

**PODOLIA AS A CULTURAL
CONTACT AREA
IN THE 4TH/3RD-2ND MILLENNIUM BC**

**Maciej Chyleński
Tomasz Goslar
Marta Gwizdała
Svetlana V. Ivanova
Mattias Jakobsson
Anna Juras
Viktor I. Klochko
Aleksander Koško
Liudmyla V. Litvinova
Sylvia Łukasik
Helena Malmström
Mykhailo V. Potupchyk
Serhiy M. Razumov
Marzena Szmyt
Gennadiy N. Toshev
Piotr Włodarczak
Danuta Żurkiewicz**

BALTIC-PONTIC STUDIES

V O L U M E 20 • 2015

BALTIC-PONTIC STUDIES

61-614 Poznań (Poland)

Umultowska 89D

Tel. 618291418

E-mail: antokol@amu.edu.pl

EDITOR

Aleksander Koško

EDITORIAL COMMITTEE

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

SECRETARY

Marzena Szmyt

SECRETARY OF VOLUME

Karolina Harat

Danuta Żurkiewicz

ADAM MICKIEWICZ UNIVERSITY
INSTITUTE OF EASTERN STUDIES
INSTITUTE OF PREHISTORY

Poznań 2015

ISBN 83-86094-20-6

ISSN 1231-0344

**PODOLIA AS A CULTURAL
CONTACT AREA
IN THE 4TH/3RD-2ND MILLENNIUM BC**

**Maciej Chyleński
Tomasz Goslar
Marta Gwizdała
Svetlana V. Ivanova
Mattias Jakobsson
Anna Juras
Viktor I. Klochko
Aleksander Koško
Liudmyla V. Litvinova
Sylvia Łukasik
Helena Malmström
Mykhailo V. Potupchyk
Serhiy M. Razumov
Marzena Szmyt
Gennadiy N. Toshev
Piotr Włodarczak
Danuta Żurkiewicz**

BALTIC-PONTIC STUDIES

V O L U M E 20 • 2015

© Copyright by BPS and Authors
All rights reserved

Reviewers: Lucyna Domańska
Przemysław Makarowicz

Cover Design: Eugeniusz Skorwider

Linguistic consultation: Ryszard J. Reisner
Piotr T. Żebrowski

Printed in Poland

Computer typeset by PSO Sp. z o.o. w Poznaniu

Printing: Zakłady Poligraficzne TMDRUK in Poznań

CONTENTS

EDITOR'S FOREWORD	5
EDITORIAL COMMENT.....	6
Svetlana V. Ivanova, Gennadiy N. Toshev, LATE ENEOLITHIC AND BRONZE AGE PROLOGUE PONTIC SOCIETIES. FOREST-STEPPE MIDDLE DNIESTER AND PRUT DRAINAGE BASINS IN THE 4TH/3RD-2ND MILLENNIUM BC: A HISTORY OF INVESTIGATIONS	7
Viktor I. Klochko, Aleksander Koško, Serhiy M. Razumov, Piotr Włodarczak, Danuta Żurkiewicz, ENEOLITHIC, YAMNAYA, CATACOMB AND BABYNO CULTURE CEMETERIES, PIDLISIVKA, BARROW 1, YAMPIL REGION, VINNITSA OBLAST: ARCHAEOOMETRY, CHRONOMETRY AND TAXONOMY	40
Viktor I. Klochko, Aleksander Koško, Serhiy M. Razumov, Piotr Włodarczak, Danuta Żurkiewicz, ENEOLITHIC, YAMNAYA AND NOUA CULTURE CEMETERIES FROM THE FIRST HALF OF THE 3RD AND THE MIDDLE OF THE 2ND MILLENNIUM BC, POROHY, SITE 3A, YAMPIL REGION, VINNITSA OBLAST: ARCHAEOOMETRIC AND CHRONOMETRIC DESCRIPTION, RITUAL AND TAXONOMIC-TOPOGENETIC IDENTIFICATION	78
Viktor I. Klochko, Aleksander Koško, Serhiy M. Razumov, Piotr Włodarczak, Danuta Żurkiewicz, ENEOLITHIC, BABYNO AND NOUA CULTURE CEMETERIES, KLEMBIVKA, SITE 1, YAMPIL REGION, VINNITSA OBLAST: ARCHAEOOMETRY, TAXONOMY AND TOPOGENETICS.....	142
Viktor I. Klochko, Aleksander Koško, Mykhailo V. Potupchuk, Piotr Włodarczak, Danuta Żurkiewicz, Svetlana V. Ivanova, TRIPOLYE (GORDINEȘTI GROUP), YAMNAYA AND CATACOMB CULTURE CEMETERIES, PRYDNISTRYANSKE, SITE 1, YAMPIL REGION, VINNITSA OBLAST: AN ARCHAEOOMETRIC AND CHRONOMETRIC DESCRIPTION AND A TAXONOMIC AND TOPOGENETIC DISCUSSION	183
Tomasz Goslar, Viktor I. Klochko, Aleksander Koško, Piotr Włodarczak, Danuta Żurkiewicz, CHRONOMETRY OF LATE ENEOLITHIC AND 'EARLY BRONZE' CULTURES IN THE MIDDLE DNIESTER AREA: INVESTIGATIONS OF THE YAMPIL BARROW COMPLEX.....	256
Liudmyla V. Litvinova, Sylwia Łukasik, Danuta Żurkiewicz, Marta Gwizdała, Maciej Chyleński, Helena Malmström, Mattias Jakobsson, Anna Juras, ANTHROPOLOGICAL DESCRIPTION OF SKELETAL MATERIAL FROM THE DNIESTER BARROW-CEMETERY COMPLEX, YAMPIL REGION, VINNITSA OBLAST (UKRAINE)	292

Svetlana V. Ivanova, Gennadiy N. Toshev, THE MIDDLE-DNIESTER CULTURAL CONTACT AREA OF EARLY METAL AGE SOCIETIES. THE FRONTIER OF PONTIC AND BALTIC DRAINAGE BASINS IN THE 4TH/3RD-2ND MILLENNIUM BC..... 336

Svetlana V. Ivanova, Viktor I. Klochko, Aleksander Koško, Marzena Szmyt, Gennadiy N. Toshev, Piotr Włodarczak, ‘YAMPIL INSPIRATIONS’: A STUDY OF THE DNIESTER CULTURAL CONTACT AREA AT THE FRONTIER OF PONTIC AND BALTIC DRAINAGE BASINS 406

List of Authors 425

Editor's Foreword

The present volume of *Baltic-Pontic Studies* comprises papers reflecting a segment of research into the *Podolia cultural interchange* of communities genetically related to the drainage basins of the Black and Baltic seas in the 4th/3rd-2nd millennium BC. Accordingly, the papers present the results produced by the Polish-Ukrainian research project whose aim was to explore the *Yampil barrow cemetery complex* located in the southern portion of the Middle Dniester Area (*Vinnitsa Oblast*).*

The respective papers discuss the Yampil cultural background – a taxonomic record of ‘barrow communities’ settling the forest-steppe zone of the drainage basins of the Dniester and Prut rivers (from the position of the state the investigations of them have been until now). Next, they present the archaeometric and taxonomic descriptions of cemeteries explored by the *Yampil Expedition* in 2010-2015 (Klembivka, Pidlisivka, Porohy, Prydnistryanske) and further, examine the chronometry and anthropological characteristics of the populations that co-created the necropolises in question.

This volume of papers includes synthesizing studies that, while continuing to examine the questions raised earlier, focus on ‘Podolia conceptual propositions’ in the context of Baltic-Pontic archaeology. This particular research focus shall be continued in subsequent volumes of *BPS*.

The requirements related to *BPS* going electronic are the reason behind the limited modification of its editorial formula, which readers will see on the pages of this volume.

The present 20th volume has been made possible owing to the generous financial support provided for undertaking scholarly investigation and associated editing, and publishing, as well as administration under the aegis of a grant from the *National Programme for the Development of the Humanities* (no. 108/NPH3/H12/82/2014).

The reviewers of the papers published in this volume were Professors Lucyna Domańska and Przemysław Makarowicz.

* For a broader discussion see: ‘Naddniestrzańskie kompleksy cmentarzysk kurhanowych społeczności z III i z pierwszej połowy II tysiąclecia przed Chr. w okolicach Jampola, obwód winnicki. Z badań nad północno-zachodnią rubieżą osadnictwa kręgu kultur „wczesnobrązowych” strefy pontyjskiej. Badania z lat 1984-2014 In: Aleksander Koško, Mychajł Potupchyk, Serhiy Razumov (Eds) *Archaeologia Bimaris – Monografie* 6. Poznań: Wydawnictwo Nauka i Innowacje.

