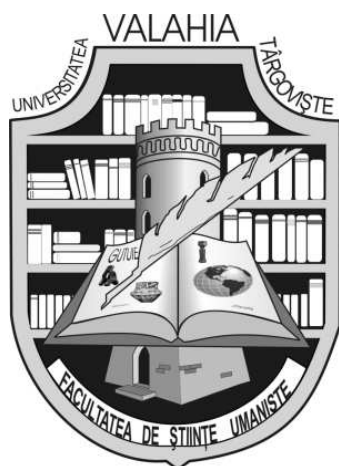


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Faculté de Sciences Humaines

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Bone and antler artefacts dated from Early Neolithic discovered recently in South-Western Transylvania, Romania

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Abstract: *Bone and antler artefacts dated from Early Neolithic discovered recently in South-Western Transylvania, Romania.* The article presents an Early Neolithic assemblage made of 11 artefacts of bone and antler discovered recently in South-Western Transylvania, Hunedoara and Alba Counties. The osseous materials artefacts were discovered at Lunca Târnavei-“Valley” during a periegesis and at Şoimuş/“Pe Teleci”/“Teleghi” where due to the extent of the Deva-Orăştie Motorway, more than 500 m of the site were excavated. The Western part of the site was researched by a team from Museum of Dacian and Roman Civilisation of Deva (Cătălin Rîşcuţa, Ioan Alexandru Bărbat and Antoniu Marc); the artefacts analysed in this article were discovered in this sector. Even if they are only few (N = 13), the pieces are both ordinary and rare or even unique ones. The typology comprises ordinary pieces like: points made of fragments of long bones or scrapers made of ribs. The rare pieces are: red deer antler sleeve, the blank of bone spoon and the fragment of red deer skull cap. Artefacts discovered at Şoimuş can be dated from Starčevo-Criş IC-IIIB.

Keywords: Alba County, bone and antler industry, Hunedoara County, prehistoric technology, Starčevo-Criş culture, Transylvania.

The archaeological research recently carried out has enriched our perspective regarding the osseous materials industry by identifying new types of artefacts, but especially by identifying aspects related to the artefacts’ morphology and functionality (C. Beldiman 2007; D.-M. Sztancs, 2011).

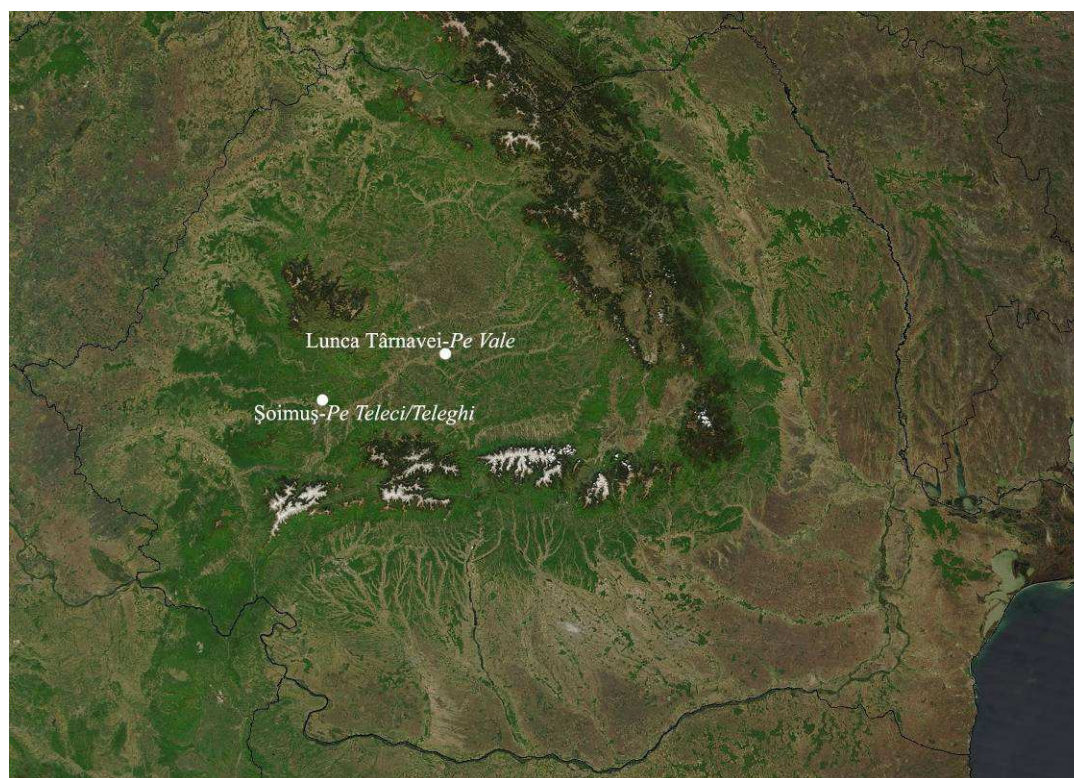
The archaeological excavations carried out by Ioan Alexandru Bărbat, Cătălin Rîşcuţa and Antoniu Marc in two Early Neolithic sites from Alba and Hunedoara County provided new objects made of bone and antler.

