

# ANNOUNCEMENTS

ANDRZEJ PELISIAK

## **MENILITE HORNSTONE SOURCES AND PROCESSING SITE AT CISNA IN HIGH BIESZCZADY MOUNTAINS**

### ABSTRACT

A. Pelisiak 2016. *Menilite hornstone sources and processing site at Cisna in High Bieszczady Mountains*, AAC 51: 285–292.

The menilite hornstone processing site Cisna 6 was discovered in 2015 during the surface surveys carried out by Andrzej Pelisiak in the western part of High Bieszczady Mts. It is located within Solinka river Valley, near the edge of the river terrace about 4 m above the flood zone of the valley close to natural deposits of menilite hornstone in the riverbed of the Solinka river. The archaeological material was discovered on an area of about 150 m<sup>2</sup>. There were collected 53 natural pieces of raw material, 25 artefacts made of menilite hornstone and one artefact made of siliceous sandstone. This assemblage probably is not homogenous. There were recognized artefacts which can be dated to the Late Neolithic as well as to the Bronze Age.

**Key words:** Polish High Bieszczady Mts.; menilite hornstone; processing site; Late Neolithic; Bronze Age

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### INTRODUCTION

Archaeological surface surveys carried out from 2012 onwards in the Polish High Bieszczady Mountains resulted in discovery of most the 30 sites dated to the Late Neolithic and Bronze Age. Almost all of them are represented by single artefacts made of various local and nonlocal raw material (Pelisiak, Maj 2013; Pelisiak 2014a; 2016a; 2016b; Pelisiak, Maj, Bajda 2015)<sup>1</sup>. The sites are located in different landscapes, some of them within the subalpine zone (1000–1250 m a.s.l.).

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<sup>1</sup> Up to 2012 except artefact made of menilite hornstone discovered at Połonina Wetlińska (Valde-Nowak 1991) no sites dated to the Neolithic and Early Bronze Age were known from the High Bieszczady Mts. (Valde-Nowak 1988).

Sites from the high mountain zone are located in a clear spatial context of salt water springs (Pelisiak 2014/2015). The chronology of these sites and their landscape position corresponds with the palynological records of human activity in the Bieszczady Mts. which came from Tarnawa, Smerek and Wołosate peatbogs. The pollen diagrams from these palynological locations suggests that the animal herding on this area begun at ca. 3200 BC (Ralska-Jasiewiczowa 1972; 1980). As it was already suggested archaeological finds from the High Bieszczady Mts. dated to the Late Neolithic and Early Bronze Age can be considered as the strong argument for seasonal herding of animals conducted within the transhumance system (Pelisiak 2013a; 2013b; 2014b). During the 2015 surface surveys first menilite processing site was discovered in the High Bieszczady Mts. at Cisna, powiat Lesko. It is located within Solinka river Valley, near the edge of the terrace about 4 m above the flood zone of the valley (Fig. 1). The archaeological material was found on the area of about 150 m<sup>2</sup> in the vicinity of the menilite hornstone natural deposits located in the bottom a Solinka river valley and in a Solinka riverbed about 20-30 m from the site. The area of the site is covered by natural vegetation: bushes, grass and young beech trees. This resulted in difficulties in identification of artefacts on the surface of the ground. Fortunately extremely dry conditions during July and August 2015 limited the growth of low plants. That year condition of surface surveys were much better like during the last years what made it possible to discovery this site.

#### ARCHAEOLOGICAL MATERIAL COLLECTED FROM THE SURFACE OF THE SITE

Archaeological material collected within an area of processing site Cisna, site 6 during the surface surveys carried out in 2015 contains consists of 53 pieces of raw material and 25 artefacts made of menilite hornstone and one artefact made of siliceous sandstone.

