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A new Roman Period burial ground of the Przeworsk culture from Pakoszówka (the Upper San River basin)

Abstract: The article concerns the discovery of the new Przeworsk culture burial ground, which is only the second known burial site from the Upper San River basin, beside of necropolis located in Prusiek site 25. The site 33 in Pakoszówka was excavated completely during field works carried out between 2015 - 2018. During the excavations, a number of richly furnished burials were discovered, including extraordinary double warrior grave. Beside of graves where metal parts of weaponry were found, a few graves without rich inventory were discovered. The site is dated to the end of the Early Roman Period and the late Phase C1 of the Younger Roman Period. The burial ground in Pakoszówka corresponds well with the recent funeral finds from Rankovce located in Eastern Slovakia (Košice Region). Together with finds from the Upper Tisa River basin, it indicates migration of the Przeworsk culture population to the areas bordering the Roman Empire in this turbulent time and the special role it played in the events of the end of the second century A.D.

Keywords: Carpathians, cremation graves, necropolis, weaponry, Wroczeń Mountain

A small cremation cemetery of the Przeworsk culture in the village of Pakoszówka, Sanok Commune and County, Site 33 (AZP 112-77/146) is one of the most interesting recent discoveries related to the Roman Period in the Upper San River basin. The necropolis is situated on the edge of a forested oblong southwestern slope of Wroczeń Mountain which dominates the vicinity (Fig. 1). The mountain is 498.1 m asl high and is located in the south-western extremity of the Dynów Foothills, in the junction with the Jasło-Sanok Valleys. The site is located on a much lower level, at the height of c. 346-350 m asl (Fig. 2).

The discovery of the necropolis in Pakoszówka is significant, as in the territory of the Upper San River basin only one burial ground of the Przeworsk culture population has been known so far. It was discovered in Prusiek, Sanok County



(Site 25)¹. This site was excavated in the years 2004-2009 by an expedition from the Institute of Archaeology of the Jagiellonian University. These works resulted in a discovery of 41 burials which are dated to the end of the Early Roman Period and the beginning of the Younger Roman Period (Madyda-Legutko, Pohorska-Kleja *et al.* 2005; Madyda-Legutko, Rodzińska-Nowak 2014; Madyda-Legutko, Rodzińska-Nowak *et al.* 2006a; 2006b; 2007; 2008; 2009, 2010).

The fact that the cremation cemetery was located in the slope of Wroczeń Mountain is of no surprise. In preceding years numerous traces of Roman Period settlement were found in its vicinity (Fig. 1). A large Przeworsk culture settlement in Pakoszówka (Site 1) is situated at the foot of one of the neighbouring hills, on a flattening located directly to the west of the cemetery. The settlement was partially examined and it is dated to the turn of the Early and Younger Roman Period (Madyda-Legutko, Pohorska-Kleja et al. 2006a; 2006b; Madyda-Legutko, Smajek 2010). What is more, on a terrain feature situated next to the necropolis (c. 100 m to the south) there is a settlement in Srogów Górny (Site 1/2). Two rectangular hearths were recorded there and these features are believed to be related to this period² (Muzyczuk, Pohorska-Kleja 1993-1994, Fig. 10:1-2). One must also mention Site 26 in Pakoszówka, where a feature dated to the Younger Roman Period was discovered. A large assemblage of wheel-made pottery was discovered within this feature, which is why it was interpreted as a pottery depot (Madyda-Legutko, Pohorska-Kleja 2004; Rodzińska-Nowak 2018). It must be stressed, however, that a compact settlement cluster from the Roman Period was identified in the entire region of the Upper San River basin (Madyda-Legutko, Rodzińska-Nowak 2017, 429-431, Fig. 1).

The cemetery in Pakoszówka which is discussed in this paper was discovered in late August 2015. An incidental discoverer found an assemblage of a few iron artefacts within a forest road. Initially, he believed that these were parts of contemporary agricultural machinery. However, in the course of exploration, his doubts were provoked by a bent artefact, resembling a sword blade. A day after that, he contacted one of the co-authors of this paper (P. Kotowicz) in order to demonstrate the finds. An inspection of the artefacts left no doubt that these were archaeological finds dated to the Roman Period (two sword fragments, a twisted bail, a buckle, two shield-grip fragments and a shield-boss). Two weeks

¹ It is not certain whether the identification of a supposed cremation grave from Załuż, Sanok County is correct (Aleksiewicz 1958, 50-51; Kotowicz 2005, 715, 717, Fig. 4:h – with literature references).

² In 2017, in the course of archaeological works related to a development concerning the construction of a gas line crossing the area of the site, further features related to the settlement which existed in this place were discovered – Grzegorz Płoskoń, M. A. from the "ARCHAIA" Archaeological Services in Przeworsk, personal communication. The authors are indebted for this information. During these field works, Roman Period features – including rectangular hearths – were also found at several other sites in Pakoszówka and the neighbouring village of Strachocina.

