Investigating a Chalcolithic dwelling at Isaiia, Iași County, Romania

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Abstract. The detailed investigation of dwelling no. 14 (Precucuteni II phase) from the Isaiia site brings interesting and, in some instances, novel data concerning the building system and the internal architecture of the Early Chalcolithic housing. Also, the artefacts from inside the dwelling and from the surrounding features bear witness about prehistoric crafts like pottery manufacture, stone knapping and polishing, animal hard tissue working, about the relations with neighbouring cultural areas, and, last but not least, about the ritual behaviour of the Precucuteni communities.

Rezumat. Cercetarea detaliată a locuinței nr. 14 (Precucuteni II) din situl de la Isaiia furnizează informații interesante și pe alocuri inedite privind sistemul de construcție și arhitectura interioară a construcțiilor din eneoliticul timpuriu. De asemenea, artefactele descoperite în interiorul locuinței și în complexele adiacente sunt dovezi ale practicării preistorice a unor meșteșuguri precum prelucrarea ceramicii, cioplirea și șlefuirea pietrei, prelucrarea materiilor dure animale, ale relațiilor cu ariile culturale învecinate și, nu în ultimul rând, ale comportamentelor rituale ale comunităților Precucuteni.

Keywords: Chalcolithic, Precucuteni culture, surface dwelling, ritual assemblage.

Introduction

The archaeological site *Balta Popii* is located in the north-eastern part of Romania (Figure 1), at about 3 km NE from the Isaiia village (Răducăneni commune, Iași County). Geographically, the location is positioned in the middle sector of the Prut corridor, in the northern part of the Bârlad Plateau, on a fragment of terrace from the right side of the Jijia River, close to the confluence with the Prut River⁷ (Figures 2–3).

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⁷ URSULESCU, TENCARIU 2006, 11.

The excavations carried out in 1996-20178 established and confirmed the general stratigraphy of the settlement. To begin with, it has been observed that the thickness of the cultural layer is not uniform across the surface due to the slope of the terrace, which has an inclination from southwest to northeast. Therefore, the layer gradually thins towards the edge of the terrace and thickens towards the southwest. At the base, above the oolitic limestone layer, covered with sandy loess, there is a yellowish-brown soil layer, where quite sporadic remains of a Neolithic habitation (LBK) are found. Two thicker layers (light-brown and brown) are to be found above, containing the vestiges of the Chalcolithic habitation (the Precucuteni culture). Based on the discovered artefacts (especially the pottery typology) it was established that the lower layer belonged to the Precucuteni II phase, showing two stages of habitation (the oldest—IIA—dates back to the Precucuteni II phase, while the new stage— IIB—corresponds to the passage from the phase II to III), and the upper level—IIIA—falls at the beginning of the Precucuteni III phase 10. Above, there is a thinner and darker layer, with traces of Bronze Age (two early graves) and Iron Age (early Hallstatt — Corlăteni-Chișinău Culture) habitations. An even thinner layer contains very rare remains of a fourth century AD presence, related to the early Sarmatian tombs¹¹, which form a small necropolis here. A last layer with archaeological remains reveals a sporadic early medieval habitation (Răducăneni culture). Finally, there is a vegetable layer of which some modern disturbances were recorded.

As mentioned, the Early Chalcolithic habitation, through the complexes of the Precucuteni culture (phases II and III), is the highly represented period in the stratigraphy of the Isaiia site. So far, 11 dwellings and over 60 pits belonging to this culture were investigated (Figure 4). This paper will focus on the investigation of a dwelling (no. 14) from the southeastern periphery of the settlement; the interior architecture, the inventory (artefacts), the building system as well as the surrounding features (as part of the household) will be considered.

Dwelling no. 14: archaeological description

The excavation of the year 2015 was prefaced by the magnetometric survey of the eastern and southeastearn area of the settlement, by a team of the Arheoinvest Platform (Figure 5). Among others, the survey revealed the existence of a compact anomaly, of considerable size, in an area of the settlement considered peripheral, where the presence of other important

 $^{^8}$ URSULESCU, MERLAN, TENCARIU 2001, 110–113; 2002, 160–163; URSULESCU et al. 2003, 158–160; 2004, 149–151; 2005, 188–191; 2006, 187–190; 2008, 161–162; 2009, 124–125; 2010, 79–81; 2011, 58–59; BOLOHAN et al. 2016, 39–40.