Editorial comment

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

Svetlana V. Ivanova*, Gennadiy N. Toshev**

LATE ENEOLITHIC AND BRONZE AGE
PROLOGUE PONTIC SOCIETIES.
FOREST-STEPPE MIDDLE DNIESTER
AND PRUT DRAINAGE BASINS
IN THE 4TH/3RD-2ND MILLENNIUM BC:
A HISTORY OF INVESTIGATIONS

ABSTRACT

The paper presents a historiographic context helpful in the current investigations of the cultural contacts between the societies of the east and west of Europe in the borderland of Podolia and Moldova in the Late Eneolithic and the prologue of the Bronze Age. The focus is on the state of research (chiefly taxonomic and topogenetic) into the sequence of taxa in the age of early 'barrow-building', identified in the funerary rituals of societies settling the forest-steppe of the north-western Black Sea Coast in the 4th/3rd-2nd millennium BC.

Key words: Late Eneolithic, forest-steppe of north-western Black Sea Coast, Gordinești type, Zhvotilovka-Volchansk type, Yamnaya culture, Budzhak culture, Catacomb culture, Edineț culture, Babyno culture, Noua culture

The present investigations concentrate on 4th/3rd-2nd millennium BC societies settling the Dniester and Prut interfluvium and drainage basins, in particular their northern portion: the area of the forest-steppe that forms the borderland between Podolia and Moldova, an area of special interest on the map of transit routes, facil-

* Institute of Archaeology National Academy of Science of Ukraine; Heroyiv Stalingrada 12, 04210 Kyiv, Ukraine; svi1956@gmail.com

** Zaporizhya National University; Zhukovskogo Street 66, 69063 Zaporizhzhya, Ukraine; gent51@mail.ru

itating contacts between societies inhabiting the drainages of the Black (to which it belongs) and Baltic seas. For it is there that the watersheds of the Prut and Dniester as well as Dniester and Southern Bug rivers are located. They are associated with the development, beginning with the 4th millennium BC, of the network of stable exchange routes [Klochko, Koško 2009].

Any reconstruction of the economy of prehistoric societies entails to a larger or smaller degree the reconstruction of a climate and surrounding landscape, because these two factors may have a significant impact on the major occupations of human populations. Special attention to the natural context and research perspectives into the palaeo-environment of the Dniester Area was given by the Polish-Ukrainian research project focused on the north-western settlement limit of Pontic zone cultures in the prologue of the Bronze Age [Makohonienko, Hildebrandt-Radke 2014].

The archaeological study of the landscape in question involves answering two major questions. The first refers to the relationship between man and the natural environment while the second to the discussion about natural zone boundaries. These questions are closely interrelated, for any analytically justified distinction between natural zones determines the correctness of conclusions drawn not only by geologists or geographers but also archaeologists. In this case, it is absolutely necessary to have a clear idea of boundaries between zones, in particular the boundary between the steppe and forest-steppe on the north-western coast of the Black Sea. Its delimitation raises controversies, hence the history of research and its current state shall be discussed below.

1. THE ENVIRONMENTAL ASPECT AND THE RELEVANCE OF NATURAL ZONE DISTINCTION

Together with the spread of a production economy, on the steppes of the north-western Black Sea Coast, a complex system developed, featuring ecologically intricate relationships between vegetation, animals and man. Hence, the reconstruction of the surrounding environment and climate is particularly relevant for the study of the history of societies at various chronological stages, especially those from which no written records survive. The distinctive features of the economy, settlement and cemetery topography, trade routes and population movements to a greater or lesser degree are related to the climate and landscape, which ultimately determine not only the conditions people live in but also their way of life. Therefore, the studies of archaeological cultures and historical-cultural processes have relied for the last few decades on research results supplied by

geologists, pedologists, botanists, biologists, and ecologists. This has permitted a reconstruction of the environment in which primitive societies lived. Researchers begin to see a relationship between the dynamics of archaeological culture development and climate changes. Climate changes must have had an impact, either directly or indirectly, on the transformations of the economic and social systems of ancient groups of humans. This, in turn, made for the development and survival of the best-adapted models of social organization. Under the favourable conditions of moist periods, the anthropogenic impact on the environment grew stronger. Conversely, when the climate became more arid, conditions were more conducive to the development of mechanisms, allowing for adaptation to climate changes [Kremenetskiy 1991: 177].

The steppes of the north-western Black Sea Coast are the most humid region of all Eurasian steppes. It is believed that Black Sea transgressions moderated aridity, leaving the climate more humid and thus influencing the development of the economic-cultural varieties of Bronze Age societies. The adaptation of populations to climate changes and the anthropogenic impact on the environment must have been interrelated and balanced, which is seen in both the absence of gaps in the cultural-historical development of such societies and the lack of clear traces of ecological crises.

The settlement of new territories, population movements and contacts are to a certain degree dependent on a terrain type and the natural zone of habitation. Nomadism is usually connected with the steppe zone. It is believed that climate changes may result in the movement of subzones north (in the case of increasing aridity) and south (in more humid periods) [Pustovalov 2001-2002]. For this reason, it is crucial to delineate the boundary between the steppe and forest-steppe, i.e. to find out what type of natural environment the societies of the Eneolithic and the Bronze Age lived in.

2. PHYSIOGRAPHIC FEATURES ON THE NORTH-WESTERN BLACK SEA COAST

Traditionally, the north-western Black Sea Coast is defined as the area extending between the Southern Bug, Prut and Danube rivers (administratively speaking: the Republic of Moldova and the Odessa Region in Ukraine). In the south, it is bounded by the coast of the Black Sea, while in the north its limit coincides with the boundary between the steppe and forest-steppe, which is variously delineated by specialists.



Fig. 1. Regional division of natural and vegetation zones in the Dniester-Prut interfluvium I – Bukovina beech and hornbeam-oak forests; II – meadows turned into a steppe, now ploughed; III – Romankivtsi forest-steppe with the greatest share of oak; IV – So-rotsk forest-steppe; V – Bălți steppe, multispecies: fescue-feather grass, now ploughed; VI – Codrii including the areas that used to be covered by hornbeam-oak forests; VII – Codrii including the areas that used to be covered by beech-oak forests; VIII – Northern Budzhak steppes, multispecies: fescue-feather grass, now ploughed; IX – Southern Budzhak steppes, multispecies: fescue-feather grass, now ploughed; X – tussock-sagebrush steppes; XI – freshwater vegetation limanowa; XII – saltwater vegetation limanowa. After Shabanova *et al.* 2010: 10, revised

The region of interest to us here (the interfluvium between, and drainages of, the Prut and Dniester rivers) is part of the north-western Black Sea Coast together with adjacent forest-steppe areas in the north (Fig. 1).

There are no dissenting voices in respect to terrain descriptions made by specialists. Thus it can be said that a large portion of Ukraine's territory covers the south-western fringe of the East European Plain and is rather flat or undulating. Within Ukraine, the Plain consists of lowland and upland areas. The Podolian Upland (on the left bank of the Dniester) extends northwest-southeast, from the upper reaches of the Southern Bug River. The southern portion of Ukraine is occupied by the Black Sea Lowland, slightly tilted southward and consisting of broad valleys and flat watersheds. It adjoins the Black and Azov seas and forms a crescent about 120-150 km wide.

The watershed between the Prut and Dniester tilts southward, while its northern part is covered by a range of high hills (Khotyn Upland). Its edge on the Dniester side is steep, while on the Prut side, it is rather flattened out.

In terms of physiography, the north of the Republic of Moldova is occupied by the Moldavian Plateau, featuring flattened reliefs and flat interfluviums. In its western portion, adjacent to the Prut River, a range of chalk hills rises, known as *Tovtry* (a bar of separate rounded massifs 50-80 m high). South of the Moldavian Plateau, there extends the North Moldavian Plain, the surface features of which are rather monotonous. In the central part of the right-bank Prut drainage basin, the Ciuluc Plateau lies, cut by a network of deep valleys and ravines. In the east, between the valleys of the Răut and Dniester, Dniester Hills rise, densely cut by valleys and ravines.

Centrally located, the Central Moldavian Plateau – *Codrii* – has the highest elevations in the country: 350-430 m. The relief is rather diversified there, featuring many bars, hills and deep ravines.

South of the *Codrii*, the country has a small flatland known as the South Moldova Plain, characterized by broad valleys and ravines. In Moldova's southwest, between the Prut and Ialpuș rivers, the Tigheci Plateau is known for its undulating, erosional-landslide terrain [Shabanova *et al.* 2014].

The question of the boundary between the steppe and forest-steppe represents a greater challenge as far as archaeological enquiry is concerned. We shall not, however, relate to the rather long discussion of the origins of the forest-steppe (natural or anthropogenic) or the time it came into existence. These questions are answered in detail by specialists. What we shall focus on instead is the demarcation of the two natural zones.