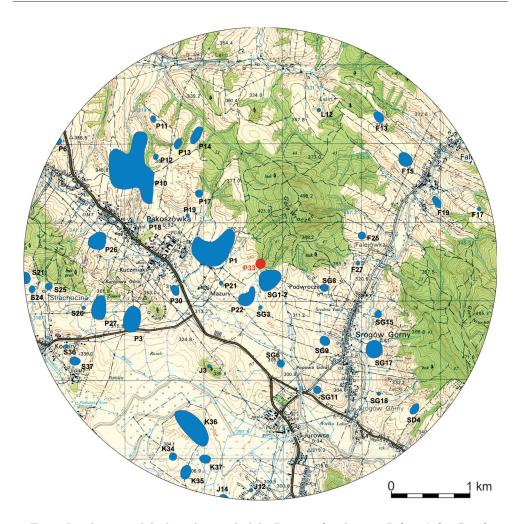


Fig. 1. Localisation of the burial ground of the Przeworsk culture in Pakoszówka, Sanok County, site 33 (red point) and distribution of settlements from the Roman Period (in blue) registered during the field walking survey conducted within Archaeological Record of Poland program (F – Falejówka, J – Jurowce, K – Kostarowce, L – Lalin, P – Pakoszówka, S – Strachocina, SD – Srogów Dolny, SG – Srogów Górny; 1 – site number in the) (by P. N. Kotowicz on the basis of Madyda-Legutko 1995, with supplements)

thereafter, a site inspection was undertaken in the presence of a representative of the Office of Monument Protection. The inspection confirmed the aforementioned supposition. Another two small fragments of iron artefacts and a single burnt human bone were identified among the finds which were extracted by the discoverer. The surface of the site was also examined with a metal detector and

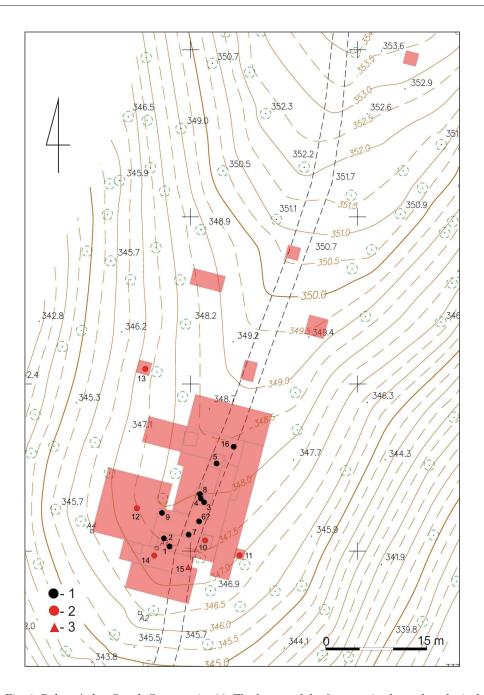


Fig. 2. Pakoszówka, Sanok County, site 33. The layout of the features in the archaeological trenches: 1 – cremation graves; 2 – holes made by metal detectorists; 3 – pottery concentration (by P. N. Kotowicz)

another three strong signals were recorded. This boosted the decision to carry out rescue excavations. Since 2017, regular excavations were held and these were conducted jointly by the Historical Museum in Sanok (P. Kotowicz, PhD) and the Institute of Archaeology of the Jagiellonian University (J. Bulas, M.A., and later on also M. Okońska, M.A.). The excavations were supervised by prof. dr hab. Renata Madyda-Legutko and dr hab. Judyta Rodzińska-Nowak.

In the course of four years (2015-2018) five research expeditions were organised. About 516 m² of the surface was examined within 25 archaeological trenches with annexes³. As the site was endangered by illegal treasure hunters, it was decided to first explore places where the metal detector recorded signals which could suggest the presence of burials with metal artefacts. Then, these trenches were joined and broadened in order to grasp features with no metal furnishings or located at depths beyond the reach of the metal detector.

As the site was located in the forest, the top layer was the forest bed with humus, and its thickness was about 10-15 cm. The soil cover of the site is composed of yellow clay with an abundance of stones and gravel. It was in this layer that grave tops were recorded, usually at the depth of c. 20-30 cm. Grave boundaries on this level were usually not clearly legible. A detailed surface prospection of the site with the use of metal detectors was also carried out. What is more, the detectors were also applied during the examination of each exposed level in the archaeological trenches. In the result of it, some dozen metal artefacts which were deposited beyond grave contexts were discovered. Their dispersion and an analysis of the distribution of the discovered graves allows for an assumption that the entire area of the cemetery was examined. It encompassed the most flattened part of the mentioned promontory and its surface was about 500 m² (Fig. 2). In 2017, additional geomagnetic prospection of the site was held⁴. It revealed a number of anomalies which indicated the presence of metal artefacts under the surface of the ground. All these anomalies were verified with the use of the metal detectors and archaeological trenches were opened within areas suggested by signals from below the layer of the forest humus. These trenches did not result in discoveries of new graves; however, they recorded the presence of individual metal artefacts which were deposited at greater depths and whose chronology varied⁵.

