Marek Florek

The Maria Curie-Skłodowska University in Lublin

HORN AND BONE ARROWHEADS FROM SANDOMIERZ. CONTRIBUTION TO THE STUDY OF MONGOL-RUTHENIAN RAIDS ON SANDOMIERZ REGION IN THE MIDDLE AGES

Early Mediaeval arrowheads made of antler or bone are rare discovery. We know only about a dozen such finds in the whole area of Poland. So far, Polish researchers have generally assumed that arrows with horn and bone arrowheads were used to hunt animals or catch fish. For this reason, they have been virtually ignored in studies of Early Mediaeval weapons.²

The assumption that bone and horn-headed arrows were only hunting weapons was strongly influenced by the belief that they could not effectively penetrate the armour or shield, in contrary to the tips made of metal (iron). That claim was supported, for instance, by a finding from the Wolin island a jaw (mandible) of a boar pierced by conical arrowhead made of horn.³ Researchers specializing in the Early Mediaeval weaponry from the areas of Eastern Europe thought differently. According to them, bone and horn arrowheads could have been used both as a hunting and fighting weapon.⁴

Horn and bone arrowheads, just like the iron ones, can be divided into two basic types based on the way they were attached to a shaft: socketed or tanged ones.⁵ All copies of arrowheads of the first type, i.e. those socketed onto the shafts, were made of horn, specifically of the tips of deer's or roe deer's antlers. They are in the shape of a slim cone with bottom part wider and hollow inside, with a socket which is not as clearly separated as in the case of iron arrowheads. A. F Medvedev named them in his typology as a type 1 of bone and horn arrowheads. 6 In Poland, such specimens were found among others in Wolin, Gardziec, Poznań, Biskupin, Kruszwica

¹ W. Hensel, Słowiańszczyzna wczesnośredniowieczna, Warsaw 1987, p. 141.

² A. Nadolski, Studia nad uzbrojeniem polskim w X, XI i XII w., "Acta Archaeologica Universitatis Lodziensis", vol. 3, 1954, p. 66; P. Strzyż, Uzbrojenie we wczesnośredniowiecznej Małopolsce, Łódź. 2006, p. 80.

³ W. Filipowiak, Sprawozdanie z prac wykopaliskowych w Wolinie w latach 1953-1954, "Sprawozdania Archeologiczne", vol. 1, 1955, pp. 179-195.

А. Ф. Медведев, Ручное метательное оружие. Лук и стелы, самострел VIII-XIV в.в., "Археология СССР. Свод археологических истчников", Е1-36, Москва 1966, р. 88.

A. Nadolski, Studia, p. 64

⁶ А.Ф. Медведев, *Ручное*, р. 87.

and Sanok.⁷ Such items were also discovered in other regions of early medieval Slavs, e.g. Czech and Ruthenia.⁸

Arrowheads of the second type, i.e. the one hammered into the shaft, can be generally divided into two groups. First group consists of arrowheads with separated tang, which was circular in cross-section and tapered downward, and with variously shaped blade (mostly flat or diamond-shape, however, there are few copies that are circular in cross-section). The second group contains arrowheads with flat tang, which is more or less separated, and with a slender blade, most often with diamond cross-section, rarely triangle or in a shape of flat hexagon. Only a few tanged arrowheads made of bone or horn were found in Poland, which indeludes two with a circular cross-section. The first one was discovered in a settlement in Czermno, which is identified as Czerwień described in the letopis. The second arrowhead was found during excavations of so-called Lunar Mound in Husynne on the Bug, a site that is usually considered to be a burial mound, but most probably was an earthwork with residential building, presumably in the form of a tower. The second arrowhead was found the shape of the second arrowhead was found the second arrowhead to be a burial mound, but most probably was an earthwork with residential building, presumably in the form of a tower.

