

# THE EARLY MEDIEVAL GRAVES OF GROß OTTENHAGEN (BEREZOVKA). ON THE WAY FROM SAMBIA TO THE MIDDLE REACHES OF THE NIEMEN

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## Keywords

Prussians, Early Medieval period, archival archaeology, cremation graves, burial rite, typo-chronology, Natangia

## Abstract

The field research at Groß Ottenhagen (Berezovka) conducted in 2003 and 2004 was the first international scientific collaboration between German and Russian archaeologists in Kaliningrad region since 1945. The Groß Ottenhagen cemetery demonstrates almost continuous functioning for about 1,000 years, from the Roman Iron Age up to the Middle Ages. The part of the site considered in the article belongs to the last stage of the development of Sambian-Natangian culture among the Old Prussians in the 11th to the 13th centuries AD. Despite a first analysis by the excavators in 2005, this data from the cemetery has never been fully published. Groß Ottenhagen graves from the discussed period are represented by so-called double layer burial features, with human cremations on top of horse burials. The burial rites and grave goods at the cemetery are discussed in the context of archaeological material from the Sambian peninsula and southwest and central Lithuania. The relative chronology of Groß Ottenhagen is based on an analysis of grave goods, as well as the stratigraphy and the spatial distribution of the graves. According to the absence of imported/status goods at Groß Ottenhagen, the cemetery probably belonged to a peripheral group of the late Sambian-Natangian region culture of the Prussians.

## Introduction

The cemetery at Groß Ottenhagen, today named Berezovka<sup>1</sup> in the Kaliningrad region of Russia, is one of the hundreds of graveyards from the first millennium AD in the former East Prussia which were excavated by German archaeologists before the Second World War. Due to the highly complicated history of investigation, and the political changes following the war, all these monuments are encumbered with one big problem: even if they have been excavated, the results have never been completely published, and in addition, finds and original documentation have been lost for half a century as a consequence of the war.

As part of the famous archaeological Prussia-Collection stored in the castle and in the Landesamt für Vorgesichte of Königsberg, all finds and archival documents shortly before the war were evacuated and hidden for nearly 50 years in different locations in Russia, Poland and Germany. Since the beginning of the 1990s, more than 50,000 documents and nearly 50,000 finds have been re-discovered, but in total disorder, most of them missing information about their origin (Reich 2003). They have been sorted as far as possible in a tremendous manual work done by colleagues from different European countries; but still, working with this archival material is extremely difficult, and can be compared to rebuilding a complicated puzzle without a model. The cemetery at Groß Ottenhagen is a lucky exception here.

<sup>1</sup> Since the site found its way into literature under the name Groß Ottenhagen, we will use only this old German name of the site in the article.

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Herbert Jankuhn, the first excavator, at that time a student of Max Ebert, was instructed by the *Altertumsgesellschaft Prussia* to investigate some graves which were discovered during sand digging activities close to the village of Groß Ottenhagen. In two fieldwork campaigns in 1928 and 1930, he excavated 78 graves from the Roman Iron Age and the Migration period. Of these, only three almost complete grave inventories<sup>2</sup> and one single clay vessel<sup>3</sup> were published before the loss of the Prussia Collection; and two more graves<sup>4</sup> are only mentioned, with a list of their grave goods without any pictures. These few published complexes are the basis for all later publications<sup>5</sup> about Groß Ottenhagen, judging it as a cemetery from the older Roman Iron Age and the Late Migration period, belonging to a cultural unit of the Sambian peninsula and the neighbouring landscapes of Natangia and western Nadrovia, which German archaeologists called the *Samländisch-Natangische Kulturgruppe* (Engel and La Baume 1937, p. 142). In the 1990s, the Polish scholar W. Nowakowski (1996, p. 14) renamed it Dollkeim-Kovrovo culture.

Due to the above-mentioned events concerning the loss of the archives of the Prussia Collection, with a few exceptions, all finds from Groß Ottenhagen are still lost today<sup>6</sup>. But what has survived is an almost complete excavation report, consisting of photographs, plans, measuring sketches, drawings of graves and finds, and two diaries with precise descriptions. Jankuhn simply did not deliver his excavation report to the authorities of the Prussia Museum, but kept it in his private possession, until it was handed over to the Archaeological Museum of Schleswig in Germany as a part of his legacy in the early 1990s, more than 60 years after the excavations. Another dozen documents are stored in the modern Prussia Archive of the Museum of Pre- and Early History in Berlin. All these papers allow for the exact reconstruction of 78 excavated graves from the Early Roman Iron Age and the

Migration Period<sup>7</sup>. And moreover, the forgotten location of the cemetery could be rediscovered by analysing some of Jankuhn's sketches.

The successful reidentification of the exact location of the cemetery at Groß Ottenhagen was the starting point for a Russian-German excavation project, as cooperation between the Kaliningrad Regional Museum of History and Art and the Archaeological States Museum Schloß Gottorf in Schleswig, Germany, supervised by Konstantin Skvortsov and Timo Ibsen, and supported by students at Kaliningrad State University and Christian-Albrechts-University Kiel. Financed by the ZEIT-Stiftung Ebelin und Gerd Bucierius Hamburg and the Alumni-Verein of Kiel University<sup>8</sup>, in two campaigns, from 1 to 28 August 2003, and 3 to 27 August 2004, the team excavated another 44 features, of which 26 count as burials. About half the graves discovered during the modern excavations belong to previously known phases of the Roman Iron Age and the Migration period of the cemetery. The second part of the recently excavated graves can be dated to the 11th to the 13th century, and hence to the Late Iron Age, as a so far unknown third occupation phase of Groß Ottenhagen: ten cremation graves of humans, one supposed inhumation, and 12 horse burials<sup>9</sup> (11 of them under human graves) (Fig. 1).

Altogether, the cemetery contains 104 burials and 46 undefined features. It can be divided into three different periods: phase one, Roman Iron Age (2nd and 3rd centuries AD)<sup>10</sup>; phase two, Migration period (5th to 7th centuries AD); phase three, Medieval Period/Late Iron Age (11th to 13th centuries AD). The latest phase three (11th to 13th centuries AD) is of especially great interest in the context of recent studies on Prussian culture. For this reason, the authors have decided to present this material, using the opportunity to correct some previously published datings and issues on finds from Groß Ottenhagen (Ibsen and Skvortsov 2005). All the results presented below are based on rescue excavations, which have not examined the whole cemetery. Thus, only tendencies can be summarised, which cannot be automatically applied to the cemetery as a whole.

### Topographical situation

The cemetery at Groß Ottenhagen is situated on the edge of a sand or gravel pit in today's village of Berezovka, ap-

<sup>2</sup> Graves 19 and 23 are published with a full inventory, grave 78 only partly. The fibula from grave 78 is preserved only in drawings by Erika Löwedej (La Baume 1941, p. 6, Fig. 1; 1942, p. 16, Fig. 2; 1944, p. 4, Fig. 5).

<sup>3</sup> Clay vessel from grave 65 (Jankuhn 1950, p. 57, Fig. 8.d).

<sup>4</sup> Graves 70 and 87 (La Baume 1944, p. 15).

<sup>5</sup> Jaskanis (1977, p. 313) lists and maps the cemetery in his studies of West Balt sites from the first five centuries AD (Jaskanis 1977, p. 348, Karte 2, 216). S. Wilbers-Rost (1994, p. 205, Cat. No 120.1–8), on the basis of H. Jankuhn's private documents, integrated the inventory of seven horse burials at Groß Ottenhagen into her work about Germanic horse gear. W. Nowakowski assigned the published inventories of graves 19, 23 and 78 to his Dollkeim-Kovrovo culture (1996, pp. 14, 63 Taf. 93–95).

<sup>6</sup> Only four clay vessels from Groß Ottenhagen in 1944 have been transferred in connection with the evacuation of the pottery stocks of the Prussia Collection to the former Heimatmuseum Allenstein (Reich 2003, p. 14), today the Muzeum Warmii i Mazur in Olsztyn, and hence have survived until today. Some other artefacts are stored in the new Prussia-Archive in the Museum for Pre- and Early History in Berlin.

<sup>7</sup> All the surviving documents were analysed by Timo Ibsen in his unpublished MA thesis (Ibsen 2004).

<sup>8</sup> The authors would like to thank both institutions for enabling the excavations with funding.

<sup>9</sup> Most of the human remains have not yet been anthropologically analysed, only those from graves 103 and 108 (see page 180 in this article).

<sup>10</sup> Phase B2 and B2/C1-C1a.

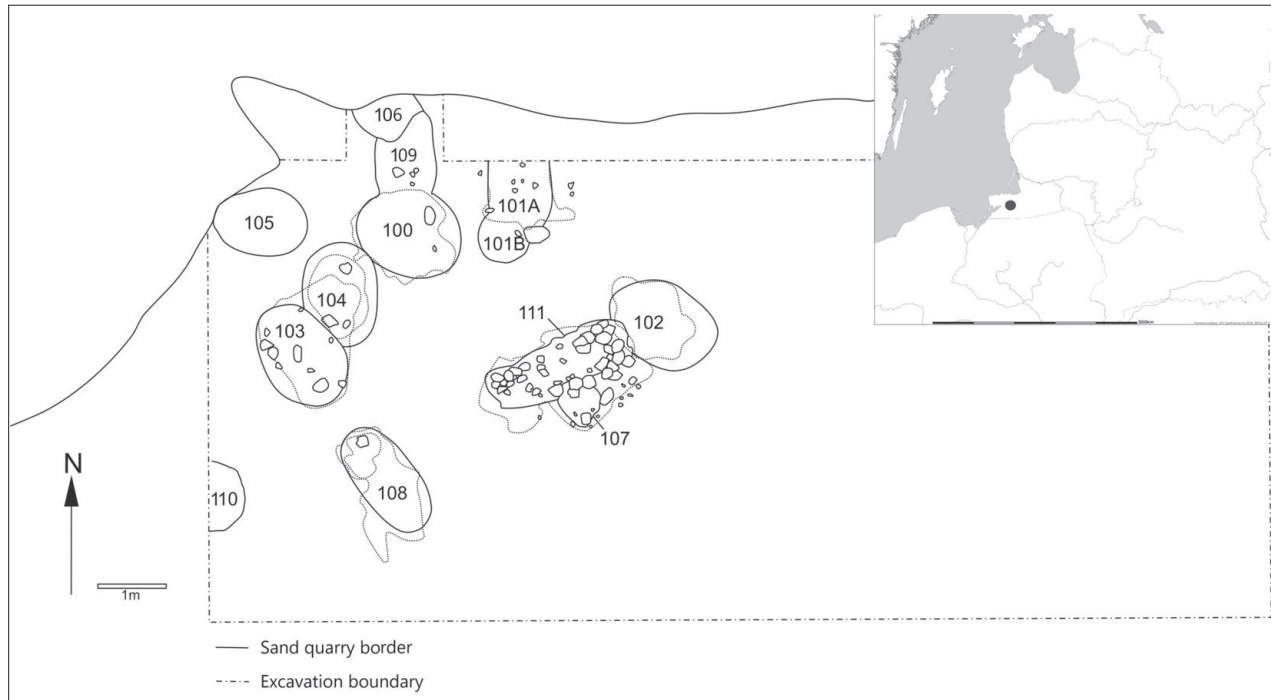


Figure 1. Groß Ottenhagen (Berezovka): A plan of the excavations and the location of the cemetery (drawing by T. Ibsen, K. Skvortsov, R. Shiroukhov; geographical map GIS Department of the ZBSA).

proximately 30 kilometres east of Kaliningrad, and four kilometres south of the River Pregola. The later village of Groß Ottenhagen lies 15 to 20 metres above the river's four-kilometre-wide sandy plain. Historical sources witness that due to the low rate of flow and its shallow depth, the river flooded the whole plain up to Tapiau (today Gwardeisk) if westerly winds pushed back the water (Kosack 1952, p. 12). For the so far not located affiliated settlement, we can assume that it was built on the same spot as the present village, or at least on the higher banks of the river valley some hundred metres south of the graveyard.

An article in a contemporary local newspaper of 7 March 1928 reports that: '...for years they have been taking gravel out of the hill ...'<sup>11</sup> and discovered many archaeological finds. This 'hill' was more a small hillock, sticking out of the plain no more than two or three metres. This position on top of a sandy elevation, typical of cemeteries from the first millennium in the region, made it easy to dig grave pits in the soft ground, and offered visibility to the buried ancestors. Today, the expansion of the gravel pit has enlarged 30 metres to the east and 40 metres to the north compared with maps from the time of the excavations<sup>12</sup>.

<sup>11</sup> MFV PM-A 482/1, 8.

<sup>12</sup> See ordnance map 'Meßtischblatt Nr. 1391' from 1914, with corrections in 1922 and 1936, edited by the former Reichsamt für Vermessung. Jankuhn's old excavation trenches can be projected into the centre of the pit, and hence are completely destroyed, whereas the south and west edges of the pit today still seem to be untouched.

### Short prehistory

The 'late pagan'<sup>13</sup> graves of Groß Ottenhagen are the only ones known in the micro-region studied. Before the excavations in 2003, archaeological finds from the 11th to the 13th centuries were represented here by a silver neck-ring and a penannular silver brooch, both found at the foot of Gauleden (Tumanovka) hillfort several kilometres to the east of Groß Ottenhagen (Gaerte 1929, Fig. 268.b; Grenz 1975, p. 52; RGA, T. 141). The hillfort at Gauleden is the only known archaeological site in the area synchronous with the late phase of the cemetery (Crome 1938, p. 312). Gauleden could have been the administrative centre for neighbouring manors and villages with Prussian names on the south bank of the Pregel: Kapkeim, Linkehnen and Genslauk, mentioned in the documents of the Teutonic Order only in the 14th century (Blažienė 2005, pp. 60, 63, 76, 111). Judging by the absence of the original Prussian place-names in the vicinity of Groß Ottenhagen, the village of Worienen, located one kilometre to the north, can be considered the central-place connected with the cemetery. Worienen was recorded only in 1543, being the only known Prussian village in the neighbourhood (Blažienė 2005, p. 230)<sup>14</sup>. There is no reliable information about any

<sup>13</sup> The original German term *Spätheidnische Zeit* (translated here as 'late pagan period') refers to the old German term for the time between the 9th and the 13th century AD.

