

**UKRAINIAN FORTRESSES  
A STUDY OF A STRONGHOLDS SYSTEM  
FROM THE EARLY IRON AGE IN PODOLIA**

**B-PS**

**21 • 2016**

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## CONTENTS

|   |     |
|---|-----|
| EDITOR'S FOREWORD .....   | 4   |
| EDITORIAL COMMENT .....   | 6   |
| PART 1 – THE “UKRAINIAN FORTRESSES” IN THE NORTH PONTIC<br>LANDSCAPE OF THE IRON AGE..... 7   |     |
| Marcin Ławniczak, Marcin Ignaczak, MACROSPATIAL ANALYSIS OF EARLY<br>SCYTHIAN FORTIFIED SETTLEMENTS IN THE RIGHT-BANK OF UKRAINE .....  | 7   |
| Marcin Ławniczak, MICROSPATIAL ANALYSIS OF SELECTED EARLY SCYTHIAN<br>FORTIFIED SETTLEMENTS IN PODOLIA .....  | 27  |
| Marcin Ławniczak, PHOTOGRAMMETRY-BASED SPATIAL ANALYSES OF<br>SETTLEMENTS IN SEVERYNIVKA AND NEMYRIV.....   | 54  |
| PART 2 – THE HILLFORT IN SEVERYNIVKA, ZHMERYNKA REGION, VINNYTSIA<br>OBLAST: RESEARCH RESULTS FROM 2009-2015 ..... 69   |     |
| Oleksandr Shelekhan, Oksana Lifantii, Yuriy Boltryk, Marcin Ignaczak, DEFENSIVE<br>STRUCTURES OF SEVERYNIVKA HILLFORT (EXCAVATIONS OF 2009<br>AND 2012-2013) .....                | 69  |
| Oleksandr Shelekhan, Oksana Lifantii, Yuriy Boltryk, Marcin Ignaczak, RESEARCH IN<br>THE CENTRAL PART OF SEVERYNIVKA HILLFORT (QUADRATS F80, F90,<br>G71, G81) .....              | 91  |
| Oleksandr Shelekhan, Oksana Lifantii, THE ELEMENTS OF THE HORSE BRIDLE<br>FROM THE SEVERYNIVKA HILLFORT .....   | 219 |
| Oksana Lifantii, Oleksandr Shelekhan, METAL ARTEFACTS FROM<br>THE SEVERYNIVKA HILLFORT.....   | 255 |
| PART 3 – CONCLUSIONS..... 277   |     |
| Marcin Ignaczak, Yuriy Boltryk, Oleksandr Shelekhan, Oksana Lifantii, Łukasz Olędzki,<br>THE FORTRESSES OF UKRAINE. THE BUILDERS OF EARLY IRON AGE<br>STRONGHOLDS IN PODOLIA..... | 277 |
| LIST OF AUTHORS .....   | 291 |

## Editor's Foreword

This volume of *Balic-Pontic Studies* presents the results of the latest Polish-Ukrainian studies on the 'fortresses of Ukraine', a name originally used to denote a network of Early Iron Age hillforts in the Ukrainian forest-steppe. The scope of their identification is related to the earlier findings of Ukrainian researchers, who linked the issue of 'fortified settlements' (the so-called giants' strongholds) with the influence of the nomads of the steppes. The Scythians brought East-Eurasian cultural patterns to the Pontic region, which was coetaneously colonised by the Greeks. Directly inspiring the cognitive framework of the programme, the findings of Ukrainian archaeologists failed to provide answers to basic questions about the genesis of settlement agglomerations of the 'fortresses of Ukraine' or the way they functioned. Neither did they enable to establish secure dating for this cultural phenomenon.

Diagnostic for the archaeological research on the issue, the site of Severynivka, Zhmerynka Region, Vinnytsia Oblast, was identified as a fortified settlement dating from 'Scythian times' by the 1946-1948 'South-Podolian archaeological expedition' of the Leningrad University led by Mikhail I. Artamonov. The research was continued in the 1960s by Galina I. Smirnova, who analysed the results of M.I. Artamonov's earlier research, and in the 1980s by B.M. Lobay. Intended to determine the typochronology of the hillfort, the investigations did not furnish any detailed information about the context of the settlement base.

The presented Polish-Ukrainian 'Podolia programme' was carried out between 2009 and 2015, under the grant of the Institute of Archaeology of the National Academy of Sciences of Ukraine; the Institute of Prehistory (now the Institute of Archaeology) Adam Mickiewicz University, Poznań, Poland; the Poznań Prehistoric Society; and from 2013 also the National Science Centre under the grant: „*Fortece Ukrainy. Badania nad systemem grodzisk z wczesnego okresu epoki żelaza na obszarze Podola*” [*The Fortresses of Ukraine. The studies on the system of the Early Iron Age hillforts in Podolia*] (No. UMO-2012/07/B/HS3/01917).

In addition to excavations that were aimed at examining the fortifications of this diagnostic fortified settlement and producing archaeological and bioarchaeological sources, this programme included also an innovative (in terms of its methodology) geospatial prospection. Providing the first summary of the issue of the

fortresses of Podolia, this collection of papers offers a prologue for further research, mainly into the way these Late Bronze Age/Early Iron Age hillforts of the forest-steppe zone functioned in the settlement space.

This volume discusses the results of such outlined research programme in two cognitive dimensions. The first – general, macro spatial – looks at the geography of the settlement in right-bank Ukraine (part 1). The other one is source-related. It seeks to identify the concept behind the settlement in the Severynivka hillfort, a ‘test area’ for detailed findings, mostly regarding the taxonomy, typochronology and chronometry of the phenomenon of the ‘fortresses of Podolia’ (part 2).

The papers in this volume of BPS were peer reviewed by Professors Janusz Czebreszuk and Przemysław Makarowicz.

## Editorial comment

1. All dates in the B-PS are calibrated [BC; see: Radiocarbon vol. 28, 1986, and the next volumes]. Deviations from this rule will be point out in notes [bc].
2. The names of the archaeological cultures and sites are standarized to the English literature on the subject (e.g. M. Gimbutas, J.P. Mallory). In the case of a new term, the author's original name has been retained.
3. The spelling of names of localities having the rank of administrative centres follows official, state, English language cartographic publications (e.g. *Ukraine, scale 1 : 2 000 000*, Kyiv: Mapa LTD, edition of 1996; *Rèspublika BELARUS', REVIEW-TOPOGRAPHIC MAP*, scale 1 : 1 000 000, Minsk: *BYELORUSSIAN CARTOGRAPHIC AN GEODETIC ENTERPISE*, edition 1993).



**Oksana Lifantii\*, Oleksandr Shelekhan\*\***

## METAL ARTEFACTS FROM THE SEVERYNIVKA HILLFORT

### ABSTRACT

There is a considerable amount of bronze and iron products originating from the Severynivka hillfort. The findings were divided into groups according to function. Assumptions have been made about the source regions of their origin.