Menilite hornstone: 45 irregular natural pebbles of menilite raw material (dimensions from 30 to 148 mm); 8 natural tablet-like blocks of raw material, dimensions 64 × 68 × 33 mm; 41 × 32 × 22 mm; 42 × 38 × 18 mm; 54 × 30 × 19 mm; 72 × 28 × 32 mm; 45 × 33 × 38 mm; 65 × 40 × 26 mm; 65 × 45 × 33 mm; 8 pieces of raw material with single negatives of detached flakes, dimensions: 112 × 87 × 50 mm; 47 × 33 × 18 mm; 64 × 35 × 40 mm; 77 × 47 × 27 mm; 98 × 69 × 44 mm; 39 × 29 × 18 mm; 50 × 32 × 37 mm; 76 × 32 × 20 mm; 1 tablet-like piece of raw material with initial traces of shaping one narrow side, dimensions 82 × 63 × 29 mm; 1 piece of technical debris with negatives of detached flakes, dimensions 39 × 19 × 8 mm; 1 piece of raw material with one edge retouched on one face, dimensions 29 × 23 × 13 mm (Fig. 2:6); 1 fragment of crushed single platform blade core, striking platform formed by detachment of flakes from the edge of the striking platform and flaking surface, dimensions 23 × 22 × 18 mm; 1 single base splintered piece, dimensions

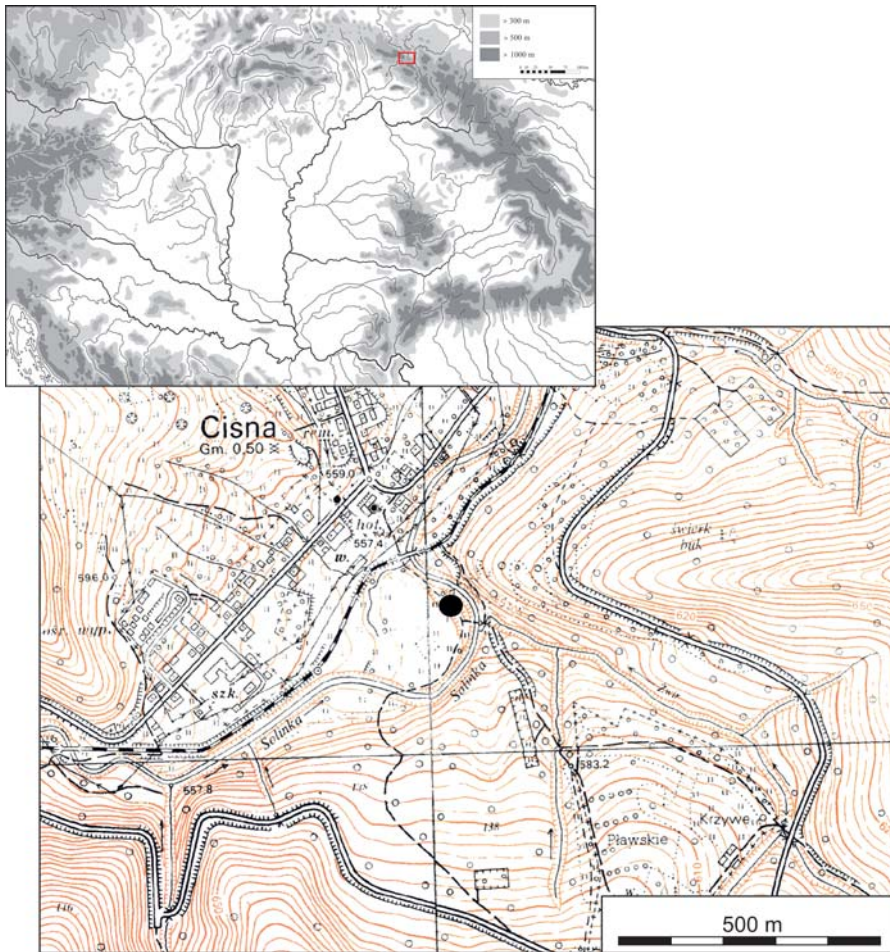


Fig. 1. Cisna, powiat Lesko, site 6. Location of the menilite hornstone processing site; drawn by I. Jordan, A. Pelisiak.