⁹ BRAUNGART 2014.

¹⁰ URSULESCU 2008, 210-211.

¹¹ URSULESCU, KOGĂLNICEANU 2007.

complexes was not expected. By small-scale excavations intended to verify the magnetic anomaly, a medium-sized dwelling was identified and partially documented 12 . It appeared as a conglomeration of burnt clay — to the fullest extent, a destruction layer of the dwelling, i.e. the walls crashed following the fire that ended its existence. Except for gathering a few vessels and samples for dating, sporo-polinic and phitoliths analysis, the remnants of the dwelling were preserved for future excavations. Two absolute chronology data obtained for the IIB layer (one on a bone from the dwelling, the other on a bone from a stone structure from the same layer in its vicinity) indicate that the construction was used sometime around 5680 ± 40 B.P. $(4618-4446 \text{ cal BC}) / 5660 \pm 40$ B.P $(4592-4438 \text{ cal BC})^{13}$.

During the campaign from 2017, a detailed investigation of the whole construction was achieved. By the uncovering and thorough clearing of the dwelling 14 area it was observed that its burned remains occupied a quasi-rectangular surface of about 9 × 7 m (Figures 6–7). Of course, to the periphery of the agglomeration the materials were scarce, which indicated, from the beginning, the fact that the actual dwelling had much smaller dimensions. Although, at first sight, the complex seemed quite well preserved, the research revealed a series of subsequent anthropic interventions that affected its integrity: pits no. 75 and 77 (one in the centre of the dwelling and the other on the NW side, both belonging to the Hallstatt period), pits no. 76 and 78 (affecting the western and, respectively, the northern corners of the dwelling, belonging to Precucuteni culture) (Figure 8); also, although we did not observe any pits, the area of the hearth was severely affected (practically destroyed, only a few small groups of fragments of the hearth's surface were identified, some of them turned face down).

However, a number of very interesting observations were made concerning the building system and the interior architecture of this inhabitation structure. The identification of several post holes after the removal of the debris showed the actual dimensions of the dwelling, which had a rectangular shape $(7.2 \times 5.1 \text{ m})$, with the long axis orientated WNW-ESE (Figure 8).

Apparently, the dwelling had only one room, being served by a single heating installation — a hearth that was heavily damaged after the arson of the dwelling. The sporadic remains of the hearth (typical groups of strongly burned sandy clay, without organic inclusions) indicate the fact that it was built directly on the ground, near the eastern long flank of the dwelling; it probably had an elongated shape (oval or rectangular), with dimensions of maximum 2×1.5 m, with the long axis orientated approximately E–W. The identified fragments did not show any redressing. Two fragments of anthropomorphic statuettes were discovered in the area of the hearth. Most likely, the disturbance of the hearth, along with the pit no. 76 (see below), were part of an abandonment ritual of the house after its destruction.

¹² BOLOHAN et al. 2016, 39-40

¹³ VORNICU 2017, 192, table 1, figure 2.

The area of the dwelling in front of the hearth (westward) and from the northwest (approximately covering squares 105-108/b-f) had no specific interior features, and the multitude of ceramic shards, fragments of several clay boxes, grinders and fragments of grinders make us believe that various household activities were carried out in this space (Figure 9). Instead, a massive clay platform (Figure 10) set on wooden beams, probably split into two, was set up right next to the hearth toward the southeast. The clay platform was 12–15 cm thick and the impressions of the beams underneath the platform showed a thickness of 8–10 cm (Figure 11); the beams were oriented on the short axis of the dwelling (approximately E–W).