**Key words:** Eastern Podolia, Scythian time hillfort, iron, bronze, weapons, household implements, ornaments, Early Iron Age

The hardware, found at the Severynivka settlement from the Scythian period, located in the Eastern Podolia has been analysed. These materials act as reliable chronological indicators as there is a lack of ancient ceramics.

During the years of research of three archaeological on-site expeditions<sup>1</sup> representative sets of various bronze and iron products were found from almost all areas of the studied settlement (Fig. 1). The total number of artefacts is 65 (Tab. 1). They are represented by weapons, household implements and adornments.

Not dwell too much on the description of the context of the discussed artefacts in separate complexes, for it is stated in the relevant articles of this journal, we shall focus on the analysis of various types of materials and patterns in their expansion in some areas of the hillfort.

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<sup>1</sup> South-Podolian expedition led by M.I. Artamonov, salvage excavations led by B.M. Lobay and Ukrainian-Polish expedition led by Yu.V. Boltryk and M. Ignaczak.

## 1. ORNAMENTS

Numerical superiority in this category belongs to metal **hairpins** which were represented by 16 items. It is equal to 24.6% of the total number of metal products. They were found during excavations in the southern and central parts of the settlement. These products are evidence of using shoulder (cap, cloaks) and head (cover) draping clothes. They also could be used for female updo hairstyles [Klochko 2007: 34].

The two hairpins which originated from B.M. Lobay's excavations were not mentioned in his reports, but are held in the collection of the Vinnytsia Regional Museum as those coming from the Severynivka hillfort<sup>2</sup>. It is difficult to pinpoint the location of their discovery on the monument. The first hairpin has curled spiral head (Fig. 2: 7). This form is distinctive for items of the 22<sup>nd</sup> type by V.G. Petrenko. However, in her remarks, they are all made of round bronze wire, which sometimes were unriveted in a tetrahedral shape on the head [Petrenko 1978: 18]. The scholar linked the origin of such forms with the Lusatian culture territory where they have spread during the Bronze Age. Most Severynivka hairpins are pins with spiral heads from mound 3 near Bratyshev [Sulimirski 1936: 53, Tab. VIII: 3a].

The following pin, whose exact location is also not identified by the memo, is made of iron. It belongs to the second variant of the 19<sup>th</sup> type by V.G. Petrenko – the pins with staff-like heads, the inner side of which is curved in a loop (Fig. 2: 6). L.S. Klochko called them “pins with an S-shaped head” [Klochko 2007: 30-31]. The similar artefacts generally originate from the forest-steppe of the right bank of Dnieper River. The closest form has pins from burial 1 mound 395 near the Kovaliv village [Petrenko 1978: Tab. 11: 16]. According to V.G. Petrenko, pins of that variant appeared on the territory of the forest-steppe only in the 5<sup>th</sup> – 4<sup>th</sup> century BC. Instead, the hairpins of the first variant of the same type are limited to the period of the 7<sup>th</sup> century BC. Such late dating of the artefacts similar to that pin is contrary to all other findings from the Severynivka hillfort. This may indicate either false identification of the hairpins as originated from the Severynivka, or the existence of site layers which have not yet been discovered. There is a third possibility that hairpins of this shape were used earlier than V.G. Petrenko thought. Thus, the issue of dating the pins currently remains open.

One specimen of pit 19 in the south-western part of the settlement is an iron pin which is bent in a loop form on the head (Fig. 1: 44). It is referred to as the first variant of the 21<sup>st</sup> type by V.G. Petrenko's typology [Petrenko 1978: 18, Tab. 13: 4]. According to the scholar's observations pins of this variant mainly occur in early sites mainly on the right bank of Dnieper River, although single samples were

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<sup>2</sup> We express our gratitude for the opportunity to study the artefacts stored in the museum to the head of department of monuments M. Potupchyk.

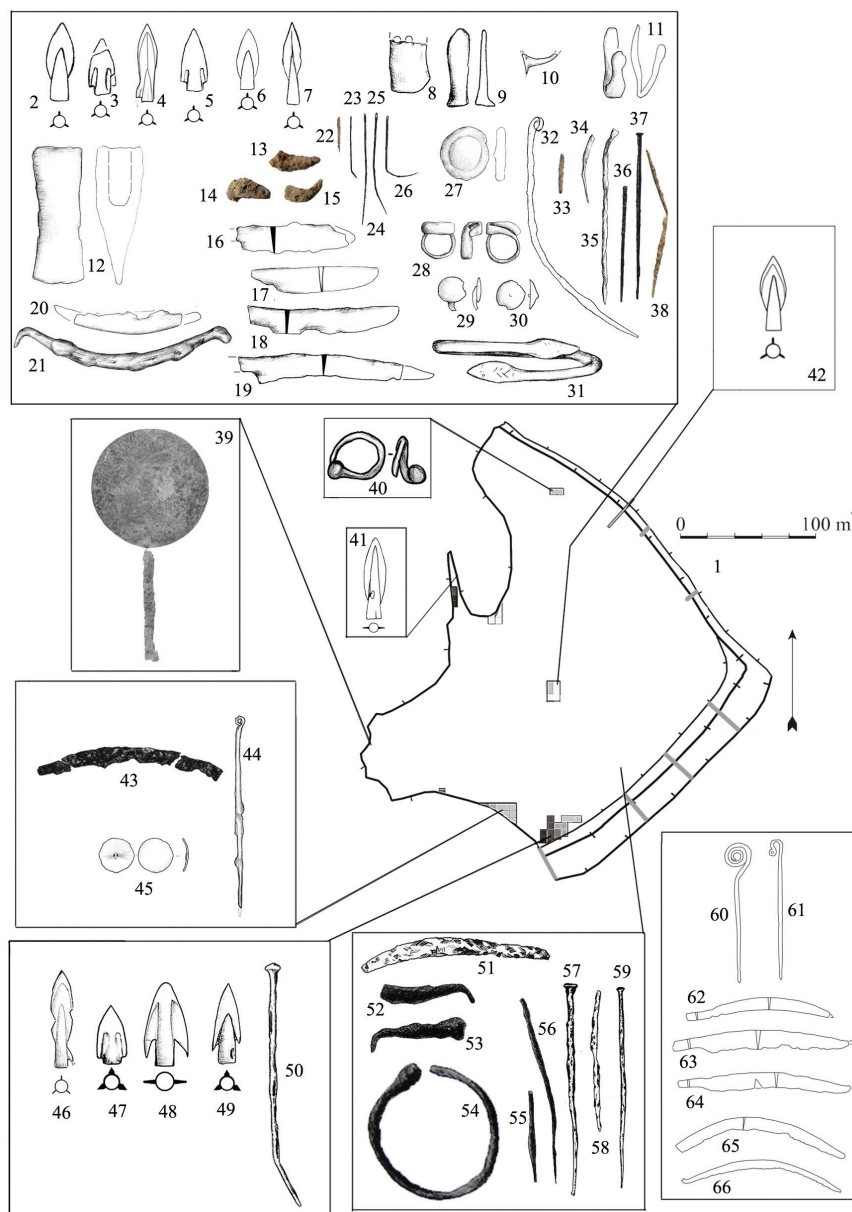


Fig. 1. The metal items from the Severynivka hillfort, arbitrary scale: 1 – plan of the hillfort; 2-38 – goods from the Complex 1; 39 – the mirror from the excavations lead by M.I. Artamonov; 40 – the earring from pit 24; 41 – the bronze arrowhead (surface find on the sq. F); 43-45 – the artefacts from the north-western excavation site; 46-50 – the artefacts from the South excavation site; 51-59 – the artefacts from the excavation headed by B.M. Lobay (from pit-house 2 and dwelling 5); s – the artefacts from the excavation headed by B.M. Lobay with a non-identified origin

found in other forest-steppe groups, except Posulska, Mid-Don and West-Podolian [Petrenko 1978: 18]. According to V.G. Petrenko the pin from a coaly layer 2 of Complex 1 (Fig. 1: 32) applies to the same type. This layer dates back below to the 7<sup>th</sup> – 6<sup>th</sup> centuries BC.