<sup>14</sup> There is weak evidence of a Prussian hillfort under the church of the later village of Groß Ottenhagen: during a lecture about the excavations at Groß Ottenhagen given by Timo Ibsen in May 2004 in Bebra, Germany, a former inhabitant of

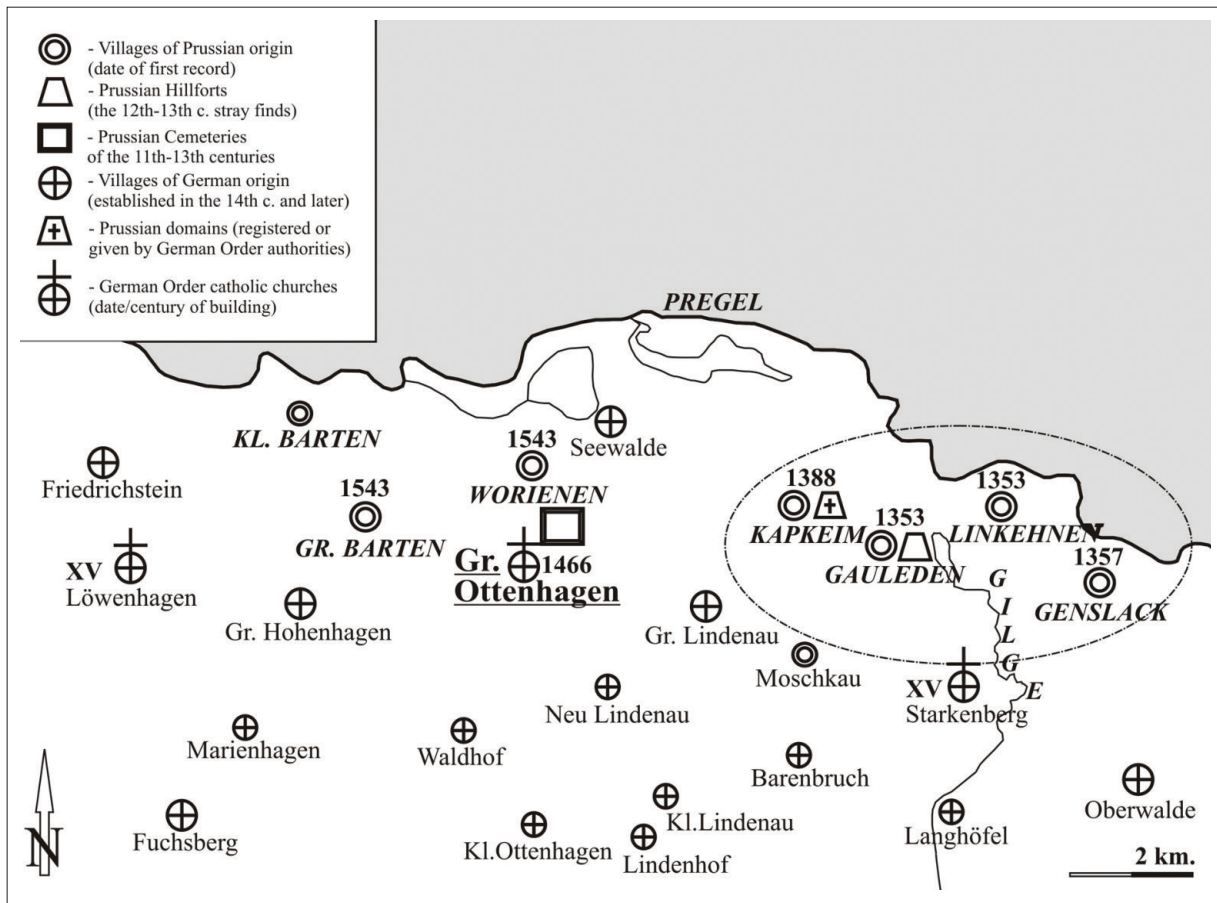


Figure 2. Historical place-names in the Groß Ottenhagen area (drawing by R. Shiroukhov).

Prussian family from the neighbourhood of Worienen or its role in the conquest and Christianisation of Natangia.

The Prussian place-names and hydronyms (Pregel, Gilge), together with the archaeological information, point to the presence of a Prussian population in the micro-region before the 13th century<sup>15</sup>. Most of the place-names connected with Groß Ottenhagen are of German origin, and relate to the period of the colonisation of Natangia (Fig. 2). But even after the conquest of the coastal part of Natangia, where the first castles, churches and settlements were established, this area remained untouched by colonists until the first quarter of the 14th century, probably due to its natural inaccessibility and remoteness from the new administrative centres. But the main reason for the late colonisation of the Groß Ottenhagen micro-region should be considered the ongoing war between the Teutonic Order and the Lithuanian dukes. According to Peter of Dusburg, on 23 February 1311, Vytenis devastated

Sambia and Natangia with a large army<sup>16</sup>. In the same year, the Order and 400 (!) Natangian horsemen launched a military campaign against Lithuania as far as present-day Grodno (Dusburg III, 306, 308). However, neither Groß Ottenhagen nor its neighbourhood is mentioned by the chronicler. There is an opinion that the mass settlement of the southern part of the lower reaches of the Pregel began after 1312, when the children and grandchildren of the first colonists of Sambia and Natangia moved from the new administrative centres to the east (Grunert 1975, pp. 59–60). Thus, the German-speaking population appeared in Natangia only during the reign of Grand Master Konrad Zöllner von Rotenstein in 1382–1390, due to the stabilisation of the political situation. Apparently, this explains the rather late construction of the church in Groß Ottenhagen (1466) and other churches in the micro-region (Boetticher 1898, pp. 80, 111; Bachtin, Doliesien 2000, pp. 152, 156, 255) (Fig. 2).

The relatively late foundation of the village and church of Groß Ottenhagen underlines the German origins of the newly established settlement. Most of the names of

Groß Ottenhagen, E. Beister, reported that his teacher always mentioned a Prussian hillfort which was covered by the later church in the village.

<sup>15</sup> The toponym could be related to settlers of Prussian origin in the times of the Teutonic Order too.

<sup>16</sup> At the same time, the first families of Lithuanians (Christians who fled their homeland?) were mentioned as having settled in Gauleiden, Linkehnen and Zophen (Grunert 1975, p. 61).

other colonist settlements in the area are supplemented with 'forest' or 'glade' (in German *Hagen, Wald, Linden*, etc). This provides further evidence of the emergence of colonist settlements in areas not occupied by Prussian villages and later cleared of forest<sup>17</sup>. Thus, the village of Groß Ottenhagen mentioned after the 14th century (Grunert 1975) could be a successor to the Prussian settlement related to the cemetery.

## Grave goods

The grave goods from Groß Ottenhagen are analysed as follows: first, the inventory of the lower layers of cremation graves, also known as 'double layer' cremations, containing horse burials or sacrifices, will be discussed. Afterwards, the grave goods of the upper layers of human cremations will be reviewed. Details of the burial rite, social position and gender of the deceased, as well as the chronology of the described part of the cemetery, will be discussed below.

## Horse harnesses and equestrian equipment

### Bridle gear

Several almond-shaped forehead horse pendants were found in the lower part of grave 100 (Fig. 3.15, 19, 20, 34). One bigger forehead pendant is closer to Sambian prototypes (Fig. 3.35). Forehead horse pendants are usually flat plates of an almond (or teardrop) shape, decorated mostly with an image of a bird of prey made in a pseudo-granulation technique on a sheet of white metal. They are found in graves from the 11th and 12th centuries in most of the investigated cemeteries of Sambia: Kovrovo<sup>18</sup>, Gerojskoje-5<sup>19</sup>, Klintsovka-1<sup>20</sup>, Mitino<sup>21</sup>, Povarovka<sup>22</sup>, Schulstein (La Baume 1944, p. 19, Fig. 36a; Kulakov 1999, Figs. 7–64; Kulakov, Markovets 2004, p. 184, Fig. 3.1–8; Zubarev 2004; Pronin et al. 2006, Figs. 129, 142; Kulakov 2007, Figs. 106.1, 159.29, 225.5; Skvortsov 2010, p. 171; Shiroukhov 2020, pp. 418–422). Pendants with an image of a bird of prey together with other equestrian equipment, as well as some weapons, ornaments and imports in general, testify to the commonality of the Prussian culture of Sambia in the 10th to the 12th centuries. Most of the pendants were found in horseman 'double-layer' graves, which allowed the authors to identify them with members of the Prussian warrior elite (Kulakov 1992, pp. 139, 141–142;

Skvortsov 2010, p. 171). The pendant from Groß Ottenhagen lacks the typical bird-decoration on a white-metal plate. Hence, it could represent a simplified and later (?) derivative of Sambian prototypes. A similar pendant was recently found in grave 3 at the Scalvian Viešvilė-1 cemetery on the right bank of the Niemen (TIM AP 87), which alludes to contacts with the lower Neman.

All other and smaller pendants of elongated shape from grave 100 correspond to the specimen from Marvelė horse burial 3, central Lithuania (Bertašius 2002, Fig. 88; 2009, p. 150, Taf. 19.14–19). Similar or simplified horse bridle parts originating from central Lithuania are closer to the Sambian specimen<sup>23</sup>. The similarity between the Groß Ottenhagen materials and both Sambian and central Lithuanian analogues does not end here. Vladas Žulkus stressed the importance of cross-connections between the West Balts and the Middle Niemen region in the 10th to the 12th centuries (Žulkus 2006, p. 23).

## Horse bridle mounts and strap fitting

Unlike horse burials on the Sambian peninsula, where hundreds of bridle mounts can be found in the context of one burial complex, only a few occurred at Groß Ottenhagen. Poorly decorated horse bridle mounts lacking white metal coating were found in four out of 12 horse burials<sup>24</sup>.

A pair of flat sub-rectangular strap/belt fittings made of iron from grave 100, decorated with S-shaped terminals, is unusual. This is the first known find of this type in cemeteries in Sambia and Natangia. They are similar to the flat comb-form iron plates, known from horse burials from the late 11th to the 13th century in the Sambian cemeteries at Blöcken<sup>25</sup>, Kholmy (grave 39), Klintsovka-1 (grave 83), Löbertshof<sup>26</sup> and Mitino (Kulakov 1999, Fig. 39; Zubkov 2015). The shape of the upper part of the described plates is close to the 'S' and '8'-shaped plates and pendants of horse bridles known from the Sambian cemeteries at Kholmy, Ekritten-III (Sirenevo) and Schulstein, as well as from South Curonian synchronous cemeteries (Gintališkė) (Širouchov 2012, p. 42, Fig. 56). The specimens from Groß Ottenhagen probably form a set with the zoomorphic bridle bit from the same grave.

Cruciform iron mounts are known in a wide area from Scandinavia to Poland and other Baltic lands. They were found in graves 100 and 104. The specimens found in

<sup>17</sup> There could also be abandoned/devastated Prussian settlements, occupied later by villages of colonists.

<sup>18</sup> Graves 305, 339 and 375. The site is also known as Dollkeim-Kovrovo.

<sup>19</sup> Graves 22, 74a and 102.

<sup>20</sup> Graves 10, 36, 37a, 52, 56, 65, 82, 91, 97, 140, 142 and 149.

<sup>21</sup> Grave 402.

<sup>22</sup> Graves 31 and 34/34a.

<sup>23</sup> The cemeteries at Barinė, Graužiai, Marvelė, Obeliai, Tulpiakiemis, Veršvai, etc. (Navickaitė 1958, pp. 83–93; Kulikauskas et al. 1961, pp. 442–448; Volkaitė-Kulikauskienė 1971, Figs. 31, 35; Urbanavičius, Urbanavičienė 1988, Figs. 46.3, 47.4; Petruilienė 1995, pp. 53–55, Figs. 16–18; Varnas 1995, pp. 246–252; Bertašius 2009).

<sup>24</sup> Graves 100, 103, 104 and 107.

<sup>25</sup> MVF V, 448, 8892/21.

<sup>26</sup> MVF III, 73, 848. 40.