Immediately near the hearth, on the platform, in an area of approximately 1.5 m \times 0.8 m (along the eastern side of the dwelling), were observed several prints of parallel planks arranged on the long axis of the dwelling (Figure 12). The placement of this area near the hearth and alongside the dwelling's wall could indicate a place for sleeping (wooden bench). In the eastern corner of the dwelling, on an area of about 2 \times 1 m, the clay platform was interrupted, making room for another large grouping of storing vessels and clay boxes; one of the vessels was kept almost entirely *in situ*. During the dismantling, it was observed that the pot was slightly buried (about 10 cm below the ancient inhabitation level — Figure 13). In this case we are probably dealing with a storage area.

Last but not least, in the southern corner of the dwelling, where an obvious elevation of the level of the dwelling could be noticed, another element of internal architecture with uncertain destination was discovered. It is a type of impost (which overlaps the platform directly, and was overlaid by a fallen wall, very heavily burned), with the dimensions of 2.30×1.40 m, and about 10 cm thick, oriented on the short axis of the dwelling (Figure 14/a). This internal feature has flat surfaces on both superior and inferior faces, without post prints, branches or other supporting elements, which would indicate the fact that it was modelled directly on the platform of the dwelling (Figure 14/b). We should mention that no artefacts have been discovered on the impost or between it and the platform.

As mentioned above, the exact dimensions of the dwelling have been established after it being dismantled, by identifying several post holes for the wooden structure supporting the walls. 17 post holes were observed alongside the walls of the house, and one inside, approximately in the centre of the short axis; this central post was probably intended to support the roof ridge. The post holes were 20 to 35 cm in diameter, with depths between 40 and 50 cm, and they were placed at least 50 cm apart (Figure 8). The area beneath the dwelling was not excavated in its entirety, so the rest of post holes, as well as the pits no. 77 and 78 (delimited, but only partially investigated) remain to be investigated in the following campaigns.

The artefacts of the dwelling no. 14

Regarding the archaeological materials, inside the house were found typical chalcolithic categories of artefacts: ceramic ware, clay figurines, knapped and polished stone tools, etc.

By far, the most spectacular discovery from the inventory of the dwelling no. 14 is a biconical vessel and its content, discovered in the western corner of the dwelling (square 107 f). During the 2015 test excavations, our attention was drawn by a decorated pot, typical for the second phase of the Precucuteni culture, which survived almost intact to the walls crash (Figure 15/1). Consequently, it was taken together with the soil within for sampling. The biconical vessel has a symmetrical and very careful made decoration realised by incisions and horizontal and oblique grooves; on the maximum diameter it has four conical bulges, each with horizontal unperforated holes (Figure 15/4).

At the time it was broken open in the laboratory (Figure 15/2–3), two objects of burnt clay were discovered inside the biconical vessel: a fragment of a statuette and a small cone. The figurine is rather rare in the context of the Precucuteni anthropomorphic art, through the very suggestive rendering of pregnancy (Figure 15/5). The clay cone has a small hole at the top (Figure 15/6), suggesting that in the past it probably had a clay ball on top, probably fixed by a wooden rod, just like the pieces of the large cult complex discovered in the dwelling no. 1 from Isaiia ¹⁴. Thus, this composite piece, with a mobile head, was very likely a stylized phaloid image, a symbol of masculinity. In association with the female statue, the complex played a role in the ceremonies dedicated to the cult of fertility and fertility. The fact that the statue is fragmented and the cone lacks the clay ball is not accidental, perhaps the ensemble being dismantled after the symbolic "sending" of the "message" towards the divinity, but without losing its ritual significance.

Also, one can note the relatively large number of ceramic vessels, many decorated with incisions, impressions, grooves and excisions. The ceramic assemblage¹⁵ from the dwelling comprises a censer (Figure 16/2), beakers (Figure 16/1), bowls (Figure 16/8), biconical vessels (Figure 16/9), pear-shaped vessels (Figure 16/4), stemmed bowls (Figure 16/6–7), lids (Figure 16/3, 5), large clay boxes (for storage).