Hairpins with nail-shaped heads are, by four pieces, more widely represented in the hillfort. Moreover, two of them were made of bronze. It should be mentioned that the use of this metal for making ornaments is not typical for the Severynivka settlement. There are two items originating from excavations led by B.M. Lobay in 1980. They were made of iron (Fig. 1: 57) and bronze (Fig. 1: 59). The pins were found in the filling of a pit-house 2. Moreover, the author of the excavation mentions that a bronze pin was lying in the lower layer of the soil and the iron one was in the top layer.

The pins of the same type were found by our expedition in several parts of the settlement. The bronze one comes from Object 4 in the southern part of the hillfort, the excavation, which is located not far from excavation 2 from 1980 led by B.M. Lobay. The homestead in this area existed no later than in the middle of the 6<sup>th</sup> century BC.

The second iron pin was found in the central section of the settlement in the “garbage layer” of Complex 1 (Fig. 1: 37), by the first half of the 6<sup>th</sup> century BC dating by the materials found in it.

These pins can be classified as Type 5 by V.G. Petrenko which is common in the early layers of the Trakhtemyriv and Bilsk hillforts of the Ukrainian forest-steppe [Petrenko 1978: Tab. 6]. In addition, similar items are typical for the Early Scythian burial mounds [Kovpanenko 1981: 117]. According to L.S. Klochko these nail-like head-shaped items date back to the 2<sup>nd</sup> millennium BC and during Scythian times they became a constant feature of the decoration sets of the forest-steppe regions [Klochko 2016: 110]. Only iron fragments with the lost top part, which renders their exact dating impossible, present other hairpin findings. It must be noted that these pieces of products originated from excavation block 2 from 1980 (Fig. 1: 58), dwelling 5 from 1985 (Fig. 1: 55-56) and different layers of Complex 1 (Fig. 1: 33-36, 38).

Another type of jewellery which was found at the Severynivka settlement is bronze earrings. They are represented by three sets, two of which are highly damaged. They are fully preserved items originating from the northern section of the settlement (Fig. 1: 40). These earrings belong to the first variant of Type 3 by V.G. Petrenko [Petrenko 1978: Tab. 16: 48-50]. Earrings of this variant were accidentally found near the villages of Moshny and Trakhtemyriv. Moreover similar items originated from mound 1 near the Rakiv Kut 3 village at the Ternopil region at the West Podolia, which was dated near the first half of the 6<sup>th</sup> century BC by V.G. Petrenko [Petrenko 1978: 26]. Later on, this date was corrected by Anna Gaw-

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<sup>3</sup> In V.G. Petrenko's monograph this village was mistakenly named Rakovkat [Petrenko 1978: Kat. 132].

lik to the second half of the 7<sup>th</sup> – beginning of the 6<sup>th</sup> century BC [Gawlik 2005: 210-212].

It is curious that the finding of an earring of the second variant of type 3 [Smirnova 1998: Fig. 15: 9], comes from a nearby Nemyriv hillfort and, according to V.G. Petrenko, it presents the most ancient form of this type [Petrenko 1978: 26].

The origin of this earring type remains an open question. This form was common during the Scythian period on the territory of the Podolia region, the Dnieper Basin and in the area of the Lusatian culture [Moskwa 1962: 15, Fig. 4: 4; Abłamowicz, Abłamowicz 1989: 208-209, Fig. 7]. The scholars determined that this earring shape formed on the territory extending from Poland in the West to Siberia in the East, focusing on the Western Podolia region [Sulimirski 1936: 113; Petrenko 1978: 25-26; Gawlik 2005: 219-220; Klochko 2007: 88].

The following piece of earring comes from the pit F (Fig. 1: 29), dating anywhere between the second half of the 7<sup>th</sup> – and the first quarter of the 6<sup>th</sup> century BC. Due to the loss of one part of the item the information about it is incomplete. However, the shape of the shield and bracket can be attributed to the fourth variant of type 1 by V.G. Petrenko. A similar earring comes from the mound near the Lysychnyky village on the Dniester Basin, through the finding of grey-clay pottery dating from the late 7<sup>th</sup> – first quarter of the 6<sup>th</sup> century BC [Smirnova 2006: 79, Fig. 2: 4, 5]. The earrings from pit 12 of the Dolyniany settlement in the Dniester Basin [Smirnova 1981: 43, Fig. 10: 7] and the Trakhtemyriv settlement [Petrenko 1978: Tab. 16: 6, 11] are part of the same horizon. Similar gold earrings come from a complex dated back to the end of the 7<sup>th</sup> – beginning of the 6<sup>th</sup> century BC: mound 4 near the Hladkovschyna village, mound 407 near the Zhuravka village, tomb 1 from the Repiakhuvata Mohyla mound [Grigorev, Skoryi 2012: 452]. Earrings from a burial site in the Zabłotce in area of the Tarnobrzeg group of the Lusatian culture dated to the 6<sup>th</sup> – 5<sup>th</sup> century BC on the basis of trilobate beads dating [Bajda-Wesołowska *et al.* 2014: 120-121]. Still more probable dating for these artefacts is a period between the 7<sup>th</sup> – and the 6<sup>th</sup> century BC [Leviński, Haheu 2011: 57].

Only a fragment of the guard of the third earring was found in the filling of fosse 4 of Complex 1. The object dates to the iron trilobate during the time from the middle of the 7<sup>th</sup> century BC. V.G. Petrenko based this estimate on a conical-shaped shield of similar artefacts distinguished from type 5. Judging by the similarity in shape to the item accidentally found near Bukryn village [Petrenko 1978: Tab. 17: 3] this earring from Severynivka can be assigned to the first considered type.