³ The trenches were initially arranged in such a way that they would not disturb the tree stand and the undergrowth, which is why they strongly deviated to NE-SW from the N-S axis. In the subsequent years it was decided to keep this arrangement.

⁴ The excavations were carried out by the ProDigi company, owed by Piotr Wroniecki M. A. from Warszawa.

⁵ It is worth mentioning that traces of the human presence which predated the period of use of the cemetery were also recorded at the site (the Neolithic – the Early Bronze Age?, the Bronze Age – the Early Iron Age). Furthermore, later finds (the Modern Period) were also discovered.

In the result of the excavations, 16 features were found, including five presentday holes made by detectorists (Features 10-14), nine certain cremation graves of the Przeworsk culture (Features 1-9, 16), one supposed burial (Feature 6)⁶ and a pottery assemblage (Feature 15) (Fig. 2). Regrettably, it cannot be said whether and how many graves were destroyed by trees growing at the site. Near the cluster of the graves there are three large beeches with developed root systems and it cannot be excluded that individual burials may be within their reach. On the other hand, on the basis of the excavations it can be said how many graves were disturbed or destroyed by treasure hunters who were using metal detectors. There is no doubt that the activity of the detectorists was the reason behind the disturbance of three burials (Features 1, 7, and 9). It seems, however, that apart from the mentioned features, other ones were not disturbed. This can be implied by the fact that all the recorded holes dug by the treasure hunters were not deeper than 20 cm. On the other hand, these holes may suggest that a certain number of finds from the forest humus (beyond the archaeological features) was plundered.

The discovered burials gathered in the cluster aligned along the NW-SE axis (Fig. 2). Only one grave was somewhat shifted to the west. Two cases (Features 3 and 16) were urn graves. As regards Feature 1, it can be assumed that the burnt body and furnishings were deposited in a chest made from organic materials. Concerning other burials (Features 2, 4-5, 6?, 7-9), no remains of ceramic urns or organic containers were found. It can be thus assumed that these were pit burials. As mentioned above, three burials were strongly disturbed (Feature 1), or almost completely destroyed (Features 7 and 9)⁸ by the treasure hunters. Additionally, a small group of pottery (Feature 15) was discovered in the S-E part of the site. This, however, was not accompanied by burnt human bones. It is worth mentioning that individual fragments of bones and pottery were also scattered in the archaeological trenches beyond the graves.

The bone remains from the graves underwent anthropological analyses. In the light of the excavations which have been held so far we know that five or six men (Features 1, 3, 5, 7, and 16) and a child (Feature 4) were buried in these graves. A high number of men's graves is remarkable. On the basis of the anthropological

⁶ An interpretation of this group of finds as a burial is not certain. The furnishings encompassed two special finds (a golden pendant and a spearhead) which were located next to each other. In their neighbourhood there was a vestigial amount of charred human bones. The cluster has no legible borders and its arrangement was additionally disturbed by tree roots.

⁷ Such an interpretation may be implied by the form of the burial, with special reference to its regular shape and flat bottom. We would like to thank Katarzyna Czarnecka, PhD from the State Archaeological Museum in Warszawa for providing us with data on burials in wooden caskets in Roman Period Europe

⁸ In the case of Feature 9, at least part of its furnishings could be reconstructed on the basis of artefacts (a spearhead and a shield-boss) which were recovered from an anonymous finder via intermediaries.

analyses and with support from archaeological premises, seven out of nine burials can be quite certainly identified as men's burials (Features 1, 3, 5, 7, 8, 9, 15). They contained metal parts of dress, tools and items of daily use. However, what was the most numerous were various finds of weaponry (cf. Godłowski 1974, 64; Czarnecka 1990, 111-112; Madyda-Legutko, Rodzińska-Nowak et al. 2005). The assemblage of weaponry includes four partially or entirely preserved swords which were ritually bent, nine spearheads, one iron spear butt cap, five shieldbosses, at least three fragmentarily preserved shield-grips, as well as six iron spurs. Other finds encompassed, among others, six fibulae, five buckles, two belt end fittings, an iron fire striker, five knives, one whetstone and shards of ceramic vessels. Most metal artefacts, chiefly weaponry, were ritually burnt and bent, in line with the funeral customs characteristic for the Przeworsk culture (Madyda-Legutko, Rodzińska-Nowak et al. 2005, 181, with further reading). In many cases the state of preservation of the finds was additionally related to natural corrosion processes, which caused strong damage to the artefacts in the case of the discussed site. This is particularly relevant for the finds which were not covered by fire patina which comes into existence in the result of secondary burning on the funeral pyre.