Three arrowheads with flat tang are known and described. Two of them were discovered in Sandomierz on the Castle Hill, 11 and one was found in the settlement in Chełm. 12 In the case of the latter, its discoverers assumed it was a template for the casting molds used for the production of metal arrowheads. However, this interpretation

⁷ E. Cnotliwy, Z badań nad rzemiosłem zajmującym się obróbką kości i rogu na Pomorzu Zachodnim we wczesnym średniowieczu, "Materiały Zachodnio-Pomorskie", vol. 2, 1956, pp. 151-181; idem, Rzemiosło rogownicze na Pomorzu wczesnośredniowiecznym, Wrocław 1976, pp. 74-75 (picts. 20: h, picts. 21: k, pp. 231-232); W. Filipowiak, Sprawozdanie, p. 193, ryc. 8; P. Kotowicz, Militaria średniowieczne w zbiorach Muzeum Historycznego w Sanoku. Katalog zbiorów, Sanok. 2002, p. 33; W. Łęga, Kultura Pomorza we wczesnym średniowieczu na podstawie wykopalisk, Toruń 1930, p. 213, pict. 309; Z. Rajewski, Gród staropolski na półwyspie jeziora biskupińskiego w pow. żnińskim, [in:] Gród prasłowiański w Biskupinie w powiecie żnińskim, Poznań 1938, p. 87.

⁸ V. Hruby, *Slovanské kosténé prědměty a jejich výroba na Moravé*, "Archeologické Památky", no. 48, 1957, pp. 118-212; E. Cnotliwy, *Rzemiosło*, p. 232; А.Ф. Medvedev, *Ручное*, pp. 87-88.

⁹ J. Kuśnierz, Militaria z Czermna nad Huczwą. Próba rekonstrukcji ataku Tatarów na gród (w 1240 r.) na podstawie dotychczasowych badań archeologicznych, "Acta Militaria Mediaevalia", vol. 1, 2005, p. 118.

¹⁰ T. Żurowski, G. Mikołajczyk, *Sprawozdanie z badań kurhanu we wsi Husynne w pow. hrubieszowskim w 1954 r.*, "Sprawozdania Archeologiczne", vol. 1, 1955, p. 254, pict. 9: d.; M. Florek, *Issues Concerning the Existence and Functions of the So-Called Great Kurgans in Malopolska in Early Phases of the Early Middle Ages*, "Annalecta Archaeologica Ressoviensia", vol. 3, pp. 280-282.

¹¹ M. Gula, T. Rysiewska, *Zabytki wydzielone ze stanowiska Zamek II w Sandomierzu*, [in:] *Sandomierz. Badania 1969-1973*, vol. 1, ed. S. Tabaczyński, Warsaw 1993, pp. 267, 278, pict. 15; M. Florek, *Wczesnośredniowieczny rogowy grot strzały ze Wzgórza Zamkowego w Sandomierzu*, "Acta Militaria Mediaevalia", vol. 11, 2015 (in printing).

¹² S. Gołub, T. Dzieńkowski, *Piąty sezon badań wykopaliskowych na wczesnośredniowiecznej osadzie w Chełmie na stanowisku 144*, "Archeologia Polski Środkowowschodniej", vol. 5, 2000, p. 123, pict. 5: 2.

is entirely unlikely, as we do not know any cases of arrowheads cast in molds dating back to the early Middle Ages.

Besides the two relics from Sandomierz, which will be discussed later, all tanged arrowheads come from the areas that in the Middle Ages were part of Galicia-Vladimir Ruthenia (except for brief episodes of Polish rule). Arrowheads of this type are particularly numerous in Medieval Ruthenia, as well as on the Eurasian steppe areas located east from Ruthenia.¹³

The first of the arrowheads found in Sandomierz was discovered during excavations carried out in 1959 by Jerzy Gąssowski on the Castle Hill. It was found in the excavation unit I at a depth of 216 cm, in a layer of earth between the stone and brick rubble and daub. The excavation unit was located on the western slope of the hill, its dimensions were 20x5 m (Fig 1). It is impossible to determine the exact location of the artefact. The arrowhead (Fig. 2a) was made of horn. The blade is lanceolate with rhomboidal cross-section, slightly notched at the part it becomes the tang. The tang is slightly narrower than the blade and its cross-section is similar to a rectangle. Overall length of the arrowheads is 76 mm, including blade length – 52 mm, preserved stem length (part of it is chipped) – 24 mm, maximum blade width – 17 mm, the maximum thickness of the blade- 8 mm, width of the tang - 9 mm, thickness of the tang – 5 mm.

Similarly to other artefacts coming from the research on the Castle Hill in 1959, the arrowhead had never been published. J. Gassowski only generally mentioned that "one can find arrowheads and crossbow bolts" in the layer that contained fragments of burnt beams and daub (being a result of the fire and, according to him, connected with the destruction of the stronghold at the time of the Mongol invasion in 1260). On the other hand, Eligia Gassowska mentioned only the crossbow arrowheads in a description of a variety of items that had been found during the research on the Castle Hill in 1959-60.