The geographical area and the history of research

Lunca Târnavei

The archaeological periegesis carried out in the spring of 2009 in Alba County, Lunca

Târnavei-“Valley” (comm. Şona) (fig. 1), led to the identification of a Starčevo-Criş settlement. Unfortunately, in the 20th century, it was destroyed by clay and sand exploitations from a nearby quarry. In what concerns the earlier discoveries done in this area, the following bibliography may be consulted: V. Moga, H. Ciugudean, 1995, p. 121; I. A. Bărbat, 2005, p. 13-30; I. A. Bărbat, 2008a, p. 13-14; I. A. Bărbat, 2008 b, p. 49. The inhabitants do not use a specific toponym for this area of the village. “On the Valley”, “The Valley”, “Coast” or “Ierdaş” are some of the terms used to designate this part of the village. From a geographical point of view, the site is placed in the South-Western part of the village, on the left shore of the Târnavă Mică River, being limited in the West by a small river and in the North by the last houses and gardens



1



2

Fig. 1 – 1 Localisation of the Lunca Târnavei-“Valley” and Șoimuș/“Pe Teleci”/“Telegi” archaeological sites (after http://www.eurfedling.org/maps/Satellite_Romania.jpg); 2 localisation of the Lunca Târnavei-“Valley” and Șoimuș/“Pe Teleci”/“Telegi” archaeological sites (after <http://www.maps.google.com>).

from the actual village. Unfortunately, the existence of a quarry in the nearby area determined the destruction of a significant part of the site. The pieces that we will present in this article were recovered after a periegesis.

Șoimuș

The archaeological site of Șoimuș from Hunedoara County is placed in the vicinity of the village bearing the same name (Șoimuș Commune) (fig. 1), more exactly in its Eastern part, on the second terrace of the right shore of the Mureș River. This place is known as “Pe Teleci” or “Teleghi”.

The area found between Șoimuș and Bălata where “Pe Teleci”/“Teleghi” is placed was quoted very often in the archaeological literature and many discoveries have been made here (M. Roska, 1942, p. 165, nr. 113; O. Floca, 1969, p. 17; O. Floca, 1972, p. 13-14; I. Andrițoiu, 1979, p. 27, nota 34; I. V. Ferencz, D. Ferencz, 2001, p. 132; S. A. Luca, 2005, p. 151; S. A. Luca, 2008, p. 165).

In the old inventory register (Prehistory) of the Museum of Dacian and Roman Civilisation Deva, the inventory numbers between 5055 and 5079 refer to archaeological pieces (potsherds and osteological pieces) “... found at Șoimuș – Bălata...”. (MDRC, Old Inventory Register, Prehistory, no. 1 – 11625, ms.).

The discoveries dated from the Roman period are documented by numerous debris of building materials found between Șoimuș and Bălata. A part of these artefacts were recovered and registered by G. Téglás. In these conditions, Dumitru Tudor was determined to state that a Roman *vicus* might have existed there (D. Tudor, 1968). Liviu Mărghită includes Șoimuș in the catalogue of Roman discoveries made in Hunedoara County. The information he provided was then used in the Romanian archaeological literature (L. Mărghită, 1975).

A first archaeological excavation was led in 1973 by Ion Andrițoiu who conducted a survey in the Northern part of the site, after some fortuitous discoveries were made while the poultry farm of Șoimuș was being built. The area is known as “Poultry Farm” or “Farm no. 2” (I. Andrițoiu, 1979; F. Drașovean, M. Rotea, 1986; Gh. Lazarovici, Z. Kalmar-Maxim, 1991; Z. Maxim, 1999; S. A. Luca 2005; S. A. Luca, 2008).

The most recent discoveries were made in the autumn of 2011 while the Southern part of the “Pe Teleci”/“Teleghi” archaeological site was affected by the Project Deva-Orăștie Motorway between km 29+750-30+300 (fig. 2). Due to its extent on more than 500 m of the area bounded for research, the site was divided for excavation between teams of archaeological research. The members of the teams came from: the Museum of Dacian and Roman Civilisation of Deva (the Western part – B Zone), the “Vasile Pârvan” National Institute of Archaeology and the National Museum of Romanian History of Bucharest (Eastern part – A Zone) (Schuster *et al.*, 2012).



Fig. 2 – Aerial view of the B Zone (western) of the Șoimuș/“Pe Teleci”/“Teleghi” archaeological site (after

<http://www.jurnalul.ro/observator/autostrada-deva-orastie>).

Discovery context of bone and antler artefacts

Lunca Târnavei

During a field archaeological research done in Lunca Târnavei-“Valley”, two bone artefacts (fig. 3), an important quantity of ceramics and osteological materials were recovered. It is considered that these were part of a complex discovered near the profile of the above-mentioned quarry.

Șoimuș

In the Western part of the archaeological site Șoimuș-“Pe Teleci”/“Teleghi” a series of complexes were researched. They were dated