Among the men's burials, a richly furnished double⁹ grave of mounted warriors (Feature 1) is no doubt the most interesting one. In all probability, burnt remains of the deceased were interred in a wooden chest. The dead were post-mortally provided with two complete sets of weaponry:¹⁰ two swords, two shield-bosses, four heads of shafted weapons and two spurs. Apart from weapons, a fragment of an imported bronze Roman seal box was found in the grave. This find is absolutely unique in the environment of the Przeworsk culture. Furthermore, this grave also yielded an artefact made from twisted iron rod. Artefacts of this kind are sporadically found in burials of the Przeworsk culture population (Rycel 1981, 265-268, Tab. II; Liana 1965, 267-268, Fig. 1: a; Siciński 2010, 42-43, 162, Fig. 70: 1-7; Zagórska-Telega 2000, 314, 326, Fig. 6: 5), including that in Ostrów upon the San River, Przemyśl County¹¹. Iron tools that were manufactured with the use of a similar technique were also discovered in a princely grave in Mušov, Brno-Venkov County in Moravia (Feugère 2002, 421-563). Finds of this

⁹ This identification seems to be confirmed by an extraordinary amount of burnt human bones discovered in the grave (2135 g), which is approximately twice as much as the weight of bones from single graves.

The literature offers data on analogous graves with parts of more than one set of weaponry, including similar burials which are dated to the late phase of the Early Roman Period and the beginning of the Younger Roman Period (Dąbrowski 2016, with further reading). The issue of so-called double burials requires a broader discussion. However, due to the size of this paper, this problem will be dealt with in the next publications devoted to this necropolis.

¹¹ We are indebted to Anna Lasota-Kuś, PhD from the Institute of Archaeology and Ethnology of the Polish Academy of Science, Kraków Branch for this information.

kind can be interpreted as kitchen utensils. They also find their counterparts in the milieu of the La Tène culture (Feugère 2002, 433-440; Pieta 2010, 248-249, Fig. 112: 8-13).

Three burials with only single elements of furnishings were also discovered in the cemetery. Among the poorest graves, there were two urn burials (Features 3 and 16). An identification of the sex of individuals who were buried therein and who were not equipped with weapons and other characteristic items is ambiguous or not possible at all¹². We are dealing with a similar situation in the case of the supposed grave (Feature 6), which yielded a golden pendant that was ornamented with filigree and granulation (Fig. 3). Two golden pendants were also discovered in the neighbouring necropolis in Prusiek (Madyda-Legutko, Rodzińska-Nowak *et al.* 2010). It must be stressed, however, that the form of the discovered artefact is atypical and has no analogies from cemeteries of the Przeworsk culture which have been excavated so far¹³.

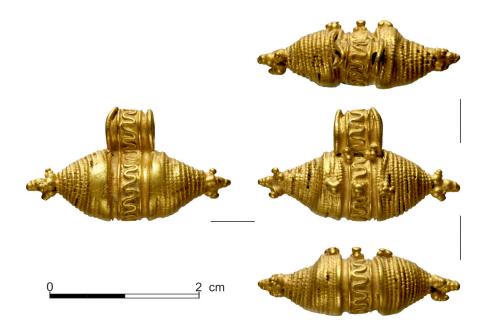


Fig. 3. Pakoszówka, Sanok County, site 33. Golden pendant from the cremation grave (?) no. 6 (feature no. 6) (fot. by D. Szuwalski)

¹² On the other hand, in the case of Feature 16 we have results of anthropological analyses which imply that an adult man was interred in this grave.

¹³ Individual analogies are known from the territory of Ukraine and they were discovered in result of illegal field prospection carried out by treasure hunters.

The ceramic finds on the site are represented by two urns and fragments of a few vessels which were part of the grave furnishings. All these vessels were manufactured without the use of potter's wheel. Some of these bear traces of secondary burning. Some vessels were made in a pretty negligent manner and their surfaces are coarse. On the other hand, the surfaces of the remaining ones are smooth and easily abradable. Vessels with a similar characteristic of surface, but made with the use of potter's wheel, occur quite frequently in the area of the Upper San River basin. They were discovered, among others, at sites 1 and 26 in Pakoszówka (Madyda-Legutko 1996, 77-78, 90-91, 107-108; 2004, 80; 2010, 28; Madyda-Legutko, Pohorska-Kleja et al. 2006a; 2006b), at Site 54 in Sanok (Madyda-Legutko, Pohorska-Kleja et al. 2004; 2008) and in the cemetery in Prusiek (Madyda-Legutko, Rodzińska-Nowak et al. 2006a, 64).