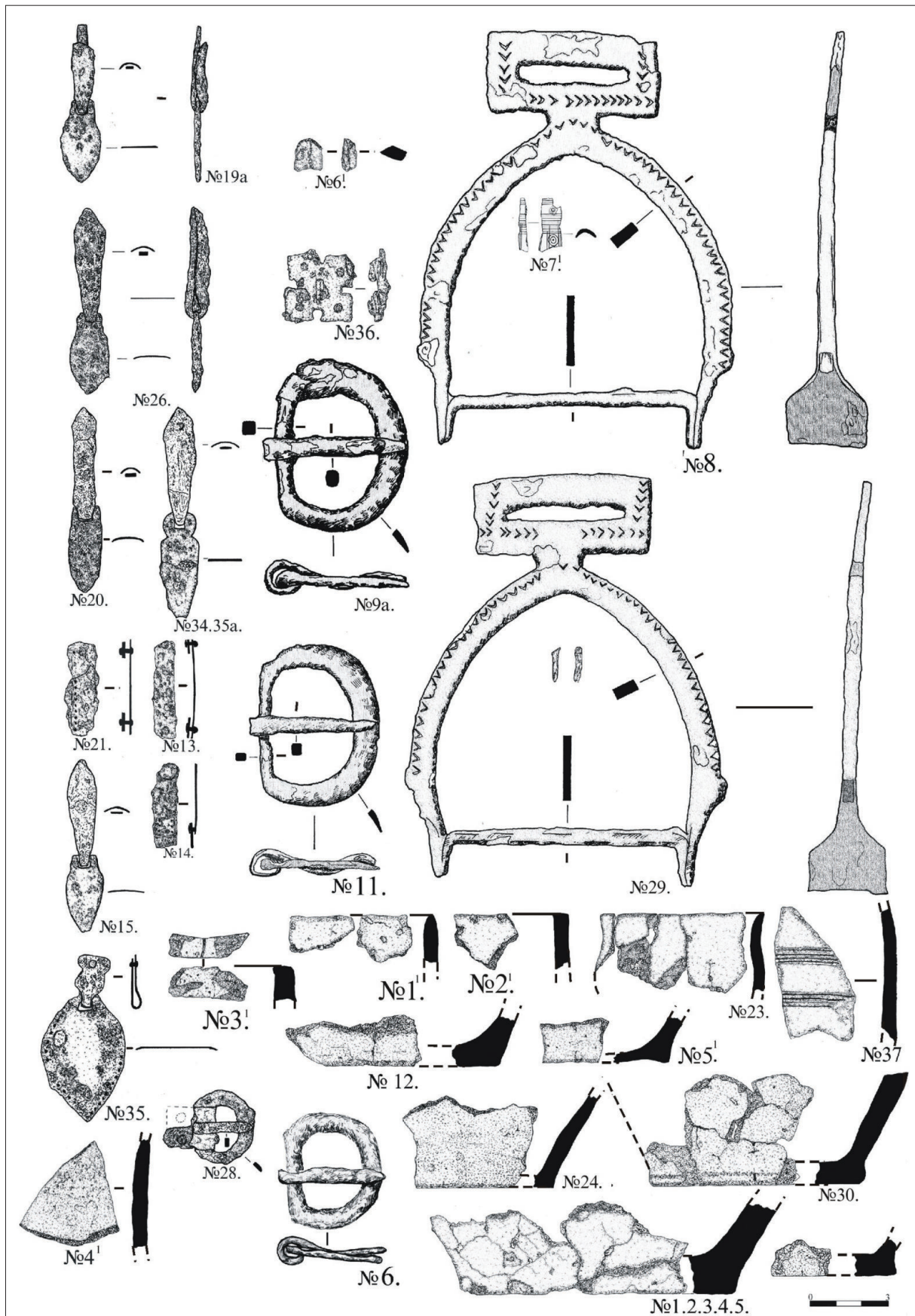
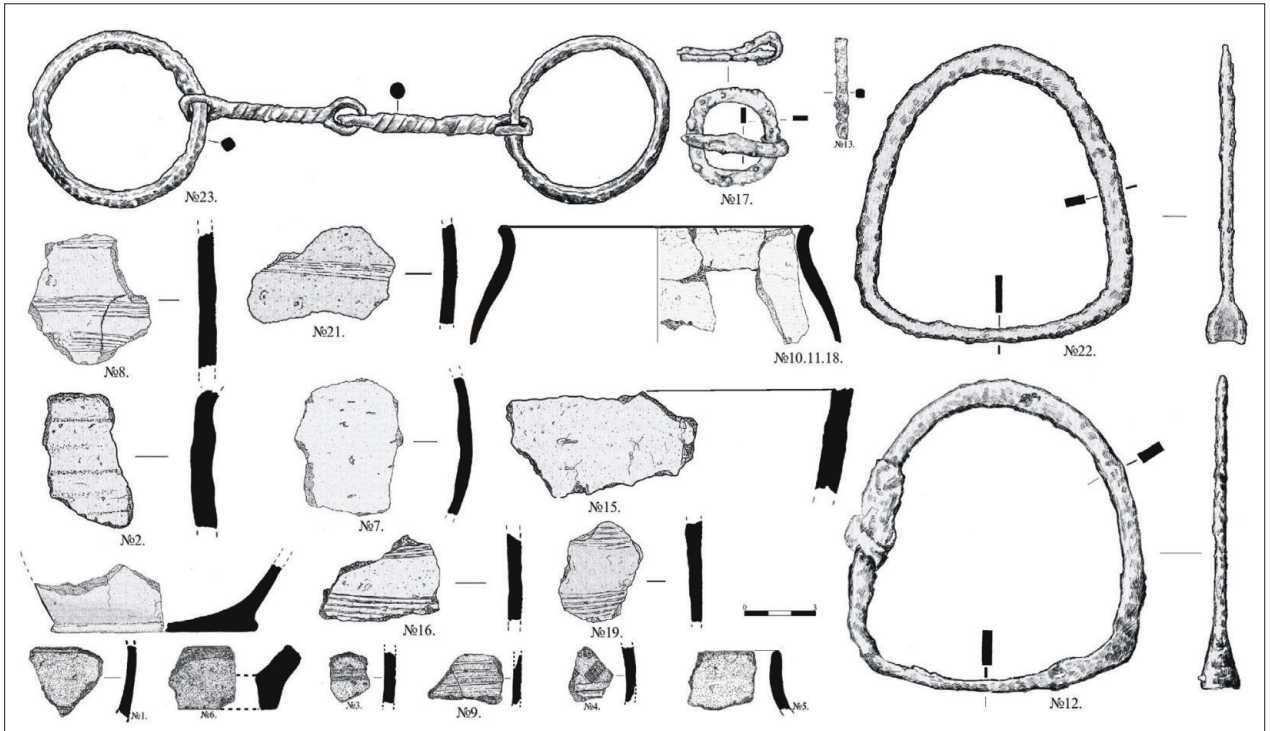
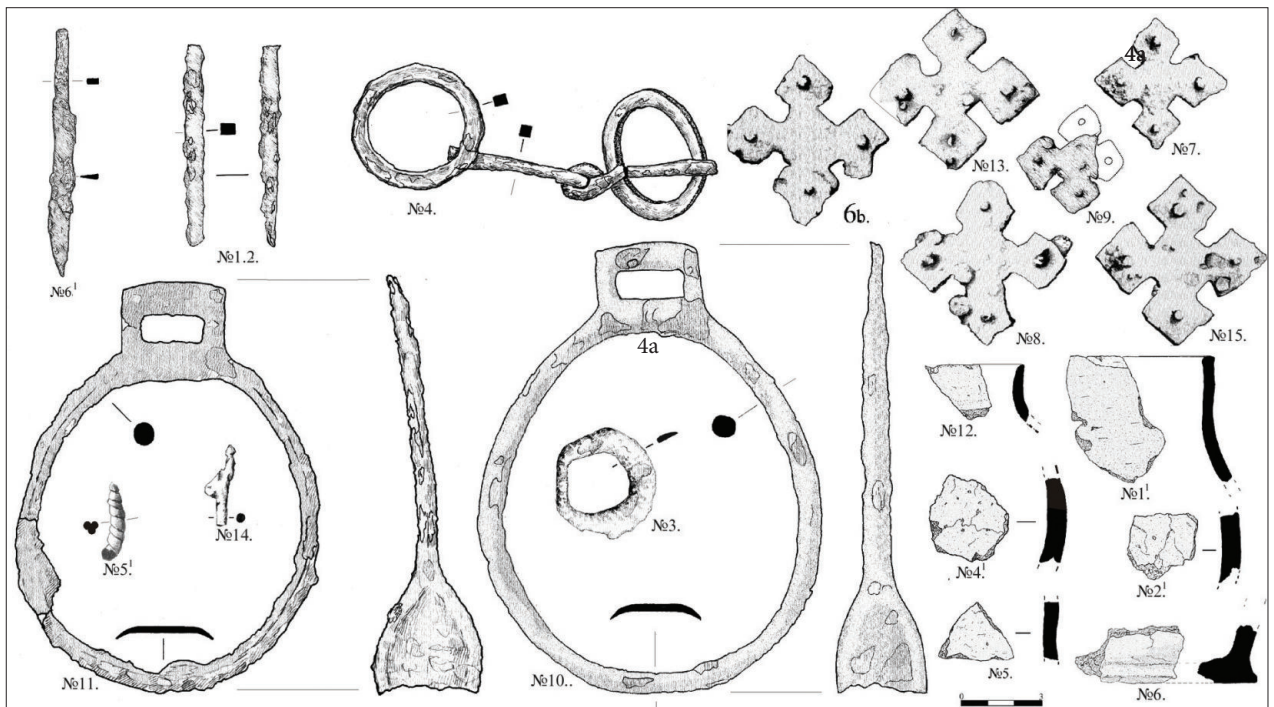


Figure 3. The main grave goods from Groß Ottenhagen grave 100 (drawing by T. Ibsen, K. Kamp, K. Skvortsov and D. Tiukhtin).



4a



4b

Figure 4a. Grave 102 grave goods; 4b. Grave 104 grave goods (drawing by T. Ibsen, K. Kamp, K. Skvortsov and D. Tiukhtin).

grave 104 are of a more elaborate form, with decoration of hammered dots on the edges (Fig. 4b). The closest analogies are known again from cemeteries in Sambia: Klintsovka-1 (gr. 91, 118), Blöcken and Löbertshof (Kulakov 1999, p. 247, Figs. 43, 49, 64; MVF V.4448.8892/21, 73.848.40). The closest analogues to the cross-shaped mounts of Groß Ottenhagen east of Natangia were found on the northeast tribal border of the Jotvingians in Szittkehmen/Wehrkirchen (Žytkeimy, Kr. Gołdap). Carl Engel notes the influence of Sambian-Natangian culture from the 11th to the early 13th centuries on the burial rite, set of ornaments and other items in this area (Engel 1939, pp. 52–54, Fig. 7.e). Similar mounts are known from the synchronous central Lithuanian horse burial 64 at Veršvai. Just like the Klintsovka-1 mounts, they are coated with white metal (Kulikauskas et al. 1961, Fig. 318)<sup>27</sup>.

Four mounts of a rhomboid form with less distinguished terminals found in grave 103 at Groß Ottenhagen also have their closest analogues in Sambian cemeteries: Kovrovo<sup>28</sup>, Gerojskoje-5<sup>29</sup> and Klintsovka-1<sup>30</sup> (Zubarev 2004; Kulakov 1999, Fig. 319.53; Kulakov 2007, Figs. 161, 180) (Fig. 5). Judging by the general forms of the horse harnesses from Kovrovo grave 353 and Klintsovka-1 grave 83, where similar mounts in a triangle and rectangular form, bells, and especially bridle bits with bow-curved cheek pieces, were found, the Groß Ottenhagen examples can be dated to the 11th or early 12th century<sup>31</sup>. Horse burials in central Lithuania, like grave 14 in Tulpiakiemis cemetery, provide further analogues to the finds from Groß Ottenhagen (Varnas 1995, Fig. 6.1–3). The last one is dated rather widely, to the 12th to the 14th centuries. A fourth example of square-form mounts belongs to grave 107. They could be a later simplified form of the earliest Prussian mounts inlaid with richly decorated plates of white metal. The only small square rivet with a clinch in the middle is known from grave 103 at Groß Ottenhagen. An analogous item is known from grave 57a at Gerojskoje-5 (Zubarev 2004). According to the Sambian context, the Groß Ottenhagen mounts can be dated to the 11th or early 12th centuries.

### Strap distributors

Grave 100 provides an example of four iron horse bridle strap-distributors, accompanied by two to four belt-distributing pendants of laurel-leaf form and decorated with several horizontal lines (Fig. 3). Similar finds are represented by the Sambian cemeteries at Bludau<sup>32</sup> and Blöcken

(Bezenberger 1914, p. 224, Fig. 66; La Baume 1944, p. 19, Fig. 34; MVF). According to the inventory from Bludau grave 9, such strap-distributors can be dated to the middle of the 11th to the turn of the 12th and 13th centuries (Bezenberger 1914, pp. 222–228, 234–247; Širouchov 2012, p. 60). These strap-distributors possibly originated from earlier and more elaborated bronze examples from Gotland, which influenced Curonian (Anduliai, Griežė and Palanga) and Prussian (Alejka-3 and Kleinheide) finds from the 11th and 12th centuries (Nerman 1931, pp. 164–166; Thunmark-Nylén 2000; Širouchov 2012, p. 41, Fig. 53).

### Bridle bits

Bridle bits with ring terminals prevail in horse burials at Groß Ottenhagen. They were found in seven out of nine horse burials with bridle bits. This reflects a common tendency in Prussian cemeteries from the 10th to the beginning of the 13th centuries, where bridle bits with ring terminals occur in 70% of all horse burials (Širouchov 2012, Table 19). Bridle bits with ring terminals appear in the Sambia and Natangia area already in the Roman Iron Age, and are present throughout the Migration period.

Four out of seven bridle bits with ring terminals have straight undecorated crossbars with round cross-sections<sup>33</sup>. Three bridle bit bars are torqued<sup>34</sup>, whereas six are two-part bridle bits. The crossbars of the bridle bit from grave 106 are connected by an S-shaped distributor (type Skvortsov III.3). As was stated, all these bridle bit features originated in the area of the Prussians in the 6th and 7th centuries, and existed until the 12th and 13th centuries (Skvortsov 2010, pp. 147–159; Kontny et al. 2011, pp. 97–100, 185–286). The final clarification of the dating and typology of Prussian bridle bits with cheek pieces in ring form is only possible after a detailed comparison of 10th to 13th century specimens with examples from the Migration period (Fig. 4).

Two iron bridle bits with zoomorphic cheek pieces from graves 100 and 103 are remarkable. Both bridle bits have similar stylistic features (Figs. 3, 5, 6). The cheek pieces of both bridle bits are flat in cross-section, looking like curved metal figures, recalling birds or horses<sup>35</sup>. In both cases, the cheek pieces finish with iron rings, and are connected by two-part torqued iron crossbars; no traces of white metal coating were observed. The Groß Ottenhagen zoomorphic cheek pieces are technically close to Sambian examples.

<sup>27</sup> LIIR Fototeka (Archeologijos), Nr. ng. 4745 (<http://www.aruodai.lt/paieska2/vaizdas.php?VId=9339> [accessed 11 May 2020]).

<sup>28</sup> Graves 340 and 353.

<sup>29</sup> Grave 57.

<sup>30</sup> Graves 83, 84 and 130.

<sup>31</sup> V. Kulakov dated these graves to the last quarter of the 10th century (Kulakov 1999, p. 245; 2007, p. 54).

<sup>32</sup> MVF PM V,409,87589 09.

<sup>33</sup> Graves 101a, 104, 106 and 108.

<sup>34</sup> Graves 101b, 102 and 108.

<sup>35</sup> They could also depict some mythological creatures with iconographic features of both horses and 'dragons'. The similarity between the images of supposed heads of dragons and the heads of horses on some West Balt penannular brooches also attracts some attention.



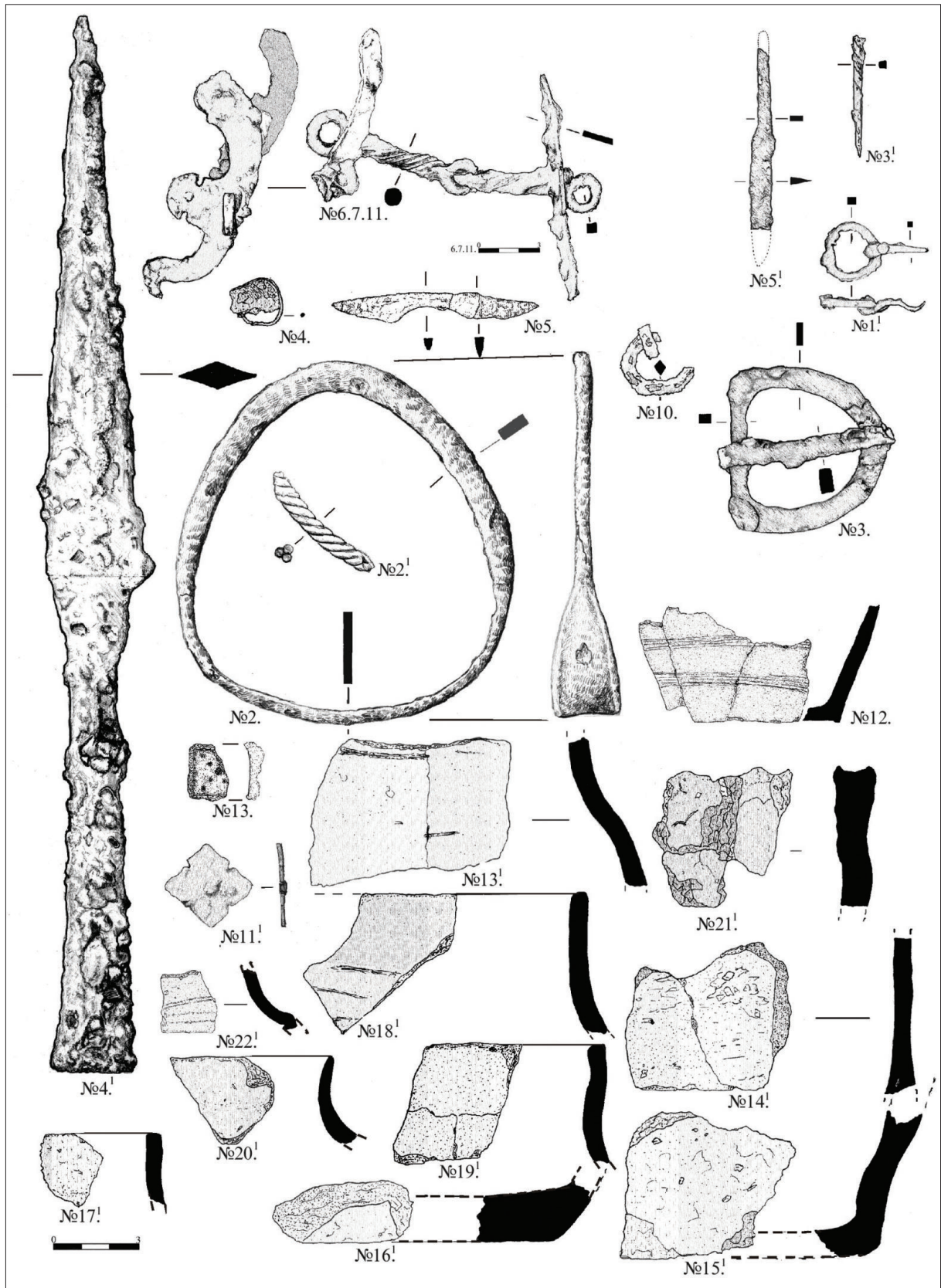


Figure 5. Grave 103 main grave goods (drawing by T. Ibsen, K. Kamp, K. Skvortsov and D. Tiukhtin).

