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

Yuryi V. Boltryk
Marcin Ignaczak
Oksana Lifantii
Marcin Ławniczak
Łukasz Olędzki
Oleksandr Shelekhin
BALTIC-PONTIC STUDIES
61-614 Poznań (Poland)
Umultowska 89 d
Tel. 618291418
E-mail: antokol@amu.edu.pl

EDITOR
Aleksander Kośko

CO-EDITOR
Marzena Szmyt

EDITORS OF VOLUME
Yuryi V. Boltryk
Marcin Ignaczak

EDITORIAL COMMITTEE
Sophia S. Berezanskaya (Kiev), Lucyna Domańska (Łódź), Elena G. Kalechyts (Minsk), Viktor I. Klochko (Kiev), Mykola N. Kryvaltsevich (Minsk), Roman Litvinenko (Donieck), Jan Machnik (Kraków), Przemysław Makarowicz (Poznań), Vitaliy V. Otroshchenko (Kiev), Marzena Szmyt (Poznań), Petro Tolochko (Kiev)

SECRETARIES OF VOLUME
Vitlyi Zhygola,
Marcin Ławniczak
Karolina Harat,
Danuta Żurkiewicz

ADAM MICKIEWICZ UNIVERSITY, POZNAŃ
INSTITUTE OF EASTERN STUDIES
INSTITUTE OF ARCHAEOLOGY
Poznań 2016
ISSN 1231-0344

Vol. 1: Weapons of the Tribes of the Northern Pontic Zone in the 16th–10th Centuries BC., by Viktor I. Klochko.
Vol. 5: Beyond Balkanization, edited by Lucyna Domańska, Ken Jacobs.
Vol. 8: Between West And East People of The Globular Amphora Culture in Eastern Europe: 2950–2350 BC, by Marzena Szmyt.
Vol. 9: The Western Border Area of the Tripolye Culture, edited by Aleksander Kośko.
Vol. 11: Fluted Maces in the System of Long-Distance Exchange Trails of the Bronze Age: 2350–800 BC, edited by Aleksander Kośko.
Vol. 14: Routes between the Seas: Baltic-Bug-Boh-Pont from the 3rd to the Middle of the 1st Millennium BC, edited by Aleksander Kośko and Viktor I. Klochko.

Orders regarding Baltic-Pontic Studies should be addressed directly to the Editorial Office (BPS, Institute of Prehistory, Umultowska 89D, 61-614 Poznań, Poland).
E-mail: iplib@amu.edu.pl; antokol@amu.edu.pl

Moreover, we are pleased to inform that BPS volumes currently out of print (1-20) are available online at the Adam Mickiewicz University Repository (AMUR): repozytorium.amu.edu.pl
Starting with volume 20, the BPS is also available on the De Gruyter Open platform.

The project was funded with measures National Science Center awarded by decision number DEC-2012/07/B/HS3/01917.
UKRAINIAN FORTRESSES
A STUDY OF A STRONGHOLDS SYSTEM
FROM THE EARLY IRON AGE IN PODOLIA

Yuriy Boltryk
Marcin Ignaczak
Oksana Lifantii
Marcin Ławniczak
Łukasz Olędzki
Oleksandr Shelekhan

BALTIC-PONTIC STUDIES
VOLUME 21 • 2016
CONTENTS

EDITOR’S FOREWORD ........................................................................................................................... 4
EDITORIAL COMMENT .......................................................................................................................... 6

PART 1 – THE “UKRAINIAN FORTRESSES” IN THE NORTH PONTIC LANDSCAPE OF THE IRON AGE... 7
Marcin Ławniczak, Marcin Ignaczak, MACROSPATIAL ANALYSIS OF EARLY SCYTHIAN FORTIFIED SETTLEMENTS IN THE RIGHT-BANK OF UKRAINE .......... 7
Marcin Ławniczak, MICROSPATIAL ANALYSIS OF SELECTED EARLY SCYTHIAN FORTIFIED SETTLEMENTS IN PODOLIA ................................................................. 27
Marcin Ławniczak, PHOTOGRAMMETRY-BASED SPATIAL ANALYSES OF SETTLEMENTS IN SEVERYNIVKA AND NEMYRIV ....................................................... 54