The analysis of funeral rites and a typochronological classification of the artefacts, both from the graves and their vicinity, allow for an unambiguous interpretation of the examined site as being related to the Przeworsk culture milieu. The time of use of the cemetery falls between the late Phase B2 and the end of Phase C1. Weaponry finds discovered in the graves can be classified as belonging to Groups 4 and 5 of graves with weapons according to K. Godłowski (1992, 80; 1994a; Kontny 2008, 124). The latest horizon of use of the cemetery in Pakoszówka is marked by a series of finds dated to Phase C1. These were discovered both in the grave assemblages and in the topsoil. Among these, it is necessary to mention fibulae of Group VI according to Almgren and a low-domed shield-boss of Type Jahn 7a with a so-called pseudo-spike (Kontny 2019, 133) from Grave 5 (Fig. 4, 5:2). As regard finds from outside the grave contexts, one must mention an iron buckle of Type D20 according to Madyda-Legutko, which is dated to Phase C1a (Madyda-Legutko 1986, 31, 35).

A bronze fibula with a full catch-plate and a plate on its head is an interesting discovery. It was found in the topsoil (Bulas, in this volume). It is one of few finds in the territory of the Upper San River basin whose chronology reaches Phase C3/D (Schulze-Dörrlamm 2000; Petrauskas, Sinica 2010, 121; Woźniak 2011, 185). This artefact has individual analogies in the territory of Poland, chiefly in areas which were settled by the populations of the Wielbark culture as well as on the territory of the Chernyakhov culture (Petrauskas, Sinica 2010). However, due to a huge chronological discrepancy between the discussed find and the grave assemblages, and bearing in mind the lack of other artefacts related to this chronological period, it seems almost certain that this fibula is an isolated stray find that is not related to the use of the cemetery.

In the light of the results of the excavations and on the basis of the analysis of the finds it is possible to offer a preliminary summation of the issue of the necropolis in Pakoszówka. This site is the second Roman Period cemetery in the Upper San River basin that was fully examined. It is composed of a small



Fig. 4. Pakoszówka, Sanok County, site 33. Inventory of the cremation grave no. 5 (feature no. 5) (fot. by D. Szuwalski)

number of burials which are dated to the time between the end of the Early Roman Period and the late Phase C1 of the Younger Roman Period. Apart from cases of sites where individual burials were found and which are also known from the territory of the Carpathian Mountains¹⁴, the cemetery in Pakoszówka is one of the smallest burial grounds of the Przeworsk culture which have been excavated so far. Furthermore, it is the smallest cemetery in the group of small necropoles which have been discovered on both sides of the arc of the Carpathians in the recent years: the aforementioned site in Prusiek (Site 25), Ostrów (Site 21) (Lasota, Stempniak 2015; in this volume), and Rankovce, Košice County, Slovakia (Gašaj, Rákoš 2015; Rákoš in this volume).

In the present state of research it is difficult to define reasons behind the cessation of use of the cemetery in Pakoszówka, especially in view of the lack of certain data which would enable us to assume that the settlements which surrounded the discussed necropolis ceased to be used in a similar chronological horizon. Attention must be paid here to the low number of graves which were discovered. This number certainly does not correspond to the number of inhabitants of even the closest settlements.

¹⁴ This remark assumes that we define such sites as necropoles where a certain group of people (more than one or two persons) was buried. This is due to the fact that there are sites where single burials were discovered. Furthermore, such instances are also known from the Carpathian zone – Rajbrot, Bochnia County (Biborski, Zagórska-Telega 2007-2008, 429-440) and Chełmiec, Nowy Sącz County (Madyda-Legutko 1996, 55; 2004, 73).

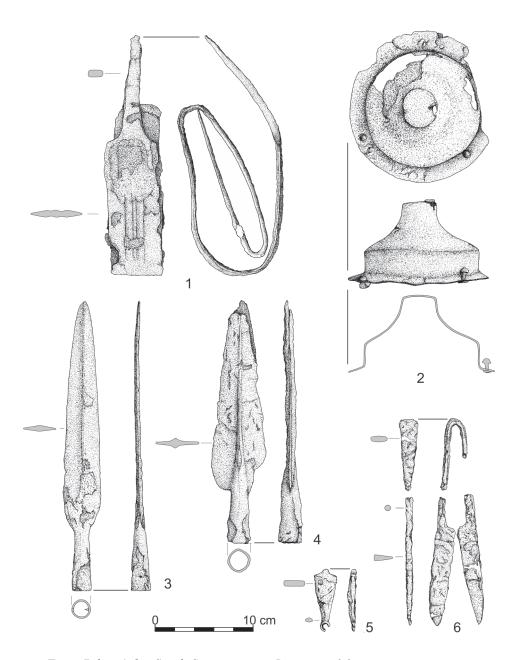


Fig. 5. Pakoszówka, Sanok County, site 33. Inventory of the cremation grave no. 5(feature no. 5) (drawn by M. Okońska)