The second arrowhead was found in the course of research on the western slope of the Castle Hill by Stanisław Tabaczyński in 1970-73. It was discovered in the plot B of the are 59, in a layer of brown earth with traces of burnt wood (layer no. 20) that dates back to the mid thirteenth century. ¹⁶ Its description was published in the first volume of the *Sandomierz*. *Badania 1969-1973*, but neither scale nor drawings of cross sections were attached and the object was described as one without analogy, probably

¹³ А.Ф. Medvedev, *Ручное*, p. 87; Ю. С. Худяков, *Вооружение центральноазиатских кочевников в эпоху раннего и развитого Средневековья*, Новосибирск 1991, p. 124, picts. 65-67; W. Świętosławski, *Arms and Armour of the Nomads of the Great Steppe in the Times of the Mongol Expansion (12th-14th Centuries)*, Łódź 1999, p.130.

¹⁴ J. Gąssowski, *Początki Sandomierza w świetle badań archeologicznych (do XIII wieku)*, [in:] *Studia Sandomierskie. Materiały do dziejów miasta Sandomierza i regionu sandomierskiego*, eds. T. Wąsowicz and T. Pazdur, Łódź 1967, p. 191.

¹⁵ E. Gąssowska, *Badania wykopaliskowe w Sandomierzu w latach 1958-1968*, "Sprawozdania Archeologiczne", vol. 22, 1970, p. 213.

¹⁶ M. Gula, S. Tabaczyński, Analiza stratygraficzna i problemy datowania umocnień Wzgórza Zamkowego, [in:] Sandomierz. Badania 1969-1973, vol. 1, ed. S. Tabaczyński, Warsaw 1993, p. 197.

related to fisheries.¹⁷ The arrowhead is made of bone. The blade is narrow and lanceolate, rhomboid in cross-section, only slightly wider than the tang, which is flat in cross section. An overall length of the preserved part is 183 mm, including length of the blade – 123 mm; maximum blade width is 14 mm and maximum blade thickness is 7 mm.

Both arrowheads represent the most common form of bone and horn arrowheads with a quite wide, flat tang, that are known in Eastern Europe as well as in vast areas of Central Asia.¹⁸ These arrowheads are considered to be typical for the nomads (Pechenegs, Cumans, Mongols) and have been adapted in the medieval Ruthenia, just like in case other elements of the weapons. The vast majority of them was discovered in strongholds, however there were few found in cemeteries. It is believed that they have been used both in battle and during hunting. The arrowheads found in Ruthenia are only approximately dated, from the ninth to the fourteenth century.¹⁹

As it was mentioned before, only one more arrowhead with flat tang has been found in Poland. It was discovered in Chełm, in the settlement that dates back to the thirteenth-fourteenth century, i.e. to times when it was the capital of one of the Principalities of Western Ruthenia. Moreover, no arrowheads of this type have been not found in a relatively well examined fortified settlements of the Polish-Ruthenian border such as Czermno, Gródek, Sąsiadka, Sanok or Trepcza.²⁰

The comparison of archaeological profiles of excavations done in 1959 and seventies on Castle Hill indicates that both arrowheads were found within the layers dated back to 2nd half of the thirteenth century, associated with the destruction of the stronghold fortifications by fire. It is believed that the fire took place during one of the Mongol-Ruthenian invasions in Lesser Poland in the thirteen century, most probably in 1241 or in 1259/1260. We discount the opinion of E. Gassowska, according to which the layer with traces of fire discovered on the western slope of the Castle Hill dates back to the Middle Ages and was a result of the fire set by by the Lithuanians in 1349 or even later, during an accidental fire. ²²

Taking into account the place they were found in, i.e. within the fire layers dated back to 2nd half of the thirteenth century and the fact that the two artifacts represent

¹⁷ M. Gula, T. Rysiewska, *Zabytki*, p. 278.

¹⁹ А.Ф. Медведев, *Ручное*, s. 88.

¹⁸ А.Ф. Медведев, *Ручное*, p. 88; W. Świętosławski, *Arms*, p. 130, picts. XVIII: 1-7.