Decorations are also represented by two **bracelets** from the Severynivka hillfort. A beautifully preserved item was found in coaly layer 2 of Complex 1 (Fig. 1: 31). This bracelet is made of a wire wrapped in a cross section, bent in half turns. After cleaning it from the signs of oxidation the engraved pattern was found on its unriveted ends. Thus, the light notches in a herringbone shape are

observed on the “snake heads”. V.G. Petrenko knew about 27 similar items, which she distinguished in type 2. Bronze bracelets with similarly ornamented ends occur even in the Prescythian burials, including mound 5 near the Luka-Vrublivetska village [Shovkopljas, Maksymov 1952: 99, Fig. 2: 3], or mound 3 of the Saharna II [Kashuba 2008: Fig. 2: 3]. They are known among Vysocka culture, including the Chehy burial [Sulimirski 1931: Tab. XXV: 27]. M.M. Daragan links them with the Hallstatt influence and with burials of noble women – family heads, or priestesses [Daragan 2010: 88, 107-108]. A bracelet very similar to the item from Severynivka comes from the Mala Ofirna mound (dating back to the second half of the 7<sup>th</sup> century BC, where artefacts with a western look were also found – such as a spear with ribbing on the socket, palstave or a set of black burnished dishes [Petrovska 1968: 164, Fig. 4: 7]. In addition a similar item is known from the mound 407 near Zhuravka village [Illinska 1975: Tab. X: 14]. It is easy to date this kurgan through a number of its features, in particular, the conical beads and a mirror point to the third quarter of the 7<sup>th</sup> century BC [Riabkova 2010: 186], although the peculiar features of gold plate in a form of three coils may point at the beginning of the 6<sup>th</sup> century BC [Fialko 2014: 162]. On the right-bank area of Dnieper River the “snake-headed” bracelet is also known from the kurgan 5 near the Vovkivci village. The complex dates back to the first quarter of the 6<sup>th</sup> century BC based on finding of an archaic Samos amphora [Lomtadze, Firsov 2005: 181, Fig. 2: 2]. The bronze bracelet with ends in the form of snakehead was found in an ash-mound 1 at the Tsaryna Mohyla settlement [Murzin *et al.* 1998: 17]. A fragment of a similar product came from excavation block 29 at the east Bilsk settlement [Shramko 2009: Fig. 2: 4]. In Central Europe the snake-headed bracelet was found among the materials of the Vekerzug culture [Chochorowski 1985: Abb. 11: 7, 15], which formed at the end of the 7<sup>th</sup> – the beginning of the 6<sup>th</sup> century BC. What is more the finding of a snake-headed bracelet in the Vetersfelde/Witaszkowo Hoard is notable, and dates back to the third quarter of the 6<sup>th</sup> century BC [Nebelsick 2015: 141].

It should be noted here that the layer, in which the described bracelet was found dates back to the end of the 7<sup>th</sup> – beginning of the 6<sup>th</sup> century BC. Thus, this testifies on behalf of the belonging of Severynivka's item to the described horizon.

The second bracelet was found on the floor of dwelling 5 excavated in 1985 by B.M. Lobay. Unfortunately, the quality of the picture and description presented in the report do not allow for discussing its form with full certainty [Lobay 1985: 25, Tab. 96: 1]. It might be similar to the bracelet from the top coaly layer of Complex 1, as it had unriveted ends with a snake-headed form. Judging by the analogies above, we can assume that this type of bracelet on the territory of the right-bank forest-steppe could be dated no later than the mid 6<sup>th</sup> century BC.

A bronze plaque with a round shield and a small loop on the back most likely can be referred to the decorations of the clothes (Fig. 1: 45). They were found in pit 17 in the southwestern part of the settlement. Unfortunately, we do not know the exact analogies of this. However, the similarity between the item from the Sev-

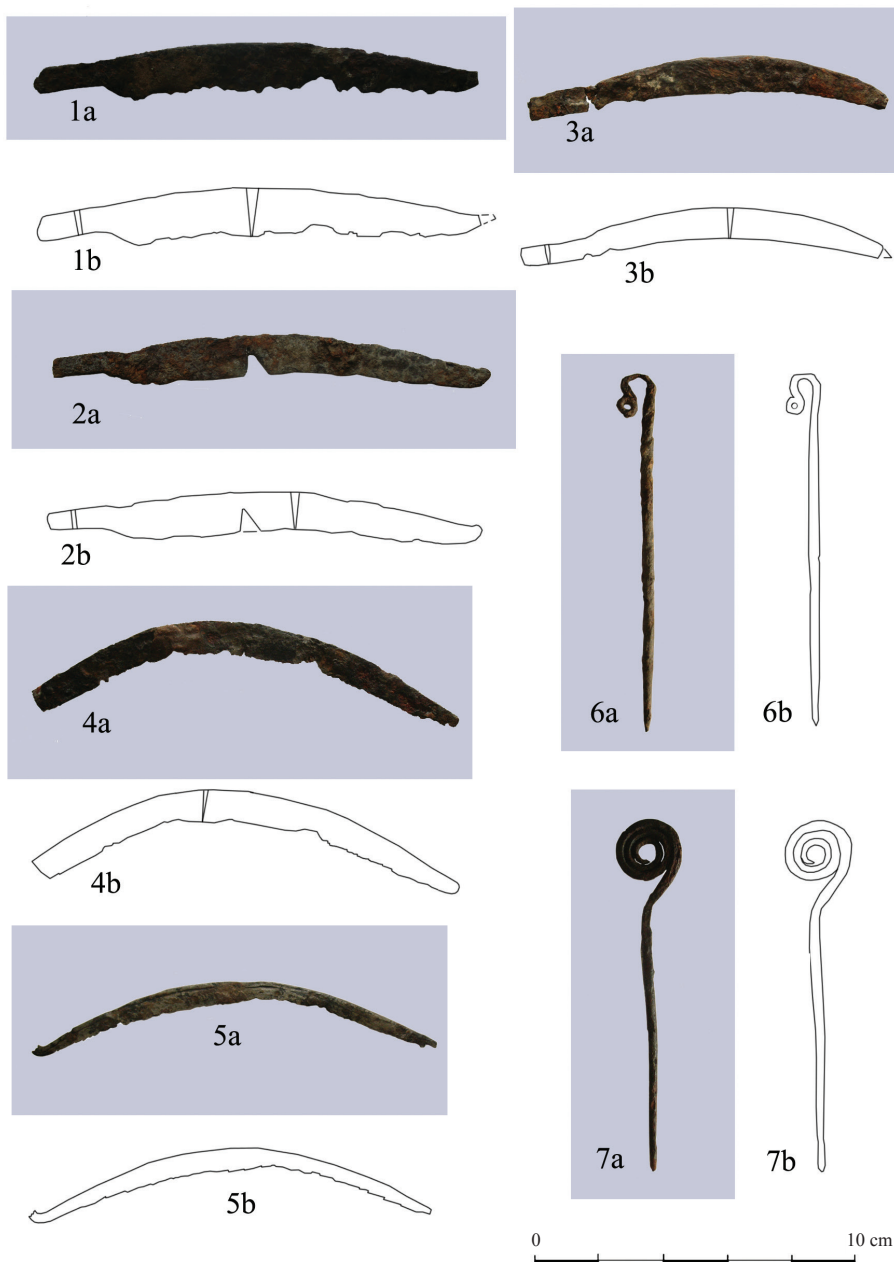


Fig. 2. The iron items of the non-identified origin from the Severynivka hillfort (excavation led by B.M. Lobay): 1 a, b – photo and figure of the knife; 2 a, b – photo and figure of the knife; 3 a, b – photo and figure of the knife; 4 a, b – photo and figure of the sickle; 5 a, b – photo and figure of the sickle; 6 a, b – photo and figure of the hairpin; 7 a, b – photo and figure of the hairpin



erynivka and the artefact from mound 1 near the Perebykivtsi village of the first quarter of the 6<sup>th</sup> century BC could be noticed [Smirnova 1979: Fig. 4: 1].