Already in the first half of the 20th century, L.S. Berg summed up the results of research into this question and observed that as a forest-steppe (from the point of view of surface features) one should consider the areas where forests and brush were still found on watershed plateaus. Thus, the forest-steppe-steppe boundary can be drawn from northern Bessarabia, along the northern edge of the

Bălți Steppe in the direction of Balta (or slightly further south, in the direction of Ananyiv), along the upper course of the Inhul River as far as Poltava and Kremenchuk, next between Kharkiv and Iziium and further east. In support of his conception, L.S. Berg adduced data on the character and distribution of soil types and climate parameters, observing that the southern forest-steppe limit coincided with the axis of the belt of a mid-latitude barometric pressure maximum (so-called Voyeykov axis). He also studied other elements such as mean annual temperatures in July, specificity of isotherms in January and mean annual precipitation. Within the steppe belt, two ‘forest-steppe’ islands stand out: *Codrii* in Moldova and the Donetsk Upland, divided between Ukraine and Russia [Berg 1947: 285-287].

F.N. Milkov considered the boundary delineated by L.S. Berg artificial and related it to the impact of an anthropogenic factor – deforestation. As the main criterion, he considered not a complex of characteristics but the presence of watershed forests. Under this assumption, he drew the forest-steppe boundary from the southern edge of the *Codrii*, through Dniepropietrovsk, Samara valley, Donetsk and further east [Milkov 1951: 7-12]¹.

As can be seen, in the case of the interfluves between the Prut, Dniester and Southern Bug rivers, the difference in the course of the boundary, as delineated by the above two scientists, between the steppe and forest-steppe is considerable.

Many specialists had followed the findings by F.N. Milkov for quite a long time. However, recent decades have witnessed a fully justified return to L.S. Berg’s conception. Additional arguments in its favour include the calculations of the hydrothermal coefficient [Fedotov 2008: 10]. The ‘Berg Line’ is recognized by the following Ukrainian geographers: M.I. Davydova, A.I. Kamienskiy, N.P. Nekliukova, G.K. Tushynskiy [Fedotov 2008: 11].

As for the existing forests on the watersheds of the *Codrii*, Donetsk and Volga uplands, specialists believe that they cannot serve as the criterion for demarcating a horizontal (latitudinal) zone, because they are connected to altitudinal zonation, being the first (and the only) plant layer². The watersheds show zonation traits characteristic of the middle and lower climate-vegetation layers; however, on both the *Codrii* and Donetsk Upland, they are covered by steppes. The use of the altitudinal diversification of lowland landscapes for demarcating the zones of the steppe and forest-steppe (as well as forest-steppe and forest zones) bore out L.S. Berg’s conception and proved that the boundary between the geographical zones he delineated was accurate [Fedotov 2008: 9-11].

¹ The boundary lines, as drawn by the above named scientists, partially overlap in some sections in the east.

² It is a well-known fact that a high-mountain layer may be found in a different latitudinal zone.

3. THE HISTORY OF INVESTIGATIONS OF LATE NEOLITHIC AND BRONZE AGE PROLOGUE SITES IN THE CENTRAL, FOREST-STEPPE PRUT-DNIESTER INTERFLUVE AND THE DNIESTER DRAINAGE BASIN

The Eneolithic, in the area in question, includes Tripolye culture (TC) settlement complexes and barrow burials of various cultural groups.

The first *Tripolye sites* were discovered close to the village of Krinichki, Balta uyezd, in the late 19th century. In the early 20th century, S.S. Hamczenko excavated dozens of TC *ploshchadki* in the vicinity of the villages of Krinichki and Korytnoe. In the 1950s, the Odessa Museum of History and Archaeology, headed by A.L. Yesipenko, discovered Tripolye sites in the villages of Timkovo and Slobodka, and investigated settlements in the vicinity of the villages of Aleksandrovka and Cherkasov Sad. A.A. Kravchenko and L.G. Garkusha discovered the settlement of Perlikany. The 1970s witnessed the resumption of excavations at already-known and newly-discovered settlements: Aleksandrovka (K.V. Zinkovskiy), Slobodka-Lesnichestvo, Timkovo (N.B. Burdo, M.Y. Videyko), Nemirovskoe, Stanislavka (M.Y. Videyko), Cherkasov Sad (L.Y. Polischuk). Now, in the Prut and Dniester interfluve, we know of sites related to all the development stages of the TC: early (Tripolye A-Precucuteni III), middle (Tripolye BI-Cucuteni A and Tripolye BII-Cucuteni A-B) and late (Tripolye CI-Cucuteni B), as well as single CII sites [Burdo, Polischuk 2013: 43-44].

The investigations of *barrow sites* in the middle Dniester drainage basin began in the late 19th century. It is from that time that excavations headed by N.E. Brandenburg date. They were carried out in the vicinity of the village of Camenca but did not yield any Eneolithic sites at that time. Investigations concentrated then on the southern, steppe regions. The early 20th century saw amateur barrow excavations near Ciocîlteni of which no documentation has survived, hence, it cannot be known what period they concerned [Rafalovich, Ketraru 1966: 103].

For a long time, field investigations had not gone beyond rare excavations of single barrows and small barrow groups. Only rescue excavations on new construction sites in the 1970s and 1980s were to provide an opportunity to expand the database concerning the Copper Age.

3.1. EARLY-BARROW, 'LATE-ENEOLITHIC' CULTURAL GROUPS

The first discoveries of Eneolithic barrows in the middle Prut drainage basin were made by an expedition headed by V.A. Dergachev in 1975-1976 [Dergachev

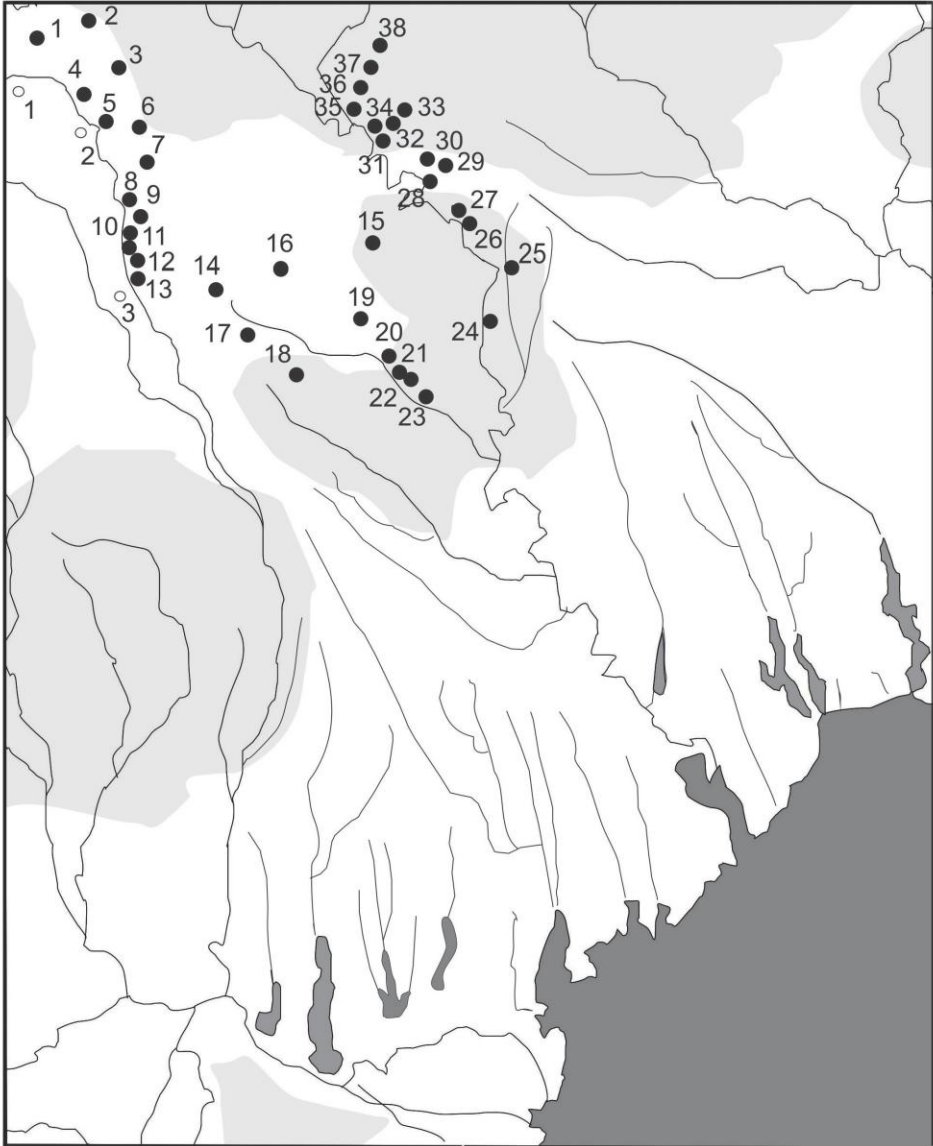


Fig. 2. Yamnaya culture sites in the drainage basins of the middle course of the Dniester and Prut rivers (above the Budzhak steppe zone). • Dniester-Prut interfluvium: 1 – Medveja, 2 – Cotiujeni, 3 – Corjeuți, 4 – Pererita, 5 – Tețcani, 6 – Burlănești, 7 – Hancăuți, 8 – Corpaci, Bădragii Vechi, 9 – Cuconești Vechi, 10 – Scherbaki, 11 – Dumeni, 12 – Duruitoarea Nouă, Vărațic; 13 – Costești, Costești Noi, 14 – Iabloana, 15 – Mărculești, 16 – Frunzeny, 17 – Bursuceni, 18 – Mîndrești, 19 – Rogojeni, 20 – Codrul Nou, Brînzani Noi, 21 – Ciocîlteni, 22 – Brăviceni, 23 – Orhei, 24 – Mocra, 25 – Timkovo, 26 – Podoima, 27 – Camenca, 28 – Cuzmin, 29 – Hristovaia, 30 – Ocnița, 31 – Prydnistryanske, 32 – Sloboda Pidlisivska, 33 – Pidlisivka, 34 – Severynivka, 35 – Porohy, 36 – Dobrianka, 37 – Pysarivka, 38 – Klembivka; ○ Prut western bank: 1 – Corlăteni, 2 – Iacobeni, 3 – Glăvănești-Vechi

