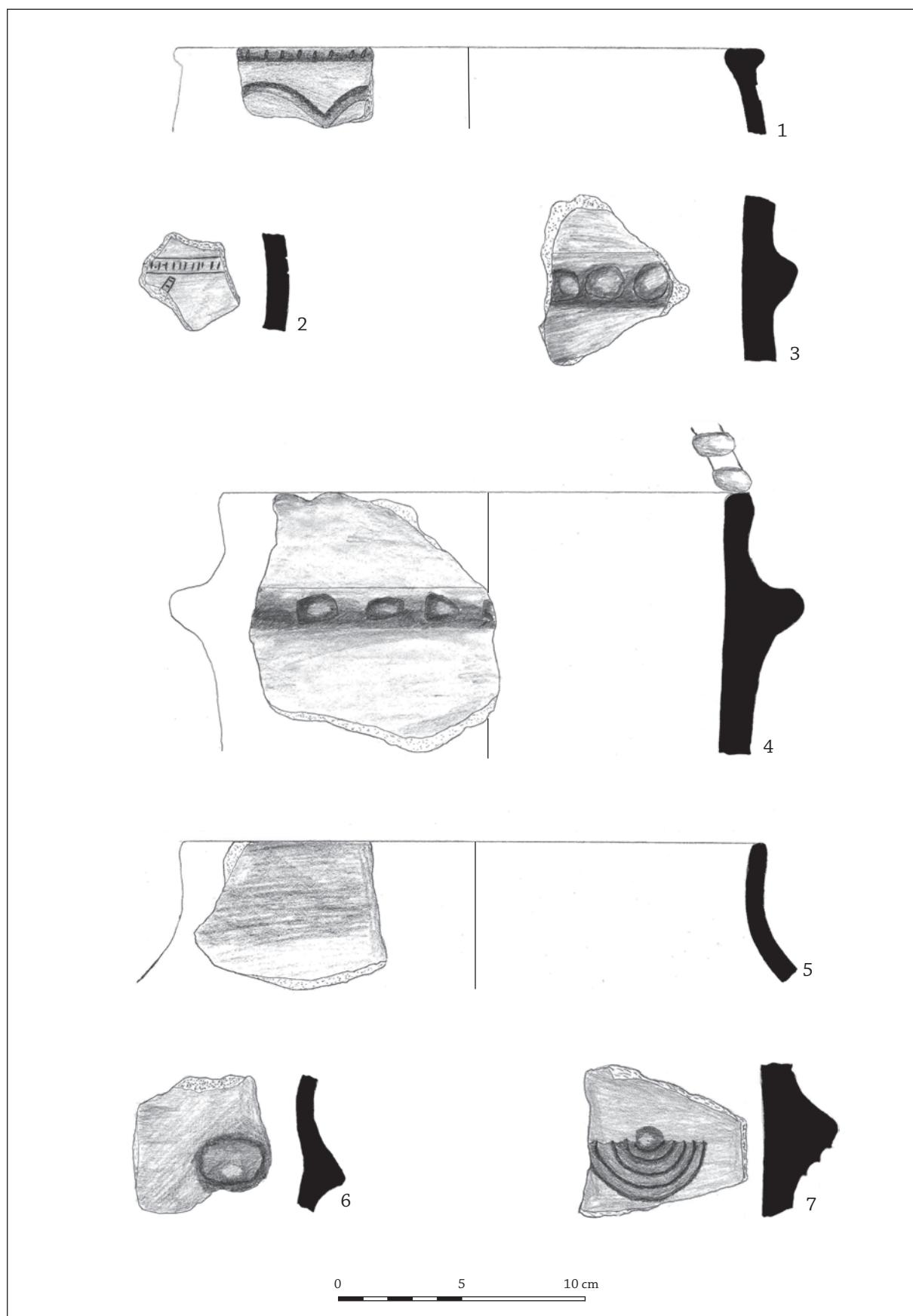


Plate 9. Pottery. 1975–1976 archaeological campaigns. 1. Cassette B, ▼ 1,40; 2. Cassette B, ▼ 1,30; 3–4. Cassette C, ▼ 0,70; 5. Cassette C, ▼ 0,75; 6. Cassette C, ▼ 1,60; 7. Trench S2, square 7, ▼ 0,55.