Among and under the debris of the house was found also a number of small finds of particular interest: figurines, miniature chairs (thrones), bone objects. Of these, we note a fragment of a feminine figurine, discovered in the close vicinity of the remains of the hearth, whose shape and dimensions do not fit into the Precucutenian "canon". The statuette had slightly raised and perforated hips, overgrown buttocks decorated with spiral incisions, legs separated by deep incisions ending with bounded feet shaped as an impost (Figure 17/11). Its

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¹⁴ URSULESCU, TENCARIU 2006, 46.

¹⁵ The materials mentioned and illustrated here represent only a small part of the ceramics from the dwelling; the rest are still under processing and restoration.

best analogies were found in the Stoicani-Aldeni area, being almost similar to the figurines discovered at Suceveni and Dodești¹⁶. Other small finds from the dwelling worth mentioning are the figurines (intact or fragmented) typical for the Precucuteni anthropomorphic art (square 106e — Figure 17/1; square 108b [with hexagonal cross section of the neck] — Figure /7; square 109e — Figure 17 /6, square 109c — Figure 17/3). From under the dwelling (the Precucuteni Inferior IIA layer) came a miniature chair with the back rest finished with two small horns and the seat decorated with stitches disposed in a spiral (Figure 17/9) and an intact figurine (Figure 17/2).

The **chipped stone assemblage** discovered in dwelling 14 and its additional features (pit 74 and 76) is typical for the Precucuteni II phase and has the same technological and typological characteristics as the assemblages from other archaeological features in Isaiia¹⁷. The main raw material for the 64 flint items was procured from the deposits of Cretaceous flint from the Prut River (n = 44), but also from regions far away as the Balkan platform (one item) or the Volhynian platform (five items). For 14 artefacts it is hard to establish their raw material since they are heavily burnt. Technologically speaking, the flint items can be divided as: cores and core maintenance elements (n = 3: Figure 18/1–2), blanks (n = 26 of which nine flakes and 15 blades: Figure 18/3–10), retouched products (n = 25: Figure 18/11–19, 21), debris (n = 8), hammerstones (n = 1) and atypical artefacts (n = 1: Figure 18/20). As typology, the retouched artefacts can be assign to the following classes: endscrapers (n = 15: Figure 18/11–15), sidescrapers (n = 6, Figure 18/16–19), retouched blades (n = 1), atypical retouched pieces (n = 2), trapezes (n = 1: Figure 18/21).

The flint collection discovered in 2017 is similar to the other assemblages from the settlement: low metric characteristics, the preference for ovoid/round flakes as a support for endscrapers and sidescrapers, the presence of cortical items, the high fragmentation of the blades with rectilinear and parallel edges and arises, the low angle of the platform at the round flakes 18.

The polished stone artefacts are represented by three objects with rectilinear active part (Figure 19/2–4), of which two are intact and one is a fragment. To them it can be added the seven querns (some intact, some broken) and three grinders (Figure 19/1).

Four bone artefacts were discovered in the area of the dwelling 14 and its adjacent features: two knucklebones with wear¹⁹ and one perforated phalange (Figure 19/6). Another perforated phalange was discovered in the inferior layer (Figure 19/7).

¹⁶ DRAGOMIR 1983, 98; fig. 48/6-8; 52/3-6

¹⁷ For a detailed view on the chipped stone industry from the site, see VORNICU 2017.

¹⁸ VORNICU 2017.

¹⁹ For the use-wear analysis of other knucklebones from Isaiia, see SIDÉRA, VORNICU 2016, 379-388