PART 2 – THE HILLFORT IN SEVERYNIVKA, ZHMERYNKA REGION, VINYTSIA OBLAST: RESEARCH RESULTS FROM 2009-2015 .............................................................. 69
Oleksandr Shelekhanch, Oksana Lifantii, Yuriy Boltryk, Marcin Ignaczak, DEFENSIVE STRUCTURES OF SEVERYNIVKA HILLFORT (EXCAVATIONS OF 2009 AND 2012-2013) ..................................................................................... 69
Oleksandr Shelekhanch, Oksana Lifantii, Yuriy Boltryk, Marcin Ignaczak, RESEARCH IN THE CENTRAL PART OF SEVERYNIVKA HILLFORT (QUADRATS F80, F90, G71, G81) .......................................................................................................................... 91
Oleksandr Shelekhanch, Oksana Lifantii, THE ELEMENTS OF THE HORSE BRIDLE FROM THE SEVEINYIVKA HILLFORT ............................................................... 219
Oksana Lifantii, Oleksandr Shelekhanch, METAL ARTEFACTS FROM THE SEVERYNIVKA HILLFORT .............................................................................................. 255

PART 3 – CONCLUSIONS ...................................................................................................................... 277
Marcin Ignaczak, Yuriy Boltryk, Oleksandr Shelekhanch, Oksana Lifantii, Łukasz Ołędzki, THE FORTRESSES OF UKRAINE. THE BUILDERS OF EARLY IRON AGE STRONGHOLDS IN PODOLIA ................................................................. 277

LIST OF AUTHORS ............................................................................................................................. 291
Editor's Foreword

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

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

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

In addition to excavations that were aimed at examining the fortifications of this diagnostic fortified settlement and producing archaeological and bioarchaeological sources, this programme included also an innovative (in terms of its methodology) geospatial prospection. Providing the first summary of the issue of the
fortresses of Podolia, this collection of papers offers a prologue for further research, mainly into the way these Late Bronze Age/Early Iron Age hillforts of the forest-steppe zone functioned in the settlement space.

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

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

1. All dates in the B-PS are calibrated [BC; see: Radiocarbon vol. 28, 1986, and the next volumes]. Deviations from this rule will be point out in notes [bc].

2. The names of the archaeological cultures and sites are standarized to the English literature on the subject (e.g. M. Gimbutas, J.P. Mallory). In the case of a new term, the author’s original name has been retained.

3. The spelling of names of localities having the rank of administrative centres follows official, state, English language cartographic publications (e.g. *Ukraine*, scale 1:2 000 000, Kyiv: Mapa LTD, edition of 1996; *Rëspublika BELARUS’*, REVIEW-TOPOGRAPHIC MAP, scale 1:1 000 000, Minsk: *BYELORUSSIAN CARTOGRAPHIC AN GEODETIC ENTERPISE*, edition 1993).
MACROSPATIAL ANALYSIS OF EARLY SCYTHIAN FORTIFIED SETTLEMENTS IN THE RIGHT-BANK OF UKRAINE

ABSTRACT

The macrospatial analysis of fortified settlements in the right-bank of Ukraine allows for observations of a few regularities related to the location of sites along the rivers and watersheds. ‘Land’ settlements, e.g. Yakushyntsi or Mlynok, may have connected sites located along large watercourses, e.g. Trakhtemyriv, Rudkivtsi, which specialised in trade with the Greeks.