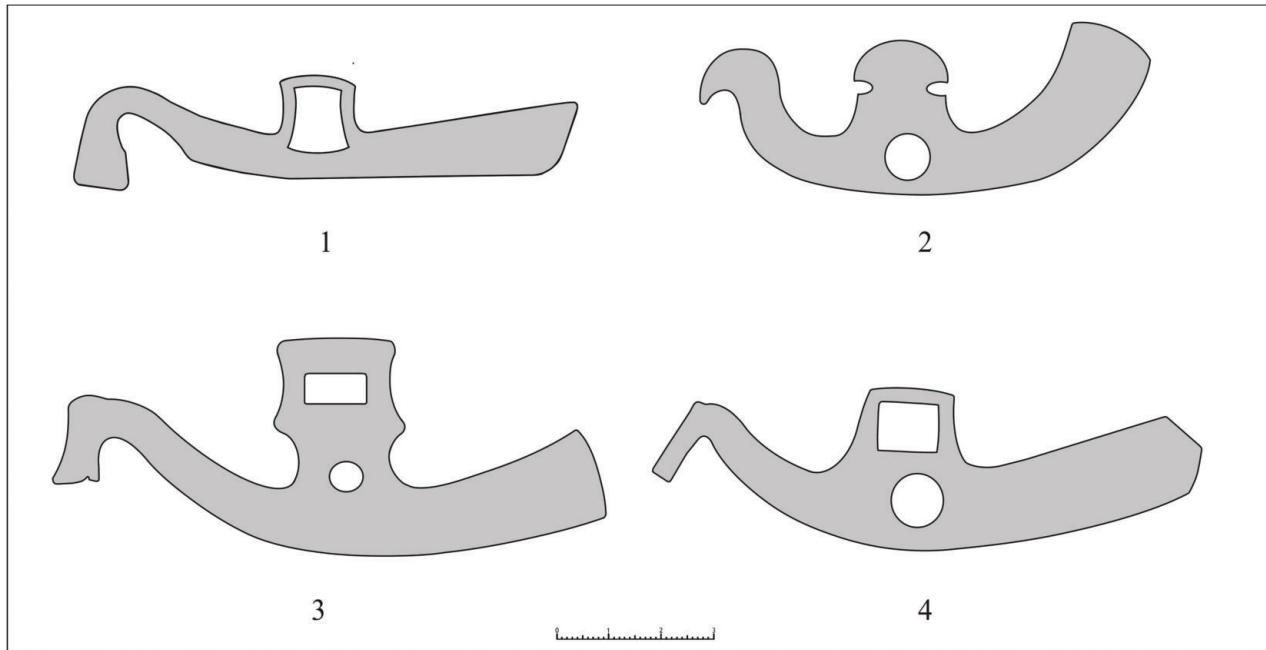


Figure 6. Iron zoomorphic cheek-pieces from Groß Ottenhagen graves 100 and 103 (1, 2) and their bronze analogues from Veršvai grave 17(35) (3) and Marvelė grave 59 (4) (drawing by R. Shiroukhov).

Similar flat geometrised cheek pieces in the form of a bow with upturned ends are known from Klintsovka-1 grave 83 and Kovrovo grave 353, and from Trausitten<sup>36</sup> cemetery (Kulakov 1999, Fig. 39; 2007, Fig. 180). The zoomorphic cheek pieces from Groß Ottenhagen are similar to the flat openwork cheek pieces from Gerojskoje-5 grave 121, and to an example from Kleinheide cemetery. Especially the latter shows almost the same zoomorphic motifs (Zubarev 2004; Skvortsov 2012). Bridle bits with realistic zoomorphic cheek pieces found in Sambia, made of either bone<sup>37</sup>, iron or bronze<sup>38</sup>, are not directly comparable to the iron cheek pieces of Groß Ottenhagen. All known Sambian examples have a different shape and design (Fig. 6.1–2).

Bronze zoomorphic cheek pieces are known from horse burials/sacrifices in central Lithuania. Flat zoomorphic iron cheek pieces were found in horse burial 26 at Seredžius (Jurbarkas area), dated to the 13th or 14th century (Urbanavičius 2011, pp. 396–397, Fig. 555). Zoomorphic cheek pieces from Marvelė grave 59 and Veršvai grave 17(35) are dated to the 11th or 12th centuries (Bertašius 2009, Taf. 147; Butrimas 2009, pp. 166–167, Figs. 93–94)<sup>39</sup>. The zoomorphic cheek pieces from Groß Ottenhagen are similar to the cheek pieces made of bone from the central Lithuanian cemeteries at Marvelė, Veršvai, Graužai and Ruseiniai (Urbanavičius 1970, Fig. 4; 2011, Fig. 98; Volkaitė-Kulikauskienė 1971; Butrimas 2009, p. 166, Fig.

<sup>36</sup> MVF III.144.1014.

<sup>37</sup> Grave 375 at Dollkeim-Kovrovo (Kulakov 2007, Fig. 225).

<sup>38</sup> Gerojskoje-5 grave 96 and stray finds (Zubarev 2004; Nigmatullin et al. 2005, Fig. 8).

<sup>39</sup> According to the data from investigations of Veršvai cemetery (Kaunas area) in 1938–1941 (LIIR F.1: 378, 400, 410, 429).

99). In general, images of birds and horses are frequent among the zoomorphic pendants of the Balts (Butrimas 2009, pp. 715–718; 2011, pp. 57–59). A combination of horse and bird images is noticeable in the iconography from both the Natangian and central Lithuanian areas<sup>40</sup> (Fig. 6.3–4).

Cheek pieces in the form of a bird or horse in the regions of upper Natangia and the middle reaches of the Neman could have appeared independently of each other, under the influence of beliefs formed by the active role of the horse in daily life and by the rituals and funeral rites of the Prussians (Natangians) and Aukštaitians. On the other hand, the iconographic connection between Natangian and central Lithuanian artefacts is evident. In the

<sup>40</sup> The use of this image probably had its own semantic roots. The embodiment of the horse-bird idea in the form of cheek pieces could serve to 'accelerate' the running horse. Ideas about flight on horseback, according to the reports of German-speaking sources, were typical of the Prussians. The Treaty of Christburg of 1249 between the Teutonic Order and the Prussians (Natangians, Pomesanians and Warmians) says: 'Raising their eyes to the sky, they [the priests] cry, falsely claiming that they saw the deceased flying in the sky on a horse, adorned with shining weapons, carrying in his hand a falcon, with a large retinue, heading for another world' (Friedensvertrag, II.3). The idea of flying on horseback is rather archaic, being indirect evidence of what could be the existence of a winged horselike Pegasus in Greek mythology. According to V. Propp: 'Flying on a horse has an ancient pre-agricultural phenomenon, it developed from bird-like flight, or from flight on a bird's back' (see shamanism). In the archaic consciousness 'a horse is assimilated with a bird, like the winged horse, which is actually a horse-bird' (Dundulienė 1977, pp. 95–96; Propp 1986, pp. 173, 210).

classic sense of cultural diffusion, it seems that more detailed bronze cheek pieces from central Lithuania could be the prototypes for the simplified iron cheek pieces of the Natangians. In any direction of cultural exchange, these finds are evidence of the cultural community of the lower reaches of the Pregel and the middle reaches of the Neman (Nemunas in Lithuanian, Memel in German).

### Horse bells

One iron horse bell of cylindrical shape was found in horse burial 105 at Groß Ottenhagen. The artefact does not stand out against a background of similar horse bells from the recently investigated Sambian cemeteries at Alejka-3, Gerojskoje-5, Klintsovka-1, Kovrovo, Povarovka, etc. Horse bells are not a rare find, considering the high number of Prussian horse burials from the Late Iron Age. They appear on average in 37% of burials in the five most comprehensively studied cemeteries<sup>41</sup>. The iron horse bell from Groß Ottenhagen grave 105 is similar to examples from central Lithuanian 'horse' cemeteries from the 11th to the 13th centuries<sup>42</sup>. The similarity and uniformity between the main types of horse bells in Sambia, Natangia and central Lithuania<sup>43</sup> demonstrate the close cultural ties between these areas (Fig. 7a).

### Stirrups

Stirrups and bridle bits are the most numerous finds in Prussian horse burials/sacrifices from the 10th to the 13th centuries, where they are found on average in 80% of all graves (Široukhov 2012, p. 94). All Groß Ottenhagen stirrups have direct analogies in Sambia, central Lithuania and other territories of the Balts. The total number of stirrups from the 9th to the 13th centuries in the north Prussian area exceeds several thousand (Široukhov 2012, pp. 87–94; Goßler 2013)<sup>44</sup>.

The most suitable typology for Prussian stirrups, including those from Groß Ottenhagen, was established by

<sup>41</sup> At the Alejka-3 and Klintsovka-1 cemeteries, iron bells were found in 47% of horse burials; at Gerojskoje-5 cemetery, in 42% of horse burials; and at Kholmy and Povarovka cemeteries, iron horse bells occurred in 19% and 28% of horse burials (Široukhov 2012, p. 94, Table 19).

<sup>42</sup> Marvelė (graves 36, 40, 67 and 96), Obeliai (grave 17), Pakapiiai (grave 23), Tulpiakiemis, Veršvai (graves 164, 163, 140). (Navickaitė 1958, 83–93; Volkaitė-Kulikauskienė 1971, Fig. 39; Urbanavičius and Urbanavičienė 1988, 34, Fig. 53; Varnas 1995, Fig. 9.2–12; Bertašius 2009, Tab. 101, 123, 125, 159; LIIR AF Nr. ng. 4749b).

<sup>43</sup> This statement is based on the argument that horse bells are very rare in the East Baltic funerary context, beyond the three areas mentioned (Juškaitis 2005, p. 149; Široukhov 2012, p. 86).

<sup>44</sup> Including stray finds.

Norbert Goßler (2013). It is based on an analysis of the 9th to 15th-century stirrups from the Berlin part of the Prussia Collection kept in the Museum for Proto- and Prehistory. Goßler focuses especially on Prussian stirrups from the 10th to the 12th centuries. His typology is based mostly on archival and already-published data. Since the Prussian typology of stirrups by Goßler is not sufficient to analyse the stirrups from the Groß Ottenhagen horse burials, we employ the typology of Lithuanian stirrups by Antanavičius (1976), and the analysis of Polish examples by Świątosławski (1990) to fill some gaps. The typology of Rus' stirrups by A. Kirpichnikov (1973) is also taken into account. It should be noted that the large number and the diversity of Late Iron Age Prussian stirrups requires a more detailed typology, based on finds from recent excavations of Prussian cemeteries.

In total, 20 forged iron stirrups were found in 11 horse burials at Groß Ottenhagen. Paired stirrups were found in six burials<sup>45</sup>, grave 108 contained two unpaired specimens<sup>46</sup>. Single stirrups were found in four heavily disturbed graves<sup>47</sup>. The most popular type of stirrup at Groß Ottenhagen corresponds to Goßler type DIII.1, represented by six paired examples (graves 102, 103 and 107) (Figs. 4a, 5, 8a). Stirrups of the same simple elliptical shape, widening at the base, were found in other Prussian cemeteries: Kovrovo<sup>48</sup>, Povarovka<sup>49</sup> and Kholmy.<sup>50</sup> Before 1945, such stirrups occurred in the east Sambian cemeteries of Blöcken and Viehof (Goßler 2013, Taf. 10. 2, 7–9). Goßler dated DIII.1 stirrups from the 11th to the beginning of the 13th century (Goßler 2013, Fig. 4). Judging by the horse burials at Groß Ottenhagen with DIII.1 type stirrups and other Sambian analogues, this dating corresponds to the relative chronology. Stirrups of Goßler's DIII.1 type are also known from central Lithuanian cemeteries (Bertašius 2002, Fig. 90.1).

Another popular type of stirrup from Groß Ottenhagen, known from graves 101a (2), 105 (1) and 106 (1), corresponds to Goßler DIII.3 type. Most DIII.3 type stirrups are present in the Sambian cemeteries of Alejka-3<sup>51</sup>, Blöcken<sup>52</sup>,

<sup>45</sup> Graves 100, 101a, 102, 103, 104 and 107.

<sup>46</sup> The tendency to put two (sometimes three) unpaired stirrups in one horse burial is common to all Sambian cemeteries from the 11th to the 13th centuries (Mühlen v. z. B., 1975, p. 47; Široukhov 2012, pp. 88, 91).

<sup>47</sup> Graves 101b, 105, 106 and 109.