J. Ginalski, P. Kotowicz, Elementy uzbrojenie i oporządzenia jeździeckiego z grodziska wczesnośredniowiecznego "Horodyszcze" w Trepczy, pow. Sanok, stan. 2, "Materiały i Sprawozdania Rzeszowskiego Ośrodka Archeologicznego", vol. 25, 2004, pp. 187-257; P. Kotowicz, System militarny Sanoka we wczesnym średniowieczu, "Acta Militaria Mediaevalia", vol. 1, 2005, pp. 61-86; idem, Broń i oporządzenie jeździeckie, [in:] Sutiejsk. Gród pogranicza polsko-ruskiego w XI-XIII w. Studium interdycsyplinarne, ed. J. Kalaga, Warsaw 2013, pp. 62-75; Czerwień – gród między Wschodem a Zachodem. Katalog wystawy, red. J. Bagińska, M. Piotrowski, M. Wołoszyn, Tomaszów Lubelski 2012.

²¹ J. Gąssowski, *Początki*, p. 191; S. Tabaczyński, A. Buko, *Sandomierz: Starożytność. Wczesne średniowiecze*, Rzeszów 1981, p. 97.

²² E. Gąssowska, *Z problematyki badawczej wczesnośredniowiecznego Sandomierza*, "Rocznik Muzeum Świętokrzyskiego", vol. 7, 1971, p. 52.

forms that are unusual for Polish lands, but typical for Eastern Europe, they should be considered as arrowheads used during one of Mongol or Mongol-Ruthenian invasions in Sandomierz. The most likely scenario is that they come from the Mongol invasion in 1241 or Mongol-Ruthenian invasion at the turn of 1259 and 1260.

After a short siege during the first invasion Sandomierz was conquered by the Mongols on 13 February 1241 and probably was burnt, but we have no further information on the course of the struggle itself. In early March of the same year the Mongols led by Ordu, brother of Batu Khan, appeared near Sandomierz for the second time. After a two-day stopover in a dilapidated stronghold Mongol troops split into two groups, one of which moved in the direction of Krakow and the other headed to Tarczek, towards Łęczyca. Probably there were no fights in Sandomierz at that time.²³

Another raid took place in late 1259 and 1260. It is regarded as the most devastating and tragic for Sandomierz. The details about the course of the raid, the siege and conquer of the city are very well known thanks to the description on the Halych-Volyn Letopis probably drafted by an eyewitness.²⁴ Polish sources complement this report.²⁵ According to them, the Mongol army under the command of Borundaj (who was supported by Ruthenians led by Prince of Vladimir Vasilko Romanovich and by Roman and Leo, sons of Danylo Romanovich, Prince of Galicia) passed the Vistula in Zawichost and arrived to Sandomierz in the beginning of January 1260. The chronicle describes "/.../ придоша к Судомиру, и объступиша со всѣ сторонѣ, и огородиша и около своимъ городомь, и порокъ поставиша. И пороком же бьющимь неослабо день и нощь, а стръамъ не дадущимъ выникнути изъ заборолъ". ²⁶ Most likely. this should be interpreted as evidence that the invaders built fortifications around ramparts of the proper stronghold (hereinafter referred to as дитинецъ) and the borough, which were situated on the hill with the present Castle and Cathedral. They placed battering rams at the fortifications and shot bows and perhaps crossbows. A phrase "[...] огородиша и около своимъ городомь [...]" did not describe a shaft of earth, stone and wood, as some researchers believe.²⁷ Construction of such a shaft was not possible because of both a lack of time and topography. It was rather some kind of makeshift wooden structure. The assault occurred after four days of continuous destruction of the shaft by rams and intense fire, and as a result the borough was captured. Wooden residential buildings, including wooden strengthening and stone temple, that is identified with the Blessed Virgin Mary collegiate church, in which part

²³ M. Florek, *Najazdy mongolskie na Ziemię Sandomierską w średniowieczu w świetle źródeł pisanych, legend i wyników badań archeologicznych*, "Z Otchłani Wieków", vol. 62, no. 1-4, 2007, p. 35.

²⁴ Галицко-волынская летопись. Библиотека литературы древней Руси, eds. Д. С. Лихачев, Л. А. Дмитриева, А. А. Алексееча, Н. В. Понырко, vol. 5, Санкт-Петербург 2005, pp. 284-356.

²⁵ Kronika Wielkopolska, ed. B. Kürbis, Kraków 2010; J. Długosz, Annales seu cronicae incliti Regni Poloniae, vol. 7 and 8, Warsaw 1974.

²⁶ Галицко-волынская летопись, р. 290.