Key words: macrospatial analysis, fortified settlements, Podolia, Scythian time, Early Iron Age

INTRODUCTION

In total 31 early Scythian fortified settlements were recorded in the right-bank of Ukraine (Fig. 1; Tab. 1). Of all the presented macro-scale spatial demarcation of sites, the most useful systematics is the one developed by Y. Boltryk [1993], in which it was proposed to connect settlements into groups formed by ‘political alliances’. These alliances were formed between communities inhabiting settlements in order to exchange information about possible dangers and to aid each other in
defensive efforts. Y. Boltryk proposed five such settlement concentrations: Pastyr-ske, Tiasmin, Kaniv-Trakhtemyriv, Khotiv-Khodosiv and Zhurzhentsi-Medvyn-Komariv. As the list of sites is incomplete, the initial proposition was further expanded, in order to implement concentrations from Nemyriv, Severynivka and Ilintsi in eastern Podolia.
Due to the increasing data, this initial division requires further development, modifications and detailed descriptions. For the purpose of the analysis, the author assumed that every designated group should comprise a single ‘gigantic’ site (with the size exceeding 100 ha), which is treated as an assumed ‘capital city’ – central settlement. The exception was the settlement in Pastyrske, which was to be surrounded by a rampart connecting all sites into one large concentration. After the analysis of the map illustrating the systematic of Y. Boltryk (cf. Fig. 2) it is clear

Fig. 3. Representations of sites in relation to Dnieper, Southern Bug and Dniester. Source: Author’s work

Fig. 4. Visualisation of land connections based on 35 km buffer-zones. ‘X’ marks the area, which should have a site sealing the assumed communication network. The farthest south western point is Rukhotyn, which lacks a connection with any of the settlements in the 70 km radius. Source: Author’s work
Fig. 5. Groups of sites associated with the Dnieper with highlighted ‘capital cities’. Source: Author’s work

Fig. 6. Site distribution of sites of the Motronin sub-group. Source: Author’s work
that the size of the Podolia group is disproportionate in relation to other groups covering the area that connect all of the groups of the right-bank Ukraine. Remarkably, all fortified settlements were located in the vicinity of three large rivers: Dnieper, Southern Bug and Dniester, or their tributaries (cf. Fig. 3). Despite this, all groups display strong connections with the Dnieper River, apart from the Podolia group, which was located in the Southern Bug and Dniester catchment area. The distribution of particular fortified sites in this group shows that the sites are located over the Dniester along other rivers, contrary to the sites found in the Southern Bug area. In the remaining cases, the location of the fortified sites was determined by watersheds not by access to a nearby river. Such a thesis would imply their relation with land trails. It demonstrates, that there is no single factor that determined the location of the sites.

This argumentation proves, that the initial systematics of Y. Boltryk requires modifications, which would include an overriding class of settlement concentration (hereinafter referred to the ‘group’). Its definition would be determined by a geographic factor – namely the vicinity of a river – and the internal division would use the existing model (identifying sub-groups). This solution would result in the division of the Podolia group into Dniester and Southern Bug groups with the remaining settlements being incorporated into the Dnieper group (Fig. 3).
The remaining part of the text will provide a detailed description of all groups, including the possible functions of all the settlements. It was assumed that the standard function of the settlements was to protect the population and to serve as a trade and political centre oriented towards the production and acquisition of goods (i.a. metallurgy, antler and bone processing, pottery manufacturing, textile production, agriculture, husbandry).

Location of the site was recognised as the specialising criterion, since the sites located along water trails (mainly Dnieper and Dniester, maybe partially Southern Bug) were connected with Greek colonies, while the sites located along land trails were using other means of communication between the sites within a particular structure (for nomads – Scythians). In addition, an important element of a site location was the influence and military control over the goods distributed along trails.

By using the ‘Buffer’ tool in ArcMap software a 35 km long buffer zone was drawn around the settlements (Fig. 4). As a result, a network of fortified settlements set 70 km apart was designated. In order to travel such a distance, a slightly laden rider (e.g. a Scythian) would need a single day, while a cart or a walker would need two days. The two locations are: exceptional area marked on the map.
as X (Fig. 4), in which (or its direct vicinity) no settlement dated to the Scythian period was found (although its remains might have been destroyed or there was a smaller, open settlement) and the second location the Rukhotyn in the west (Fig. 4). What makes it unique is its location on the margin of the area.