Perhaps the personal decorations included a very thick **“iron ring”**. It was probably made of a flat wire, which previously was of a different use. After putting this item to ornament an a fingers its resambles diameter and overall look greatly a ring. Taking into consideration the probability of different use of the “ring”, we could not find any similar objects. Such rings with a spiral wire shield were only rarely found among the antiquities of the Podolia area. It resambles the discovery of the Early-Scythian period at the Dolyniany settlement. Furthermore G.I. Smirnova noted that such products were found most commonly among the antiquities of the Vysotsko culture [Smirnova 1981: 48, 60, Fig. 4: 6].

## 2. HOUSEHOLD ITEMS

Needles, knives and sickles could be attributed to the metal goods used in households. **Needles** were found only in the central part of the settlement, but in fairly representative numbers – five pieces (Tab. 1). Four of them were found in coaly layer 2 of Complex 1, which is the one filled with different findings the most. Three of them are perfectly preserved (Fig. 1: 24-26), and in one the upper part of the eye is missing (Fig. 1: 23). Another piece of needle comes from the “garbage layer” (Fig. 1: 22). All of these needles are very similar shape and size. They are made of iron. It is noteworthy that due to their small size, the needles are often not recorded on the monuments of the Scythian period. Only three instances are known from the excavations of the Motronyn settlement: two made of steel, and one of bronze [Bessonova, Skoryi 2001: 98]. However, the two iron needles from the Motronin hillfort are much heavier than the ones from the Severynivka hillfort. Small sized items are known from the East-Bilsk fortified settlement [Shramko 2016b: 82, Fig. 4: 20]. Iron needles of much larger sizes, can also be found, and they are said to be used as a spinning tool [Shramko 2016b: 320, Fig. 41: 1-3]. It has been suggested that there was a possible Greek influence, in particular Olbia, in the design of the needles from the forest-steppe sites [Bessonova, Skoryi 2001: 99]. Similar findings in kurgans should be mentioned as well. The burial with the bronze needle in the mound 129 at the Tenetyinka River [Ilinskaya 1975: 46, Tab. XXVIII: 2] belongs to the archaic time. A burial dating to the 4<sup>th</sup> century BC also has needles: mound 397 near the Zhuravka village [Bobrinskiy 1905: 5] and mound 326 near Huliai-Horod [Bobrinskiy 1901: 44].

On the Severynivka hillfort **11 knives** and their fragments were found (Tab. 1). Most of them belong to a group of products with curved or arched back, far fewer



of them have a straight back. Thus the place of discovery of these three items remains unknown. This applies to items with an arched spine unearthed during excavations of B.M. Lobay at the site (Fig. 1: 62-64; Fig. 2: 1-3). Another iron knife comes from the excavation of the house 2 from 1980 (Fig. 1: 51).

Furthermore, the items with arched spine come from the investigation of the Southwestern and central part of the settlement. The iron knife with an arched spine comes from the filling of pit 15 (Fig. 1: 43). However, most knives were found in the central part of the settlement. The earliest time for the arrangement of strata is the filling of fosse 4 (Fig. 1: 20) and pit 1 of Complex 1 (Fig. 1: 14). Knives from the coaly layer 2, one of which has an arched spine (Fig. 1: 19) and three others – straight spines (Fig. 1: 16, 17), are part of a later dating.

All Severynivka knives with more than a preserved blade, have a handle, which was probably made of wood. The evidence supporting this assumption is the remnants of wood rust on several items and the fact that the horn handles were not found at the settlement. The iron handles of knives were not found at the Severynivka hillfort either.

In addition, three **sickles** were found there. They are represented by one fully preserved item and one fragment (Fig. 1: 13, 65, 66). Two sickles were found during the excavation led by B.M. Lobay yet the exact location of their unearthing is unknown (Fig. 2: 4, 5). One fragment of another sickle comes from the “garbage layer” of Complex 1 and probably dates back the same as the other materials from it. Because that kind of tool was used over a long period of time, it could not be used as a reliable chronological marker. Thus, a discussion arose as to the problem of discerning the sickles from the razors, and it shall be considered below. All three considered items could be interpreted as farming equipment – namely sickles.

### 3. WEAPONS

Another large group – consisting of 12 items – is **arrowheads**, one of which is made of iron and the others – of bronze.

The largest number of arrowheads (six pieces) came from the partially investigated cult object which is called Complex 1. They come from different layers, pits and ditches of the forementioned megaobject. Four arrowheads were found in the southern part of the settlement, and the remaining two – in the northwestern and the northeastern section of the hillfort.

We shall start the description of this type of weapon from a place of its highest concentration in the chronological order. The earliest one is the trilobate iron arrowhead found in the filling of ditch 4 (Fig. 1: 7). It has a cuspidal leaf shape

and a long socket. B.A. Shramko has noted that these kinds of items are most commonly in quiver sets in the burial complexes of Posullia, such as Strashna Mohyla and the mound near the Popivka country seat, and dates them to a time not earlier than the mid 7<sup>th</sup> century BC [Shramko 2009: 389]. Similar items were prevalent until the middle of the 6<sup>th</sup> century BC, as indicated by findings from a burial ground near Nartan, which is included in the transitional horizon between the Early and Middle-Scythian time [Mohylov, Didenko 2009: 46]. Consequently, by the given analogies, the arrowhead from the Severynivka settlement could be dated back to anywhere from the mid-7<sup>th</sup> century BC to the end of the 7<sup>th</sup> century BC (the upper chronological boundary is defined by the lower verge of existence of the covering layer).

The three bronze arrowheads were found in the top coaly layer of Complex 1. The first trilobate item has a leaf-shaped head and a long socket without a spine (Fig. 1: 2). The arrowhead from the dump of the excavation block in the central part of the hillfort has the similar form. This prevents us from attributing it to a specific layer or object of the Complex 1. These arrowheads belong to the first chronological group by A.I. Meliukova. The items of an analogical form were found in the mounds 15 and 469 near the Aksiutyni village [Galanina 1977: Tab. 19: 19], the Strashna Mohyla mound [Illinska 1951: Tab. II: 4, 5], kurgans 481 [Galanina 1977: Tab. 25: 33] and 482 near Basivka [Galanina 1977: Tab. 25: 13], and mound 488 near the Vovkivci village [Galanina 1977: Tab. 23: 18, 19].