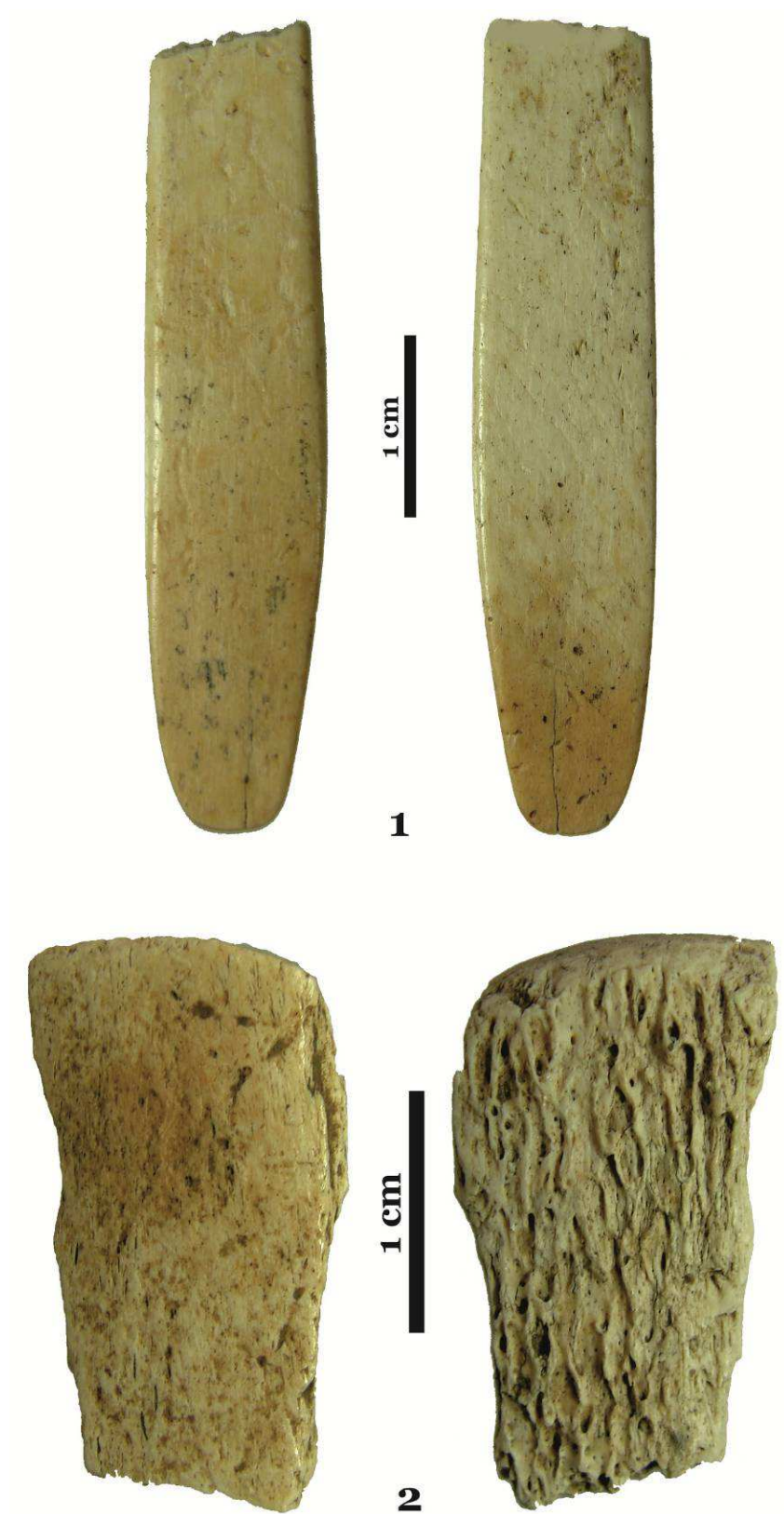


Fig. 3 – Lunca Târnavelor-“Valley”: 1 LTV 1; 2 LTV 2.

from the Early Neolithic, Starčevo-Criș culture (Schuster *et al.* 2012, p. 292). Among the archaeological materials discovered, some bone and antler objects were identified (fig. 4- 8). The Neolithic archaeological materials and the documentation were kindly offered for study by our colleagues PhD. C. Rîșcuța and A. Marc (MDRC Deva) whom we would like to thank on this occasion.

Because the study of archaeological materials is at the beginning, osseous materials artefacts were identified only in few complexes until now. These were taken from different levels of digging. At the middle of the past century, land improvement works were done on the entire surface of the site. Consequently, the upper archaeological levels were damaged and each researched complex had to be reported to the actual ground-level.

C18 (Km 30+260 - 30+280). It is a surface archaeological complex that overlaps a semi-subterranean structure. From a cultural and chronological point of view, the two habitation horizons are dated from Starčevo-Criș IC – IIA (semi-subterranean house) up to IIA – IIB (house).

Two pieces were discovered in the most recent complex – the surface one – encountered at a depth of 0.55-0.75/0.80 m. The other pieces of inventory were discovered in the semi-subterranean structure (0.75/0.80 – 1.20/1.30 m).

Complex placed at the edge of the site (Km 30+300 - 30+320). The hut was randomly identified during some activities that had as a purpose the rehabilitation of the Western part of the site. We have to mention that more than 80% of the surface of the archaeological complex was discovered without specialised survey. The pieces gathered belong to an archaeological surface complex that, according to the Northern profile of the house, is placed at a depth of 0.20-0.40 m. Unfortunately, the strong fragmentation of the osteological materials and thus of the bone and antler artefacts is related to the mechanical interventions that destroyed most of the archaeological complex.

Cultural and chronological classification of artefacts

Lunca Târnavei

According to the ceramics discovered at Lunca Târnavei-“Valley”, the site was built somewhere around the end of Starčevo-Criș IIIA. Other specifications are hard to state due to the character of the research. Despite the fact that the *impress* ornamentation is very frequent in numerous combinations, there are no pieces with incised surfaces or with slip in the ceramic assemblage that was gathered from the surface (high-quality pottery), and the shapes illustrate pots included in the bowls category, or in the one of cups with short/high foot and sometimes slightly ringed.