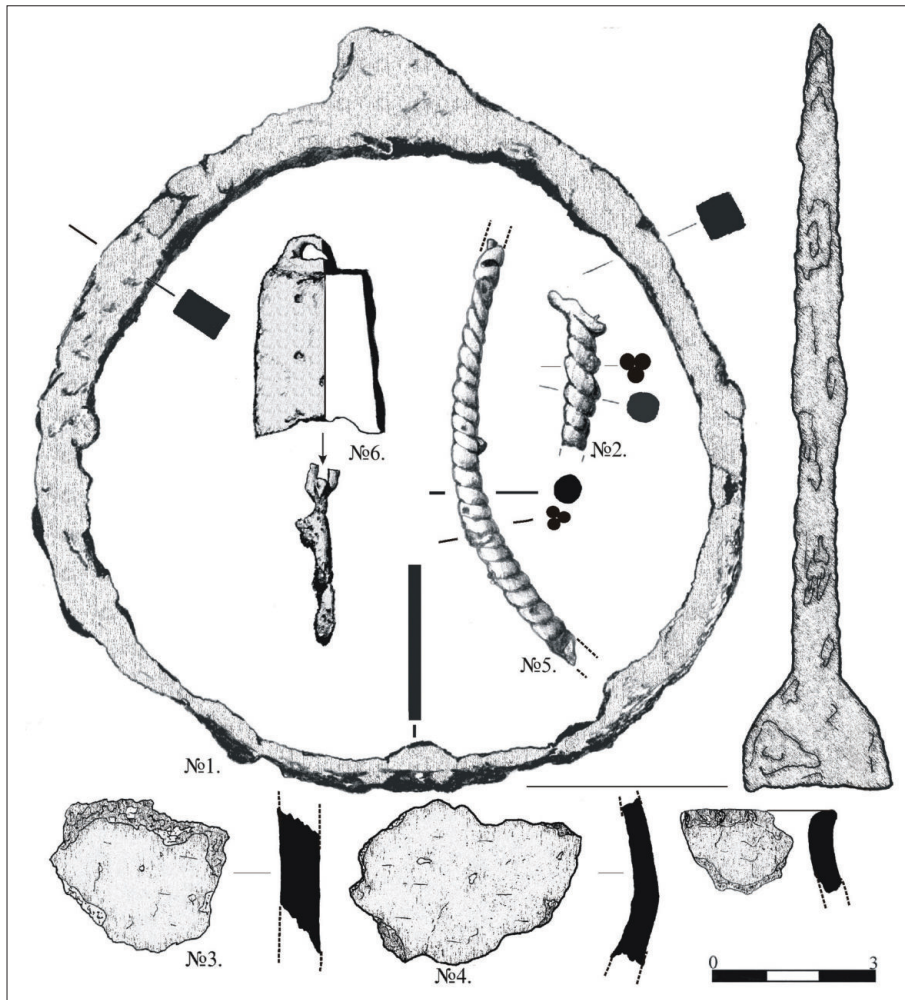
<sup>48</sup> Graves 305, 311, 369 and 371 (Kulakov 2007, Figs. 94, 106, 215, 217).

<sup>49</sup> Graves III, XX and X11V (Pronin et al. 2006, Figs. 44, 101, 110–111).

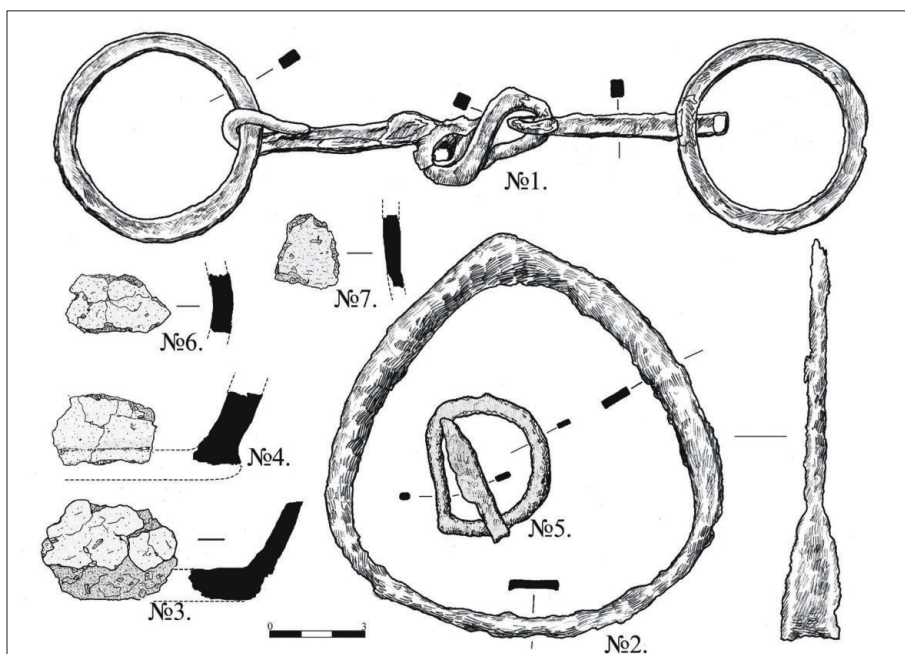
<sup>50</sup> Grave 69 (Zubkov 2015).

<sup>51</sup> Grave 531 (Skvortsov 2007).

<sup>52</sup> MVF 448.8892.



7a



7b

Figure 7a. Grave 105 grave goods. 7b. Grave 106 grave goods (drawing by T. Ibsen, K. Kamp, K. Skvortsov and D. Tiukhtin).

Gerojskoje-5<sup>53</sup>, Klintsovka-1<sup>54</sup>, Mitino<sup>55</sup> and Povarovka<sup>56</sup>. The main period of their distribution is the 11th and 12th centuries, but they also appear up to the end of the 12th and the beginning of the 13th centuries (Goßler 2013, Fig. 4). These stirrups correspond to Świętosławski type VIII, dated to the 12th and 13th centuries (Świętosławski 1990, p. 67) (Fig. 7).

The paired stirrups from horse burials 104 and 109<sup>57</sup> belong to Goßler's BI1a type, corresponding to Antanavičius 6a and Świętosławski III.a types. These stirrups are typical of Prussian cemeteries from the period: Alejka-3<sup>58</sup>, Klintsovka-1<sup>59</sup>, Kovrovo<sup>60</sup> and Kolmy<sup>61</sup>. Świętosławski places these stirrups chronologically in the Viking Age. Antanavičius and Goßler date 6a/BI1a type stirrups to a wider timespan, to the 10th to the 12th centuries. Moreover, Goßler considers that BI1a stirrups could have been in use throughout the 12th century (Antanavičius 1976, p. 75; Świętosławski 1990, Fig. 18; Goßler 2013, Figs. 3–4) (Fig. 4b). A small stirrup from burial 101b formally refers to Goßler BI1a type, and is comparable to type I by Kirpichnikov (1973, Fig. 29). Similar stirrups were found at Klintsovka-1<sup>62</sup> and Kholmy<sup>63</sup>, where they belong to the 11th and 12th centuries.

A stirrup of a rather archaic form was found in horse burial 108. Conditionally referring to AII3 type after Goßler and type I by Świętosławski, this type was already known from the Prussian graves of the 8th and 9th centuries at Widitten and Zophen (Heym 1938; Kleeman 1956). These stirrups were also found in later horse burials of Prussians: Blöcken, Grebieten, Klintsovka-1<sup>64</sup>, Seefeld, Schulstein, Viehof (Gaerte 1929, Fig. 278.b; Goßler 2013, Taf. 3.1–6). Świętosławski dates such stirrups basically to the 9th and 10th centuries. According to Goßler, stirrups of type AII.2–3 can be dated to the 9th to the 11th centuries (Goßler 2013, Fig. 4). Judging by the accompanying grave goods from grave 108<sup>65</sup>, AII3 stirrups could have been used in the 11th and 12th centuries. The second single

stirrup found in grave 108 is difficult to attribute to any comparative type. It is a kind of combination of type 3 (in the bottom part) of Antanavičius and VIII Świętosławski type (Antanavičius 1976, p. 75; Świętosławski 1990, Fig. 18). V. Kulakov dated stirrups of the same form found in graves 89 and 92 at Klintsovka-1 to the 9th or 10th centuries (1999, pp. 246–247, Fig. 41). The context of grave 108 at Groß Ottenhagen extends the use of such stirrups by the Prussians to the turn of the 11th and 12th centuries (Fig. 8a-b).

A pair of stirrups from horse burial 100 is definitely worth attention. Both stirrups can be attributed to Goßler type AIII<sup>66</sup>. The form and the decoration of these stirrups is close to the examples of Blöcken (Osokino) horse burial 7, a cemetery north of the River Pregel. Like the ones from Blöcken, the stirrups are decorated with stamped decoration of zigzags and denticles (Peiser 1919, p. 360, Fig. 1)<sup>67</sup>. The closest geographical analogue to these AII.1 type stirrups is known from Zophen (Heym 1938, Fig. 124). Similar stirrups were found before 1945 at Grebieten, Groß Friedrichsberg, Seefeld and Schulstein (Gaerte 1929, Fig. 278.d; Goßler 2013, Taf. 2.1–2, 4–5). Identical stirrups are common in the recently investigated Sambian cemeteries of Gerojskoje-5<sup>68</sup>, Klintsovka-1<sup>69</sup>, Kleinheide, Kovrovo<sup>70</sup> and Povarovka<sup>71</sup>. AII.1 type stirrups are dated by Goßler to the period from the end of the 9th to the beginning of the 11th century (Goßler 2013, Figs. 3–4), with some possibly extended to the 12th century. These stirrups can also be compared to Antanavičius type 3, dated to the 11th and 12th centuries (Antanavičius 1976, p. 72; Skvortsov 2010, p. 174). Similar stirrups are also known from central Lithuanian cemeteries from the 10th to the 12th centuries (Bertašius 2009, Figs. 164, 166) (Fig. 3).

## Girth buckles

Seven D-shaped girth buckles were discovered in graves 100 (three examples), 103, 106, 107 and 109 at Groß Ottenhagen. Such buckles are found in all recently investigated cemeteries in Sambia (Skvortsov 2010, pp. 172–173). They were in use from the 11th (Klintsovka-1, Kovrovo) to the turn of the 12th and 13th centuries (Widitten)<sup>72</sup>. Round-

<sup>53</sup> Grave 61 (Zubarev 2004).

<sup>54</sup> Graves 14, 32, 104, 110 (Kulakov 1999, pp. 221, 227, 250, 252, Figs. 10, 18, 45, 47).

<sup>55</sup> Stray find (Skvortsov 2010, pp. 175–176).

<sup>56</sup> Grave X (Pronin et al. 2006, Fig. 69).

<sup>57</sup> One stirrup was displaced by ploughing to grave 100.

<sup>58</sup> Grave 523a (Skvortsov 2007).

<sup>59</sup> Graves 1, 19, 138 and 187 (Kulakov 1999, Figs. 1, 10, 56, 63).

<sup>60</sup> Graves 263, 264, 266 and 353 (Kulakov 2007, Figs. 33, 36, 42, 179–180).

<sup>61</sup> Grave 54 (Zubkov 2015).

<sup>62</sup> Graves 25, 149 and 153 (Kulakov 1999, pp. 224, 262, Figs. 14, 60–61).

<sup>63</sup> Graves 70 and 82 (Zubkov 2015).

<sup>64</sup> Graves 93, 96, 98B and 102 (Kulakov 1999, pp. 246, 248–249, Figs. 41–42, 44–45).

<sup>65</sup> A fragment of a clay vessel with a profiled rim and stamped decoration, and a spear with a high collar and extended feather with a rhomboid cross-section, allow us to attribute this grave to the 11th or 12th century.

<sup>66</sup> Also, with some reservations, these stirrups could be attributed to the 3rd Antanavičius and Świętosławski II types.

<sup>67</sup> MVF V, 448, 8892/5.

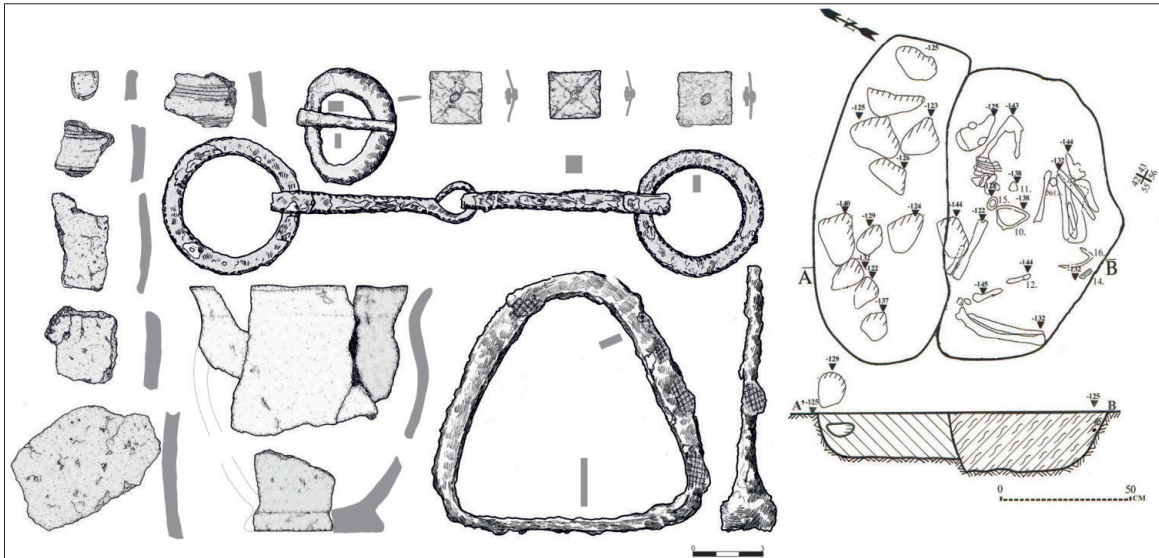
<sup>68</sup> Grave 59 (Zubarev 2004).

<sup>69</sup> Graves 96 and 108 (Kulakov 1999, p. 251, Figs. 40, 47).

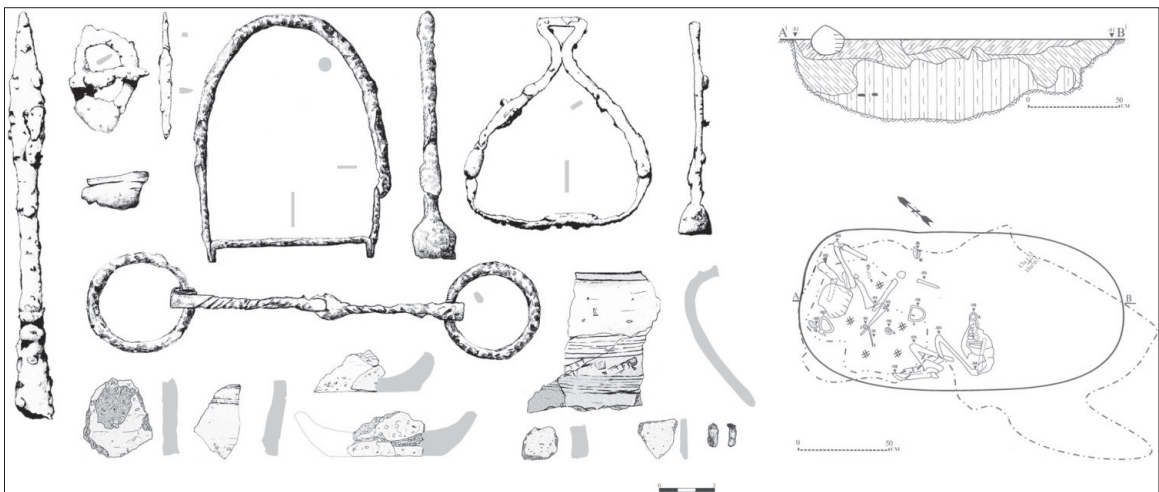
<sup>70</sup> Graves 339, 340, 348, 349, 352, 356 and 376 (Kulakov 2007, Figs. 159, 162, 171, 177, 183, 191, 223).