1. **THE DNIEPER GROUP OF THE EARLY SCYTHIAN FORTIFIED SETTLEMENTS**

Considering the size of the fortified settlements, it is safe to assume that the majority of the population inhabiting it was living in the vicinity of Dnieper (i.e. the Khodosivka Welyke – 2000 ha) and to the east of it (i.e. the Bilsk settlement – 4500 ha) [Lawnickzak 2013]. The majority of them probably served as a trade post collecting neighbouring resources (i.e. wood, wheat, or cattle), which would be transported by tributaries to the Dnieper River from where a developed river
transport would ship them to the Greek colonies, e.g. Borysthenes (the Greek name of the Dnieper River), located at the Black Sea coast. According to the outlined proposition, this group comprises five sub-groups, which are named after the 'capital' settlement, i.e. Motronin, Pastyrske, Zhurzhynstoi, Trakhtemyriv, and Khodosivka (Fig. 5).
1.1. THE MOTRONIN SUB-GROUP

This concentration comprises of three settlements and of a few flat settlements. These settlements are the farthest ones in the East of all the sites found on the right-bank of the Dnieper River. The main settlement is Motronin, which covers an area of 200 ha, with the remaining two being Chubivka and Pleskachivka. They are all located a few kilometres away from the Dnieper River (Fig. 6). The Motronin settlement is the furthest to the South, located on the Kholodnyi Plateau in the centre of the Kholodnyi Yar area.

1.2. THE PASTYRSKE SUB-GROUP

This sub-group comprises of four settlements (Pastyrske, Makiivka, Budianske, Sharpivsk), located close to each other (Fig. 7). The greatest distance between the settlements is 9 km (Pastyrske – Makiivka). There is a thesis, that during their existence there was a rampart surrounding four settlements. This is supposed to explain the absence of a gigantic site exceeding 100 ha, since the Pastyrske site covers ‘only’ 25 ha [Boltryk 1993].

1.3. THE ZHURZHYNTSI SUB-GROUP

This concentration comprised of four fortified sites: Zhurzhyntsi, Komariv, Medvyn and Busheve (Fig. 8). The largest one is Zhurzhyntsi which is over 700 ha. The group is located between the rivers Ros and Hnylyi Tikych, on the watershed between Dnieper and Southern Bug (Fig. 9) [Lawniczak 2013: 52]. Such a distance between the main watercourses (Dnieper and Southern Bug) and the location on the watershed suggests, that this settlement is connected with land trails. Through the analysis of land connections (Fig. 4) it is possible to treat it as a link between concentrations in the south-east (Motronin, Pastyrske), east (Trakhtemyriv) and north (Khodosivka) of the Dnieper River drainage. This thesis is supported by the far north location of the settlement in Busheve (31 km from the closest in Medvyn), which closed the trade routes.
1.4. THE TRAKHTEMYRIV SUB-GROUP

This sub-group comprises of four fortified sites (Trakhtemyriv, Hryhorivka, Kaniv I and Kaniv II) and is located on a massive elevation on the Dnieper River curve, referred to in the literature as the promontory (partially also in its vicinity; Fig. 10). The name of the concentration comes from the site covering an area of 630 ha and its location on a tall steep, which goes down to the Dnieper River itself. The positioning of this place, in the vicinity of a river may suggest a strong relationship of the group with the assumed water trails, and it might be further supported by the distance from main watersheds and the location on the side of the network of connections presented in the beginning of this chapter.

1.5. THE KHODOSIVKA SUB-GROUP

This concentration consists of five fortified settlements (Khodosivka Welyke, Khodosivka Kruhle, Khotiv, Hrubske and Mlynok), is located the farthest to the north of all of the described sub-groups (Fig. 5). Khodosivka Welyke is the largest settlement located in the right-bank Ukraine, with a size of approx. 2000 ha and is located on the outskirts of present-day Kyiv, which stresses the importance of the area for locating large-size settlements. Two further settlements (Khodo-
sivka Kruhle and Khotiv) were located within a short distance (a few kilometres) from the central one. The three settlements were most likely connected with the Dnieper River and used it for communication with other sites (Fig. 11). On the opposite side, there are two sites of the group located to the west (Hrubske and Mlynok), which might have been connected with the land trail joining all the Dnieper River sites with the Southern Bug and Dniester groups (Fig. 4).