Șoimuș

The discoveries are very recent, consequently we should emphasize the fact that the inclusion of the findings into one of the phases of the Starčevo-Criș culture is provisory. The names of the complexes are in the same situation.

As we mentioned above, the earliest pieces were dated from the Starčevo-Criș IC – II A (Gh. Lazarovici, 1977; Gh. Lazarovici, 1979; Gh. Lazarovici, 1984; Gh. Lazarovici, Z. Maxim, 1995; Z. Maxim, 1999) or Precriș I/II (I. Paul, 1989; I. Paul, 1995; M. M. Ciută, 2000; M. M. Ciută, 2005; M. M. Ciută, 2009) and they were recovered from the inventory of the semi-subterranean complex.

The hut is characteristic especially for the end of the Starčevo-Criș IIA culture and the beginning of the next one, IIB (M. Nica, 1971; Gh. Lazarovici, 1977; Gh. Lazarovici, 1979; Gh. Lazarovici, 1984; Gh. Lazarovici, Z. Maxim, 1995; Z. Maxim, 1999).

The functioning period of the hut discovered at the Western edge of the site can be very easily mentioned. The archaeological material (ceramics) is specific to the Starčevo-Criș IIIB (Gh. Lazarovici, 1977; Gh. Lazarovici, 1979; F. Drașovean, 1981; N. Ursulescu, 1983; N. Ursulescu, 1984; Gh. Lazarovici, 1984; Gh. Lazarovici, Z. Maxim, 1995; Z. Maxim, 1999; E. Popușoi, 2005; S. Băcuet-Crișan, 2008).

Catalogue

The methodological parameters of the description and analysis are presented in various publications and we will not insist upon them (C. Beldiman, 2007; D.-M. Sztancs, 2011).



Fig. 4 – Șoimuș/“Pe Teleci”/“Teleghi”: 1 SMT 1; 2 SMT 2; 3 SMT 3.

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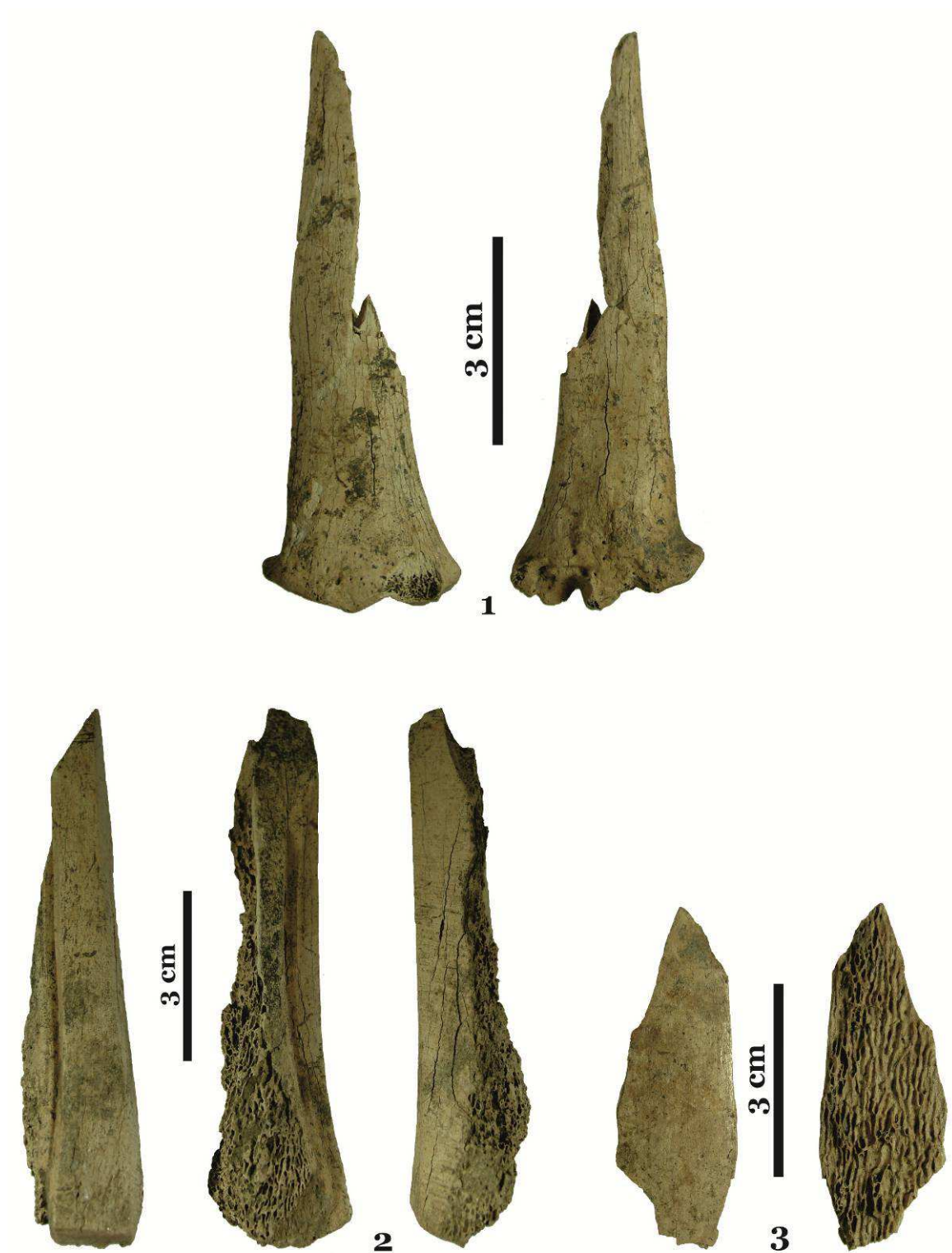


Fig. 5 – Şoimuş/“Pe Teleci”/“Teleghi”: 1 SMT 4; 2 SMT 5; 3 SMT 6.