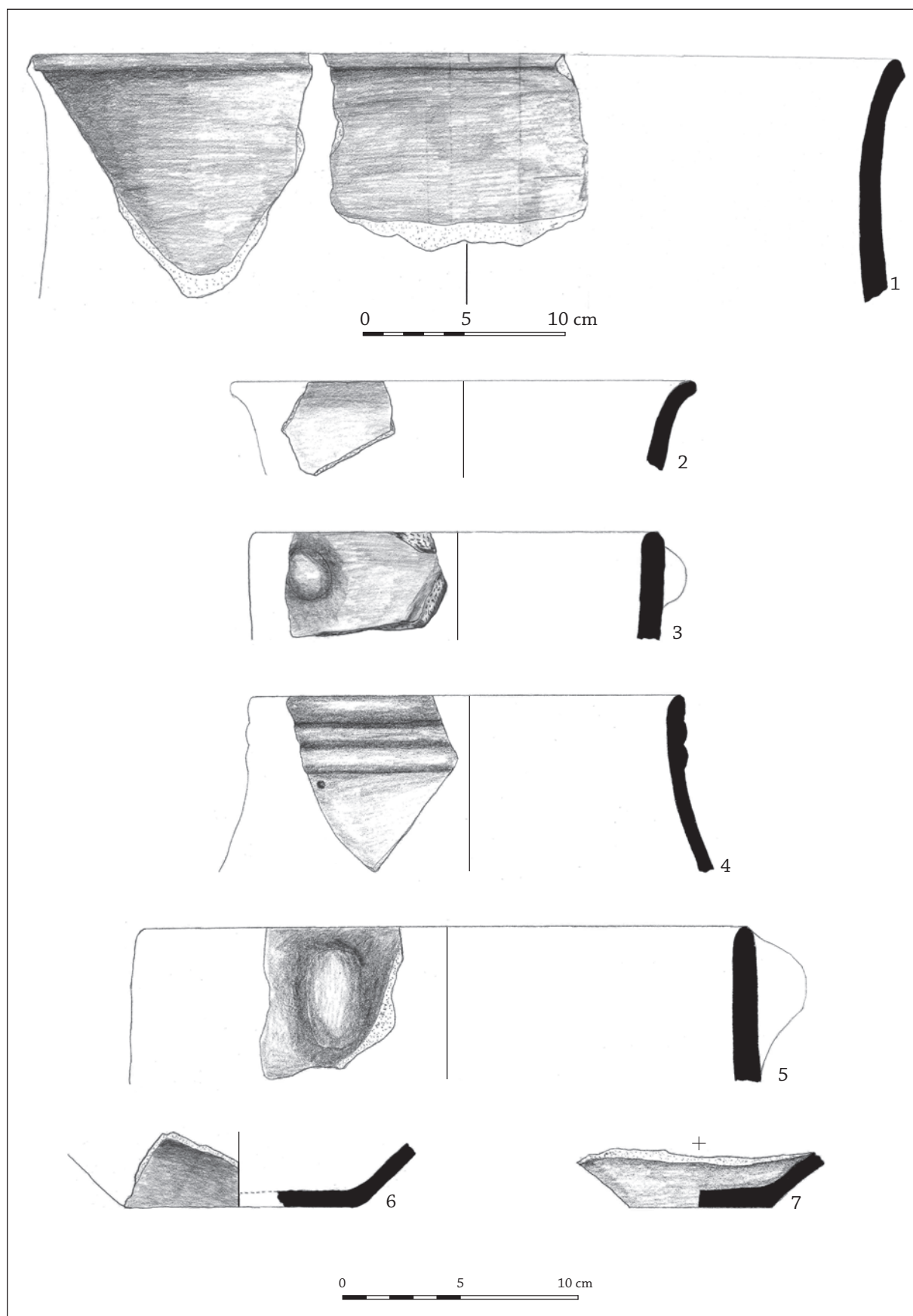


Plate 10. Pottery. 1975–1976 archaeological campaigns. 1. Trench S1, ▼ 0,40 m;  
1975–1977 archaeological campaigns. 2–7. Without an exact location.