1982]. Among Gordinești type features, he counted a burial from barrow 4 near Costești and burials from barrows 16-18 in the vicinity of Dumeni, excavated by V.A. Safronov [Dergachev 1982:126]. A burial from barrow 2, Costești site, containing pennant projectile points, had been initially associated with the influence of the Maikop culture, but was later rightly included in the Zhivotilovka-Volchansk cultural group (type) [Rassamakin 1994; 1997: 294]. A clear group of three Zhivotilovka burials with a characteristic inventory was discovered near Bursuceni [Yarovoy 1979]. Zhivotilovka-type burials were excavated on the following sites: Scherbaki [Larina 1989], Cuconești Vechi [Dergachev 1982], Duruitoarea Nouă [Demchenko 2007].

In the 1980s and 1990s, extended burials were investigated in barrows on the following sites: Ocnîța, Camenca district [Manzura *et al.* 1992], Bursuceni [Yarovoy 1979: 491-492], Vărativ, Prut drainage basin [Larina 1989], Timkovo (on the bank of the Rybnitsa River, a left tributary of the Dniester) [Ostroverkhov *et al.* 1993].

Neolithic burials were also discovered in barrows investigated near Yampil in 2014 by the Yampil Expedition of the Adam Mickiewicz University in Poznań and the Institute of Archaeology, Ukrainian NAS in Kyiv [Prydnistryanske 1: *see* Klochko *et al.* 2015].

Summing up, Eneolithic burials beneath barrows are few in the region in question in contrast to the Budzhak Steppe to the south and the interior of the interfluvium of the Dniester and Southern Bug. This picture is made complete by Gordinești-type burials both barrow and flat ones [Larina 2003; Topal, Tserna 2010: 294; Yarovoy *et al.* 2012: 300; Włodarczak *et al.* 2015; Klochko *et al.* 2015].

3.2. YAMNAYA CULTURE (FIG. 2)

For the first time, barrows in the middle Dnieper drainage basin, near Camenca, Olgopol district, Podolia Governorate, were investigated in 1899-1900. The investigations were carried out by N.E. Brandenburg, director of Petersburg's Artillery Museum [*Zhurnal Raskopok Brandenbura* 1908: 173-175]. Four barrows were built in the Bronze Age while only two features belong to the Yamnaya culture (YC) [Kachalova 1974].

For a long time, excavations had been carried out only in the southern, steppe portion of the region. The first extensive barrow excavations, which resulted in the discovery of many YC burials in the north of the Prut-Dniester interfluvium, were carried out on the construction site of the Costești water-power plant in 1974-1976. Tens of barrows were excavated and found to contain burials from various periods, including the YC. Cemeteries and single barrows were found near Costești, Ivano-

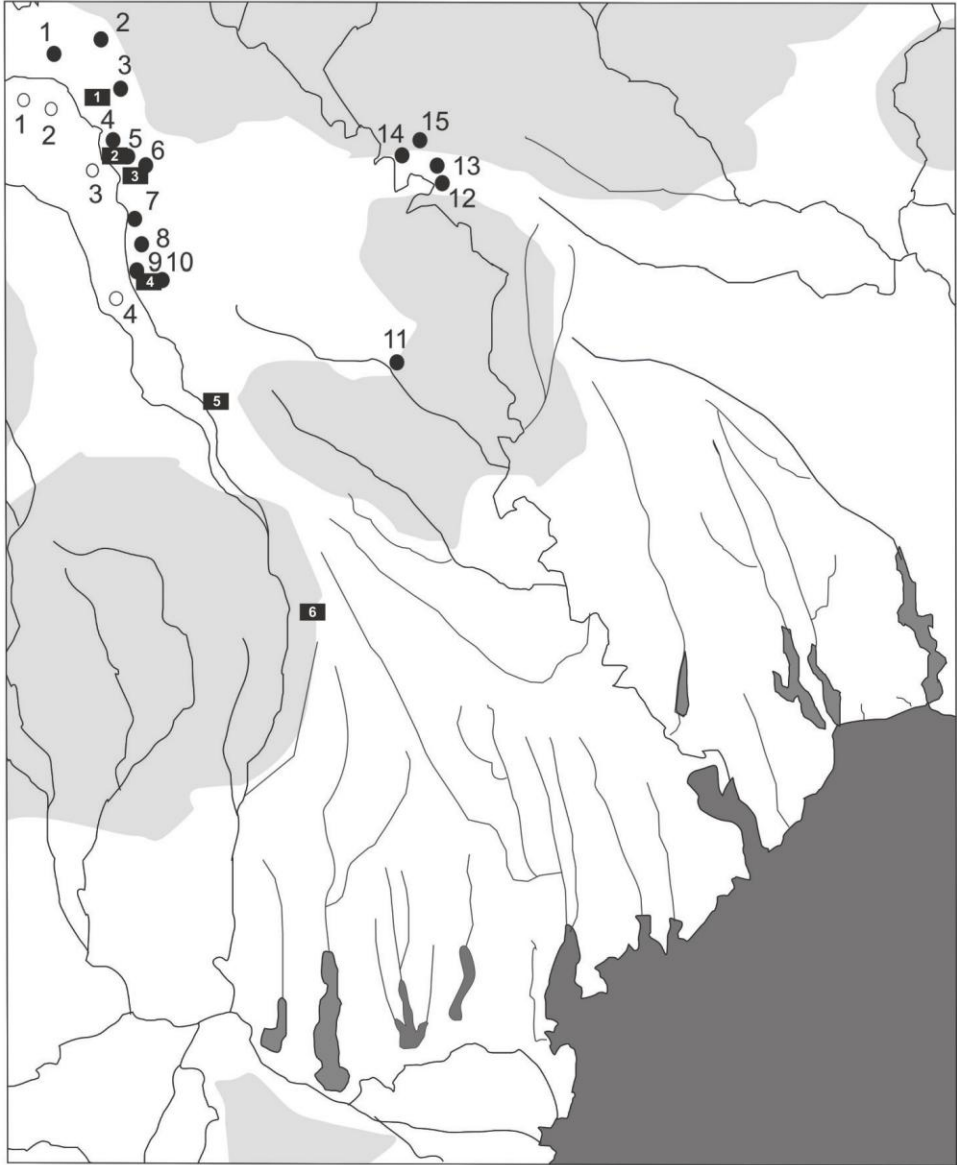


Fig. 3. Catacomb culture and Edineț culture sites in the drainage basins of the middle course of the Dniester and Prut rivers (above the Budzhak steppe zone). Catacomb culture sites. ● Dniester-Prut interfluvium: 1 – Medveja, 2 – Cotiujeni, 3 – Corjeuți, 4 – Tețcani, 5 – Bezeda, 6 – Hancăuți, 7 – Corpaci, 8 – Cuconești Vechi, 9 – Dumeni, 10 – Duruitoarea Nouă, 11 – Codrul Nou, 12 – Cuzmin, 13 – Ocnîța, 14 – Prydnistryanske, 15 – Pidlisivka; ○ Prut western bank: 1 – Corlăteni, 2 – Slobozia Hănești, 3 – Iacobeni, 4 – Glăvănești-Vechi; ■ Edineț culture sites: 1 – Brînzeni, 2 – Cuconești Vechi, 3 – Văratice, 1/4; 1/7, 4 – Cuconești Vechi II 4/?, 5 – Pruteni, 6 – Tochile-Răducani

vca, Rîșcani District, Cuconeștii Vechi, Scherbaki, Corpaci, Hancăuți, Edineț District, [Dergachev 1982; Yarovoy 1984; Larina 1989], Hristovaia, Camenca District [Yarovoy 1980] and Iabloana, Glodeni District [Yarovoy 1983], Orhei District *loco* [Dergachev 1973; Popovich 2008], Dumeni District.