²⁷ S. Krakowski, *Region kielecki jako teren najazdów w drugiej połowie XIII wieku*, "Rocznik Muzeum Świętokrzyskiego", vol. 8, 1973, p. 193.

of the population took refuge, were burnt during the attack. The residents of the borough panicked and rushed to the strongholds when the Mongols arrived. The fleeing people could not fit into the narrow gate of the stronghold and the bridge over the moat between the stronghold and borough collapsed under the weight of the crowd. The chronicler described that so many people were killed that the moat was filled with dead bodies and one could cross it stepping on the bodies as if it was a bridge. The stronghold was not conquered, but the defenders surrendered on February 2, 1260 after the instigation of the Ruthenian princes that were sent to negotiate on behalf of the Borundaj. The capture of Sandomierz resulted in slaughter of its inhabitants on the meadows along the Vistula River.

The author of the *Letopis* does not mention burning the stronghold down, although he previously described a fire in the borough that destroyed its strengthening. Nevertheless, it is believed that the city was burned as well and therefore the traces of fire that were discovered during archaeological excavations on the western slope of the Castle Hill are associated with the most tragic events of 1260 or with earlier invasion in 1241. ²⁸ 49 monks from the St. James monastery of the Dominican Order were killed during this raid, all of them were later declared as martyrs. A settlement on the Old Town Hill was burnt and its inhabitants were killed as well, which has been confirmed by the results of archaeological research, as the remains of the burnt buildings dating back to the middle of the thirteenth century and a charred human skeleton has been discovered at this location. ²⁹

Mongolian-Ruthenian army arrived to Sandomierz once again in mid-February 1280 under command of Prince Lev Halicz Daniłowicz, his son George, Vladimir, Prince of Volyn and Mstislav, Prince of Lutsk. *The Halych-Volyn Letopis* states that "И тако перешедша сташа около города. Стоявше же маль час, не бишася", 30 in the sense that there were no attempts to capture the stronghold. 31 Perhaps there was only a blockade or maybe it was not defended at all.

Another raid on Sandomierz area took place in the winter of 1287 and 1288. The Mongol army was led by Khan Telebog supported by the troops of Ruthenian princes Lev, Vladimir and Mstislav. In this case, sources mention only that the invaders approaches to Sandomierz and started the siege, but do not say anything about the attempts to assault and capture the city. Some researchers believe that after the destruction of the stronghold in 1260 the ramparts of the city, which got location privilege in 1286, were rebuilt and were so strong, that the invaders did not even try to attack.

²⁸ J. Gąssowski, *Początki*, p. 191; S. Tabaczyński, A. Buko, *Sandomierz*, p. 97.

²⁹ J. Gąssowski, *Początki*, p. 214; E. Gąssowska, *Z problematyki*, p. 60.

³⁰ Галиико-волынская летопись, р. 312.

³¹ Z. Szambelan, *Najazdy ruskie na ziemię sandomierską w XIII wieku*, "Acta Universitatis Lodziensis", Folia Historica, vol. 36, 1989, p. 24.

³² S. Krakowski, *Region*, p. 203.

³³ A. Buko, *Archeologiczne przyczynki do badań nad genezą średniowiecznego ośrodka miejskiego w Sandomierzu*, "Kwartalnik Historii Kultury Materialnej", vol. 30, no. 3-4, pp. 328-334; idem, *Początki Sandomierza*, Warsaw 1998, p. 123.

It seems more likely, however, that the real reason was that there was nothing to capture. Few months before the invasion the city, which got the privilege of location from Prince Leszek Czarny, had no fortifications. The archaeological research showed that fortification in the form of wood and earth shaft were built in the twenties of fourteenth century.³⁴ The stronghold on the Castle Hill was at that time also poorly protected, as its modernization took place only at the beginning of the fourteenth century.³⁵

It is interesting that numerous Mongol and Mongol-Ruthenian invasions are so poorly reflected in archaeological sources. The two arrowheads from the Castle Hill are the only findings of unambiguous eastern (Mongolian-Ruthenian) origin discovered in Sandomierz. We are not able to determine whether they got here during the invasion in 1241 or in 1260, although the latter date seems more likely taking into account written sources. Later invasions should be excluded from these considerations because of the dating of the layers where the arrowheads were found. Several iron arrowheads that are in the Diocesan Museum in Sandomierz found in the vicinity of St. James church in 1959 are not associated with Mongols. It is even more surprising if one recalls a description of 4 day long siege in Halych-Volyn Letopis: according to the chronicler the Mongol-Ruthenian army shot arrows so intensively that the defenders could not take positions on the shafts. However, Mongol (or Mongol-Ruthenian) military, including the characteristic arrowheads which are considered to be a trace of invasions in thirteen century, are known from many other sites in Poland.³⁶