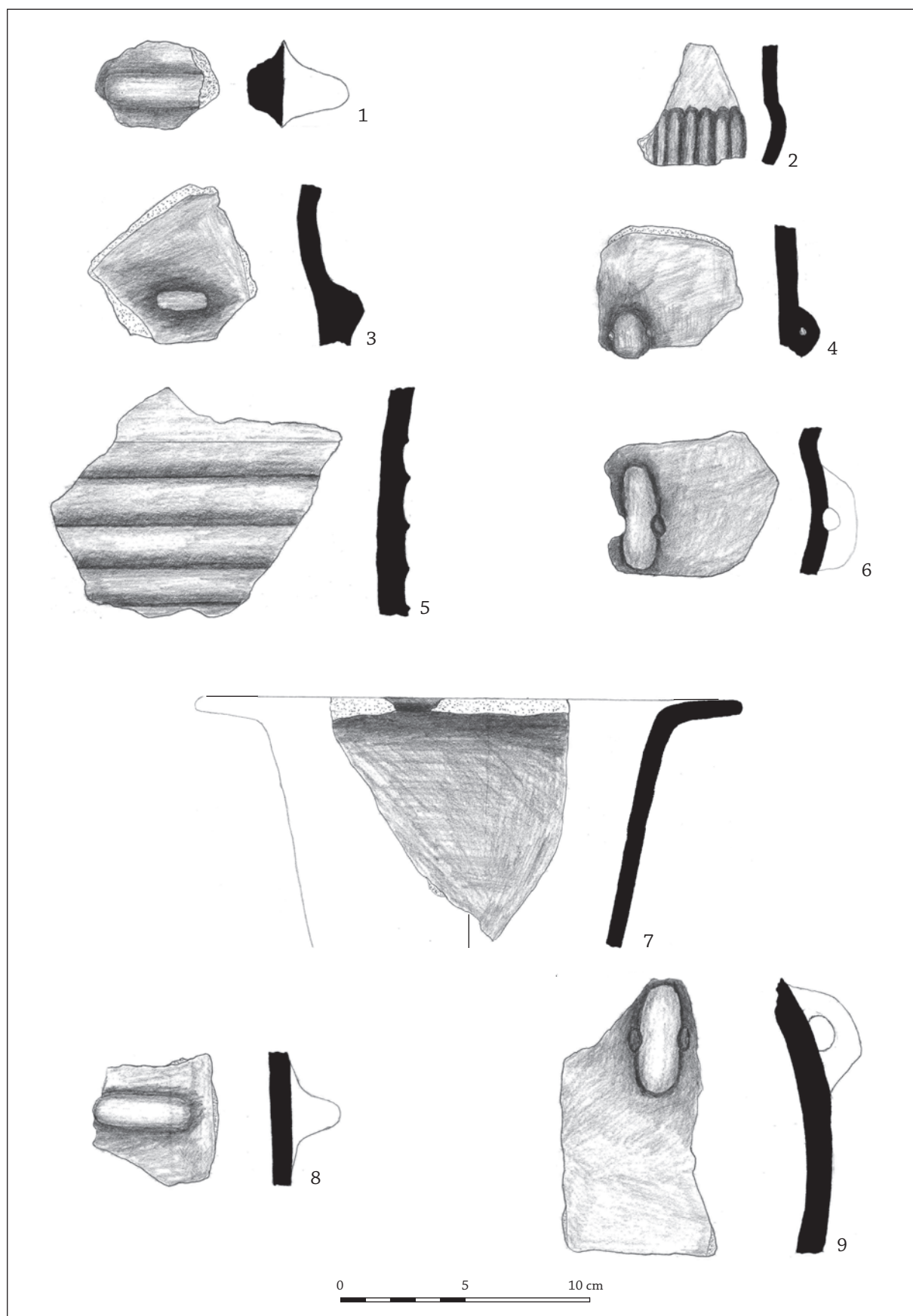


Plate 11. Pottery. 1975–1977 archaeological campaigns. 1–6. Without an exact location; 7–9. E. Dörner's field survey.