2. THE DNIESTER GROUP OF EARLY SCYTHIAN FORTIFIED SETTLEMENTS

Judging by the arrangement of sites in the vicinity of Dniester, its local settlements were of a similar function to the Dnieper River ones but of adequate proportions (smaller number and size of settlements, as well as a smaller river). In this case the main colonies associated with the trail were Tiras (from the Greek Dniester) and Nikonion located at the Dniester estuary (Fig. 1). Probably their role was not limited to trade posts but also meant the responsibility for controlling the river trail and participation in contacts between Greeks and the communities inhabiting the western areas such as the Vekerzug culture located in the Tisza drainage [Chochorowski 2014]. In total, the Dniester group included seven settlements: Hryhorivka, Lomaziv, Vysheholchedaiv, Nyzhchyiolchedaiv, Matsiorsk, Rudkivtsi and Rukhotyn. Remarkably, there is no dominating centre, that would exceed the others in size. Nearly all sites were located on the left (northern) bank of
Dniester, which probably indicates the neutral border of Scythians and the lands under their control. The exception is Rukhotyn, located in the far west. All sites of this group are located within a small distance from Dniester (max. 24 km) and its tributaries (Fig. 12).

### 3. THE SOUTHERN BUG GROUP OF EARLY SCYTHIAN FORTIFIED SETTLEMENTS

In comparison to two other concentrations (the Dnieper and Dniester ones), the Southern Bug group is the one most strongly associated with land (Fig. 13). Out of four constituting sites (Pereorky, Yakushyntsi, Severynivka, Nemyriv), three are located on watersheds and may have contributed to the mainland communication network between Dnieper and Dniester (Fig. 4). The exception is Nemyriv, which is in the lower part of Southern Bug, on the side of the assumed land trail. Due to its size (125 ha) it contrasts strongly with other Podolian sites, being the only large settlement in the area.
3.1. THE PEREORKY, YAKUSHYNTSI, AND SEVERYNIVKA
FORTIFIED SETTLEMENTS

Pereorky, Yakushyntsi, and Severynivka are the three settlements strongly associated with watersheds. The first two are in close vicinity of each other (4 km) on a plateau located on the right-bank of Southern Bug (Fig. 13). On the other side of the river, there are, two smaller watercourses: Postolova (in the north) and Desna (in the south) 18 km apart from each. Perhaps this watercourse served as a land trail leading from the Dnieper River (through fortified settlements in Hrubsko and Mlynok) to the Dniester (Fig. 14), which contributed to their significance for the previously highlighted network of land connections (Fig. 4). The area may also served as a crossing of the Southern Bug, which may have been protected from the south-west by two fortified settlements, forming a gateway towards the ford and an entrance on the trail. This thesis is supported by strongly fortified settlement in Yakushyntsi. 35 km away from the south-east of the site in Yakushyntsi, also on the right tributary of Southern Bug is Severynivka. The fortified settlement is located at the intersection of two vital watersheds, the first, aligned along the north-eastern/south-western axis, serves as the aforementioned connection for structures located over the Dnieper with the sites over the Dniester, and the second one starts at the Black Sea, aligned along the north-east/south-west axis, between the catchment area of Dniester and Southern Bug (Fig. 13). The thesis regarding large land movement around the site is supported by finds recovered during archaeological research conducted by a joint Polish-Ukrainian expedition between 2009 and 2015. The registered trails of local antler and bone processing, as well as numerous fragments of horse cheek pieces (finished, unfinished, or repaired). They prove that workshop producing objects used for horse-riding existed there. It can be assumed that it was often used for repairing or replacing horse-riding equipment, which would further suggest that the settlement was involved in servicing land trails.