In the 1980s, barrows on the following sites were excavated: Medveja, Briceni District [Savva, Dergachev 1984], Mărculești, Florești District [Levinskiy, Tentiuk 1990; Beylekchi 1992], Tețcani and Bezeda, Briceni District [Yarovoy 1990; Glazov, Kurchatov 2005], Cotiujeni, Șoldănești District [Agulnikov 1992], Duruitoarea Nouă, Rîșcani District [Demchenko 1988; 2007], Ciocîlteni [Ketraru, Khakheu, 1990], Brăviceni, Orhei District [Larina *et al.* 2008].

In 1988, a cemetery in the vicinity of the village of Ocnița, Camenca District [Manzura *et al.* 1992] was excavated; in 1989, barrows on the Podoima and Cuzmin sites, in the same area, were investigated [Khakheu, Bubulich 2002] while 1990 saw excavations on the Mocra site, Rîbnița District [Kashuba *et al.* 2001-2002]. In 1991, a single barrow in the vicinity of the village of Timkovo, on the left bank of the Dniester, in the Odessa *Oblast* was excavated [Ostroverkhov *et al.* 1993].

After 1991, for a long time, no archaeological investigations were conducted in this region. Only in 2013, were rescue excavations carried out of a barrow on the Rogojeni site, Șoldănești District [Agulnikov *et al.* 2014] and another on the Brînzenii Noi site, Telenești District [Agulnikov, Mistreanu 2014].

In the area known as the *Yampil Barrow Cemetery Complex*, bordering on the north-western Black Sea Coast, on the left bank of the Dniester, excavations were carried out from the mid-1980s to the early 1990s. Barrows on sites: Dobrianka, Pysarivka, Porohy, Severynivka, and Sloboda Pidlisivska were investigated [Potupczyk, Razumov 2014]. The year 2010 saw the beginning of a new stage in the investigations of *Yampil barrows*. They were located on sites: Pidlisivka 1 [Koško *et al.* 2014], Porohy 3A [Razumov *et al.* 2012; Klochko *et al.* 2015a], Klembivka 1 [Razumov *et al.* 2013; Klochko *et al.* 2015b], Prydnistryanske 1 [Klochko *et al.* 2015].

A list of YC sites in the area under discussion is given in the Annex: *Catalogue of Sites*.

3.3. CATACOMB CULTURE (FIG. 3)

The first Catacomb culture (CC) sites in the area in question were explored only in the mid-1970s. These were burials from barrows found on the Corpaci and Hancăuți sites [Dergachev 1982: 131; Yarovoy 1984: 71]. The excavations of barrows on the Dumeni site, headed by V.A. Safronov in 1974-1975, have never been published and are known only from information notices [Dergachev 1986]. The

1980s saw further discoveries of CC sites in the north of the Prut-Dniester interfluvium. These were such sites as Medveja [Savva, Dergachev 1984: 103, 107-108], Očnița [Manzura *et al.* 1992: 92] and others. Unfortunately, the largest CC barrow cemeteries – Tețcani and Bezeda sites, numbering 25 burials, and Codrul Nou with 14 burials – have not been published yet [Yarovoy 1990]. Generally speaking, in the region in question, barrows with single or few CC burials dominate.

Field investigations conducted throughout the north-western Black Sea Coast made for moving the western boundary of the catacomb historical-cultural community as far as the Prut River [Toshev 1981; Dergachev 1983]. However, for a long time, generalizing works mentioned only single sites west of the Southern Bug drainage basin [Bratchenko, Shaposhnikova 1985: 415]. At the same time, the series of assemblages in barrows on the right bank of the Prut River had long remained unexplored; only from the mid-1980s on, were they investigated and interpreted [Dergachev 1986; Burtănescu 2002].

In the mid-1980s, the question of including the Prut-Dniester interfluvium in the impact zone of catacomb groups was finally settled [Toshev 1982; 1986; Dergachev 1986]. To a large extent, the conclusions were borne out by materials obtained thanks to new excavations in the north of Moldova [Demchenko 1988; 2007; Yarovoy 1981; 1983; Savva, Dergachev 1984; Bubulich, Khakheu 2002; Yarovoy 1990; 1990a] carried out in the late 20th century. The new data were presented in synthesizing publications [Dergachev 1986; Toshev 1986; Burtănescu 2002; Ivanova 2013].

Due to their meagreness, materials from the forest-steppe are traditionally discussed in the context of the other sites in the Prut-Dniester interfluvium. Researchers distinguish early and late assemblages, which are jointly dated to the 25th-20th century BC [Kaiser 2003; Ivanova 2013].

Investigations carried out in the Yampil Region in the recent years have yielded new CC sites on the left bank of the Dniester [Klochko *et al.* 2015].

A list of CC sites in the area under discussion is given in the Annex: *Catalogue of Sites*.

3.4. EDINEȚ CULTURE (FIG. 3)

The first sites of this culture in the area under discussion were identified by V.I. Markevich in Brînzeni, Edineț District, in the early 1970s. Successive excavations carried out on a flat cemetery, permitted V.S. Titov to raise the issue of distinguishing a separate culture, which was given the name of Edineț culture (EC). He compared the EC to such cultures as Schneckenberg, Pitváros and So-

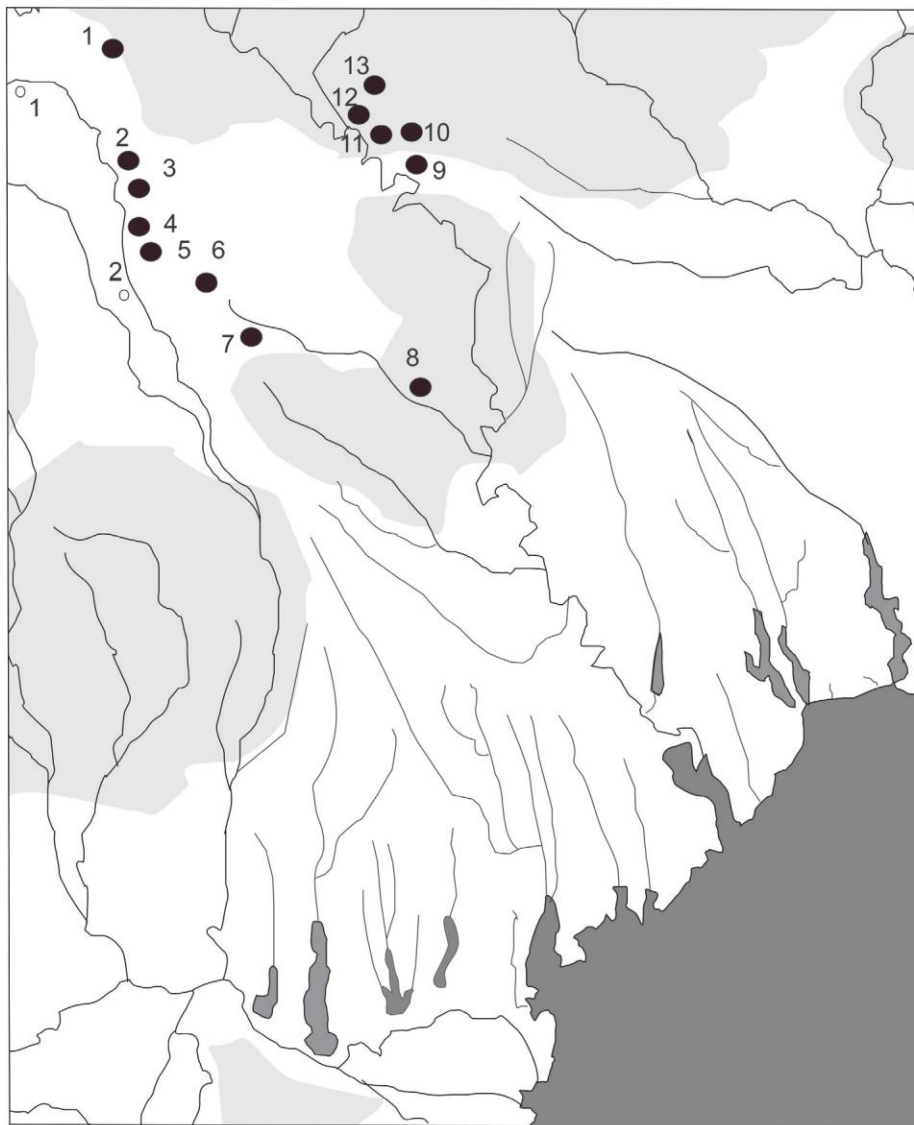


Fig. 4. Babyno culture (Mnogovalikovaya pottery) culture sites in the drainage basins of the middle course of the Dniester and Prut rivers (above the Budzhak steppe zone). ● Dniester-Prut interfluvie: 1 – Cotuijeni 1/4; 1/5; 3/1; 3/2 [Agulnikov 1992]; 2 – Corpaci 2/1 [Yarovoy 1984]; 2/2; 2/5; 3 – Cuconești Vechi 4/2; 8/10; 9/2, 26, 28, 31 [Dergachev 1986]; 4 – Dumeni 74, 8/8, 8/10 [Sava, 1992]; 5 – Duruitoarea Nouă [Demchenko 2007] - Vărătic 1/5 [Demchenko 1989]; 6 – Iabloana -1/5, 1/10 – [Yarovoy, 1983]; 7 – Bursuceni 1/13 (?) [Yarovoy, 1979]; 8 – Brăviceni 3/2; 7/1,7; 15/1,2; 16/2; 18/4 [Larina *et al.* 2008]; 9 – Ocnîța (Camenca) 2/2; 3/2; 3/7; 4/2; 5/2; 6/7; 6/26; 7/13 [Manzura *et al.* 1992]; 10 – Pidlisivka 1/5,7, 13(?) ; 11 – Severynivka 1/2, 2/2; 12 – Porohy 3/5; 4/1; 4/5; 4/9; 13 – Dobrianka 1/3; 1/10; ○ Prut western bank: Corlăteni - 1949 1/3 [Morintz 1978]; Glăvănești-Vechi-1949 1; 3; 1/10; 1/11; 1/17 [Burtănescu 2002]