Dwelling no. 14: additional features

In the north-western part of the dwelling 14 (squares 106-107/f-g) its remains looked rather thrown in that place, than being in situ. The pile of remains was constituted from wall fragments (some vitrified and glued together, by the heavy fire, with ceramic materials), restorable vessels (also with heavy burning traces), and fragments from a clay brim (coming from a hearth) but also some smaller clay objects. The small clay objects from the pile of materials are: an anthropomorphic statuette (Figure 17/4), a fragment from the backrest of a miniature throne (Figure 17/8), a violin-shaped (en violon) object (Figure 17/10), an anthropomorphic foot from a vessel. Also, two knucklebones (from a big ruminant) with wear (Figure 19/5) were part of this pile of materials. After the dismantling of this pile of materials (of almost 40 cm height), pit 76 was observed. Of an almost round shape at its digging level (~ 0.90 m diameter), the pit was widening as got deeper, having a conical shape (1.10 m in diameter at the bottom) and a 0.90 m depth (Figure 20). On the bottom of this feature there was observed a greenish sticky humus that formed as a consequence of the decomposition of the organic matter deposited in the pit. At 10 cm above the bottom, a thick layer of ash (10 cm thick) was deposited. After that, the feature has been gradually filled, on a layer of 50 cm in height with various materials: ceramics, bones, flint artefacts (n = 11: four endscrapers, one sidescraper, two blades, two flakes, one debris). After this, at one moment in the pit were thrown several vessels, broken on the spot. These vessels were also affected by the heavy secondary burning, all of them being deformed.

The violin-shaped object mentioned earlier (length = 67, width = 52, thickness = 5 mm; Figure 17/10) is made of a fine paste, without impurities, and was submitted to a secondary burning (having a rose colour on the outer surface and reddish colour in fresh break). It has no decoration but four perforations made near the extremities. These items are not a rarity in the Precucuteni culture, as they appear in various settlements, in different shapes (more or less stylised), made of materials such as clay, bone, stone or metal ²⁰. As shape, the one discovered in 2017 at Isaiia has similarities with the clay pendants from another Precucuteni II settlement, east of the Prut River, Floresti III²¹.

Probably, the pit affecting one side of the dwelling was dug at a moment near after the burning of the house, being filled probably with debris from it. This feature, together with the disarrangement of the hearth, could be guardedly related to a possible ritual of abandonment of the dwelling.

Pit 74 was interpreted as a trash pit for the inhabitants of dwelling 14. It was found at eight meters south from the dwelling, it had a low depth (only 60 cm), but was wide (1.80x1.20

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²⁰ For more on the subject of the violin-shaped (*en violon*) pendants discovered in the Early Chalcolithic sites see MONAH 2012; MAREŞ, URSU, NICULICĂ 2009, 91–106; URSU 2014.

²¹ See BODEAN 2001, 48-49.

m in the upper layer and 1.40×1.40 m at the bottom: Figure 21). The outline of this feature is pretty irregular, having a biconical shape in cross-section. It was filled with various materials, mainly animal bones (mostly from the *Bos sp.*), *Unio* shells, ceramics, flint artefacts, and a fragment from a miniature foot of a table made from clay. On the bottom of the pit was placed a quern. The rich ceramic material from its filling is represented by fragments of various recipients, out of which one must note two coming from the upper part of two vessels: one of black pottery decorated with incisions and red painting (Figure 16/12) and the other, a light brown fragment decorated with horizontal grooves, of Stoicani-Aldeni influence (Figure 16/11). Also, it must be mentioned the high number of flint items from this feature (n = 37): four sidescrapers, nine endscrapers, eight unretouched blades (fragments), one trapeze, seven flakes, five debris/shatters, one retouched blade, one fragment from a flake core and one tablet for correcting the core platform. One of the side-scrapers is made of Balkan flint 22 .

Concluding remarks

Dwelling no. 14 from Isaiia (Early Chalcolithic — the end of phase II of the Precucuteni Culture) is a typical surface dwelling of medium size²³, as is the majority of early Eneolithic buildings. It is a rectangular, single-chambered dwelling, built with vertical structural elements implanted into pits, with a platform made from split trunks covered with clay, realized only on approximately half of the floor. The interior architecture comprises only one fire installation (a hearth), an area for domestic activities and storage (with many vessels and stone grinders), another one only for storage (with at least two large clay boxes) and a clay impost of unknown purpose. In one or more moments after the (probably intentional) burning, several anthropic interventions affected the collapsed dwelling: the dismantling of the hearth, the digging of pits nos. 76 and 78. These deliberate actions can be interpreted, with great caution, as parts of a ritual of abandonment of the dwelling. Also in relation to the ritual behaviour of the denizens, in almost every dwelling from Isaiia, objects and structures of a ritual character were found, arranged especially around the fire installations. It seems that every house had a sacred area, a sort of domestic "shrine" in which every family, beyond the rules imposed by the general canons, practiced individual forms of expressions of devotion to deities, inventing original objects of worship. This is the case also for dwelling no. 14, where the "individualisation" of worship lies in the combination of male and female symbols from the assemblage consisting in a vessel containing a fragment of figurine and a small cone.