58 × 28 × 20 mm (Fig. 2:2); 1 double bases splintered piece, both bases are blunt, dimensions 82 × 40 × 18 mm (Fig. 2:3); 1 double bases splintered piece, one base sharp, opposite one blunt, dimensions 62 × 23 × 17 mm (Fig. 2:1); 1 partly crushed irregular splintered piece, dimensions 57 × 38 × 26 mm (Fig. 2:4); 1 half-product of rectangular axe or pick, traces of preparation of narrow sides and the cutting edge, one of narrow side is partly crushed, maximum length 117 mm, maximum width in a part of cutting edge 51 mm, maximum thickness 42 mm (the artefact was abandoned probably in result of oblique fracture; Fig. 2:5); 1 natural piece of raw material with one edge partly retouched on one side, dimensions 41 × 26 × 13 mm (Fig. 3:1); 1 piece of debris with crushed edges, one of them with irregular retouch, dimensions 57 × 38 × 31 mm

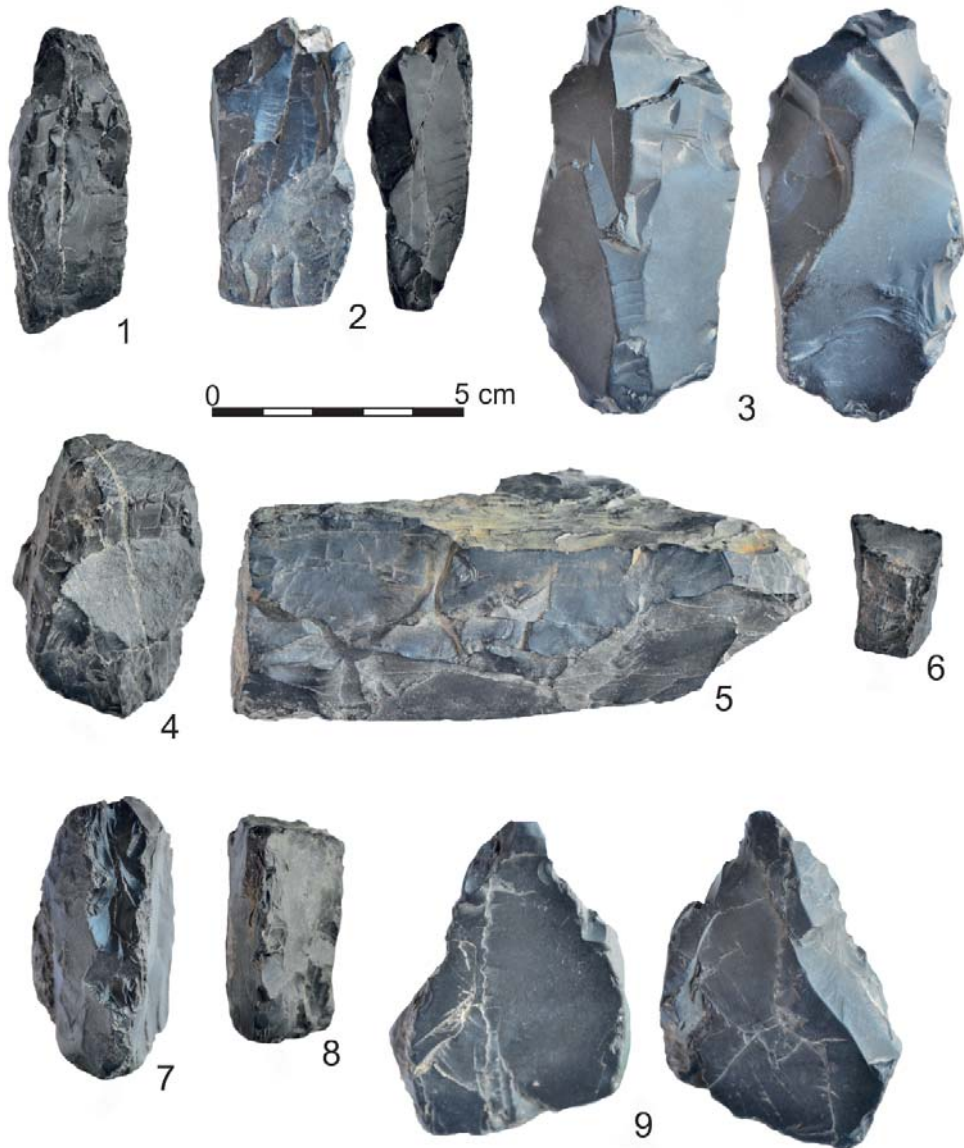


Fig. 2. Cisna, powiat Lesko, site 6. Selected artifacts made of menilite hornstone; photo and computer design Z. Maj, A. Pelisiak.