mogyvár [1975]. Another flat cemetery was investigated by V.A. Dergachev on the Cuconești Vechi site in 1975 [Dergachev 1982] and in the course of next ten years barrow complexes were discovered on the Văratice, Edineț District [Demchenko 1989] and Bădragii Vechi, Costești VIII sites. The EC includes not only funerary sites but also settlement ones, for instance a short-term Trinca camp [Demchenko 2008].

Few EC materials (fewer than 10 sites) were described and summed up in the works by V.A. Dergachev [1986; 1994] and T.I. Demchenko [2008]. The former believes the EC to be genetically related to the Hatvan culture whose sites can be found in north-eastern Hungary [Dergachev 1999: 208, 214]. J. Machnik [1991:42] records the affinities of the EC with the Schneckenberg-Glina III, Somogyvár-Vinkovci and other cultures of the middle Danube drainage basin. P. Roman [1994] links the EC origins to the cultures of northern Thrace. T.I. Demchenko draws, however, a close parallel between the EC and a number of European cultures of the Bronze Age: Belotić-Bela Crkva, Somogyvár-Vinkovci, or Nagyrév [Demchenko 2008:199].

A list of EC sites in the area under discussion is given in the Annex: *Catalogue of Sites*.

3.5. BABYNO CULTURE (FIG. 4)

The discovery of Babyno culture (BC) sites (*see* the Mnogovalikovaya culture) goes back to barrow explorations already in the 19th century [Dergachev 1973]. Until the mid-1950s, they were discussed together with Late Bronze Age materials. Extensive investigations in the 1960s and 1970s and the identification by S.S. Berezanskaya of the separate Mnogovalikovaya culture gave rise to the question of distinguishing similar complexes on the north-western Black Sea Coast [Cherniakov 1975]. They were held to include above all burials with multiple-roll pottery and belt-buckles. As far as the cultural identification of burials without any grave goods is concerned, various, often contradictory opinions have prevailed to this day. Some of such complexes are interpreted as ‘Babyno’ [Lytvynenko 2009] or ‘Sabatinovka’ [Savva 1992; Sava, Agulnikov 2003].

A credible discovery of the first BC sites in northern Moldova was made in the 1970s on the construction site of the Costești water-power plant and a water reservoir on the Prut [Safronov 1975; Nikolaeva, Safronov 1976; Savva 1992]. An assemblage from the Cuconești Vechi (9/28) site, with a knife-khanjar, gained some fame [Berezanskaya 1986].

Carried out in the middle drainage basins of the Prut and Dniester in the last decades, sporadic excavations have nonetheless contributed toward the rise of the number of BC sites in the region in question. These are: Bursuceni [Yarovoy 1979], Corpaci [Yarovoy 1984], Văratci [Demchenko 1989], Ocnîța-Camenca [Manzura *et al.* 1992], Iabloana [Yarovoy 1983], Cotiujeni [Agulnikov 1992], Brăviceni [Larina *et al.* 2008].

These materials have been included in the research of G.N. Toshev [1982], V.A. Dergachev [1986], E.N. Savva [1992], in which they are discussed together with assemblages coming from further south.

The number of known sites in the region under discussion rose considerably owing to the excavations of *Yampil barrows* in the 1980s and 1990s and in 2010-2014 [Koško *et al.* 2014; Razumov *et al.* 2011; Razumov *et al.* 2013].

The opinions of researchers as to how to interpret BC assemblages in the western portion of the area vary. Once, S.S. Berezanskaya distinguished sites on the north-western Black Sea Coast as a separate south-western variant. Later, E.V. Savva considered assemblages from the Prut-Dniester interfluvium a uniform, fully fledged social organism, which had settled this area [Savva 1992: 157-158; 177]. In his post-doctoral dissertation, R.A. Lytvynenko [2009] believed, in turn, that within the 'Babyno circle', a local Dniester-Prut BC variety could be distinguished.

Furthermore, individual BC artefacts are also known from the upper Dniester drainage basin (present-day Lviv, Ivano-Frankivsk and Ternopil Regions Oblasts). The area yielded both single funerary assemblages (Ostapie, Palikorovo, Zhorniv) and finds of pottery and bone belt-buckles within settlements. In the latter case, they were often found together with the materials of other cultures (Svitiazev, Pereveredovo, Zvenigorod). For a long time, it had been these finds that were used as a justification for synchronizing the BC with local cultures and cultural groups [Sveshnikov 1974; Berezanskaya *et al.* 1986].

Two views on the interpretation of 'Babyno' artefacts in the upper Dniester drainage basin have emerged. R.A. Lytvynenko believes that the artefacts show that 'Babyno' population groups penetrated the upper Dniester drainage basin, i.e. an area settled by neighbouring tribes [Lytvynenko 2009: 12]. There is, however, another opinion, holding that this area ought to be included in the BC-settled area [Pâslaru 2006: 233].

Due to the meagreness of source data, the problem, in our opinion, remains open.

A list of BC sites in the area under discussion is given in the Annex: *Catalogue of Sites*.

In the region under discussion – the forest-steppe in the Prut-Dniester inter-fluve – the Late Bronze Age is considered to encompass the Noua culture (NC).

The first to draw attention to the peculiarity of materials from a number of sites, especially the cemetery in the vicinity of the village of Noua, close to the city of Braşov (Romania), was I. Nestor in the 1930s. Successive investigations showed that the area settled by this culture covered a considerable part of the Dniester-Carpathian Region. At present, we know of a large number of settlements, flat cemeteries, ritual ash piles (ger. *Aschehügel*) and bronze hoards – over 500 altogether [Dergachev 1986: 153-156].

The investigations of Moldova sites have been conducted since the mid-1950s (V.I. Markevich, A.I. Meliukova, N.A. Ketraru, G.I. Smirnova, I.A. Rafalovich) [Dergachev 1973: 61]. Both settlements and flat cemeteries have been excavated. In the sub-Carpathian Region, NC materials have been actively investigated by G.I. Smirnova, E.A. Balaguri, L.I. Krushelnitskaya [Balaguri 1985; Krushelnitskaya 2006].

In the 1970s-1990s, investigations in the Prut-Dniester area covered both settlement sites and cemeteries. At present, we know of about 250 settlements alone; on some of them (e.g. Odaia-Miciurin), ritual ash piles have been studied for years [Sava, Kaiser 2011].

Of great significance was the discovery of biritual cemeteries (with flat graves and ones underneath barrows), for instance at Pereriţa and Burlăneşti; and barrow cemeteries, for instance at Chirilen [Savva 2002] and Brînzanii Noi, which opened up new vistas in the study of the Noua culture, its rituals and contacts with neighbouring cultures.

Separate categories of metal goods, both single finds and hoards, have been comprehensively described in a number of works by V.A. Dergachev [1997; 2010].

The question of the culture's origin has not been settled yet. It is presumed that it had evolved from a number of Middle Bronze Age cultures on the Danubian Lowland above all Monteoru, as well as Costiţa, Tei and Wittenberg; researchers do not exclude, however, some influence by the representatives of the Sabatinovka culture or – more generally – 'eastern impulses' [Lytvynenko 2009; Cherednichenko 2014].

The NC is considered to be contemporaneous with the Sabatinovka culture and the late stage of the Komarov culture, which it bordered on.

There is no clear answer to the question about the chronological brackets of the NC or the entire Sabatinovka-Noua-Coslogeni complex for that matter. While in the 1980s, it was believed that these taxa could be dated to the 14th/13th-12th century BC [Dergachev 1986: 170], today, a clear tendency to make them older is observed [Klochko 2006: 307-308; Sava, Kaiser 2011: 394-395].