²² Another Balkan flint artefact (an endscraper) was discovered at Isaiia in another pit coming from the same archaeological layer: see VORNICU 2017.

²³ COTIUGĂ 2015, 337, 342.

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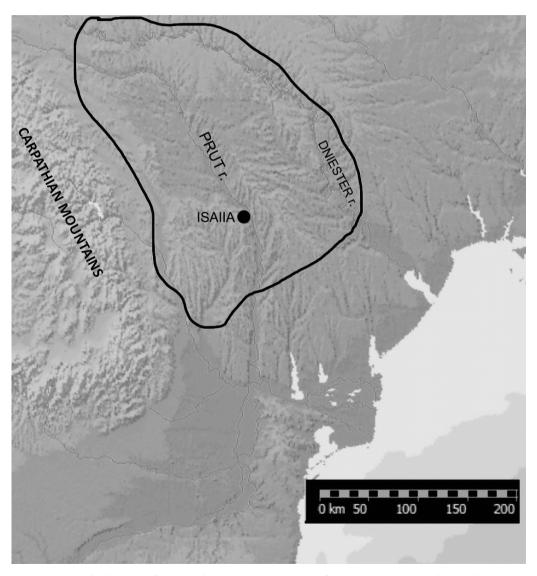


Figure 1. The location of Isaiia–*Balta Popii* site in the area of Precucuteni II – Tripolje A culture (after VORNICU 2017).

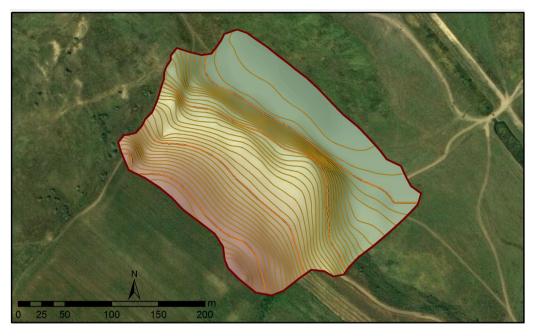


Figure 2. Topographic survey of the Isaiia–Balta Popii site.



Figure 3. Aerial image of the Isaiia–Balta Popii site (2017).

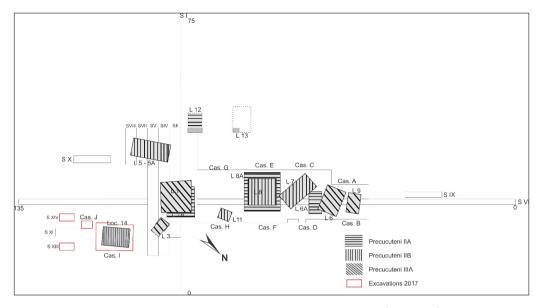


Figure 4. Isaiia-Balta Popii. The general plan of excavations (1996-2017).



Figure 5. Isaiia-Balta Popii. Magnetometric survey, 2015.

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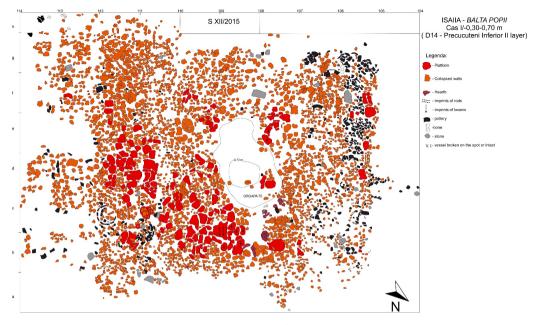


Figure 6. Plan of the dwelling no. 14.