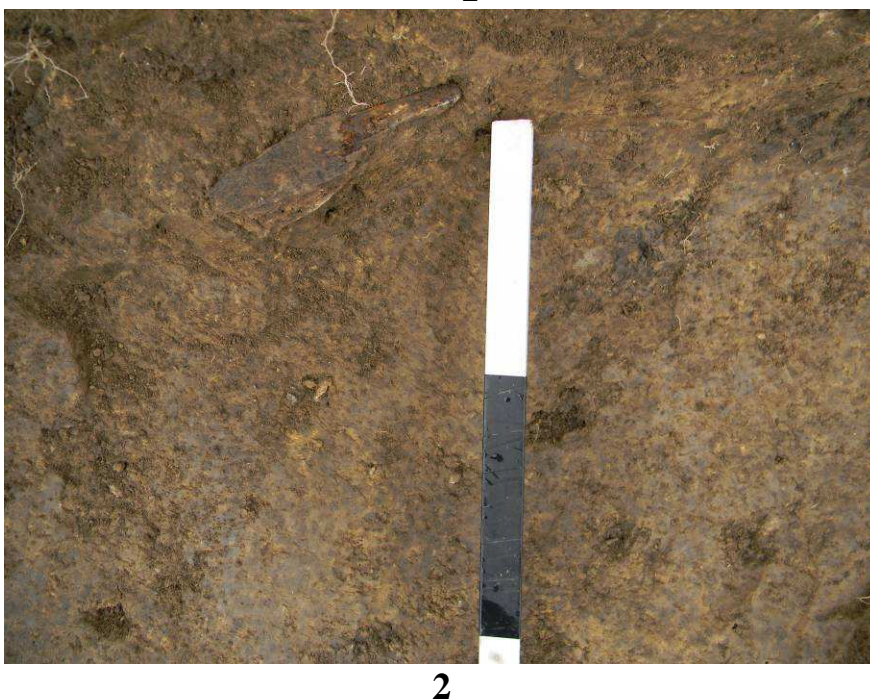


Fig. 6 – 1 Artefact SMT 7 *in situ* – complex C18; 2 artefact SMT 3 *in situ*, lower level of complex C18.

**Bone and antler artefacts dated from Early Neolithic discovered recently in South-Western Transylvania,
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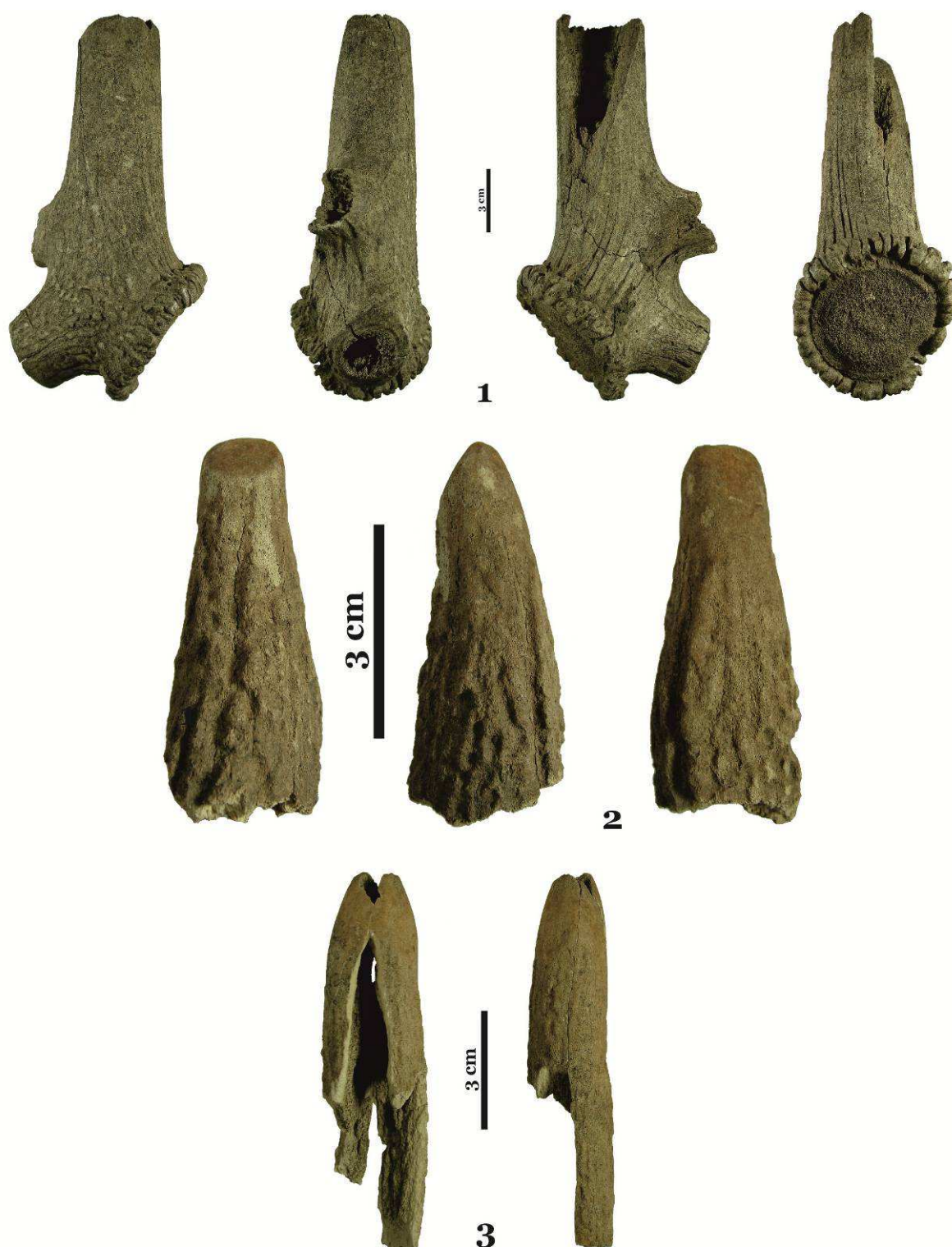