<sup>71</sup> Graves II, XI11II and stray finds (Pronin et al. 2006, Figs. 35, 106, 248).

<sup>72</sup> Grave goods from grave 2 at Widitten (Izhevskoje) together with a D-shaped buckle are represented by a penannular brooch with widened terminals and S-shaped decoration (spiral ornament). These brooches are found in East Baltic monuments from the turn of the 12th and 13th centuries to the 14th



8a



8b

Figure 8a. Grave 107 grave goods; 8b. Grave 108 grave goods (drawing by T. Ibsen, K. Kamp, K. Skvortsov and D. Tiukhtin).

shaped iron buckles were found in graves 100, 102 and 110. Similar buckles are known from Gerojskoje-5 and Mitino, where they are dated to the end of the 11th to the turn of the 12th and 13th centuries (Skvortsov 2010, p. 80). Little round-shaped buckles found in the lower layers of graves 100 and 103 probably belong to stirrup strap mounts. One profiled iron buckle of rectangular form was found in grave 101b. In Natangia, such buckles are known from Zophen grave 345b/c (Heym 1938, Tab. 6, Fig. 64). They have also occurred in most of the mentioned Sambian cemeteries, where they are dated to the 11th to the beginning of the 13th centuries (Skvortsov 2010, pp. 78–79). Iron girth buckles from Groß Ottenhagen are also similar to examples found at Marvelė and other central Lithuanian cemeteries (Bertašius 2009, Taf. 101.6, 123.6, 152.2)

and 15th centuries (Kleemann 1956, Table X11X. f; Svetikas 2009, p. 153, Fig. 138; Širouchov 2012, p. 31).

(Figs. 3–7). The Groß Ottenhagen girth buckles allude to the frequent use of saddles by the local Prussians.

### Spurs

An iron spur with a bronze upper part, found accidentally in the close vicinity of grave 109, is one of the of the earliest artefacts from the cemetery, dating from the 9th or 10th centuries, was in the supposedly later zone of the cemetery (Ibsen and Skvortsov 2005, pp. 426–427, Fig. 27). According to A. Tautavičius, these spurs appeared in the area of the Balts in the 9th and 10th centuries. Known also as Menzlin type, these spurs spread on the shores of the Baltic Sea and the North Sea mainly in the 10th and 11th centuries (Tautavičius 1996, pp. 153, 156; Goßler 1998, p. 522). Besides the Groß Ottenhagen find, such spurs are known from Kaup-Wiskiauten and the Scalvian Viešvilė-1

cemeteries (HJA). A similar spur was found in the area of Marvelė cemetery, full of graves from the 10th to the 12th centuries (Bertašius 2009, p. 179, Fig. 172.4; Ibsen 2009, p. 116)<sup>73</sup>.

Most Groß Ottenhagen equestrian equipment has links to Sambian analogues and prototypes. This again confirms the similarity between the material cultures of Sambia and Natangia in the period in question. Particularly interesting is the closeness of artefacts from the horse burials at Groß Ottenhagen to those of the east Sambian area like Blöcken, which can be linked to a group of archaeological sites located at the mouth of the Deima: Viehof, Löbertshof and Possritzen. Although the cemeteries of Groß Ottenhagen and Blöcken were separated by the River Pregel, common features can be traced in both of them. This accounts for the inventory of the upper layers of the Groß Ottenhagen graves, as well as the similarity between Groß Ottenhagen data and central Lithuanian 'horse cemeteries'. It is demonstrated by the closeness of the zoomorphic cheek pieces from Groß Ottenhagen, Veršvai, Graužai and Marvelė. It seems that prototypes of equestrian equipment spread from Sambia to central Lithuania (and vice versa) by the routes of the rivers Pregel and Neman.

### Finds from the upper layers of graves

The strong destruction of the upper (cremation) layers of burial pits by ploughing might have resulted in the incomplete inventory of the Groß Ottenhagen graves. Besides a piece of a melted glass vessel, fragments of a bone comb and numerous potsherds, and several spearheads and knives in the preserved inventory<sup>74</sup> of the upper layers, several pieces of bronze artefacts were unearthed: one neck-ring, one bracelet, and a piece of the rim of a bronze bowl.

### Weapons

Two spearheads were found in graves 103 and 108, accompanied by horse burials. On average, weapons were found in 50% of all burials, and in 75% of graves with horse burials and equestrian equipment in Prussian cemeteries in Sambia from the 11th to the 13th centuries. At the same time, arms are represented in only 10% of all graves with badly damaged upper layers: Bledau-II, Povarovka and

Kholmy. But despite the Sambian field ploughing, 83% of cremation graves with horse burials at Alejka-3, and 41% of those at Klintsovka-1, contained arms (Širouchov 2012, p. 62, Table 4, 20).

An iron spearhead from grave 103 has an elongated blade with a rhomboid cross-section and a long socket. Such spearheads are known from Prussian sites from the middle of the 11th century to the 14th century<sup>75</sup>. Such spears, associated with Kirpichnikov III.A type<sup>76</sup>, were found in cremation grave 24 (26) at Kl. Kaup, dated to the 11th century<sup>77</sup>, and in inhumation grave 46 at the same site dated by a bracteate of the Teutonic Order to the turn of the 13th and 14th centuries (Kirpichnikov 1973, p. 48; Kulakov 2010, p. 98, Fig. 5; 2011, p. 92, Figs. 5–6; 2012, p. 68, Figs. 67–68). These spearheads are not rare for Prussian warrior inhumations of the Teutonic Order period, and appear, for example, at Alt-Wehlau, Kunterstrauch, Stangenwalde and Unterplehnen/Równina Dolna (Valuev 2003, Fig. 9.2; Biermann et al. 2011, Table 19.8, 21.1; Goßler, Jahn 2013, Table 1.4; RGA). Along with zoomorphic cheek pieces and Goßler DIII.1 type stirrups, the spearhead allows us to date grave 103 from the 11th to the turn of the 12th and 13th centuries (Fig. 5).

A small spearhead with a laurel leaf-form blade and an elongated socket from grave 108 stands out against the most common types of spearheads of the Prussians. Only a few analogues are known. One specimen was found in Klintsovka-1 grave 125, dated by V. Kulakov to the last third of the 11th century. Similar spearheads with the same blade form and a shorter socket are known from Klintsovka-1 graves 38, 44 and 70 (Kulakov 1999, p. 258, Figs. 21, 27, 37, 52). An analogous spearhead with an extended socket was found in grave 97 at Gerojskoje-5 (Zubarev 2004). The context of the burials mentioned allows us to date such spearheads from the second half of the 11th to the turn of the 12th and 13th centuries (Fig. 8b).

### Artefacts of everyday use

#### Iron knives

Small iron knives were found in graves 103, 104 and 108. They were used for household purposes, and are frequent in Prussian cremation cemeteries of the period. Iron knives are represented in 20% of equipped graves in the

<sup>73</sup> The latest finds of Menzlin-type spurs in south Prussian lands are known from Bogdany, Olsztyn-Las Miejski and Szurpiły (information from Sławomir Wadył).

<sup>74</sup> In the first article, shortly after the excavations of 2004, the excavators described only a few metal artefacts from human burials (Ibsen and Skvortsov 2005, p. 424) which had been restored until then. The number of metal artefacts increased after the restoration. The additional objects are described here together with the already-published ones.

<sup>75</sup> Some examples of burials in the Prussian area from the 11th and 12th centuries with such spears are: graves 1, 7 and 8 at Ekritten, graves 2, 12 and 35 at Klintsovka-1, graves 57 and 60 at Gerojskoje-5 (Heydeck 1890, Table XII–XIII; Kulakov 1999, p. 314, Figs. 9, 19; Zubarev 2004).

<sup>76</sup> The large number and the diversity of Prussian spearheads in the Late Iron Age require a more detailed typology.

<sup>77</sup> According to the inventory of the grave (like many other graves at Kl. Kaup), it should be dated to the 12th century or later.

Klintsovka-1 cemetery<sup>78</sup>. Iron knives were found in nine (45%) cremations at Kl. Kaup, of which nearly half were equipped with arms<sup>79</sup>. In Povarovka, very similar little iron knives were found in three out of 23 'single layer' cremations (13%), and in seven out of 18 inhumation graves dated to the period between the 12th and the beginning of the 14th century (40%) (Širouchov 2012, pp. 70–71). According to V. Žulkus, such knives from Curonian cremation graves are not interpreted as weapons (Žulkus 2004, p. 155). Iron knives are a common attribute of Prussian graves of the Teutonic Order period. Thus, small iron knives with seven to 15-centimetre-long blades are typical 'unisex' grave goods from the 11th to the 15th centuries.

### Bone combs

Pieces of bone combs were found in graves 100 and 102. Bone combs are not rare in Prussian cemeteries from the 11th to the 13th centuries. They are found in 'double layer' cremations together with weapons and equestrian equipment, as well as in 'single layer' cremations without horses. Bone combs and pieces of them are known from 15 graves at Klintsovka-1: seven 'double layer' graves with arms, seven without arms, and one in a single layer cremation grave (10% of furnished graves). Pieces of bone combs were found in six Povarovka cremations without arms, three of them accompanied by horse burials (13% of graves with grave goods) (Širouchov 2012, pp. 111–112). Bone combs can hardly be a valid gender indicator of Late Iron Age Prussian material culture, because they appear in both female and male graves. The same rule applies to Groß Ottenhagen.

### Vessels

#### Ceramics

Fragments of hand-shaped pots were found in ten<sup>80</sup>, and wheel-shaped pottery ('Baltic ware') in five<sup>81</sup> out of all ten upper layer cremation graves at Groß Ottenhagen. The number of wheel-shaped potsherds dominates. Hand-shaped ceramics coexist with Baltic ware during the 11th to the 13th centuries at most archaeological sites on the Sambian peninsula and in west Lithuania (Efremov 2010; Balsas 2011; Širouchov 2012). The number of potsherds in graves at Groß Ottenhagen varies from between three and 21 (Ibsen and Skvorzov 2005, p. 424). Most potsherds were found in the upper (cremation) layers of graves. They

often have traces of re-firing<sup>82</sup>, which could be evidence of ceramics being used during funeral rites.

Some hand-shaped vessels with rims (graves 101a, 102 and 107) correspond to Žulkus A-1.2 types, popular with both Prussians and Curonians. The profile of a vessel from grave 107 can be fully reconstructed, and corresponds to subtype Žulkus A-2.b. The number of hand-shaped ceramics in general increases at monuments of the West Balts during the 11th to the 13th centuries (Širouchov 2012, pp. 54, 57). Rim parts and potsherds of vessels decorated with finger (?) imprints were found in graves 101a and 109 at Groß Ottenhagen. Vessels with similar decoration have also been found in graves from the 11th to the 13th or 14th centuries at Povarovka cemetery (Pronin et al. 2006, Figs. 166.4, 168, 179), although the main period of the distribution of such vessels in the territory of the West Balts relates to the Late Migration period<sup>83</sup> (Figs. 3, 5, 8a).

Most potsherds from Groß Ottenhagen correspond with the general Prussian funeral trend of the 11th to the 13th centuries, where pottery is found in 50% to 70% of all graves (Širouchovas 2011, pp. 294–297; Širouchov 2012, p. 57). The fragments of wheel-shaped vessels from Groß Ottenhagen are comparable to Žulkus B1 and A-b and B2.b subtypes, which were widespread in the east Baltic area from the 11th to the 13th centuries (Žulkus 2007, pp. 284–287), and were used until the turn of the 13th and 14th centuries (Bliujienė 2005, pp. 158–162; Žulkus 2007, pp. 321–323; Nowakiewicz and Wróblewski 2010, pp. 515–519; Širouchov 2012, p. 125). Most of the decorated potsherds are covered with groups of longitudinal lines. Two potsherds from graves 102 and 108 are decorated with rectangular stamps (Fig. 8b). The reconstructed upper part of the vessel from grave 108 is similar to a vessel from Klintsovka-1 grave 148. It should be noted that pottery decorated in a similar way is common at Prussian sites from the 11th to the 13th centuries. The geographically closest analogues for pottery from Groß Ottenhagen with grouped rectangular stamps are from the cemeteries at Zophen and Klintsovka-1 (Heym 1938, Fig. 210; Kulakov 1999, pp. 214–260)<sup>84</sup>. At least ten pots decorated in this way are known from Klintsovka-1. Excavations of settlements in the vicinity of the barrow cemetery at Kaup/Wiskiauten have unearthed several closely decorated potsherds from complexes radiocarbon-dated to the 11th and 12th centuries (Ibsen 2009, pp. 317–319, Figs. 234,

<sup>82</sup> Graves 100, 101a, 102, 103, 105, 106, 108 and 109.

<sup>83</sup> Hand-shaped vessels decorated by finger marks and rollers are known from the 5th to the 7th centuries from the area of Nadravians, Scalvians and Jotvingians at the sites of Deinen, Nendriniai, Opstainiai/Vylkiškiai and Vidgiriai (Grünert 1943, Figs. 7, 9; Šimėnas 2006, Fig. 52; Zabiela and Jarockis 2009, Fig. 5; Širouchov 2012, p. 57, Fig. 86.2; Jarockis 2012, p. 47, Fig. 1).

<sup>84</sup> KGOM 11168.1, 12131.5, 17567.64, etc.

<sup>78</sup> Iron knives at Klintsovka-1 were also found in cremations with arms accompanied by horse burials (15 graves), as well as in 'unarmed' graves (11 graves), and in three 'single layer' cremations.

<sup>79</sup> Graves 27, 34, 37 and 40.

<sup>80</sup> Graves 100, 101a and 102–109.

<sup>81</sup> Graves 100, 102, 103, 107 and 108.



236–237, Taf. 58.22, 65). Except for two archaic hand-shaped potsherds with roller and ‘fingerprint’ decoration, most ceramic fragments from Groß Ottenhagen correspond to the pattern of Sambian finds from the period, with plenty of analogues in the whole area of the West Balts.

### Fragments of glass and bronze vessels

A melted fragment of a white-glass goblet (?) was found in grave 100. Theoretically, it could be a part funnel-shaped goblet from the Early Medieval period. The only example of a chronologically associated glass goblet from the Kaliningrad region is known from the Schlossberg hillfort in Tilsit/Sovetsk. This green funnel-shaped glass vessel is broadly attributed to the Viking Age (RGA, Bd. 140). Such funnel-shaped vessels, made from green, whitish, bluish or transparent glass, belong to Arbman type A or Arwidsson type 1, and are well known from Birka and Haithabu (Arwidsson 1984, p. 204, Fig. 24:1.1). Glass goblets are considered high-class property.

The melted rim part of a bronze bowl was found in the filling of grave 108, maybe originating from a bronze bowl tripod or a cauldron. Fragments of such tripods/cauldrons were discovered at Kholmy and Mitino cemeteries (Zubkov 2015; Skvortsov 2015). A similar rim fragment, probably from a cauldron as well, is known from the Medieval Prussian cemetery at Stangenwalde (Biermann et al. 2011, Table 30.14; MVF PM 1184). Bronze bowl tripods and cauldrons in general are distributed in northern Europe from the Middle Viking Age up to the Middle Ages (Müller 2006, pp. 87–90).