Figure 7. Dwelling no. 14.

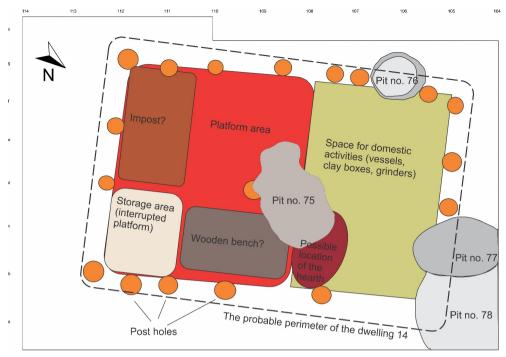


Figure 8. Sketch of the internal architecture and additional features of dwelling no. 14.



Figure 9. Detail of the area for domestic activities.



Figure 10. Image over the area with platform of the dwelling no. 14



Figure 11. Detail of the turned over platform, with imprints of beams.



Figure 12. Detail of the platform with imprints of planks (a possible bench).



Figure 13. Detail of the storage area.





Figure 14. Details of the impost (a) and the platform underneath (b).



Figure 15. The ritual assemblage from dwelling no. 14.



Figure 16. Pottery from dwelling no. 14 and its additional features.

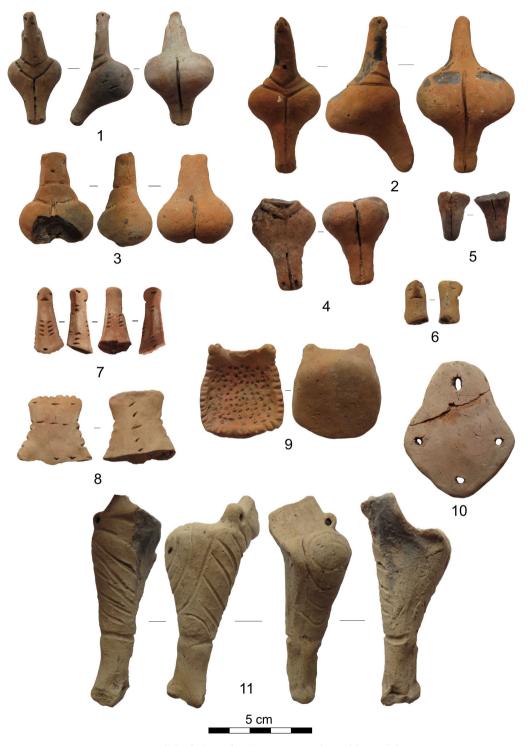


Figure 17. Small finds from dwelling no. 14 and its additional features.

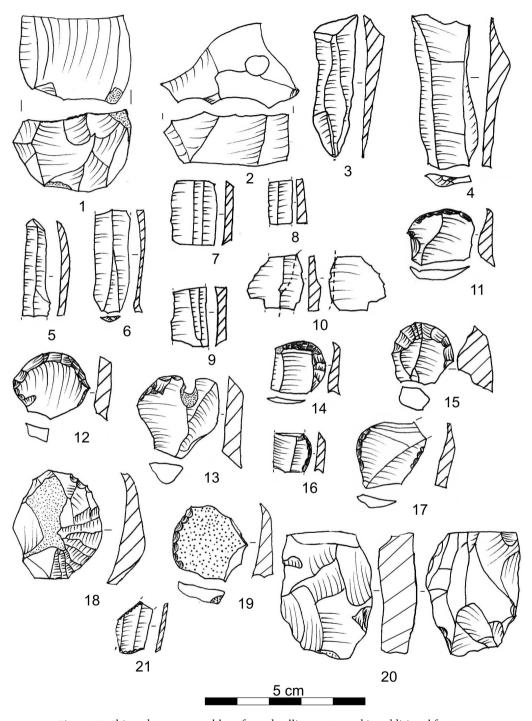


Figure 18. Chipped stone assemblage from dwelling no. 14 and its additional features.