3.2. NEMYRIV

Nemyriv is clearly the largest and most eastward located fortified settlement of Podolia. It is the single located on the left Southern Bug bank, away from the largest watersheds in the area, hence way from the mainland trails (Fig. 13). The size of the settlements, its seclusion and location in the lower part of the river, in relation to the rest of the group, as well as the large number of Greek amphorae and other
Hellenic imports found [Smirnova 1996] indicate the openness of the settlement towards trade with the ancient world. The lack of competitive sites of similar sizes might suggest that the area within the influence zone was extremely extensive. The interpretative challenge is imposed by the present-day character of the Southern Bug, which can be sailed only up to 150 km from the estuary, while the distance from Nemyriv measures approx. 400 km. It remains plausible that due to a different climate, the water levels in the period from the 7th to 5th century BC were sufficient for sailing the Southern Bug yet this hypothesis needs to be verified.

**CONCLUSIONS**

The macrospatial analysis of fortified settlements in the right-bank of Ukraine allows observation of a few regularities related to the location of sites along the rivers and watersheds. ‘Land’ settlements, e.g. Yakushyntsi or Mlynok, which may have connected sites located along large watercourses, e.g. Trakhtemyriv, Rud-kivtsi, specialised in trade with the Greeks. The initial results of the archaeological research show that some of the sites located near the rivers (Nemyriv, Motronin) have a higher frequency of Greek imports than fortified settlements located on the watersheds (Severynivka), which confirms the abovementioned thesis. The entire system and network of connections, provide insight into some certain, perhaps even planned actions, which cannot be narrowed down to coincidence.