Fig. 7 – Şoimuş/“Pe Teleci”/“Teleghi”: 1 SMT 7; 2 SMT 8; 3 SMT 9.

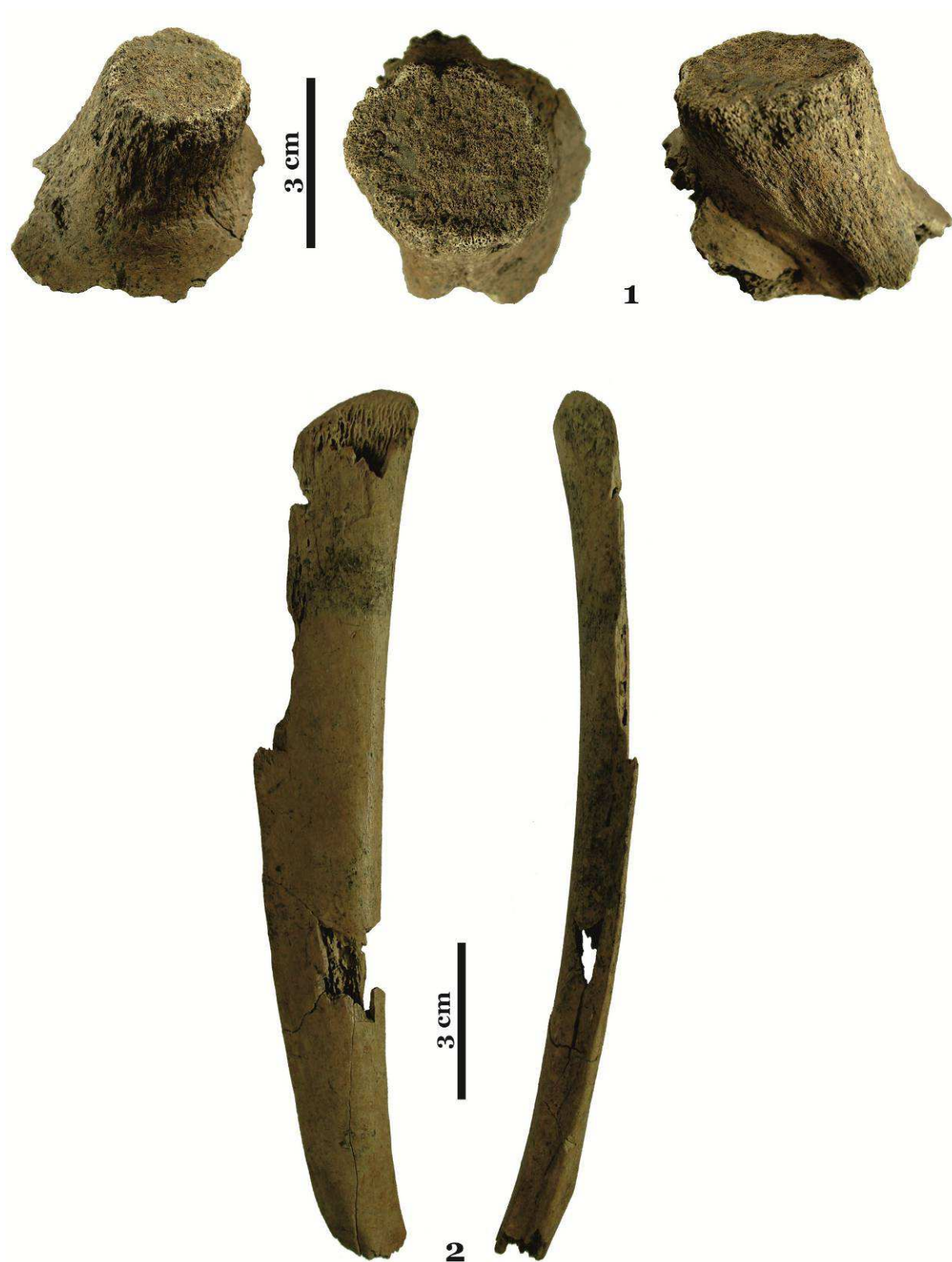


Fig. 8 – Șoimuș/“Pe Teleci”/“Teleghi”: 1 SMT 10; 2 SMT 11.