All the aforementioned sepulchral sites, including the discussed necropolis in Pakoszówka, yield significant data concerning Transcarpathian contacts in times that were close to events related to the Marcomannic Wars. An intensification of contact with the Roman Empire, which was reflected in finds of Roman imports, including numerous examples of weaponry, was in all probability related to a migration of Vandals to areas close to the limes, as described by Cassius Dio (Godłowski 1994b). In the same time, this migration fits well within the phenomenon of an expansion of the population of the Przeworsk culture toward the Upper Tisa River basin (Madyda-Legutko, Rodzińska-Nowak *et al.* 2013, with literature references). Numerous finds of Roman swords found on burial grounds of the Przeworsk culture in the San and the Tisa basins are no doubt related to military and political events of the last decades of the 2nd and the first decades of the 3rd c. AD.

REFERENCES

Aleksiewicz M.

1958 Zarys osadnictwa w okresie rzymskim oraz wpływ kultury prowincjonalnorzymskiej na ziemie województwa rzeszowskiego, Rocznik Województwa Rzeszowskiego 1(1), Rzeszów.

Biborski M., Zagórska-Telega A.

2007-2008 Rajbrot, Fundstelle 4, powiat Bochnia – Ein Gräberfeld der Völker – vanderungszeit, Acta Archaeologica Carpathica 42-43, p. 429-440.

Bulas J.

2019 Late Roman Period and early Migration Period in the Upper San River basin, Acta Archaeologica Carpathica 54, p. 57-76.

Czarnecka K.

1990 Struktura społeczna ludności kultury przeworskiej, Warszawa.

Dabrowski P.

2016 Próba interpretacji grobów wyposażonych w podwójne uzbrojenie na ziemiach polskich w młodszym okresie przedrzymskim i w okresie wpływów rzymskich, Pomorania Antiqua 25, p. 89-122.

Feugère M.

2002 Das frühe Eisengerät, [in:] Das germanische Königsgrab von Mušov in Mähren, J. Peska, J. Tejral (eds.), p. 421-563.

Gašaj D., Rákoš J.

2015 Germánske žiarové pohrebisko v Rankovciach, Pamiatky a múzeá 3/2015, p. 8-12. Godłowski K.

1974 Konfrontacja i ocena wartości archeologicznych i antropologicznych wyznaczników płci w odniesieniu do grobów ciałopalnych z okresu późnolateńskiego i rzymskiego, [in:] Metody, wyniki i konsekwencje badań kości z grobów ciałopalnych, Poznań, p. 63-70.

1992 Zmiany w uzbrojeniu ludności kultury przeworskiej w okresie wpływów rzymskich, [in:] Arma et Ollae. Studia dedykowane Profesorowi Andrzejowi Nadolskiemu w 70 rocznicę urodzin i 45 rocznicę pracy naukowej. Sesja naukowa, 7 – 8 maja 1992, M. Głosek (ed.), Łódź, p. 71-88.

1994a Die Chronologie der germanischen Waffengräber in der jüngeren und späten Kaiserzeit, [in:] Beiträge zu römischer und barbarischer Bewaffnung in den ersten vier nachchristlichen Jahrhunderten. Akten des 2. Internationalen Kolloquiums in Marburg a. d. Lahn, 20. bis 24. Februar 1994. Veröff. d. Vorgesch. Seminars Marburg, Sonderbd. 8, C. v. Carnap Bornheim (ed.), Lublin-Marburg, p. 169-178.

1994b Die Barbaren nördlich der Westkarpaten und das Karpatenbecken – Einwanderungen, politische und militärische Kontakte, Specimina Nova, p. 65-89.

Kontny B.

2008 The war as seen by an archaeologist. Reconstruction of barbarian weapons and fighting techniques in the Roman Period based on the analysis of graves containing weapons. The case of the Przeworsk Culture, [in:] The Enemies of Rome. Proceedings of the 15th International Roman Military Equipment Conference, Budapest 2005, L. Kocsis (ed.), Journal of Roman Military Equipment Studies 16/2008, p. 107-145.

2019 Archeologia wojny. Studia nad uzbrojeniem barbarzyńskiej Europy okresu wpływów rzymskich i wędrówek ludów, Oświęcim.

Kotowicz P.N.

2004 Zabytki archeologiczne z okresu lateńskiego i wpływów rzymskich w zbiorach Muzeum Historycznego w Sanoku, [in:] Okres lateński i rzymski w Karpatach polskich, J. Gancarski (ed.), Krosno, p. 711-725.

Lasota A., Stempniak S.