Almost the same bronze trilobate arrowhead with the leaf-head and a long socket (Fig. 1: 42) was found in the northeastern part of the settlement during the excavation of the intersection of the bank and the ditch on this side of the fortification. It comes from the cultural layer, probably referring, to the second construction period. For the practical identity of the item to the discussion hereinabove, we can only note that one can narrow down its dating to the second half of the 7<sup>th</sup> century BC. At the same time, a strong similarity between the two arrowheads is evidence in favour of the synchronicity of these layers.

The second bronze arrowhead from the top coaly layer of Complex 1 was highly damaged, but its form is generally typical of the quiver sets from the 7<sup>th</sup> – 6<sup>th</sup> centuries: Medvyn mound from 1901; Lazirci mound 2; Beresniahy kurgan 82 [Ilinskaya 1968: Fig. 59].

The third trilobate arrowhead has a short socket and three-edged top part of the head. Analogical items were found in such complexes as: Dolyniany kurgan 3 [Smirnova 1993: Fig. 5: 2], Perebykivtsi mound 2 [Smirnova 1993: Fig. 8: 20-21], kurgan 9 of the Piatymary I burial mound [Grechko 2012: Fig. 12: 4]. The first two complexes are dated to the end of the 7<sup>th</sup> – first quarter of 6<sup>th</sup> century BC. At the same time, the Piatymary I mound is referred to as the “transfer period between the Early-Scythian and Mid-Scythian period”, namely, before the mid 6<sup>th</sup> century BC. Therefore, on the basis of analogies, the lower edge of the disposition of the discussed three arrowheads from the Severynivka could be limited to the end of

the 7<sup>th</sup> century BC and the top edge, based on the lower limit of existence by the covering strata could not be placed into the 6<sup>th</sup> century BC.

From the “garbage layer”, marking the final stage of the existence of Complex 1, comes one bronze arrowhead. It has cuspidal leaf form on the head and a protruding socket with a fragmented spine on it (Fig. 1: 4). Analogical trilobate arrowheads come from such archaic complexes as: Aksiutyntsi mound 469 [Galanina 1977: Tab. 19: 11, 14, 16], kurgan 474 between Osytniazhka and Pastyrsk village [Galanina 1977: Tab. 15: 25-28] tomb 1 and 2 of Repiakhuvata Mohyla mound [Ilinskaya *et al.* 1980: Fig. 6: 13, 14: 2-4], Huliai-Horod mound 38 [Ilinskaya 1975: Tab. II: 15-18], Perebykivtsi mound 2 [Smirnova 1993: Fig. 8: 11, 12] and Skorobor mound 10 [Shramko 2016a: 363, Fig. 70: 16]. All of these burial mounds come from the archaic period. The quiver set from Dolyniany mound 3, where there are arrowheads with similar forms to the items uncovered in both described layers of Complex 1 [Smirnova 1993: Fig. 5: 2-4, 5, 9] is particularly noteworthy. According to G.I. Smirnova this burial can be dated to by the end of the 7<sup>th</sup> – first quarter of the 6<sup>th</sup> century BC [Smirnova 1993: 112]. Thus, the time when the described bronze arrowhead from the “garbage layer” of the Severynivka hillfort occurred could be narrowed down to the first half, and probably the first quarter of the 6<sup>th</sup> century BC.

The next arrowheads were found in relatively closed complexes or in a cultural layer. They can be dated based on the analogues items from the burial mounds. The most archaic form of a bronze bilobate arrowhead was found in the cultural layer of the first horizon in the southern sector of the settlement (Fig. 1: 48). The closest analogical items were found mostly in Cimmerian barrows: Serzhen-Yurt, and Kholmskoe [Makhortykh 2005: 102]. Moreover analogies occurred among the burials of the North-Pontic area which were recognised by O.R. Dubovska in the Late-Chornogoriv group [Dybovska 1997: Fig. 7: 5, 6, 10]. Among the monuments of the Scythian time there is only one analogical finding to the described bilobate arrowhead – the item from the Novozavedennoe II kurgan 17 [Grechko 2012: Fig. 5: 2]. In addition, it is possible to compare the copy artefact from the Severynivka and bilobate arrowheads, (but without the protruding socket), from the Strashna Mohyla mound [Illinska 1951: Fig. 2: 2, 3].

The following trilobate arrowhead with a three-edged top on the head, arched flute and protruding socket (Fig. 1: 49) came from the lower layer of the same southern section. It could be attributed to the horizon of burials of the end of the 7<sup>th</sup> century BC by the numerous similarities of the quivers sets from Starsha Mohyla and Repiakhuvata Mohyla [Grechko 2013: 148].

The trilobate arrowhead with a slightly protruding socket (Fig. 1: 47) comes from the filling of object 1. Such items can be found in the quiver sets from the 7<sup>th</sup> – 6<sup>th</sup> century BC: Medvyn mound from 1906; Lazirtsi mound 2; Beresniahy mound 82 [Ilinskaya 1968: Fig. 59].

A leaf-shaped bilobate arrowhead was found on the surface of the northwestern area. This kind of items is widely distributed in the first chronological group

but there are also individual items in the second chronological group distinguished by A.I. Meliukova [Meliukova 1964: Tab. 6, 7]. Many arrowheads with similar features come from the quiver sets: Hulai-Horod mound 38 [Ilinskaya 1975: Tab. II: 2-9], Ryzhanivka mound 5 [Ilinskaya 1975: Tab. XXII: 10], Hladkovshchyna tomb 1 kurgan 4 [Grigorev, Skoryi 2012: Fig. 14: 1-8]. The item with similar form was found among the burial goods of Strashna Mohyla [Illinska 1951: Tab. II: 28, 29]. The similar arrowheads were found at the Wicina hillfort [Bukowski 1977: Tab. XXIV: 11-13]. All these complexes point to the existence of such types of items from the second half of the 7<sup>th</sup> – to the beginning of the 6<sup>th</sup> century BC.

The last bronze arrowhead was fixed in the cultural layer of the second horizon at the northwestern area. It has a trilobate leaf-shaped form with a protruding socket and spine (Fig. 1: 46). It is a typical example of the Early-Scythian period. Particularly similar items dominated in the quiver sets in mounds 1 and 4, and also in kurgan 24 of the Kelermess burial mound, which date back to the middle – second half of the 7<sup>th</sup> century BC [Galanina 1995: 50, Fig. 3]. Although analogous arrowheads continue to exist throughout the end of the 7<sup>th</sup> – first half of the 6<sup>th</sup> century BC according to the findings in the Hladkivshchyna mound 4 [Grigorev, Skoryi 2012: 456], Repiakhuvata Mohyla tomb 2 [Ilinskaya *et al.* 1980: Fig. 14] and Basivka kurgan 482 [Ilinskaya 1968: Tab. 27: 7-32].

A fragment of iron **plaque from the scale armour** was found in the coaly layer 2 of the Complex 1 (Fig. 1: 8). Its form is similar to the plates of Type 3 by E.V. Chernenko. Such kinds of items are prevalent throughout the Scythian period, virtually unchanged [Chernenko 1968: 27]. According to the observations of E.V. Chernenko, the burials with scale armor in archaic period are known in small quantities in the middle Dnieper area [Chernenko 1968: Tab. 2]. Such findings were discovered not only in the burial mound but also at the settlement. Thus they are present in a large amount at the Bilsk hillfort [Shramko 2016a: 337, Fig. 54: 8-10, 13-16], and one damaged item comes from the Motronyn hillfort [Bessonova, Skoryi 2001: Fig. 63: 26].