On this occasion, we present the results of a first evaluation of the assemblage comprising bone and antler artefacts discovered at Lunca Târnavei and Şoimuş coming from the researches carried out by Ioan Alexandru Bărbat, Cătălin Rîşcuţa and Antoniu Marc. Some considerations regarding the typology and technology, as well as a minimal necessary illustration, are presented here. In the future, a detailed analysis of these pieces will be published.

The pieces are stored in the collection of the Museum of Dacian and Roman Civilisation of Deva, momentarily without inventory numbers.

Lunca Târnavei-“Valley” (LTV)

LTV 1 (fig. 3/1)

Scraper made of a rib (*I B4* type)

Fragment of cattle rib. Medium state of conservation; old-fractured, calcinations. A small central sector of the distal end is preserved with a unilateral, short active part manufactured by abrasion. The débitage consisted in direct percussion/chopping – direct percussion/fracture.

L 24.36; minimal width 10.09/3.22; maximal width 12.69/3.16; LPA 2.65.

LTV2 (fig. 3/2)

Bone spoon made of a rib fragment (*I F* type).

Well preserved. About 1/3 from the length of the piece is preserved – the proximal/medial part. The shaping was done using abrasion. The surfaces are well-preserved, the edges are rounded, the proximal end is symmetrical convex, the end is thinned/ on its surfaces by abrasion.

L 45.33; EP 6.48/0.94; PP 9.99/2.24; PM 9.28/2.22.

Şoimuş-“Pe Teleci”/“Teleghi” (SMT)

SMT 1 (fig. 4/1)

Point made of a caprine demi-metapodial

(*IA7 a* type; Beldiman 2007 typology).

Piece entirely preserved; good state of conservation. At the distal parts, on the upper surface – deposits of concretions. Caprine metapodial. The débitage was done using the groove and splinter techniques, followed by

direct percussion/fracture. On the inferior side, the edges were finished using abrasion. The active part is entirely preserved and it is faceted (in the case of points, this situation is rare). Use-wear traces: superficial bluntness and polish at the active part. It was probably used as a perforator for hides or textiles.

L tot 71.64; EP 14.14/9.77; PM 7.99/4.35; LPA 11.75; CD 5.86/3.70.

SMT 2 (fig. 4/2)

Point made from a segment of rib (*I A20* type).

Fragmentary piece; the distal end was fractured in the past. Good state of conservation. Segment of small mammal rib. Débitage was done using direct percussion/fracture; the shaping of the active part was done using abrasion. Use-wear traces: superficial bluntness and polish at the active part. It was probably used as a perforator for hides or textiles.

L tot 32.63/31.82; EP 6.60/1.88; PM 6.84/2.41; LPA 4.25/3.85.

SMT 3 (fig. 4/3; 6/2)

Point made from a fragment of long bone (*I A1* type).

Piece entirely preserved. Good status of conservation. Fragment of cattle scapula. The Débitage was done using direct percussion/splitting and direct percussion/fracture, followed by direct percussion/splitting on the left edge on 1/2 of its length. The other part of the edge is anatomic. The right edge is shaped using direct percussion/fracture. Use-wear traces: bluntness and polish placed at the distal end.

L tot 107; EP 28.30/9.28; PM 28.29/10.88; LPA 48.15; CD 9.81/6.62.

SMT 4 (fig. 5/1)

Point made of a caprine radius (*I A25* type).

Fragmentary piece, fractured both in the past and recently. Medium state of conservation. On the inferior side/left edge there are some traces of shaping using direct percussion/chopping and abrasion. This part is affected by corrosion.

L 86.17; EP 29.13/13.48; PM 16.10/8.07; LPA 33.

SMT 5 (fig. 5/2)

Blank of bone spoon (*IF* type).

Fragment, fractured in the past. Good state of conservation. Cattle metapodial. The proximal end preserves traces of transversal cutting, with a lithic piece (maybe a flint blade). Traces of débitage (the groove and splinter technique) are preserved on one of the sides. On the opposite side, intense abrasion was applied. Shaping using abrasion was applied on the left edge on 1/2 of its length, to the mesial part. Traces of superficial transversal cutting are preserved at the level of the mesial part. It is possible that the piece was fractured during the procedure of cutting.

L 88.44; EP 17.85/17.79; PM 15.52/12.83; depth cutting groove la EP 7.27; depth max groove 6.40.

SMT 6 (fig. 5/3)

Spatula/spoon made of a rib fragment (*IF* type).

Fragmentary piece. Cattle rib. Good status of conservation. Fractured in the past and recently. The fracture of the piece in the past produced an edge. Another edge preserves traces of shaping using direct percussion/chopping and abrasion. It probably is a fragment of a spatula/spoon.

L 59.43; PM 21.18/3.80; LPA 37.50.

SMT 7 (fig. 6/1; 7/1)

Red deer antler sleeve (*IV C3* type).

