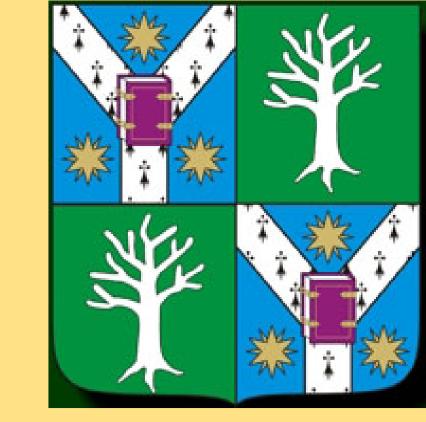


9th meeting of Worked Bone Research Group, Henan Administration of Cultural Heritage and the Henan Provincial Institute of Cultural Relics and Archaeology, Zhengzhou, China, 14-19 April 2013



Bone and antler handicraft in the area of the Sântana de Mureş-Černjachov culture and preservation of the archaeological arfefacts

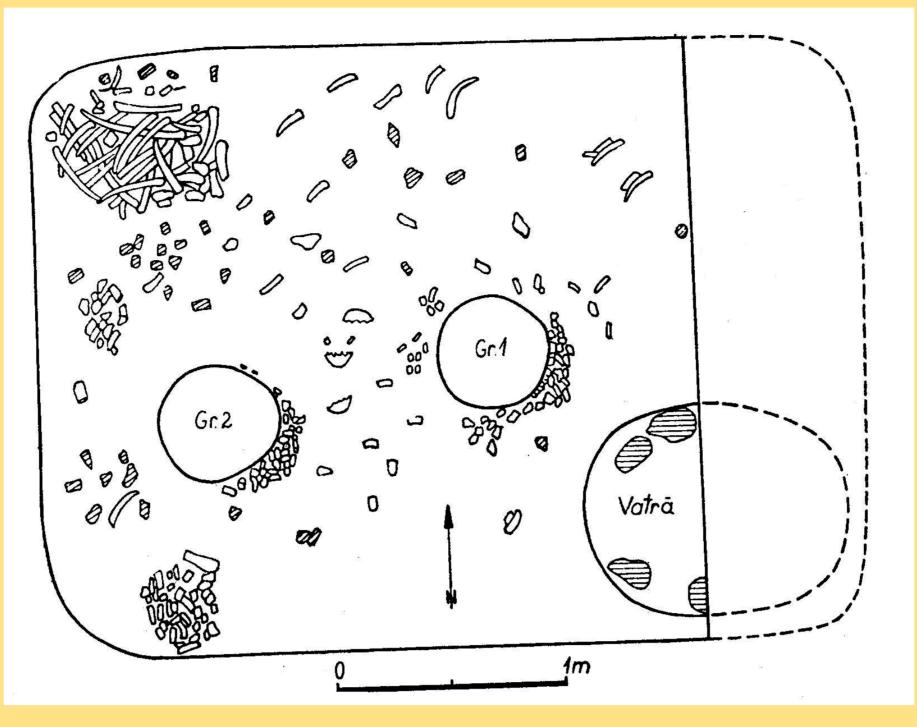
Sergiu Musteata¹, Simina Stanc²

¹ Institute of Archaeology, Romanian Academy, Iasi branch, 18 Lascar Catargi, 700107, Iasi, Romania, sergiu_musteata@yahoo.com ² "Al. I. Cuza" University, Faculty of Biology, Bd. Carol I 20A, 700505 Iași, Romania, simina_stanc@yahoo.com

Most of the archaeological sites belonging to the Late Roman Period and located in the Central and Eastern Europe have yielded numerous and various objects that demonstrate the existence of an extensive activity of bone processing. One of the well-developed handicrafts during this period in the area of the Sântana de Mureş-Černjachov Culture was bone and antler-working. Evidence of this handicraft comes from archaeological evidence attested in many settlements and cemeteries.

Handicraft settlement

During the Late Antiquity the most of goods resulted from home craft. The householders individually manufactured what they need. But some needs were supplemented by itinerant craftsmen or though the exchanges. The handicraft centers and commodity production were more characteristic for Roman urban markets, including bone working. But during the Late Roman period we can attest some elements of commodity production in the Barbaricum too. The scale of production differs from one period and region to other. Until know we know two main areas of the comb mass production in the Eastern European Barbaricum – Bârlad-Valea Seacă and Velika Snitinka (figure 1).