2015 Nowo odkryte cmentarzysko z wczesnego i młodszego okresu wpływów rzymskich w Ostrowie, stan. 21, gm. Przemyśl, woj. Podkarpackie, [in:] Barbari Superiores et Inferiores, Archeologia Barbarzyńców 2014. Procesy integracji środkowoeuropejskiego Barbaricum, Polska – Czechy – Morawy – Słowacja, L. Tyszler, E. Droberjar (eds.), Łódź-Wieluń, p. 225-233.

2019 Cementery in Ostrów, site 21 as the example of multidirectional contacts of the Przeworsk culture people living in the central part of the San River basin in the Early and Younger Roman Period, Acta Archaeologica Carpathica 54, p. 77-90.

Liana T.

1965 Grób ciałopalny z Pęcławic, pow. Łęczyca, Wiadomości Archeologiczne 31, p. 267-269.

Madyda-Legutko R.

1986 Die Gürtelschnallen der Römischen Kaiserzeit und der frühen Völkerwanderungszeit im mitteleuropäischen Barbaricum, BAR International Series 360, Oxford.

1996 Zróżnicowanie kulturowe polskiej strefy beskidzkiej w okresie lateńskim i rzymskim, Kraków.

2004 Polskie Karpaty w okresie późnolateńskim i w okresie wpływów rzymskich. Uwagi dotyczące zróżnicowania kulturowego, [in:] Okres lateński i rzymski w Karpatach polskich, J. Gancarski (ed.), Krosno, p. 71-92.

2010 Zróżnicowanie regionalne ceramiki wykonanej na kole garncarskim na przykładzie materiałów zabytkowych pochodzących z polskich Karpat, [in:] Ceramika rzemieślnicza jako źródło do badań nad zróżnicowaniem garncarstwa kultury przeworskiej, H. Machajewski, B. Jurkiewicz (eds.), Pułtusk, p. 17-33.

- Madyda-Legutko R., Pohorska-Kleja E.
 - 2004 Pakoszówka, Gde. Sanok, Woiw. podkarpackie, FSt. 26 (eine Siedlung der jüngen römischen Kaiserzeit, Recherches Archéologiques de 1993-1998, p. 126-132.
- Madyda-Legutko R., Pohorska-Kleja E., Rodzińska-Nowak J.
 - 2004 Warsztat garncarski z Sanoka, stan. 54, na tle materiałów ceramicznych z terenu górnego dorzecza Sanu, [in:] Okres lateński i rzymski w Karpatach polskich. Materiały z konferencji, J. Gancarski (ed.), Krosno, p. 691-709.
 - 2005 Cmentarzysko w Prusieku, gm. Sanok, woj. podkarpackie, stan 25. Uwagi o przenikaniu ludności kultury przeworskiej w strefę Karpat polskich we wczesnym okresie rzymskim, Acta Archaeologica Carpathica 40, p. 115-128.
 - 2006a Osada z okresu rzymskiego w Pakoszówce, stan. 1, pow. Sanok, Rocznik Przemyski 42: Archeologia 2, p. 69-84.
 - 2006b Pakoszówka, Gde. Sanok, Woiw. Podkarpackie, Fst. 1 (eine Siedlung der römischen Kaiserzeit), Recherches Archéologiques de 1999-2003, p. 160-168.
 - 2008 Ceramika z warsztatu garncarskiego z Sanoka, stan. 54 na tle materiałów ceramicznych z terenu dorzecza górnego Sanu. Próba interpretacji, [in:] Ceramika warsztatowa w środkowoeuropejskim Barbaricum, A. Błażejewski (ed.), Wrocław, p. 9-23.
- Madyda-Legutko R., Rodzińska-Nowak J.
 - 2014 Pochówek metalurga z cmentarzyska kultury przeworskiej w Prusieku, stan. 25, pow. sanocki, [in:] Honoratissimum assensus genus est armis laudare: studia dedykowane Profesorowi Piotrowi Kaczanowskiemu z okazji siedemdziesiątej rocznicy urodzin, R. Madyda-Legutko, J. Rodzińska-Nowak (eds.), Kraków, p. 277-290.
 - 2017 Stan i potrzeby badań nad osadnictwem okresu rzymskiego w górnym biegu Sanu, [in:] Stan i potrzeby badań archeologicznych w Karpatach, J. Gancarski (ed.), Krosno, p. 429-450.
- Madyda-Legutko R., Rodzińska-Nowak J., Zagórska-Telega J.
 - 2005 Uwagi na temat regut wyposażania zmartych w kulturze przeworskiej w okresie rzymskim, [in:] Do, ut des. Dar, pochówek, tradycja, Funeralia Lednickie 7, W. Dzieduszycki, J. Wrzesiński (eds.), Poznań, p. 181-188.
 - 2006a Cmentarzysko ludności kultury przeworskiej w Prusieku, stan. 25, pow. Sanok, Rocznik Przemyski 42: Archeologia 2, p. 59-67.
 - 2006b Prusiek, pow. sanocki, stan. 25. Pierwsze cmentarzysko ludności kultury przeworskiej w polskich Karpatach, Wiadomości Archeologiczne 58, p. 394-400.
 - 2007 Wyniki dalszych badań na cmentarzysku kultury przeworskiej w Prusieku, stan.
 25, pow. Sanok, Rocznik Przemyski 43: Archeologia 2, p. 61-69.
 - 2008 Wyniki najnowszych badań na cmentarzysku ludności kultury przeworskiej w Prusieku, stan. 25, pow. Sanok, Rocznik Przemyski 44: Archeologia 2, p. 47-52.
 - 2009 Prusiek, Fst. 25, Gde. und Kr. Sanok, Woiw. Podkarpackie das erste Gräberfeld der Bevölkerung der Przeworsk Kultur in den polnischen Karpaten, Recherches Archéologiques Nouvelle Serie 1, p. 295-309.
 - 2010 Złote wisiorki z cmentarzyska ludności kultury przeworskiej w Prusieku, stan. 25, gm. Sanok, [in:] Terra Barbarica. Studia ofiarowane Magdalenie Mączyńskiej w 65. rocznicę urodzin, A. Urbaniak, R. Prochowicz, I. Jakubczak, M. Levada, J. Schuster (eds.), Łódź-Warszawa, p. 785-789.
 - 2013 New data concerning the cultural situation in the basin of the Upper San River during the Roman Period, [in:] Proceedings of the international archaeological