### Bronze neck-ring

Six fragments of a bronze neck-ring made from three wires were found in Groß Ottenhagen graves 101a<sup>85</sup>, 103, 104 and 105. All the pieces have traces of fire. Unlike Scalvian or Curonian cemeteries, bronze neck-rings are not very common at Prussian sites from the 11th to 13th centuries (comparatively). Fragments of bronze neck-rings, hardly attributable to any particular type, were found in at least 12 cremation cemeteries from the 11th to 13th centuries in the area of historical Sambia. One single-piece bronze neck-ring is known as a deposit from Steinitten (Kr. Königsberg) (Hollack 1908, p. 157; RGA T. 71). The closest analogy comes from Blöcken cemetery (Široukhov 2012, pp. 37, 203–204, Fig. 44). The densest concentration of Prussian neck-rings from the pre-Teutonic Order period until the middle of the 13th century is in the region of the lower Deima, in the cemeteries of Löbertshof, Popel-

<sup>85</sup> Also, one fragment in the area of grave 101a–b.

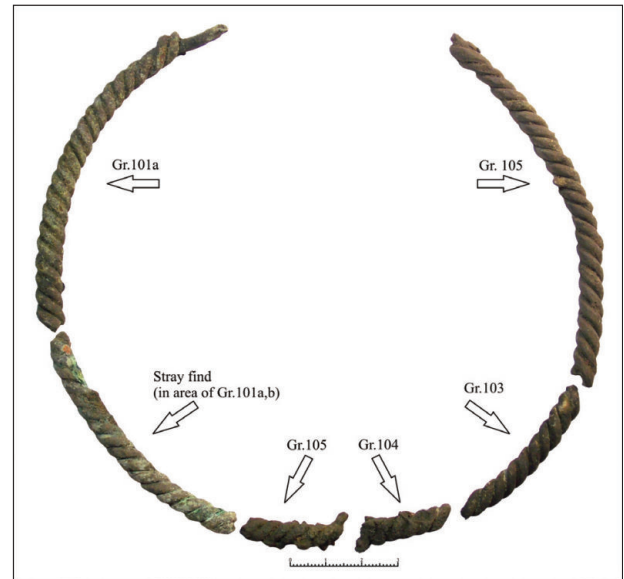


Figure 9. A bronze neck-ring, consisting of fragments originating from different burials, reconstruction (compiled and drawn by R. Shiroukhov).

ken and Viehof<sup>86</sup>, which could have been a contact zone between the Prussians, Curonians and Scalvians.

Judging from the similar cross-sections, cut marks and the visual similarity between all the neck-ring fragments, in combination with their spatial distribution within several metres in the cemetery at Groß Ottenhagen, it is possible that they belong to the same neck-ring, which was broken into pieces during the funeral ceremony (Fig. 9). If the fragmentation is not the result of later ploughing activity or grave disturbance, one possible interpretation is that fragments of one neck-ring, after they were ritually broken and burnt, were placed in four different graves, to demonstrate the close chronological and social links, and even kinship, of the deceased. The same treatment applies to the fragments of a bracelet from Groß Ottenhagen described below.

### Bronze bracelet

Four fragments of presumably one bronze band spiral (?) bracelet were found in the filling of the upper layers of graves 100, 101a and 108 (two fragments). Spiral bronze bracelets are known from the Sambian cemeteries at Kleinheide, Pokalkstein and Schlakalken. Just like the neck-rings, bronze spiral bracelets are typical of Prussian cemeteries from the late 13th to 15th century (Široukhov

<sup>86</sup> Löbertshof MVF III.73.848.37, III.297.2156.18 Nr. 5, III.239.1166, III.297.2156. 19. Nr. 7a, III.297.2156.26. Nr. 9b, III.231.2239; Popelken MVF III.248.1169; Viehof MVF V.46.6821, Nr. 8; V.46.6888; V.46.6228.22–25, 32, 64–65, 108, 117, 121–124, 131; V.166.7970. Nr. 14a; V.167/170.7970. Nr. 39.

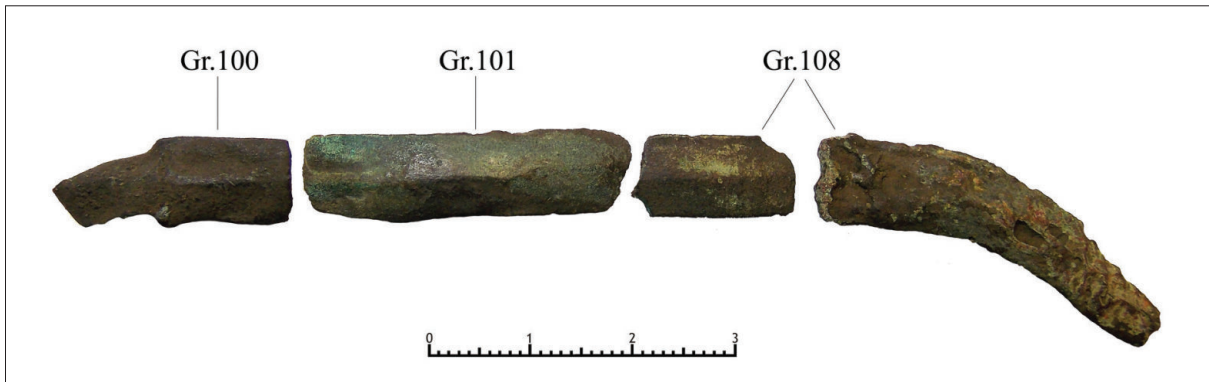


Figure 10. Pieces of a presumed bronze band bracelet reconstruction (compiled and drawn by R. Shiroukhov).

2012, pp. 39–40, Fig. 47.3–4)<sup>87</sup> and were mainly found in cemeteries at the mouth of the Deima: Blöcken, Löbertshof, Popelken and Viehof<sup>88</sup>. Like the fragments of neck-ring, all the fragments of bracelet were intentionally cut, and bear traces of fire. If they were not moved accidentally by ploughing or other disruptions of the upper layers of the grave, the single fragments could have been placed in different graves after the funeral pyre. The only combination of fragments of a neck-ring and a bracelet was discovered in grave 101a (Fig. 10).

### Burial rite

All the Groß Ottenhagen graves described are concentrated in the eastern part (the periphery) of the cemetery. Eleven of the 12 graves show a ‘double layer’ structure, where cremated remains and artefacts of a horsemen are placed above the unburnt remains of a horse. This specific rite spread in the areas of Sambia, Natangia and Upland at the end of the Migration Period (Kulakov 1990, pp. 19–21; Skvortsov 2010, pp. 16–17, 24–25, 28; Kontny et al. 2011, pp. 116–121), and remained almost unchanged until the German Crusades. The structure of the Groß Ottenhagen graves is comparable to the recently investigated Sambian cemeteries of Alejka-3 and Kholmy. In particular, the graveyard at Groß Ottenhagen belongs to a group of cemeteries known in archaeological science as ‘Aschenplätze’<sup>89</sup>. A characteristic feature of these ‘Aschenplätze’ is the huge concentration of supposedly individual cremation graves in a rather small area, in which all the graves

are covered by soil consisting of a mix of ash, cremated bones and fragmented finds, supposedly all originating from the funeral pyre. Distinguishable grave pits of the upper layer usually overlap each other, or are located in close proximity in ‘Aschenplätze’ cemeteries. The intense black upper layer is formed primarily by the proximity of the graves. The cremation process probably took place in the vicinity of the cemetery. Most Groß Ottenhagen graves are characterised by the remains of former stone pavements, which were probably destroyed during the centuries of agricultural activity on the site<sup>90</sup>. This is confirmed by the numerous fragments of grey potsherds from the 14th to 16th centuries found on the surface of the cemetery. Some of the stones from the grave pavements might have been used for the construction of buildings, churches and roads for the German village of Groß Ottenhagen in later times.

### Lower layers of graves: horse burials/sacrifices

Traditionally described just as ‘horse burials’, horse deposits are objects of ritual origin, and probably functioned as animal sacrifices. Groß Ottenhagen horse burials from the phase considered are represented mostly by complete skeletons, except for a few which were partly destroyed by sand digging activities. All of them have been buried in a prone position in oval or semi-circular pits. Nine out of ten horse burials are oriented north-south (with small deviations), with their heads directed towards the south, only one horse skeleton is oriented with its head towards the north. For the two disturbed horse burials, the orientation of the head is unclear. A south orientation of horse burials/sacrifices can be traced in the Kaliningrad region starting from the Early Roman Iron Age, remaining until the 13th century with an average of 85% within a single cemetery (Shiroukhov 2013, pp. 19–22). Judging by the

<sup>87</sup> Around 15 small undecorated spiral bracelets were found in several inhumation graves at Stangenwalde (Biermann et al. 2011, p. 265, Fig. 33.1–4, Taf. 16–17, 18.5). Another spiral bronze band bracelet is described as ‘*Armspirale*’ from the Sambian inhumation grave at Weischkitten, dated to the 14th or 15th century (Kleemann 1939, p. 223).

<sup>88</sup> At least 12 fragmented examples: Löbertshof MVF III.73.848.7; Popelken MVF III.248.1169; Viehof MVF V.46.6828. Nr. 66b, 5, 12, 22–25, 117, 120a; V.167/169.7970. Nr. 8a, 12, 29b, 34b, 37f; IV.405.5947.

<sup>89</sup> From the German for ‘area of ashes’.

<sup>90</sup> If this is true, the phenomenon of the ash layer typical of *Aschenplätze* could be the result of agriculture and ritual together.

shape and depth of horse burials, it is difficult to determine whether the horses were placed in the burial pit alive, as was described in some written records from the 13th and 14th centuries (Dusburg III.5), or if they were killed before. Usually the horses were buried fully or partially equipped.

According to the palaeo-osteological analysis of Groß Ottenhagen horse bones conducted by A. Zinoviev, most horses were buried/sacrificed at the age of 1.5 to four years. The choice of young horses for burial is a phenomenon that is observed during the entire Iron Age in the area. Horses younger than four years old, the age at which they were considered as adult and fully trained, dominate from the Roman period to the Viking Age in Sambia-Natangia. This is different to central Lithuanian horse burials, where four to ten-year-old horses dominate (Bertašius and Daugnora 2001). The horse remains from grave 100 stand out from other horse burials at Groß Ottenhagen. The estimated shoulder height and the long legs define it as an elite racing stallion of some other origin than the usual Prussian horses. Such horses are rare for burials in the neighbouring regions. The age of the horse (18 to 20 years old) is noteworthy: it was obviously very valued, because the owner would not part from it until his own death (Zinoviev 2008; 2011).

### Upper layers of graves: human burials

According to the stratigraphy of Groß Ottenhagen, the cremation graves of the upper layer were put in place immediately after the horse burials/sacrifices at the bottoms of the pits. Sometimes, human cremated bones merge partially with the lower layers of the burials, as well as some grave goods related to the human graves. Cremated remains of the deceased, mixed with charcoal, ash and fragments of artefacts used in the ritual, picked from the pyre, randomly filled the upper part of the burial pits. Despite the large number of cremated bones found in Groß Ottenhagen graves, the gender and the number of the deceased in each grave is determined only by the grave goods, due to the absence of anthropological research.

Large items like spears were intentionally placed in a special position in graves 103 and 108. On the other hand, most small objects, such as potsherds and bronze ornaments or pieces of them, were put into the graves, mixed with the bones, charcoal and ash gathered from the pyre. Therefore, fragments of a single bronze neck-ring and of a single bracelet found in various graves appear to be the result of the simultaneous cremation of the dead. According to the stratigraphy of the graves, it does not appear that fragments of the neck-ring and the bracelet were put there for a special purpose. The appearance of fragments of the same single artefact in multiple graves could be a

reflection of the 'Aschenplatz' phenomenon, when members of one community were buried within a short time in a limited space.

The complex of burial features 111 as an oval pit or 'grave' atop in an east-west orientation, and horse burial 107 below to the east stand in contrast to the cremation graves at Groß Ottenhagen. Feature 111 overlaps the earlier double layer grave 102, partially destroying its lower layer with a horse burial (Figs. 1; 8a). Grave 102 was dated to the period between the 11th and the beginning of the 13th century. Object 111 was covered by a massive elongated stone pavement. The last one refers to the Prussian inhumations of the 11th and 12th centuries, and of the Teutonic Order period, in some of which the bones are not preserved, because of the strong acidity or low calcification of the local soil. The east-west orientation of object 111 is comparable to Christian inhumations. Christian funeral traditions might have appeared in Prussia before the Baltic Crusade as influences from Polish Pomerania, Masovia or southern Scandinavia, Gotland, or even Kievan Rus'. Burial feature 111 corresponds to the 'Late Pagan' Prussian inhumation graves found in the area of cremation cemeteries in Sambia (Široukhov 2011, pp. 285–290).

Horse burial 107 is comparable by its inventory to the lower layer of grave 102. Judging by the stratigraphy of the supposed inhumation 111 and horse burial 107, the last one was erected later, probably as a horse burial/sacrifice to inhumation 111. No traces of a funeral pyre or cremation were found in the filling of burials 111 and 107. We are probably facing the remains of funerary practices established during the first millennium, which were preserved in Prussia until the German Crusades. The problem of the coexistence of traditional Prussian cremation graves from the 11th to the 13th centuries and inhumations of the Prussian Pre-Order deserves special study. The burial rite at Groß Ottenhagen is similar to the Sambian cemeteries of the period, which once again demonstrates the cultural similarity between historical Sambia and Natangia.

### Chronology

The relative chronology at Groß Ottenhagen is based on an analysis of the grave goods, the stratigraphy, and the spatial distribution of the graves. Initially, this part of the cemetery was dated by researchers to the 10th or 11th century (Ibsen and Skvortsov 2005, pp. 423, 434), based on the Prussian relative chronology established by V. Kulakov (1989, pp. 34–41; 1990, p. 15)<sup>91</sup>. Afterwards, it was dated to the 11th or 12th century (Široukhov 2011, p. 283). The

<sup>91</sup> The inaccuracy of the chronological constructions by V. Kulakov has been emphasised by various authors (see Skvortsov 2010, p. 182).

chronology of the latest phase of the cemetery is revised in this paper.

The dating of the Groß Ottenhagen graves is complicated, due to the modern damage to the cremation upper layers by agricultural activity. In spite of this, some artefacts allow us to date the graves to within a period of 100 to 150 years. First of all, these are stirrups and other pieces of equestrian equipment. The earliest artefacts found in the cemetery, dated to the 10th and 11th centuries, are the stirrup of Goßler type AIII.3 in grave 108, the Menzlin type spur stray find, and the piece of a presumably glass goblet in grave 100. The relative poverty of the Groß Ottenhagen graves and the lack of typical imports, especially from Old Rus', common to 11th-century Sambian cemeteries, alongside the absence of European coins from the 10th and 11th centuries, may be indirect evidence of their later origin.