**Table 1**

<table>
<thead>
<tr>
<th>Name (Ukrainian name)</th>
<th>Group (Sub-group)</th>
<th>Size</th>
<th>Location</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budianske (Будянське городище)</td>
<td>Dnieper (Pastyrske)</td>
<td>N/A</td>
<td>Cherkasy Oblast, Smila Raion</td>
<td>Boltryk 1993</td>
</tr>
<tr>
<td>Busheve (Бушевське городище)</td>
<td>Dnieper (Zhurzhynsi)</td>
<td>4 ha</td>
<td>Kyiv Oblast, Rokytne Raion</td>
<td>uk.wikipedia.org/Wiki/Бушевське_городище. 20.06.2013</td>
</tr>
<tr>
<td>Chubivka (Чубівське городище)</td>
<td>Dnieper (Motronin)</td>
<td>N/A</td>
<td>Cherkasy Oblast, Cherkasy Raion</td>
<td>Boltryk 1993</td>
</tr>
<tr>
<td>Name (Ukrainian name)</td>
<td>Group (Sub-group)</td>
<td>Size</td>
<td>Location</td>
<td>Reference</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------------------</td>
<td>------</td>
<td>----------</td>
<td>-----------</td>
</tr>
<tr>
<td>Hrubské (Грубське городище)</td>
<td>Dnieper (Khodosivka)</td>
<td>N/A</td>
<td>Zhytomyr Oblast, Korostyshiv Raion</td>
<td>Moruzhenko 1969</td>
</tr>
<tr>
<td>Hryhorivka I (Григорівське городище)</td>
<td>Dniester</td>
<td>10 ha</td>
<td>Vinnytsia Oblast, Mohyliv Raion</td>
<td>Moruzhenko 1969</td>
</tr>
<tr>
<td>Hryhorivka II (Григорівське городище)</td>
<td>Dnieper (Trakhtemyriv)</td>
<td>N/A</td>
<td>Cherkasy Oblast, Kaniv Raion</td>
<td>Boltryk 1993</td>
</tr>
<tr>
<td>Yakushyntsi (Якушинці)</td>
<td>Southern Bug</td>
<td>12.5 ha</td>
<td>Vinnytsia Oblast, Vinnytsia Raion</td>
<td>Moruzhenko 1969</td>
</tr>
<tr>
<td>Kaniv I (Канівське городище)</td>
<td>Dnieper (Trakhtemyriv)</td>
<td>N/A</td>
<td>Cherkasy Oblast, Kaniv Raion</td>
<td>Boltryk 1993</td>
</tr>
<tr>
<td>Kaniv II (Канівське городище)</td>
<td>Dnieper (Trakhtemyriv)</td>
<td>N/A</td>
<td>Cherkasy Oblast, Kaniv Raion</td>
<td>Boltryk 1993</td>
</tr>
<tr>
<td>Khodosivka Kruhle (Ходосівське Кругле городище)</td>
<td>Dnieper (Khodosivka)</td>
<td>1 ha</td>
<td>Kyiv Oblast, Kyiv-Sviatoshyn Raion</td>
<td>Hutsal 2000</td>
</tr>
<tr>
<td>Khodosivka Welyke (Ходосівське Вельке городище)</td>
<td>Dnieper (Khodosivka)</td>
<td>over 2000 ha</td>
<td>Kyiv Oblast, Kyiv-Sviatoshyn Raion</td>
<td>Hutsal 2000</td>
</tr>
<tr>
<td>Khotiv (Хотівське городище)</td>
<td>Dnieper (Khodosivka)</td>
<td>31 ha</td>
<td>Kyiv Oblast, Kyiv-Sviatoshyn Raion</td>
<td>Pokrovskaya 1952</td>
</tr>
<tr>
<td>Komariv (Комарівське городище)</td>
<td>Dnieper (Zhurzhyns'kyi)</td>
<td>N/A</td>
<td>Cherkasy Oblast, Kaniv Raion</td>
<td>Boltryk 1993</td>
</tr>
<tr>
<td>Lomaziv (Ломазівське городище)</td>
<td>Dniester</td>
<td>N/A</td>
<td>Vinnytsia Oblast, Mohyliv Raion</td>
<td>Artamonov 1946</td>
</tr>
<tr>
<td>Name (Ukrainian name)</td>
<td>Group (Sub-group)</td>
<td>Size</td>
<td>Location</td>
<td>Reference</td>
</tr>
<tr>
<td>----------------------</td>
<td>------------------</td>
<td>------</td>
<td>----------</td>
<td>-----------</td>
</tr>
<tr>
<td>Matsiorsk (Маціорське городище)</td>
<td>Dniester</td>
<td>N/A</td>
<td>Khmelnytskyi Oblast, Nova Ushytsia Raion</td>
<td>Moruzhenko 1969</td>
</tr>
<tr>
<td>Makiivka (Макіїве городище)</td>
<td>Dnieper (Pastyske)</td>
<td>N/A</td>
<td>Cherkasy Oblast, Smila Raion</td>
<td>Boltryk 1993</td>
</tr>
<tr>
<td>Medvyn (Медвін)</td>
<td>Dnieper (Zhurzhynske)</td>
<td>N/A</td>
<td>Kyiv Oblast, Bohuslav Raion</td>
<td>Boltryk 1993</td>
</tr>
<tr>