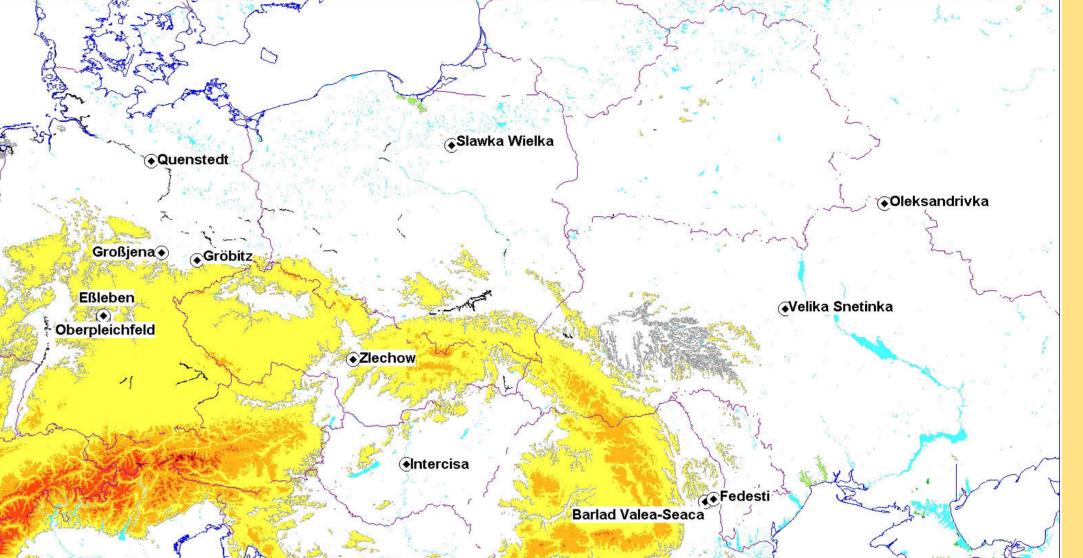




Figure 9. Valea Seaca template.

The archaeological evidence from the settlements Velika Snitinka 2 and Malaja Ofirna are showing the antler mass production. On the excavated territory of settlement (400x100 m) were attested over 20 agglomerations of the cultural goods and in fifth of them were discovered the red deer debris. In one of the construction (7x8,4m), considered as main workshop, was a surface of the 12 sq.m. with a layer composed by many antler debris, hundreds of combs elements, one finished comb and other artifacts. Total amount of the antler debris discovered in Velia Sntinka is about 16.500 and 550 unfinished and finished objects. Concerning the combs, the handle and tooth plates are very well presented.

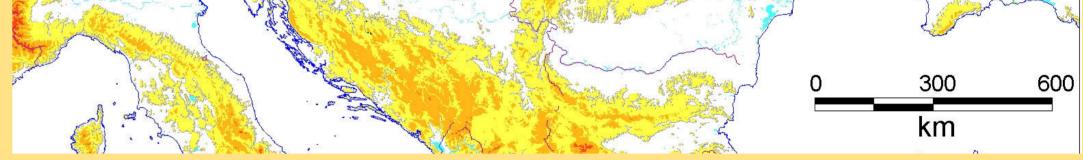
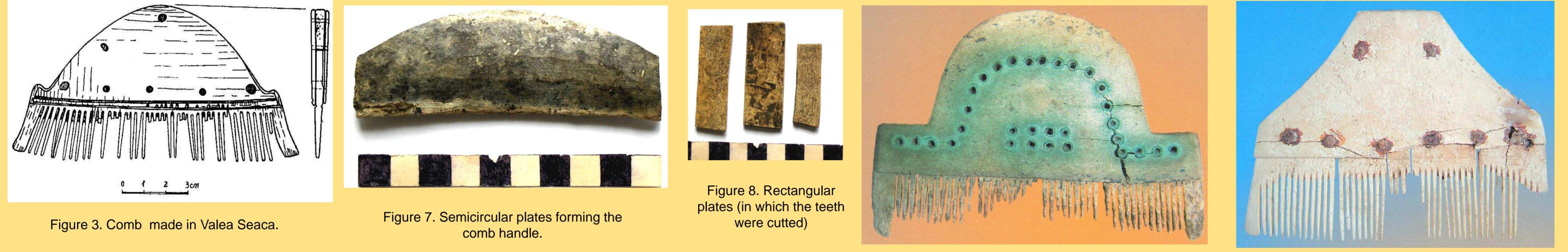


Figure 2. Dwelling no. 2 from Barlad – Valea Seaca settlement (Gr. – pit, vatra – hearth).