The other artefact which could be used as a weapon is a **socket axe (celt)** which was found at Fireplace 4 of Complex 1. A very simple, similar form is known from the Late-Bronze age [Vlassa 1982: 65]. The iron socket axes probably evolved from the bronze celts [Wanzek 1988: 103]. According to N. Boroffka the top edge of existence of this kind of weapon is 700 year BC [Boroffka 1987: Tab. 2].

This finding could be compared with the iron socket axes which were common in the East-Hallstatt area at the Early Iron age [Egg 1996: 151]. It should be noted that the popularisation of this weapon occurred both among nobleman and ordinary warriors alike [Hvala 2012: 114-122, Fig. 46: 3-14]. Although most warfare has more slender proportions, massive specimens like those from Severynivka are also known. For example, there were findings in the burial mounds: Stična, Magdalenska Gora, Ostrovec, Bukovje at the East-Alps region [Dular 2003: Fig. 68: 18, 78: 10, Tab. 31: 6, 62: 7; 62: 2]. Similar findings is the north-western part of the

Balkan Peninsula are known. Particularly, the socket axe from the burial Donja Dolina could be dated back to the second half of the 6<sup>th</sup> century BC [Gavranović 2011: 146-147, Fig. 148: 1].

In our opinion, this finding strengthened the theory about the wave of East-Hallstatt influence which was presented by trophies and prestigious things. Particularly, the decorated chapes and axe-adzes with a little side ring (palstave) could be considered as a Hallstatt weapon [Smirnova 1999b: 242; Eberts 2016: 169]. In this context, one should mention the discovery of a palstave which was made during the Scythian period at a settlement near the Dolyniany village, which based on the finds of synchronous pottery and antique ceramic imports, can be dated back to the end of the 7<sup>th</sup> – first half of the 6<sup>th</sup> century BC [Smirnova 1999a: 50-54; 2001: Fig. 5: 8].

#### 4. PERSONAL GOODS

This is one of the least representative groups on the hillfort. It includes a mirror and razors (both whole ones and pieces). The **mirror** from Severynivka could be referred to the composite type by T.M. Kuznetsova with a lateral straight handle with an extended end. Similar items are present in the complexes: Hladkovschyna mound 449 [Galanina 1977: Tab. 21: 4], Repiakhuvata Mohyla mound 2 [Ilinskaya *et al.* 1980: Fig. 20: 3], Hladkovschyna kurgan 3 tomb 1 [Grigorev, Skoryi 2012: Fig. 7: 3]. Based on the counted burial complexes, such mirror could have been used in the period from the end of the 7<sup>th</sup> and throughout the 6<sup>th</sup> century BC.

Four items of iron **razors** were found in two areas of the settlement and only one of them was undamaged.

The only complete and well-preserved razor was found in a “garbage layer” of Complex 1 (Fig. 1: 21). A piece of curved end of another iron razor (Fig. 1: 15) comes from the coaly layer 1 of the same megaobject.

Two fragments derived probably from the razor (Fig 1: 52, 53) came from dwelling 5 excavated in 1985 by B.M. Lobay. However, based on the figures given in the report, it is not possible to be fully confident about that. B.M. Lobay called them small sickle-like items [Lobay 1985: 25].

These artefacts differ from sickles by size (they are smaller), a lack of prongs on the blade and the shape of a handle-hook – the reaping sickles used for farming had a curved aside [for example: Smirnova 1982: 45; Bessonova, Skoryi 2001: 100; Shramko 2016b: 90, Fig. 9: 5]. However, its interpretation is ambiguous. For example, a similar findings from the Khreshchatyk settlement on the Dnieper basin were interpreted as a sickle, although they do not have prongs. The same was with

very similar artefacts from the Trakhtemyriv hillfort also called “sickles” [Kovpanenko *et al.* 1989: 52, Fig. 8: 36].

## 5. ARTIFACT OF UNKNOWN PURPOSE

The rounded iron item with a recess in the middle of the facial surface and small ledge on the other side (loop?) could be probably used as **ornaments**, such as medallions (Fig. 1: 27). Unfortunately, the artefact has not yet been restored, it is difficult to say with certainty what we are dealing with. The same applies to the iron object, which experienced strong deformation, rendering its interpretation impossible (Fig. 1: 9). Perhaps it was a socket (?) of some bigger object. However, the exact analogy could not be found.

In addition, the purpose of a small fragment of hardware remains unclear (Fig. 1: 10), the same goes for the iron roughly bent hook (Fig. 1: 11).

## 6. CONCLUSIONS

Consequently, during the years of three expeditions at the Severynivka settlement a satisfactory number of metal objects and fragments were found. They allow us to make some conclusions about farming activity, the life of the local population as well as its cross-cultural contacts. The largest percentage of the total number of items belongs to personal decorations – 36.7% (Tab. 1). The following numbers are farming tools – 29.3%. The third place belongs to weapons – 21.5%. The smallest percentage is personal goods – is 7.7%. Thus, the most popular items made mostly of iron were ornaments. Most of them probably were part of women clothes and hairstyles. Snake-shaped bracelets on the women’s personal ornaments are indisputable.

A set of farming tools that are typical for the forrest-steppe settlements of the Scythian period: knives, sickles and needles. Based on this evidence, it can be proved that the local people took up farming and home weaving. Knives were probably useful in many ways in everyday life – from cooking to carving horns and possibly wood.

Contrary to other considered goods, weapons were made of bronze and belonged to distant arms. The presence of celt-axes and scale armour may indicate the presence of warriors, who took part in the melee on the hillfort.

A few personal items, especially such valuable as mirrors, indicates the social stratification of the residents of the settlement or the presence of the alien population from Steppe areas (who often use mirrors). Noteworthy, that mirrors were found mostly in women's graves that is speaks in favour of the affiliation of this artefact with a noble nomad women.

The combination of cultural influences from different directions on the life of Severynivka residents is quite interesting and, in our opinion, perfectly logical. We can see artefacts as typical for Central Europe (axe-celt), the area of the Vysotsko culture (spiral-headed hairpins, earrings) and these clearly influenced by the Scythian steppe (arrowheads, mirror, armour plates). The iron sickles and knives probably originate from the local environment and demonstrate the level of economic development of the forest-steppe region.