Further rebuilding of the city, ground works and levelling in last centuries may be an explanation for the lack of findings related to fights for Sandomierz, which is also supported by the fact that we do know of hardly any other military finds dated to the Middle Ages (or at least they have not been published).³⁷ It is completely opposite in the case of sites, which were not rebuilt after the raids, e.g. we know many military items from stronghold in Vinnitsa near Połaniec, which was probably burnt during the first or second Mongol invasion.³⁸ Therefore, the two arrowheads from the Castle Hill in Sandomierz seem to be particularly interesting artefacts connected to Mongol-Ruthenian raids in Sandomierz region.

Translated by Małgorzata Florek-Wojciechowska

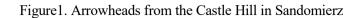
³⁵ Idem, Zabudowa Wzgórza Zamkowego w Sandomierzu w średniowieczu, [in:] Późnośredniowieczne zamki na terenie dawnego województwa sandomierskiego, Kielce 2005, p. 100.

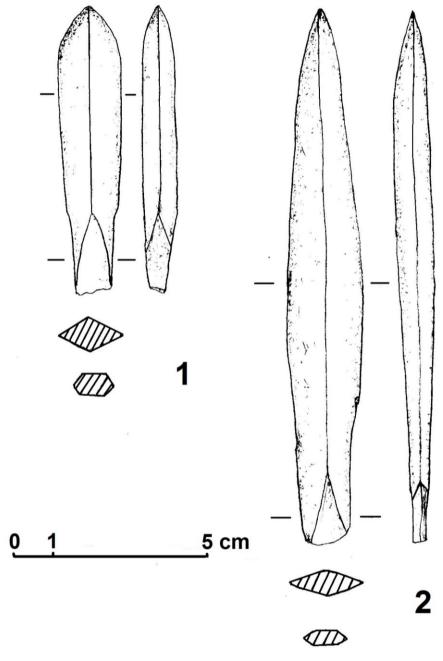
³⁴ M. Florek, *Najstarsze fortyfikacje miejskie Sandomierza w świetle ostatnich odkryć archeologicznych*, "Sprawozdania Archeologiczne", vol. 55, 2003, pp. 223-229.

³⁶ W. Świętosławski, Archeologiczne ślady najazdów tatarskich na Europę Środkową w XIII w., Łódź 1997; idem, Ślady koczowników Wielkiego Stepu z X, XI i XII wieku w dorzeczach Wisły i Odry, Łódź 2006.

³⁷ M. Gula, T. Rysiewska, *Zabytki*, p. 262-272; T. Rysiewska, *Zabytki wydzielone ze stanowiska Collegium Gostomianum w Sandomierzu*, [in:] *Sandomierz. Badania 1969-1973*, vol. 2, Warsaw 1996, pp. 327-389.

³⁸ M. Florek, *Najazdy*, p. 42.





Drawing by M. Florek. 1 – the arrowheadfound in 1959; 2 – the arrowheadfound in the course of investigations in 1970-1973.

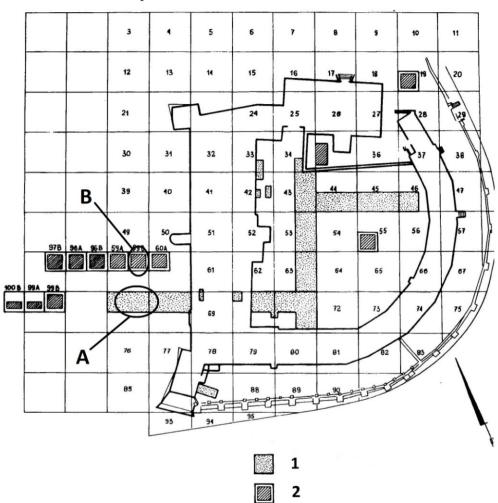


Figure 2. Map showing location of excavation pits on the Castle Hill in Sandomierz and places where arrowheads were discovered

Prepared by M. Florek. A, B – places where arrowheads were found; 1 – excavation pits investigated in 1959-1960; 2 – excavation pits investigated in 1969-1973.