# Abbreviations

Acta Ant et Arch Suppl	Acta Antiqua et Archaeologica Supplementum. Szeged.
AAC	Acta Archaeologica Carpathica. Krakow.
ACMIT	Anuarul Comisiunii monumentelor istorice. Secția pentru Transilvania. Cluj.
ActaArchHung	ActaArchHung Acta Archaeologica Academiae Scientiarum Hungaricae. Budapest.
AEM	Archäologische Epigraphische Mitteilungen aus Österreich-Ungarn.
AIIA Cluj	Anuarul Institutului de Istorie și Arheologie. Cluj.
AMP	Acta Musei Porolissensis. Zalău.
ATF	Acta Terrae Fogarasiensis. Făgăraș.
ATS	Acta Terrae Septemcastrenses. Sibiu.
Agria	Agria. Annales Musei Agriensis. Az egri Dobó István Vármúzeum évkönyve. Eger.
AnB S.N.	Analele Banatului. Timișoara.
ArchÉrt	Archaeologiai Értesítő. A Magyar Régészeti és Művészettörténeti Társulat tudományos folyóirata. Budapest.
ArchJug	Archaeologia Iugoslavica
Arh. Pregled	Arheološki Pregled. Arheološko Društvo Jugoslavije. Beograd.
AM	Arheologia Moldovei. Iași.
AMN	Acta Musei Napocensis. Cluj-Napoca.
ArchRozhl	Archeologické Rozhledy. Praga.
ASMB	Arheologia Satului Medieval din Banat. Reșița 1996.
BAM	Brvkenthal Acta Mvsei. Sibiu.
BAR Int. Ser.	British Archaeological Reports. International Series. Oxford.
BCMI	Buletinul Comisiunii Monumentelor Istorice.
BerRGK	Bericht der RömischGermanischen Kommission, Frankfurt a. Main.
BHAB	Bibliotheca Historica et Archaeologica Banatica. Timișoara.
BMB. SH	Biblioteca Muzeului Bistrița. Seria Historica. Bistrița Năsăud.
BMÉ	Bihari Múzeum Évkönyve
BMI	Buletinul Monumentelor Istorice, București.
BMN	Bibliotheca Musei Napocensis. Cluj-Napoca.
BMMK	A Békés Megyei Múzeumok Közleményei. Békéscsaba.
BMMN	Buletinul Muzeului Militar Național, București.
BThr	Bibliotheca Thracologica. Institutul Român de Tracologie, București.
CAH	Communicationes Archaeologicae Hungariae. Budapest.
Carpica	Carpica. Muzeul Județean de Istorie și Arheologie Bacău. Bacău.
CAMNI	Cercetări Arheologice. Muzeul de Istorie al R. S. România/Muzeul Național de Istorie. București.
CCA	<i>Cronica cercetărilor arheologice (din România)</i> , 1983–1992 <i>sqq.</i> (și în variantă electronică pe <a href="http://www.cimec.ro/scripts/arh/cronica/cercetariarh.asp">http://www.cimec.ro/scripts/arh/cronica/cercetariarh.asp</a> ).
CRSCRCR	Coins from Roman sites and collections of Roman coins from Romania. Cluj-Napoca.
Dacia N.S.	Dacia. Revue d'archéologie et d'histoire ancienne. Nouvelle serie. București.
Danubius	Danubius – Revista Muzeului de Istorie Galați. Galați.
DDME	A Debreceni Déri Múzeum Évkönyve. Debrecen.
DolgCluj	Dolgozatok az Erdélyi Nemzeti Érem- és Régiségtárából, Klotzsvár (Cluj).
DolgSzeg	Dolgozatok. Arbeiten des Archäologischen Instituts der Universität. Szeged.
EphNap	Ephemeris Napocensis. Cluj-Napoca.
FADDP/GMADP	Führer zu archäologischen Denkmälern in Dacia Porolissensis/Ghid al monumentelor arheologice din Dacia Porolissensis.