Table 1

Metal items from the Severynivka hillfort.

| Category  | Name           | Figure number    | Metal  | Origin                     | Quantity | Quantity in category | %    |
|-----------|----------------|------------------|--------|----------------------------|----------|----------------------|------|
| Ornaments | plate          | Fig. 1:45        | Bronze | Pit 17                     | 1        | 1                    | 1.5  |
|           | bracelet       | Fig. 1:54        | Iron   | Dwelling 5 1985            | 1        | 2                    | 3    |
|           | bracelet       | Fig. 1:31        | Iron   | Complex 1, coaly layer 2   | 1        |                      |      |
|           | ring (?)       | Fig. 1:28        | Iron   | Complex 1, coaly layer 2   | 1        | 1                    | 1.5  |
|           | medal-lion (?) | Fig. 1:27        | Iron   | Complex 1, coaly layer 2   | 1        | 1                    | 1.5  |
|           | earring        | Fig. 1:30        | Bronze | Complex 1, ditch 4         | 1        | 3                    | 4.6  |
|           | earring        | Fig. 1:29        | Bronze | Complex 1, pit f           | 1        |                      |      |
|           | earring        | Fig. 1:40        | Bronze | pit 24                     | 1        |                      |      |
|           | hairpin        | Fig. 1:55-56     | Iron   | Dwelling 5 1985            | 2        | 16                   | 24.6 |
|           | hairpin        | Fig. 1:57        | Iron   | Pit-house 2 1980           | 1        |                      |      |
|           | hairpin        | Fig. 1:58        | Iron   | Pit-house 2 1980           | 1        |                      |      |
|           | hairpin        | Fig. 1:59        | Bronze | Pit-house 2 1980           | 1        |                      |      |
|           | hairpin        | Fig. 1:34-35     | Iron   | Complex 1, dump            | 2        |                      |      |
|           | hairpin        | Fig. 1:32-33, 36 | Iron   | Complex 1, coaly layer 2   | 3        |                      |      |
|           | hairpin        | Fig. 1:37-38     | Iron   | Complex 1, 'garbage' layer | 2        |                      |      |



| Category               | Name             | Figure number     | Metal  | Origin                               | Quantity | Quantity in category | %           |
|------------------------|------------------|-------------------|--------|--------------------------------------|----------|----------------------|-------------|
|                        | hairpin          | Fig. 1:59-60      | Iron   | Unknown 1980-1985                    | 2        |                      |             |
|                        | hairpin          | Fig. 1:50         | Bronze | Object 4                             | 1        |                      |             |
|                        | hairpin          | Fig. 1:44         | Iron   | Pit 19                               | 1        |                      |             |
| <b>Total amount</b>    |                  |                   |        |                                      |          | <b>24</b>            | <b>36.7</b> |
| <b>Household goods</b> | needle           | Fig. 1:23-26      | Iron   | Complex 1, coaly layer 2             | 4        | 5                    | 7.7         |
|                        | needle           | Fig. 1:22         | Iron   | Complex 1, 'garbage' layer           | 1        | 11                   | 17          |
|                        | knife            | Fig. 1:51         | Iron   | Pit-house 2 1980                     | 1        |                      |             |
|                        | knife            | Fig. 1:18         | Iron   | Complex 1, dump                      | 1        |                      |             |
|                        | knife            | Fig. 1:16, 17, 19 | Iron   | Complex 1, coaly layer 2             | 3        |                      |             |
|                        | knife            | Fig. 1:20         | Iron   | Complex 1, ditch 4                   | 1        |                      |             |
|                        | knife            | Fig. 1:62-64      | Iron   | Unknown 1980-1985                    | 3        |                      |             |
|                        | knife            | Fig. 1:43         | Iron   | Pit 15                               | 1        |                      |             |
|                        | knife, fragment  | Fig. 1:14         | Iron   | Complex 1, ditch 1                   | 1        |                      |             |
|                        | sickle, fragment | Fig. 1:13         | Iron   | Complex 1, 'garbage' layer           | 1        | 3                    | 4.6         |
|                        | sickle           | Fig. 1:65         | Iron   | Unknown 1980-1985                    | 1        |                      |             |
|                        | sickle           | Fig. 1:66         | Iron   | Unknown 1980-1985                    | 1        |                      |             |
| <b>Total amount</b>    |                  |                   |        |                                      |          | <b>19</b>            | <b>29.3</b> |
| <b>Warfare</b>         | scaly plate      | Fig. 1:8          | Iron   | Complex 1, coaly layer 2             | 1        | 1                    | 1.5         |
|                        | socket axe       | Fig. 1:12         | Iron   | Complex 1, coaly layer 2             | 1        | 1                    | 1.5         |
|                        | arrow-head       | Fig. 1:46         | Bronze | sq. L71c, cultural layer             | 1        | 12                   | 18.5        |
|                        | arrow-head       | Fig. 1:49         | Bronze | sq. L81a, lower cultural layer       | 1        |                      |             |
|                        | arrow-head       | Fig. 1:48         | Bronze | sq. L82a, L81d, lower cultural layer | 1        |                      |             |
|                        | arrow-head       | Fig. 1:6          | Bronze | Complex 1, dump                      | 1        |                      |             |



| Category               | Name                     | Figure number | Metal        | Origin                                | Quantity | Quantity in category | %           |
|------------------------|--------------------------|---------------|--------------|---------------------------------------|----------|----------------------|-------------|
|                        | arrow-head               | Fig. 1:2-3, 5 | Bronze       | Complex 1, coaly layer 2              | 3        |                      |             |
|                        | arrow-head               | Fig. 1:7      | Iron         | Complex 1, ditch 4                    | 1        |                      |             |
|                        | arrow-head               | Fig. 1:4      | Bronze       | Complex 1, 'garbage' layer            | 1        |                      |             |
|                        | arrow-head               | Fig. 1:47     | Bronze       | Object 1                              | 1        |                      |             |
|                        | arrow-head               | Fig. 1:42     | Bronze       | Intersection 2012-2013 cultural layer | 1        |                      |             |
|                        | arrow-head               | Fig. 1:41     | Bronze       | Surface find, square F                | 1        |                      |             |
| <b>Total amount</b>    |                          |               |              |                                       |          | <b>14</b>            | <b>21.5</b> |
| <b>Personal goods</b>  | razor                    | Fig. 1:21     | Iron         | Complex 1, 'garbage' layer            | 1        | 4                    | <b>6.2</b>  |
|                        | razor, fragment          | Fig. 1:52-53  | Iron         | Dwelling 5 1985                       | 2        |                      |             |
|                        | razor, fragment          | Fig. 1:15     | Iron         | Complex 1, coaly layer 1              | 1        |                      |             |
|                        | mirror                   | Fig. 1:39     | Bronze, Iron | Pit-house 1948                        | 1        | 1                    | <b>1.5</b>  |
| <b>Total amount</b>    |                          |               |              |                                       |          | <b>5</b>             | <b>7.7</b>  |
| <b>Unknown purpose</b> | socket (?)               | Fig. 1:9      | Bronze       | Complex 1, 'garbage' layer            | 1        | 1                    | <b>1.5</b>  |
|                        | fragment of unknown item | Fig. 1:10     | Iron         | Complex 1, ditch 4                    | 1        | 2                    | <b>3</b>    |
|                        | fragment of unknown item | Fig. 1:11     | Iron         | Complex 1, ditch 4                    | 1        |                      |             |
| <b>Total amount</b>    |                          |               |              |                                       |          | <b>3</b>             | <b>4.5</b>  |

*Translated by Oksana Lifantii*

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