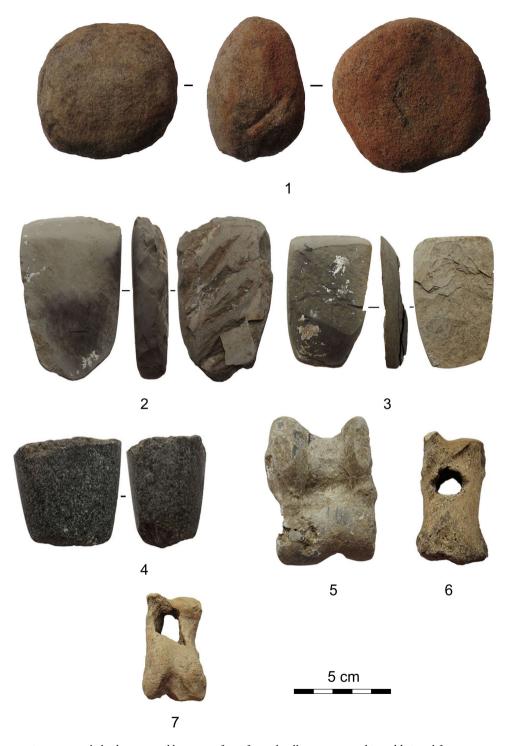


Figure 19. Polished stone and bone artefacts from dwelling no. 14 and its additional features.

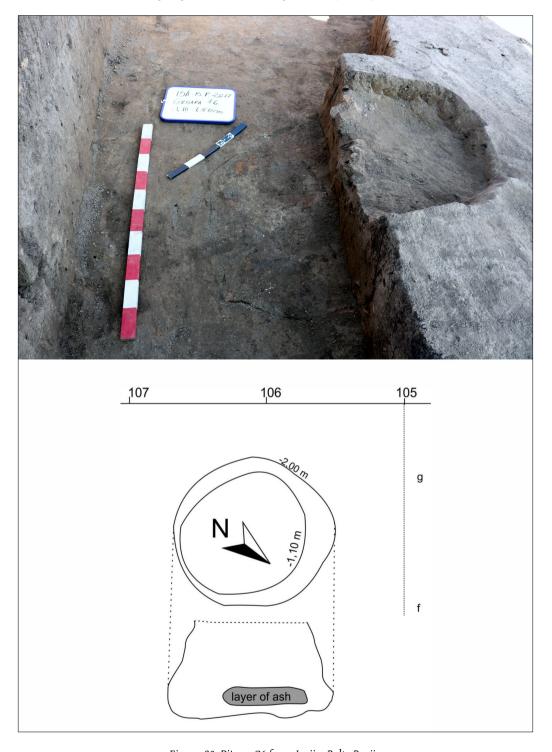


Figure 20. Pit no. 76 from Isaiia–Balta Popii.

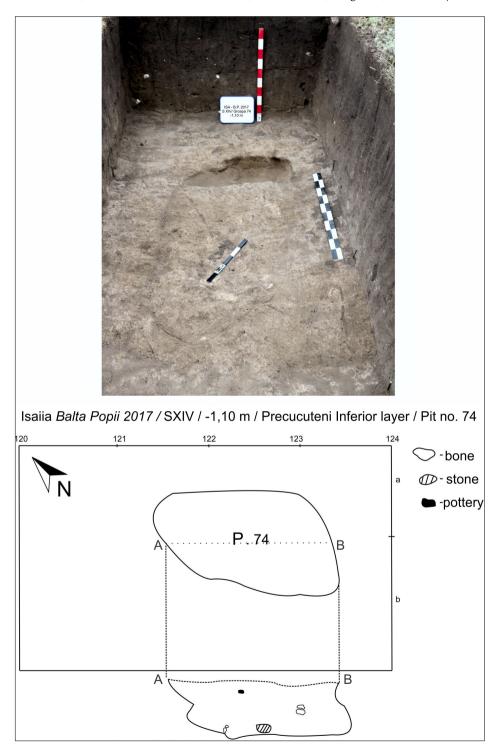


Figure 21. Pit no. 74.

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