Резюме

КОСТЯНЫЕ И РОГОВЫЕ НАКОНЕЧНИКИ СТРЕЛ ИЗ САНДОМИРА. К ИССЛЕДОВАНИЯМ МОНГОЛО-РУСИНСКИХ ВТОРЖЕНИЙ В РАЙОНЕ САНДОМИРА В СРЕДНИЕ ВЕКА

В ходе археологических исследований на Замковой горе в Сандомире в слоях, датируемых половине тринадцатого века были найдены два наконечники стрел, один из рога, второй из кости. Оба представляют собой

наиболее распространенную форму костяных и роговых наконечников стрел с довольно широким и плоским черешком, известну в Восточной Европе, а также в обширных районах Центральной Азии. Такие наконечники стрел считаются типичными для кочевников, от которих были приняты на средневековой Руси. В Восточной Европе они использовались с девятого по четырнадцатый век. Из польских земель известный только один подобный наконечник, какой был найден в Хелме и датируется XIII веком. Принимая во внимание контекст, в котором они были найдены, следует рассматривать их как наконечники стрел, используемых во время осады поселения Сандомир, во время одного из многих вторжений (но наиболее вероятно, кажется, во время монгольского нашествия в 1241 или монголо-русинского нашествия на рубеже 1259 и 1260 гг).

Ключевые слова: наконечники стрел, Сандомир, Средние века

Keywords: arrowheads, Sandomierz, early Middle Ages

Streszczenie

ROGOWE I KOŚCIANE GROTY STRZAŁ Z SANDOMIERZA. PRZYCZYNEK DO BADAŃ NAD NAJAZDAMI MONGOLSKO-RUSKIMI NA ZIEMIĘ SANDOMIERSKĄ W ŚREDNIOWIECZU

W trakcie badań archeologicznych na Wzgórzu Zamkowym w Sandomierzu w warstwach datowanych na połowę XIII w. znaleziono 2 groty strzał, jeden wykonany z rogu, drugi z kości. Oba groty reprezentują najpowszechniejszą formę kościanych i rogowych grotów strzał z dość szerokim, płaskim trzpieniem, znanych z Europy Wschodniej a także rozległych obszarów Azji Centralnej. Groty takie, uważane są za charakterystyczne dla koczowników, od których przejęte zostały na średniowiecznej Rusi. W Europie wschodniej występują one od IX do XIV w. Z ziem polskich znany jest jeszcze tylko jeden podobny grot kościany, znaleziony w Chełmie, datowany na XIII w. Biorąc pod uwagę kontekst w jakim zostały znalezione należy uznać za groty używane w trakcie oblężenia grodu sandomierskiego w trakcie któregoś z najazdów mongolskich lub mongolsko-ruskich. Przy czym najbardziej prawdopodobne wydają się być najazd mongolski w 1241 r. bądź mongolsko-ruski na przełomie 1259 i 1260 r.

Slowa kluczowe: groty strzał; Sandomierz; wczesne średniowiecze

Bibliography

Source materials

Długosz J., Annales seu cronicae incliti Regni Poloniae, vol. 7 and 8, Warsaw 1974. Галицко-волынская летопись. Библиотека литературы древней Руси, eds. Д. С. Лихачев, Л. А. Дмитриева, А. А. Алексееча, Н. В. Понырко, vol. 5, Санкт-Петербург, 2005.

Kronika Wielkopolska, ed. B. Kürbis, Cracow 2010.

Books and articles

Cnotliwy E., Rzemiosło rogownicze na Pomorzu wczesnośreniowiecznym, Wrocław 1973.