Figure 1. Location of Barlad - Valea Seaca and Velika Snitinka settlements.

In the Bârlad, Vaslui County, Romania where attested the impressive number of workshops and antler material. In the settlements from Bârlad-Valea Seacă the raw and waste material is attested for manufacture and many well-organized workshops for antler working. The waste material, un-finished objects etc. are attested in 19 out of 34 constructions. Most of the dwellings have a rectangular form and are oriented from East to West. The archaeological evidence from each construction of Valea Seaca shows very orderly distribution of the materials. This means that artisans used very economically the space. At the same time, according to the distribution of materials in the workshop we can establish the stages of the antler processing and work distribution. In the NW corner of the buildings/structures we can usually see the remains of a hearth made from clay and stones and in the central part one or two pits which were used as the "working place". A lot of fragments of red deer antler were discovered inside the area workshops. For example, in the dwelling no. 2 (figure 2) were attested ca. 250 such fragments with different dimensions, concentrated in three places. The first group (ca. 50 fragments) was in the NW corner of the workshop and contained lots of antler fragments. The second group (ca. 35 fragments) was discovered in the SE corner and contained already worked elements of antler for (teeth and comb) handles. The third group was in the west part of the workshop and contained the most final products: rectangular and semicircular elements with dimensions between 5 and 7 cm. Near to these places and in two depressions, other small antler fragments were discovered, with splits and chips, resulting from antler working and which can be considered as discard. Further, in workshop no. 2, a finished comb was discovered, worked from many rectangular pieces, fixed with bronze rivets between two semicircular slates. V. Palade calculated that, from all the discovered materials in this workshop, 400-500 rectangular and semicircular slates for comb-working and other antler objects could have been made. Concentration of the antler material in-and-around the areas of the two depressions suggest that they were linked directly with craft working. The same situation is characteristic of dwellings no. 3, 5, 8, 10, 11 and 16. We cannot tell how many workshops were active at the same time, but it is certain that local artisans produced a huge amount of antler objects. Specialization in comb making at Bîrlad-Valea Seacă shows the level of development of this handicraft and also the standardization and rationalization of a mass production in the Late Antiquity in Barbaricum. Here could be a lot of issues linked with market needs and realities: request-offer and price-quality. In case of high market request we could suppose that was a competition between craftsmen, which have to think how to produce more goods in shorter time.

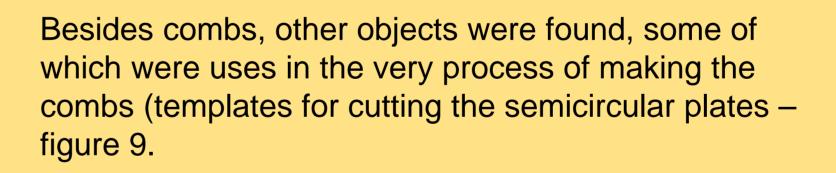


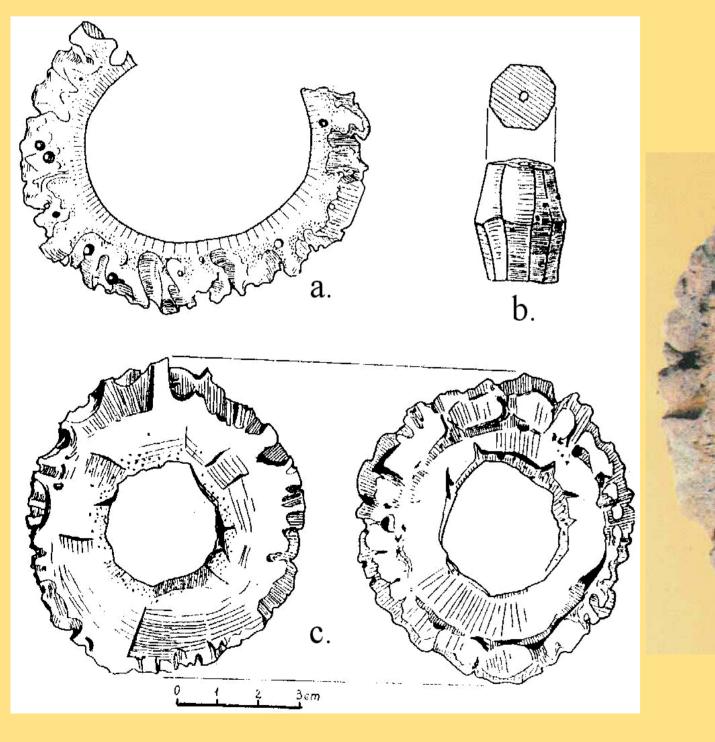
Other objects are: spindle – whorls (figure 10 b), circular pendants or bracelets (figure 10 a, 10 b, 11), different