The general chronological background of the 12 graves reviewed is the period between the middle of the 11th century and the turn of the 12th and 13th centuries. Stirrups of Goßlers types BII.a and DIII.1 in graves 101a–b, 102, 103, 105, 106 and 107, as well as a spearhead from grave 103, theoretically allow us to narrow down the dating from the first third of the 12th to the 13th century. The simplicity, geometricity and uniformity of some types of equestrian equipment in graves 100 and 103, together with some other finds, like the spearhead from grave 103, typical of Prussian graves from the 11th to the 14th centuries, and the fragments of spiral bronze bracelets, which were in use at Prussian sites until the 14th century, may also give a precise chronology of the considered area of the cemetery from the turn of the 11th and 12th centuries to the first quarter of the 13th century. The presence of fragments of supposedly one neck-ring in graves 101a, and 103 to 105, and one bracelet in graves 100, 101a and 108, gives a good opportunity for the synchronisation of dates. Grave 101a, in which a fragment of a neck-ring was detected together with a fragment of a bracelet, demonstrates that at least six burials were made simultaneously or within a short timespan. Some of these graves are also associated with other burials, especially graves 104 to 106 and 109, where stirrups of Goßler's later types BII.a and DIII.3, dating from the 12th to the turn of the 12th and 13th centuries, appear. In addition, graves 100, 102, 103 and 107b are linked by identical forms of horse harness: riding bits with flat zoomorphic cheek pieces in graves 100 and 103, and stirrups of later types like Goßler DIII.1 for graves 102, 103 and 107b. Horse burial 107 overlaps supposed inhumation 111, and is presumably the last uncovered burial complex at Groß Ottenhagen, which can be dated to the turn of the 12th and 13th centuries

According to the stratigraphy, all the upper layers of the graves were located approximately at the same ground level, sometimes overlapping each other. This means that

all the graves, with no exception, including supposed inhumation grave 111, are conjoined by a series of chronological and morphological features. This could stress the simultaneity of their construction. Ten human cremations accompanied by horse burials could be part of the funeral of one social group performed over several days; they could be the result of one relatively short event, like an armed conflict or a clash with an internal or external enemy. The burials of these individuals were made at the latest a few decades before the Teutonic Order came to Natangia. The supposed inhumation in grave 111 and horse burial 107 might be dated to the last phase of the Groß Ottenhagen chronology (but not at the same time).

Summing up the chronological review of Groß Ottenhagen, it should be stressed that the graves described here belong to the timespan between the turn of the 11th and 12th centuries and the first quarter of the 13th century, with the main stress on the 12th century (Fig. 11). Historically, it is the last phase of the 'autonomous' development of Prussian culture, characterised by a period of confrontation between the Prussian, Polish and Danish military elites, and a time of Prussian expansion into Poland. The presence of graves from the 10th and 11th centuries at Groß Ottenhagen is not denied, due to the presence of the earliest finds. To clarify this matter, AMS radiocarbon dating of the organic remains of all graves is obligatory.

### The social position and gender of the deceased

Imported goods from the 11th to the 13th centuries are widely known from Sambian cemeteries, for example, slate spindle whorls, 'Hanseatic' bronze bowls, arms of Rus' types, silver coins, and other goods from trade, like weights and balances, usually connected with a high social position, but they are absent at Groß Ottenhagen.

This could be related to either the later dating of Groß Ottenhagen burials, or to the lower social status of the deceased. However, the absence of imports, and the scarcity of ornaments and of richly decorated equestrian equipment, indicate the relative poverty of the population of Groß Ottenhagen, although fragments of a 'noble' glass vessel and a bronze bowl found in graves 100 and 108 are quite rare finds, even for rich Sambian cemeteries. A few ornaments were found mainly in small pieces, which may be explained by the funeral rite. But no fragments of pennanular brooches or other typical jewellery from the period are known from Groß Ottenhagen. Many of the artefacts found at Groß Ottenhagen are simplified replicas of earlier and more expensive richly decorated Sambian prototypes. Some archaism may also be seen in the use of some earlier types of horse harness. Of course, these interpretations are based on an excavated area with a small

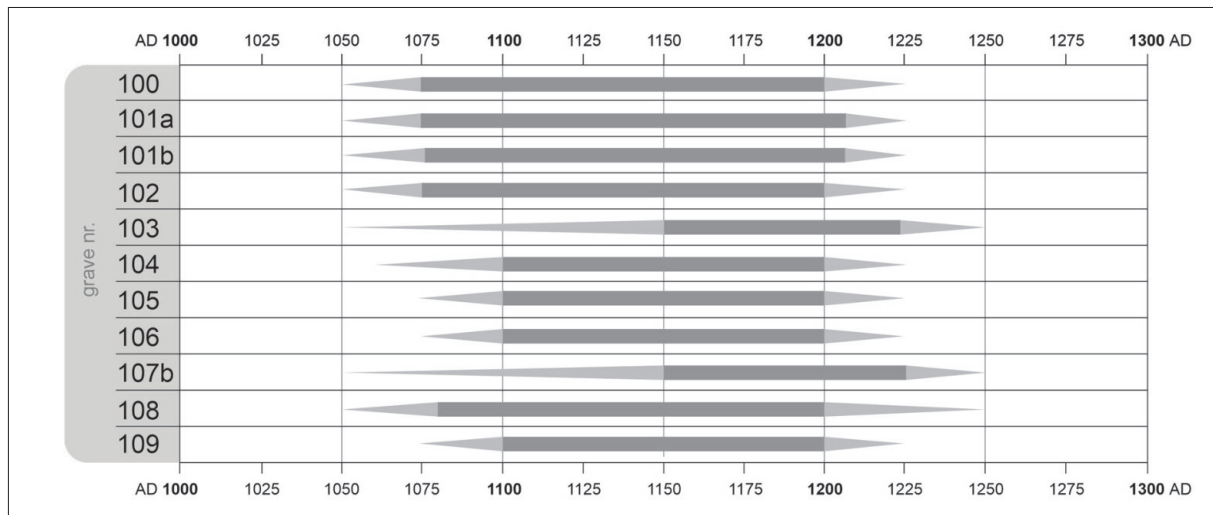


Figure 11. Relative chronology of Early Medieval Groß Ottenhagen graves (drawing by R. Shiroukhov and T. Ibsen).

number of graves, only 11. Future research could show a completely different social situation.

In the course of writing this article, in 2016 the anthropological study of cremated bone remains from graves 103 and 108 at Groß Ottenhagen was carried out by Ekaterina Kleshchenko at the Institute of Archaeology of the Russian Academy of Sciences. In both cases, the bone remains in each of these burials belonged to one adult individual (male?), about 40 years old. Both burials are characterised by the individuality of the burial (the presence of the remains of one person in the grave), and the partial deposition of the remains (the burial of a small part of the bones collected from the funeral pyre after the cremation) (Kleshchenko 2017, pp. 150–151). It is noteworthy that it was in burials 103 and 108 that weapons, spearheads, were found, which, along with anthropological data, may clarify their gender (male riders). The gender identification of other Groß Ottenhagen graves is made on the basis of grave goods and burial features. It is important that no ‘single layer’ cremation grave was found at Groß Ottenhagen. All human cremation graves were supported there by horse burials/sacrifices, usually referring to men. However, arms appeared in only two graves mentioned. Comparing the situation at Groß Ottenhagen with Sambia, it should be noted that about a third of those buried with horses in Sambian cemeteries were equipped with weapons<sup>92</sup>. Who was buried in these ‘horseman’ graves without arms? Less influential community members not associated with warrior activities, or individuals who had no right to bear arms, such as women or adolescents?

<sup>92</sup> The number of ‘double layer’ cremations without arms at five recently excavated Sambian cemeteries varies from 16.6% at Alejka-3 to 90% at Kholmy cemetery, which gives 64% of unarmed cremation graves supported by horse burials on average together with the Gerojskoje-5, Kovrovo and Povarovka cemeteries (Široukhov 2012, pp. 94–96, Table 20).

Despite the difficulties of gender identification, on the basis of the grave goods and other non-anthropological features (Kurila 2009, p. 56), it can still be assumed that the individual buried in grave 100, alongside 103 and 108, also accompanied by a horse with a relatively wealthy outfit, represents professional male riders. Graves 101a, 102 and 104 represent incomplete sets of equestrian equipment. The inventory of other horse burials is poor. Because the graves at Groß Ottenhagen are in general closely associated with each other, we can assume that these ‘incomplete’ burials are related to graves 100, 103 and 108. Thus, Groß Ottenhagen cremation graves accompanied by horses can be attributed to armed commoners rather than to the wealthy members of Prussian military elites.

## Conclusions

The grave goods from the recently excavated graves at Groß Ottenhagen allow the first contextual analysis of a Late Iron Age Natangian site since the investigation of Zophen cemetery in the late 1920s. With short gaps in the Late Roman Iron Age and the Early Medieval period in the 8th and 9th centuries, the cemetery shows continuous functioning for about 1,000 years. It is a typical expression of the concentrated archaeological landscape of the south-east Baltic region. Groß Ottenhagen is the first example of international scientific cooperation in the Kaliningrad region of Russia, combining prewar and post-Soviet research experience.

Most of the grave goods, especially the equestrian equipment, are close analogues to Sambian examples and their prototypes, as well as being indirect analogues with cemeteries in central Lithuania and some Scalvian sites. The interaction of Sambian and Natangian cultures with central Lithuania is proven by the presence of similar equestrian

equipment and burial rites, which points to the social and ritual importance of horses in both regions.

Despite the poor preservation of the upper layers of the Groß Ottenhagen graves, most of the sets of artefacts do not differ much from averagely equipped 'double layer' cremations of Sambian cemeteries from the period. The presence of fragments of a neck-ring and a spiral bracelet, alongside ornamented iron stirrups, brings Groß Ottenhagen closer to the circle of East Sambian cemeteries of the lower reaches of the Deima.

The burial rites at Groß Ottenhagen are identical to Sambian examples, which proves the closeness of the archaeological cultures of Sambia and Natangia. Both areas are characterised by human cremation graves, accompanied by horse burials/sacrifices, elements of 'Aschenplätze', and occasional inhumation graves in an area of cremation cemeteries.

The typo-chronology of Groß Ottenhagen based on the grave goods and the stratigraphic features refers to a period between the end of the 11th and the beginning of the 13th century, with the emphasis on the 12th century.

The Groß Ottenhagen materials show a connection with central Lithuanian cemeteries. This points towards a trade-and-contact route related to the biggest rivers in the region, the Neman and the Pregel. Goods imported from Old Rus' are absent at Groß Ottenhagen and the whole region for the moment, which could indicate that the Neman trade route could have played a minor role in trade with the east compared to the Vistula and Daugava routes.

This fact, together with the relative poverty at Groß Ottenhagen, expressed by the poorly equipped graves, allows for the interpretation of a peripheral group of the late stage of Sambian-Natangian Prussian culture. The Groß Ottenhagen graves belong to armed commoners, non-wealthy members of the Prussian equestrian class.

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### Abbreviations

Arch. Lituana – Archaeologia Lituana

IA RAS – Institute of Archaeology of the Russian Academy of Sciences.

KGOM – Kaliningrad Regional Museum of History and Art.

Lietuvos arch. – Lietuvos archeologija. Vilnius (since 1979)

LIIR Fototeka (Archeologija) – Lithuanian Institute of History Photograph Library (Archaeology).

MVF PM – Prussia-Archive in the Museum for Pre- and Early History in Berlin.

RGA – Rudolf Grenz Archive, Schloss Gottorf, Schleswig.

TIM – Trakų istorijos muziejus (Trakai History Museum)

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## ANKSTYVŲJŲ VIDURAMŽIŲ GROSS OTTENHAGEN (BEREZOVKA) KAPAI. PAKELIUI IŠ SEMBOS Į NEMUNO<sup>93</sup> VIDURUPĮ

ROMAN SHIROUKHOV,  
KONSTANTIN SKVORTSOV, TIMO IBSEN

### Santrauka

2003–2004 m. vykę kapinyno Groß Ottenhagen (Berezovka) archeologiniai tyrinėjimai yra pirmasis Vokietijos ir Rusijos archeologų mokslinio bendradarbiavimo Karaliaučiaus krašte (dab. Kaliningrado sritis) pavyzdys. Jų metu, taikant šiuolaikinius archeologinių tyrimų metodus, buvo surinkti naujausi ir reikšmingi duomenys apie šį paminklą, esantį istorinės Notangos teritorijoje. Tyrinėta kapinyno dalis priklauso vėlyviausiam Sembos-Notangos regiono prūsų kultūros vystymosi laikotarpiui. Iki tol apie Groß Ottenhagen žinota tik iš Rytų Prūsijos archeologų tyrimų, vykdytų iki 1945 m.

Tyrinėtas kapinynas buvo naudojamas per 1 000 metų. Pagrindinė įkapių dalis turi artimas analogijas, žinomas iš kitų Sembos pusiasalio kapinynų medžiagos. Atitikmenų iš dalies žinoma Vidurio ir Pietvakarių Lietuvos (Skalva)

kapinynuose. Sembos ir Notangos archeologinių kultūrų sąveika su Vidurio Lietuvos laidojimo paminklais atskleidžia per panašius papročius, mirusiųosius laidojant su žirgais ir jų aprangos dalimis. Tyrinėtame paminkle rasta bronzinė antkaklė ir įvijinė apyrankė šalia dekoruotų balnų kilpų rodo artimas sąsajas su Deimos žemupio kapinynų medžiaga.

Iš lyginamosios artefaktų analizės galima spręsti, kad Groß Ottenhagen laidojimo papročiai buvo identiškai Sembos kapinynams. Abiem teritorijoms būdingi degintiniai kapai su žirgų palaidojimais (aukomis), „Aschenplätze“ laidosenos atributai ir degintiniuose kapinynuose aptinkami griautiniai kapai. Remiantis įkapių analize ir stratigrafija, Groß Ottenhagen kapinyno XI–XIII a. chronologijoje galima būtų akcentuoti XII a.

Dalies Groß Ottenhagen kapinyno radinių panašumas į Vidurio Lietuvos kapinynų medžiagą sieja šią vietovę su Nemuno-Priegliaus prekybos keliu. Visgi atsižvelgiant, kad tyrinėtame kapinyne kol kas nėra aptikta importuotų prekių iš senosios Rusijos, tikėtina, kad Nemuno prekybos kelias turėjo mažesnę reikšmę Rytų prekyboje, palyginti su Vyslos ir Dauguvos kryptimis. Importuotų ir brangių įkapių Groß Ottenhagen stoka ir santykinai skurdžios tyrinėtų mirusiųjų įkapės šį paminklą leistų vertinti kaip periferinį vėlyvosios prūsų kultūros laidojimo paminklą.

<sup>93</sup> Originale upė vadinama Niemen.