Fragmentary piece, fractured in the past. Good status of conservation. Deposits are preserved inside the perforation. The surfaces are affected by axial cracks. Shed red deer antler – right side. The first tine was detached using fibre sawing (cutting using linear abrasion) applied on the entire circumference and direct percussion/fracture. On the posterior/medial side of the first tine there is a residual trace of cutting. It is placed at a distance of 12.54 mm of the cut end. The second tine was detached from its base using direct percussion/chopping applied on the median side on 1/3 of the circumference and detached using direct percussion/fracture with a large piece split from the lateral side. The beam was detached using direct percussion/chopping probably applied on the entire circumference. 1/2 of the circumference is preserved. The other part was fractured in the past. The distal part seems to have been fractured during the use of the piece. At the distal part, an axial perforation was done

in the spongy tissue by carving and by alternative rotation using a massive lithic point. Traces of the procedure are preserved on the walls of the perforation. The fracture at the perforation level highlights its morphology – an asymmetrical cone, partially finished on the distal end on a length of 19 mm. This is a rare situation in which the perforation done in a spongy tissue was not affected by the ulterior procedures. This situation was possible because of the concretions deposited on the walls of the hole, which acted as a kind of a “seal”. There are no traces of perforation for the transversal fitting of a wooden shaft. The artefact is probably unfinished or most probably a sleeve in which a lithic piece such as a chisel or a hammer was fixed. It was used by hand. There is no clear evidence of bluntness and polish that would sustain the idea of the use of a possibility that the piece was not used, being damaged because of the fixing in the perforation of the lithic piece.

L tot 194; EP (burr) 75.50/69.95; PM (tine 2) 76.78/45.25; base tine 1 43.68/33.40; base tine 2 36.58/33.20; PD (beam) 45.65/44.00; ED cca 44.60/44; diam pf ED cca 32.65/30; depth pf 68; L finished part of pf 19.

SMT 8 (fig. 7/2)

Oblique double point made of terminal segment of tine (*IGI* type).

Medio-distal segment of red deer tine. Fragment – the distal segment of piece is preserved, recently fractured. Medium state of conservation. Double asymmetric active part. It was shaped by direct percussion/chopping and abrasion. There are no use-wear traces on its surfaces.

L 54.68; PM/PD 22.96/21.78; LPA 1 12.30; width LPA 1 11.56; LPA 2 3.30; width LPA 2 10.94; ED 10.6/4.

SMT 9 (fig. 7/3)

Double oblique point made from a terminal segment of tine (*IGI* type).

Distal segment of a crown tine. Medium state of conservation. Fragmentary piece,

fractured in the past and recently; glued. The active part is bilateral shaped using direct percussion/chopping and abrasion. The fracture of the distal end was done in the past, probably during the use of the piece.

L 117.89/111.89; PM/PD 28.30/23.56; LPA 1

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cca 32; width LPA 1 16.94; LPA 2 cca 26; width LPA 2 14.80.

SMT 10 (fig. 8/1)

Fragment of red deer skull with pedicle. Hunting trophy. Medium state of conservation. Traces of superficial sawing by dog? The pedicle is preserved entire, the beam had shed. This indicates that the animal was slaughtered between October and February. This is a rare case in which this type of piece is preserved in an archaeological context.

Skull cap 72.13/58.05; thickness 11.40-13.50; diam base pedicle 44.94/38.90; surface pedicle/beam 37.47/32.09.

SMT 11 (fig. 8/2)

Scraper made of a rib segment (*I B3* type)

Cattle rib. Fragmentary piece – sectors of distal and medial part are missing. They were fractured in the past and recently. Medium state of conservation. The extraction of the rib segment was done using direct percussion/chopping – direct percussion/fracture. The proximal end is unfinished, has the aspect produced during the débitage stage; the surfaces and the edges have anatomic aspect. The active part is convex, asymmetric and it was shaped by abrasion on the plane of fracture, broader on the inferior part of the piece (the convex side of the rib) and very narrower on the opposite side. The use-wear traces are highlighted on the right edge and they illustrate the use with the right hand. The traces of bluntness and polish at the active part and proximal one appeared because of the holding in hand.

L tot 205; EP 20/13.12; PM 30.64/9.88;

ED 29.80/2.12; LPA 1 (IS) 21.50; width LPA 1 27.90; LPA 2 (SS) 5.38; width LPA 2 22.

Conclusions

Even if they are only few ($N = 13$), the pieces analysed above are important because they attest in a meaningful manner, the presence of the paleotechnological phenomenon related to osseous materials industry in some archaeological sites that have never been studied until now: Lunca Târnavei (on the Valley of the Târnava Mică River) and Șoimuș (on Mureș Valley). The artefacts discovered at Șoimuș come from certain archaeological contexts (huts) dated

from a cultural point of view from Starčevo-Criș IC-IIIb. They could also be absolutely dated, this fact being an added value of the research.

In this assemblage ordinary types of artefacts and rare or unique ones are present. Points made of fragments of long bones and ribs are included in first category, while the red deer antler sleeve, the blank of bone spoon and the fragment of red deer skull cap are the rare or unique pieces.

These artefacts increase the catalogue of Early Neolithic bone and antler artefacts from Transylvania.

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English version by Diana-Maria Sztancs; translation revised by Andreea-Daniela Hompoth.

Abbreviations in text

CD – distal diameter; Diam – diameter; ED – distal end; EP – proximal end; IS – inferior side; L – length; L tot – total length; LPA – length of active part; Max – maximum; MDRC – Museum of Dacian and Roman Civilisation Deva; N – number; PD – distal part; Pf – perforation; PM – mesial part; PP – proximal part; SS – superior side.

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