kind of pendants: half-moon, miniatural comb, prismatic (figure 12 a.) and zoomorphic (Palade, 1981).

Figure 4. Comb made in Valea Seaca.

At Barlad – Valea Seaca the red deer antlers were used exhaustibly from the level of the burr to the top of the tines. The basic product of the artisans working in these workshops was the comb (figures 3, 4,5, 6). They are made up of three overlapping rows of plates, two of which are semicircular (figure 7) plates, functioning as handles, while the third row is made of rectangular little plates (figure 8) (four till eight in number) and in these the teeth were cutted. The three rows of plates are fastened with bronze, copper and even iron rivets.





Conclusions

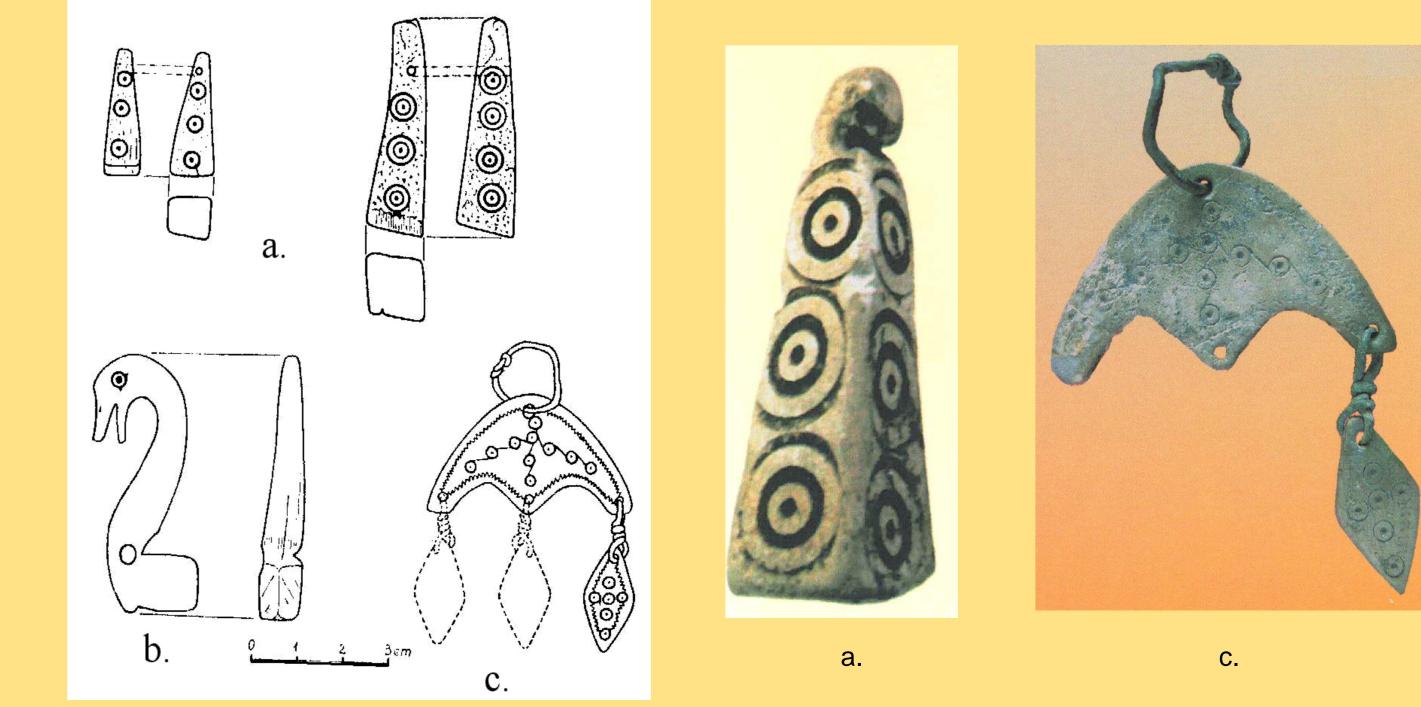
The abundance of bone and antler objects found in the Santana de Mureş-Černjachov Culture sites suggests that it was a widespread practice in the Late Roman Period. Even, if in most of the settlements from area of the Sântana de Mureş-Černjachov Culture the handicrafts were not so well separated, but the archaeological evidence discovered in the Bîrlad-Valea Seacă and Velika Snitinka 2 settlements leads us to the idea that the inhabitants living and working in these dwellings were distinctly specialized category of artisans in bone and antler working and can be considered as **comb-craftsmen** and sites as handicraft settlements.