Table 1

¹⁴C Dates for late Eneolithic and Bronze age prologue cultures in the Prut-Dniester interfluvium

Site/feature	Lab number	¹⁴ C Age BP	¹⁴ C date calibrations	Taxonomic assignment
Bursuceni 1/20	HD-19362	4548±28	3345–3120	Zhivotilovka type
Bursuceni 1/21	HD-19933	4452±22	3110±3030	Zhivotilovka type
Dubinovo 1/8	Ki-11200	3940±70	2575–2349	CC
Dubinovo 1/11	Ki-11202	3720±70	2267–1981	CC

A summary outline of NC sites in the Prut-Dniester interfluvium can be found in the works by E. Sava and V.A. Dergachev [Sava 2002: 141-158; Dergachev 2010: 305-308].

4. RADIOCARBON CHRONOMETRY

Only few radiocarbon dates are available for the forest-steppe zone: these are two burials of the Zhivotilovka type from the Bursuceni site and relatively close (geographically) CC burials from Dubinovo on the Southern Bug River (Table 1).

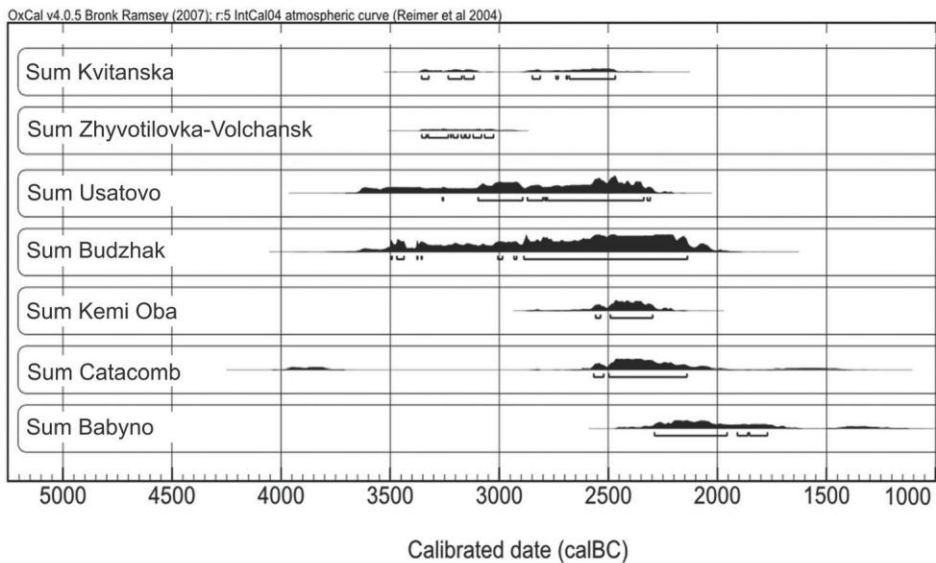


Fig. 5. Graphic presentation of the sum of dates for the cultures of the Late Eneolithic, and Early and Middle Bronze Age on the north-western Black Sea Coast

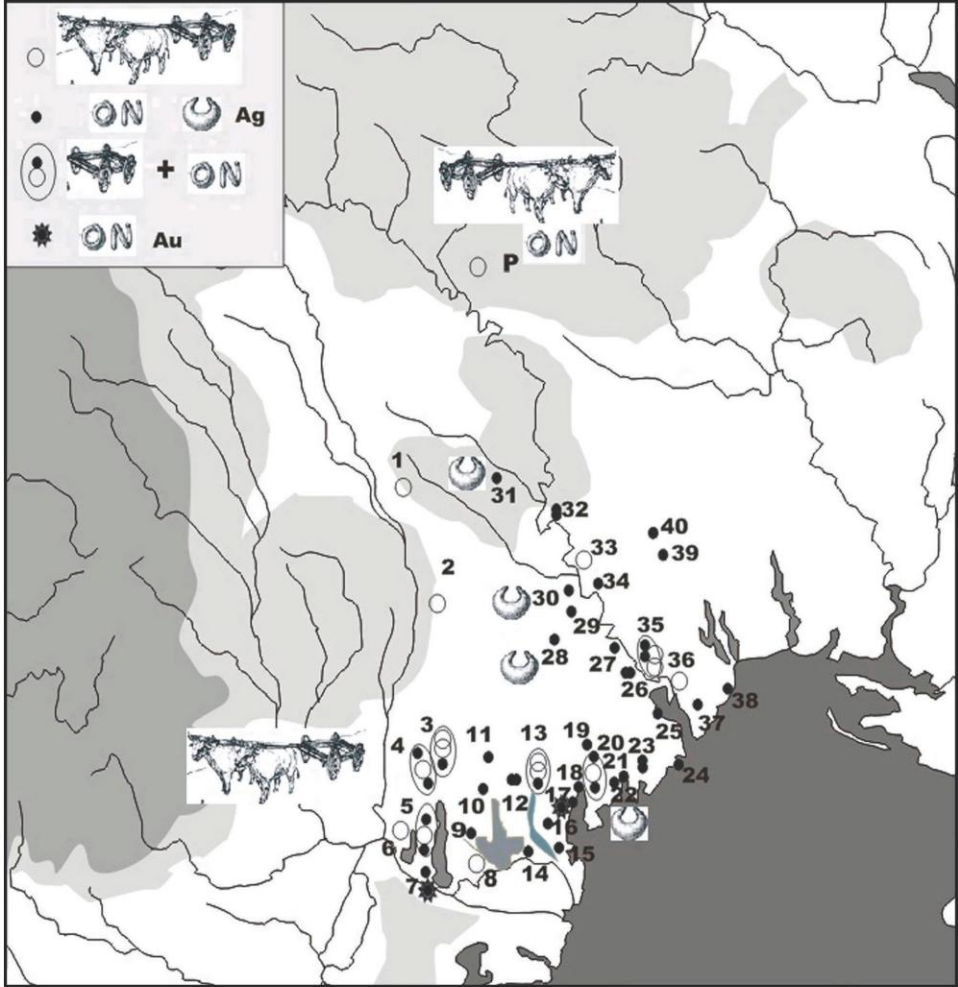


Fig. 6. Budzhak culture burials with wagons and silver ornaments on the north-western Black Sea Coast

This set of dates is supplemented by data for regions lying further south. Generally, the data are consistent with the overall chronology of the cultures discussed above (Fig. 5).

Now, this picture should be expanded to account for the information obtained by the *Yampil Expedition* mentioned earlier [see Goslar et al. 2015].

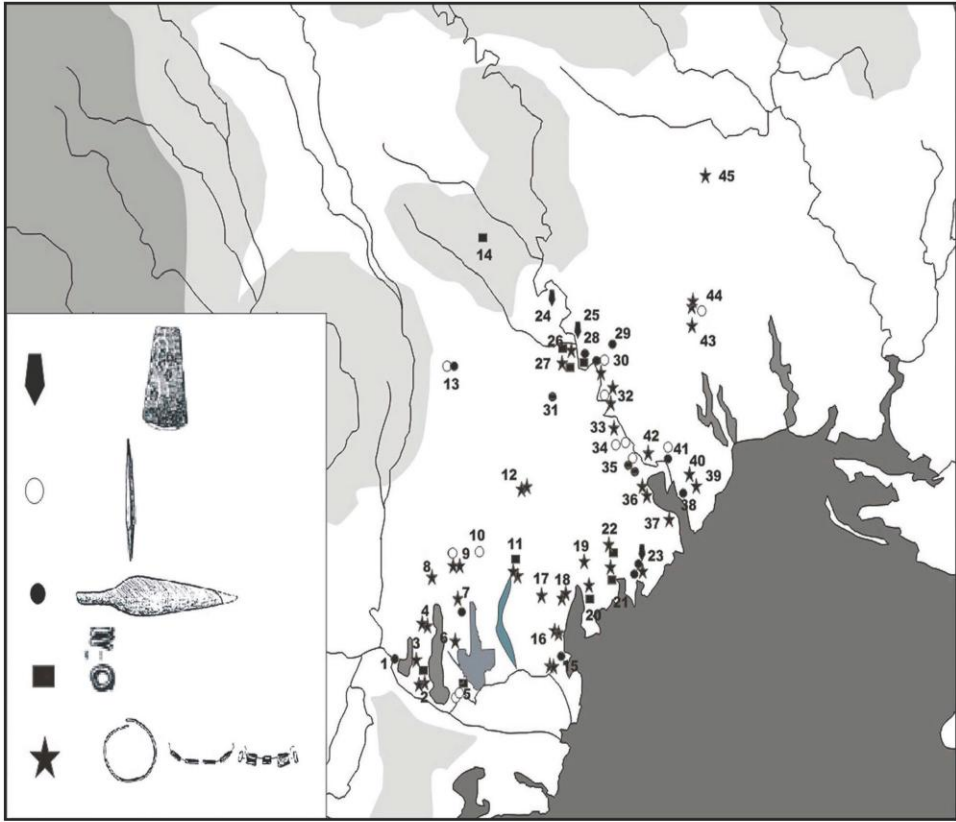


Fig. 7. Budzhak culture burials with copper products on the north-western Black Sea Coast

5. THE CULTURAL CONTEXT OF THE BLACK SEA STEPPE: THE PERSPECTIVE OF THE BUDZHAK CULTURE

Comparing the two regions – the Prut and Dniester drainage basins – a difference can be noticed in the way they were settled by the tribes of Bronze Age prologue cultures. The difference can be illustrated by the Budzhak culture (or, more broadly, the YC circle).