- Cnotliwy E., Z badań nad rzemiosłem zajmującym się obróbką kości i rogu na Pomorzu Zachodnim we wczesnym średniowieczu, "Materiały Zachodnio-Pomorskie", vol. 2, 1956.
- Czerwień gród między Wschodem a Zachodem. Katalog wystawy, eds. J. Bagińska, M. Piotrowski, M. Wołoszyn, Tomaszów Lubelski 2012.
- Filipowiak W., *Sprawozdanie z prac wykopaliskowych w Wolinie w latach 1953-1954*, "Sprawozdania Archeologiczne", vol. 1, 1955.
- Florek M., Najazdy mongolskie na Ziemię Sandomierską w średniowieczu w świetle źródel pisanych, legend i wyników badań archeologicznych, "Z Otchłani Wieków", vol. 62, 2007.
- Florek M., Wczesnośredniowieczny rogowy grot strzały ze Wzgórza Zamkowego w Sandomierzu, "Acta Militaria Mediaevalia", vol. 11, 2015 (in printing).
- Gąssowska E., Badania wykopaliskowe w Sandomierzu w latach 1958-1968, "Sprawozdania Archeologiczne", vol. 22, 1970.
- Gąssowski J., Początki Sandomierza w świetle badań archeologicznych (do XIII wieku), [in:] Studia Sandomierskie. Materiały do dziejów miasta Sandomierza i regionu sandomierskiego, eds. T. Wąsowicz and T. Pazdur, Łódź 1967.
- Ginalski J., Kotowicz P. N., *Elementy uzbrojenie i oporządzenia jeździeckiego z grodziska wczesnośredniowiecznego "Horodyszcze" w Trepczy, pow. Sanok, stan. 2*, "Materiały i Sprawozdania Rzeszowskiego Ośrodka Archeologicznego", vol. 25, 2004.
- Gołub S., Dzieńkowski T., *Piąty sezon badań wykopaliskowych na wczesnośrednio-wiecznej osadzie w Chełmie na stanowisku 144*, "Archeologia Polski Środkowowschodniej", vol. 5, 2000.
- Gula M., Rysiewska T., *Zabytki wydzielone ze stanowiska Zamek II w Sandomierzu*, [in:] *Sandomierz. Badania 1969-1973*, vol. 1, ed. S. Tabaczyński, Warsaw 1993.
- Gula M., Tabaczyński S., Analiza stratygraficzna i problemy datowania umocnień Wzgórza Zamkowego, [in:] Sandomierz. Badania 1969-1973, vol. 1, ed. S. Tabaczyński, Warsaw 1993.
- Hensel W., Słowiańszczyzna wczesnośredniowieczna, Warsaw 1987.
- Hruby V., *Slovanské kosténé prědměty a jejich výroba na Moravé*, "Archeologické Památky", vol. 48, 1957.
- Kotowicz P. N., *Broń i oporządzenie jeździeckie*, [in:] *Sutiejsk. Gród pogranicza polsko-ruskiego wXI-XIII w. Studium interdycsyplinarne*, ed. J. Kalaga, Warsaw 2013.
- Kotowicz P. N., *Militaria średniowieczne w zbiorach Muzeum Historycznego w San-oku. Katalog zbiorów*, Sanok 2002.
- Kotowicz P. N., *System militarny Sanoka we wczesnym średniowieczu*, "Acta Militaria Mediaevalia", vol. 1, 2005.
- Kuśnierz J., Militaria z Czermna nad Huczwą. Próba rekonstrukcji ataku Tatarów na gród (w 1240 r.) na podstawie dotychczasowych badań archeologicznych, "Acta Militaria Mediaevalia", vol. 1, 2005.

Łęga W., Kultura Pomorza we wczesnym średniowieczu na podstawie wykopalisk, Toruń 1930.

- Nadolski A., *Studia nad uzbrojeniem polskim w X, XI i XII w.*, "Acta Archaeologica Universitatis Lodziensis", vol. 3, 1954.
- Rajewski Z., Gród staropolski na półwyspie jeziora biskupińskiego w pow. żnińskim, [in:] Gród prasłowiański w Biskupinie w powiecie żnińskim: sprawozdanie z badań w latach 1936 i 1937, z uwzględnieniem wyników z lat 1934-1935, ed. J. Kostrzewski, Poznań, 1938.
- Strzyż P., Uzbrojenie we wczesnośredniowiecznej Małopolsce, Łódź 2006.
- Świętosławski W., Arms and Armour of the Nomads of the Great Steppe in the Times of the Mongol Expansion (12th-14h Centuries), Łódź 1999.
- Żurowski K., Mikołajczy G., *Sprawozdanie z badań kurhanu we wsi Husynne w pow. hrubieszowskim w 1954 r.*, "Sprawozdania Archeologiczne", vol. 1, 1955.
- Медведев А.Ф., *Ручное метательное оружие. Лук и стелы, самострел VIII-XIV в.в.*, Археология СССР. Свод археологических истчников, E1-36, Москва 1966.

The date of submitting the paper to the Editorial Staff: January 18, 2015. The date of initial acceptance of the paper by Editorial Staff: January 30, 2015.