(Fig. 2:7); 1 plate-like piece of debris with one edge crushed and retouched on the one side, dimensions  $42 \times 20 \times 21$  mm (Fig. 2:8); 1 plate-like piece of debris with three edges retouched on one face, dimensions  $55 \times 53 \times 18$  mm (Fig. 3:6); 1 plate-like piece of debris with irregular retouch on both narrower





Fig. 3. Cisna, powiat Lesko, site 6. Selected artifacts; photo and computer design Z. Maj and A. Pelisiak.

1–4, 6 — menilite hornstone, 5 — siliceous sandstone.

sides, dimensions  $83 \times 62 \times 29$  mm (Fig. 3:2); 1 massive flake with converging retouch on one side which forms rounded tip  $62 \times 43 \times 17$  mm (Fig. 2:9); 1 fragment of knife-like tool with natural back and part of one edge with bifacial retouch, second part of this edge with negative of detached flake which forms the burin on truncation, dimensions  $49 \times 26 \times 16$  mm (Fig. 3:3); 1 small blade from single platform blade core, one edge with utilization retouch, dimensions  $34 \times 14 \times 5$  mm (Fig. 3:4). Siliceous sandstone: 1 fragment of single platform flake core, dimensions  $62 \times 34 \times 21$  mm (Fig. 3:5).

## CHRONOLOGY

The material from Cisna, site 6 was collected from the surface of the ground. This made it difficult to decide whether it is homogeneous or not. The blade with irregular utilization retouch (Fig. 3:4) as well as fragment of blade core can be dated to the Neolithic. Splintered pieces are frequent in both Neolithic and Early Bronze Age contexts. Half-product of rectangular axe (Fig. 2:5) is also of the most typical artefact of this period. On the other hand this tool can be also interpreted as a pick. Such function of this tool is possible because of close vicinity of natural deposits of menilite hornstone and potential place of extraction of the raw material used for processing at the workshop. Moreover similar artefact was found on the exploitation and processing site at Ropa, powiat Gorlice, dated to the Early Bronze Age and also based on menilite hornstone (Valde-Nowak 1995a; 1995b, Fig. 3). Because of pick is the universal mining tool, artefacts of this kind are frequent on the both Neolithic and Early Bronze Age exploitation sites and they are not diagnostic in respect of the chronology (Borkowski *et al.* 1986; Weiner 1986). This fact allows to the assumption that artifact from Cisna, site 6 can be dated to the Late Neolithic as

well as to the Early Bronze Age. Knife-like flake tool (Fig. 3:3) can be assumed as one of the typical Early Bronze Age tool (Kopacz, Valde-Nowak 1987; Kopacz 2001). The flake core made of siliceous sandstone can be dated to the Early Bronze Age but it is also possible its Early Bronze chronology (compare Pelisiak 2016a).

## CONCLUSIONS

The site 6 at Cisna is located near the natural deposits of menilite hornstone. This and mass presence of the natural pieces of raw material on this site as well as processed blocks suggest that the menilite hornstone was exploited in the close vicinity to the workshop. This site can be linked with transhumance carried out in the High Bieszczady Mts in the Late Neolithic and Early Bronze Age. The menilite hornstone from Cisna was probably exploited and processed for local use. Identification of extraction place as well as methods of menilite hornstone mining is the task of following works.

The site at Cisna confirms exploitation of various Carpathians stone raw material during Neolithic and Early Bronze Age (Valde-Nowak 1995a; 1995b; 2001; Budziszewski, Skowronek 2001; Valde-Nowak, Strakošova 2001; Pelisiak 2014a). Because of their characteristics and relatively low quality they were exploited for local or regional use. This type of utilization of menilite hornstone can be assumed at Cisna site. However, it is possible that some stone raw material from Bieszczady Mts. e.g. siliceous sandstone were also of much wider geographical use (Pelisiak 2014a).

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*Address of the Author*

*Instytut Archeologii*

*Uniwersytet Rzeszowski*

*St. Moniuszki 10*

*35-015 Rzeszów, Poland*

*e-mail: a.pelisiak@gmail.com*