<td>Mlynok (Млинок)</td>
<td>Dnieper (Khodosivka)</td>
<td>50 ha</td>
<td>Kyiv Oblast, Fastiv Raion</td>
<td>Daragan 2010</td>
</tr>
<tr>
<td>Motronin (Мотронінське городище)</td>
<td>Dnieper (Motronin)</td>
<td>200 ha</td>
<td>Cherkasy Oblast, Chyhyryn Raion</td>
<td>Daragan 2010</td>
</tr>
<tr>
<td>Nemyriv (Немирівське городище)</td>
<td>Southern Bug</td>
<td>125 ha</td>
<td>Vinnytsia Oblast, Nemyriv Raion</td>
<td>Daragan 2010</td>
</tr>
<tr>
<td>Nyzhchyiolchedaiv (Нижчий Ольчедаїв)</td>
<td>Dniester</td>
<td>N/A</td>
<td>Vinnytsia Oblast, Mohyliv Raion</td>
<td>Artamonov 1946</td>
</tr>
<tr>
<td>Pastyske (Пастирське городище)</td>
<td>Dnieper (Pastyske)</td>
<td>25 ha</td>
<td>Cherkasy Oblast, Smila Raion</td>
<td>Yakovenko 1968</td>
</tr>
<tr>
<td>Pereorky (Переорки)</td>
<td>Southern Bug</td>
<td>N/A</td>
<td>Vinnytsia Oblast, Vinnytsia Raion</td>
<td>Moruzhenko 1969</td>
</tr>
<tr>
<td>Pleskachivka (Плескачевське городище)</td>
<td>Dnieper (Motronin)</td>
<td>N/A</td>
<td>Cherkasy Oblast, Smila Raion</td>
<td>Boltryk 1993</td>
</tr>
<tr>
<td>Rudkivtsi (Рудковецьке городище)</td>
<td>Dniester</td>
<td>40.5 ha</td>
<td>Khmelnytskyi Oblast, Nova Ushytsia Raion</td>
<td>Hutsal 2000</td>
</tr>
<tr>
<td>Rukhotyn (Рухотінське городище)</td>
<td>Dniester</td>
<td>40 ha</td>
<td>Chernivtsi Oblast, Khotyn Raion</td>
<td>Moruzhenko 1969</td>
</tr>
<tr>
<td>Name (Ukrainian name)</td>
<td>Group (Sub-group)</td>
<td>Size</td>
<td>Location</td>
<td>Reference</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------------------</td>
<td>------</td>
<td>----------</td>
<td>-----------</td>
</tr>
<tr>
<td>Severynivka</td>
<td>Southern Bug</td>
<td>5.5 ha</td>
<td>Vinnytsia Oblast, Zhmerynka Raion</td>
<td>Shelekhian 2011</td>
</tr>
<tr>
<td>Sharpivka</td>
<td>Dnieper (Pastyrske)</td>
<td>15 ha</td>
<td>Cherkasy Oblast, Smila Raion</td>
<td>Daragan 2010</td>
</tr>
<tr>
<td>Trakhtemyriv</td>
<td>Dnieper (Trakhtemyriv)</td>
<td>630 ha</td>
<td>Cherkasy Oblast, Kaniv Raion</td>
<td>Fialko, Boltryk 2003</td>
</tr>
<tr>
<td>Vyshcheolchedaiv</td>
<td>Dniester</td>
<td>N/A</td>
<td>Vinnytsia Oblast, Mohyliv Raion</td>
<td>Artamonov 1946</td>
</tr>
<tr>
<td>Zhurzyntsi</td>
<td>Dnieper (Zhurzyntsi)</td>
<td>700 ha</td>
<td>Cherkasy Oblast, Lysianka Raion</td>
<td>Bushyn, Scherbatiuk 2004</td>
</tr>
</tbody>
</table>

Description:
1 – first column contains names presented in Ukrainian literature (in brackets);
2 – second column – location of fortified settlement according to the group;
3 – third column – size of fortified settlement;
4 – fourth column – location of fortified settlements according to the administrative division;
5 – fifth column – source of information about the site.

Translated by Robert Staniuk
REFERENCES:

Artamonov M.I.
1946 *Arkheologicheskie pamiatniki Yuzhnoy Podolii (po materialam Yugopodolskoy ekspeditsii)* (held in archives of IA NANU). Kyiv.

Boltryk Y. V.

Bushyn M.I., Scherbatiuk V.M.

Chchorowski J.

Daragan M.N.
2010 *Geoinformatsionnyi analiz transformatsii poselencheskikh struktur w nachale rannego zheleznoho veka v Srednem Podneprove: sostoyanie problem i perspektivy issledovaniya* (held in archives of IA NANU).

Fialko O.E., Boltryk Y.V.
2003 *Napad skifiv na Trakhtemyrivske horodysche*. Kyiv.

Hutsal A.F.

Ławniczak M.

Moruzhenko A.O.
Pokrovskaya E.F.  

Shelekhan O.V.  

Smirnova G.I.  

Yakovenko E.V.  