FolArch	Folia Archaeologica. Budapest.
Forsch. u. Ber. z. Vor- u. Frühgesch. BW	Forschungen und Berichte zur Vor- und Frühgeschichte in Baden-Württemberg.
GPSKV	Gradja za proučavanje spomenika kulture Vojvodine. Novi Sad.
GSAD	Glasnik Srpskog Arheološkog Društva. Beograd.
HOMÉ	A Herman Ottó Múzeum Évkönyve. Miskolc.
HTRTÉ	Hunyadvármegye Történelmi és Régészeti Társulat Évkönyve
JAMÉ	A nyíregyházi Jósza András Múzeum Évkönyve. Nyíregyháza.
JahrbuchRGZM	Jahrbuch des RömischGermanischen Zentralmuseums Mainz.
Lohanul	Lohanul. Revistă cultural științifică. Huși.
MCA	Materiale și Cercetări Arheologice. București.
MCA-S.N.	Materiale și Cercetări Arheologice-Serie Nouă. București.
MA	Memoria Antiquitatis. Complexul Muzeal Județean Neamț. Piatra Neamț.
MFME	A Móra Ferenc Múz. Évkönyve. Szeged.
MFME StudArch	A Móra Ferenc Múzeum Évkönyve, Studia Archaeologica. Szeged.
MN	Muzeul Național. București.
Opuscula Hungarica	Opuscula Hungarica. Budapest.
OTÉ	Orvos- Természettudományi Értesítő, a Kolozsvári Orvos-Természettudományi Társulat és az Erdélyi Múzeum-Egylet Természettudományi Szakosztálya.
Palaeohistorica	Acta et Communicationes Instituti Archaeologici Universitatis Groninganae.
PamArch	Památky Archeologické. Praha.
Past and Present	Past and Present. Oxford.
PIKS/PISC	Die Publikationen des Institutes für klassische Studien/ Publicațiile Institutului de studii clasice. Cluj-Napoca.
PBF	Praehistorische Bronzefunde. Berlin.
PMÉ	Acta Musei Papensis – Pápai Múzeumi Értesítő.
PZ	Prähistorische Zeitschrift. Berlin.
Rev. Muz.	Revista Muzeelor, București.
RIR	Revista Istorică Română.
RMM-MIA	Revista Muzeelor și Monumentelor. seria Monumente istorice și de artă. București.
RMMN	Revista Muzeului Militar Național. București.
Ruralia	Ruralia. Památky Archeologické – Supplementum. Praha.
RVM	Rad Vojvodjanskih Muzeja, Novi Sad.
SCIV(A)	Studii și Cercetări de Istorie Veche. București.
SCN	Studii și Cercetări Numismatice. București.
SlovArch	Slovenská Archeológia. Nitra.
SIA	Studii de Istoria Artei. Cluj Napoca.
SIB	Studii de istorie a Banatului. Timișoara.
SKMÉ	A Szántó Kovács János Múzeum Évkönyve, Orosháza.
SMIM	Studii și Materiale de Istorie Medie. București.
SMMA	Szolnok Megyei Múzeumi Adattár. Szolnok.
SMMIM	Studii și Materiale de Muzeografie și Istorie Militară. București.
Starinar	Starinar. Arheološki Institut. Beograd.
StCl	Studii Clasice, București.
StComBrukenthal	Studii și comunicări. Sibiu.
StudArch	Studia Archaeologica. Budapest.
StudCom	Studia Comitatus. Szentendre.
StudUnivCib	Studia Universitatis Cibiniensis. Sibiu.
StudCom – Vrancea	Studii și Comunicări. Muzeul Județean de Istorie și Etnografie Vrancea. Focșani.
StudŽvest	Študijne Zvesti Arheologického Ústavu Slovenskej Akadémie Vied. Nitra.
Symp. Thrac.	Symposia Thracologica. București.
Tempora Obscura	Tempora Obscura. Békéscsaba 2012.
Tibiscus	Tibiscus. Timișoara.
VAH	Varia Archaeologica Hungarica. Budapest.

VMÉ  
Ziridava  
ZM  
ZSA

A Vas megyei Múzeumok Értesítője  
Ziridava. Arad.  
A Vas megyei Múzeumok Értesítője  
Ziridava Studia Archaeologica. Arad.