Figure 5. Comb made in Valea Seaca.



Figure 6. Comb made in Valea Seaca.





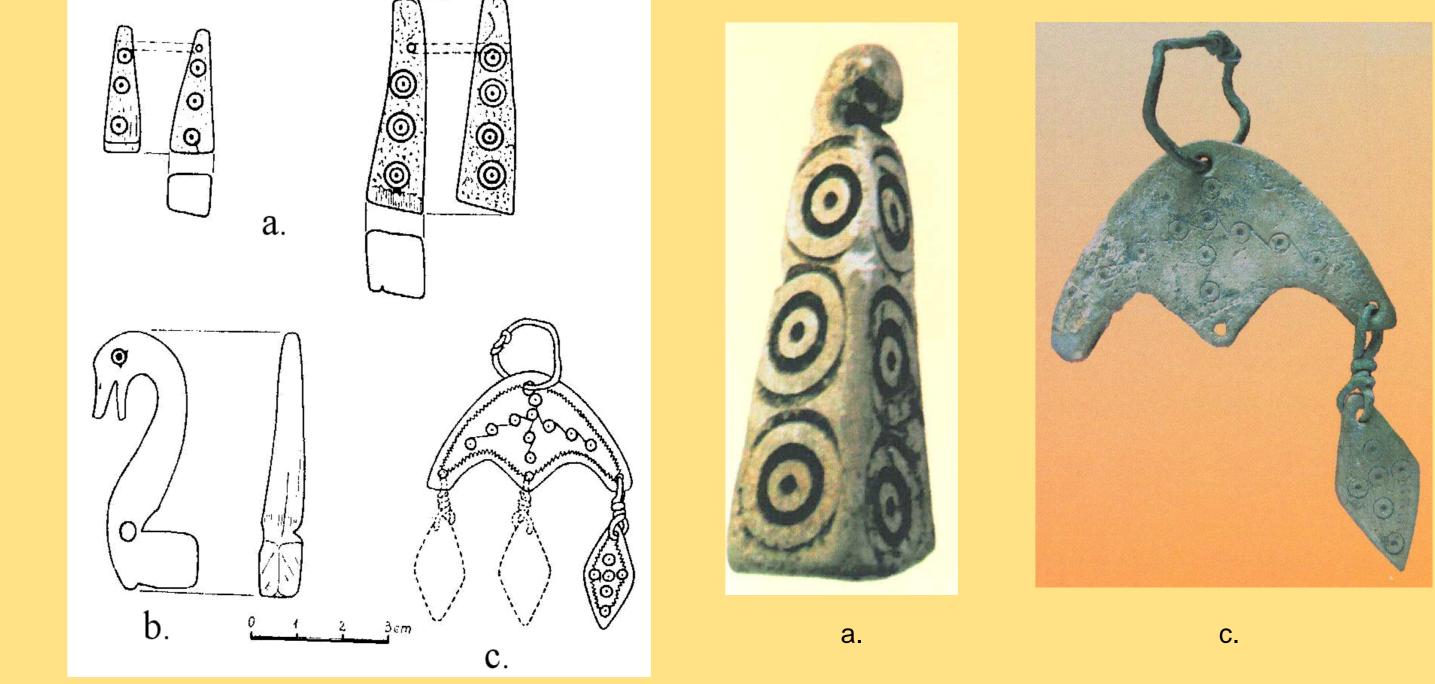


Figure 10. Circular pendants (a,. c.) and spindle-whorl (b.) (Palade, 1981).

Figure 11. Bracelet made of the red deer antler burr.

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Figure 12. : Prismatic pendants (a.), zoomorphic pendants (b.) and earring (c.).