conference Wandering and Settled Barbarians in the Carpathian Region and Neighboring Areas (1st-5th cent.) New Finds, New Interpretations held in Nyíregyháza and Satu Mare October 11-14 2010, E. Istvánovits, V. Kulcsár (eds.), Nyíregyháza p. 409-422.

Madyda-Legutko R., Smajek I.

2010 Eine Siedlung der römischen Kaiserzeit in Pakoszówka, Gde. Sanok, Woiw. podparpackie, FSt. 1, im Lichte der von 2007 bis 2008 durchgeführten Augsgrabungen, Recherches Archéologiques Nouvelle Serie 2, p. 277-289.

Muzyczuk A., Pohorska-Kleja E.

1993-1994 Badania sondażowe na stanowisku 32 w Pakoszówce, gmina Sanok, województwo krośnieńskie, Acta Archaeologica Carpathica 32, p. 167-181.

Petrauskas O. W., Sinica E. W.

2010 Die s. g. Schildfibeln in der Cernjachov-Kultur, Germania – Sarmatia 2, p. 113-132.

Pieta K.

2010 Die keltische Besiedlung der Slowakei: jüngere Latènezeit, Nitra.

Rákoš J.

2019 Przeworsk culture cemetery at Rankovce (Eastern Slovakia). Preliminary report, Acta Archaeologica Carpathica 54, p. 215-226.

Rodzińska-Nowak J.

2018 Some remarks on the genesis of wheel-made pottery in the Przeworsk Culture, [in:] To make a fairy's whistle from a briar rose. Studies presented to Eszter Istvánovitson her sixtieth birthday, M.L. Nagy, K.L. Szőlősi (eds.), Nyíregyháza, p. 313-323.

Rycel G.

1983 Cmentarzysko kultury przeworskiej w Sobótce (st. 1), woj. konińskie, Prace i Materiały Muzeum Archeologicznego i Etnograficznego w Łodzi, Seria Archeologiczna 28, p. 249–272.

Schulze-Dörrlamm M.

2000 Germanische Spiralplattenfibeln oder romanische Bügelfibeln? Zu den Vorbildern elbgermanisch-fränkischer Bügelfibeln der protomerowingischen Zeit, Archäologisches Korrespondenzblatt 30/4, p. 599-613.

Siciński W.

2010 Ratownicze badania archeologiczne na stanowisku 1 w Gozdowie, pow. Zgierz, woj. łódzkie: trasa autostrady A-1, Via Archeologica Lodziensis 3, p. 9-184.

Woźniak M.

2011 Cmentarzysko kultury wielbarskiej w Kozłówku, pow. nidzicki (d. Klein Koslau, Kreis Neidenburg) w świetle publikacji materiałów archiwalnych, Wiadomości Archeologiczne 67, p. 169-208.

Zagórska-Telega J.

2000 Bogaty pochówek kobiecy na cmentarzysku kultury przeworskiej w Opatowie, stanowisko 1, woj. śląskie, [in:] Svperiores Barbari. Księga ku czci Profesora Kazimierza Godłowskiego, R. Madyda-Legutko, T. Bochnak (eds.), Kraków, p. 313-326.

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