The Dniester drainage basin holds more of its prestigious artefacts – wagons, silver ornaments, metal goods – than its Prut counterpart. The same can be said about the distribution of burials with weapons (Fig. 6-8). The lower Dniester drainage basin is where western and north-western directions of relations kept by ‘Budzhak’ populations crossed; the northern route is documented. The middle Dniester drainage basin must have joined the Budzhak steppe to northern territories

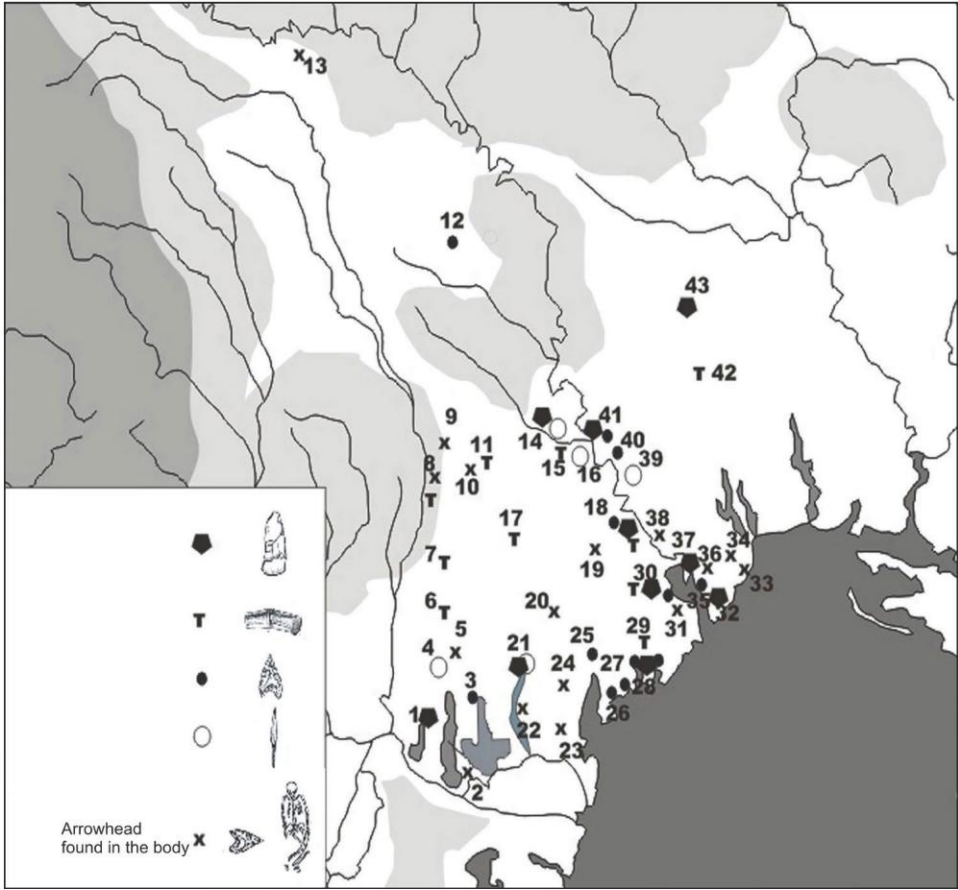


Fig. 8. Budzhak culture burials with weapons on the north-western Black Sea Coast

and central European cultures [Ivanova 2014: 26]. About the possible existence of the Dniester route, researchers wrote already earlier [Koško, Klochko 2009].

Whereas in the Prut drainage basin, the sites of both the Budzhak culture and the CC and BC are located close to known river crossings (Ungheni-Iași, Dumeni, Corpaci, Tețcani, Lipcani). Moreover, the Prut River may have been thought of as an obstacle on the westward route and not as a westward route as such.

CATALOGUE OF SITES ³**Yamnaya culture****Prut-Dniester Interfluve and Dniester Drainage Basin**

1. Medveja 1/4; 3/1; 4/2; 4/4; 5/1; 5/2; 5/3; 5/4 [Savva, Dergachev 1984].
2. Cotiujeni 1/3; 1/6; 3/3; 3/6; 3/8; 3/10; 3/11; 3/12; 3/14; 3/15; 3/15; 3/17 [Agulnikov 1992].
3. Corjeuți 1/3; 2/1; 3/1; 4/1; 4/7; 4/8; 4/9; 5/1; 6/3; 7/3; 8/1; 8/4; 8/5; 9/2; 9/3 [Levițki, Demcenko 1994].
4. Pererîta 1/1; 1/9; 1/10; 2/1; 2/5; 2/6; 2/10 [Kurchatov 2006].
5. Tețcani 1/1; 1/2; 1/7; 1/8; 1/9; 1/11; 1/12 [Glazov, Kurchatov 2005].
6. Burlănești 1/3; 1/4; 1/7; 1; 12; 1/13; 2/3; 3/3; 3/7; 4/3; 4/5; 4/6; 4/7; 4/12; 4/13; 5/3; 4/4 [Demchenko, Levitskiy 2006].
7. Hancăuți 1/2; 1/3; 1/4; 1/7; 1/9; 1/12; 2/4; 2/5; 2/6; 2/7; 2/8 [Dergachev 1982].
8. Corpaci I 1/5; 4/1; 4/3; 4/5; 5/3; 5/5; 5/6 [Dergachev 1982]; Corpaci II 2/4; 2/6; 2/7; 2/8; 2/9; 2/11; 2/12; 2/13; 2/14; 2/15; 2/16; 3/1; 3/2; 3/3; 3/4; 3/5; 3/6; 4/1; 4/2; 4/4; 4/5 [Yarovoy 1984].
9. Cuconești Vechi 1/1; 1/3; 1/7; 2/2; 2/3; 3/5 [Dergachev 1982].
10. Scherbaki 1/1; 1/2; 1/5; 1/6 [Dergachev 1982]; 2/2; 2/3 [Larina 1989].
11. Dumeni 1/7; 1/10; 3/2; 3/5 [Dergachev 1986].
12. Duruitoarea Nouă I 1/2 [Dergachev 1982]; Duruitoarea Nouă II (Vărativ) 1/1; 1/5; 1/6; 1/7; 1/8; 1/10; 1/11 [Larina 1989]; Duruitoarea Nouă III 1/2; 1/3; 1/5; 2/1; 2/3; 2/4 [Demchenko 1988]; 3/3; 3/4; 4/1; 4/2; 4/3; 5/4; 5/5; 5/6; 6/2; 6/5; 7/2; 7/3 [Demchenko 2007].
13. Cuconești Vechi 1/5; 1/6; 1/7; 1/9; 1/12; 3/1; 3/2; 3/5; 5/2; 6/1; 8/2; Costeș-ti Noi 1/1 [Dergachev; 1982].
14. Iabloana 1/1; 1/3; 1/4; 1/7; 1/8; 1/11; 1/15; 1/16; 1/17; 1/18; 1/19 [Yarovoy 1983a].
15. Mărculești 1/1; 1/2; 2/2 [Levinskiy, Tentiuk 1990]; 3/1; 3/2; 3/3; 3/5; 3/6; 3/8; 3/9; 3/10; 3/11; 3/12; 3/14; 3/15; 3/16 [Beylekchi 1992].
16. Frunzeny 1/1; 1/2; 1/4; 1/6 [Dergachev 1973].

³ (?) = marks burials whose cultural interpretation in the publication or the report raises doubts with the present Authors.

17. Bursuceni 1/2; 1/6; 1/9; 1/10; 1/12; 1/14; 1/15; 1/16; 1/18; 1/19; 1/3; 1/24; 1/26 [Dergachev 1986].
18. Mîndreşti 1/1; 1/3; 1/4; 1/8 [Dergachev 1973].
19. Rogojeni 1/1; 1/2 [Agulnikov *et al.* 2014].
20. Codrul Nou 1/2; 1/3; 1/6; 1/7; 2/1; 3/6 [Dergachev 1986]; Brînzani Noi 1/2; 1/3; 1/4 [Agulnikov, Mistreanu 2014].
21. Ciocîlteni 2/6; 2/9; 2/10; 2/13; 3/3; 4/1; 4/2; 4/3; 4/4; 4/5; 5/3; 5/6; 5/7; 5/9 [Ketraru, Khakheu 1990].
22. Brăviceni 1/1; 1/10; 1/11; 1/12; 1/14; 2/2; 2/3; 2/4; 2/5; 2/7; 2/8; 2/9; 3/1; 4/4; 7/2; 7/4; 7/8; 7/9; 7/12; 7/13; 9/5; 9/6; 11/1; 11/8; 11/9; 12/1; 12/2; 12/3; 13/4; 13/5; 13/6; 13/7; 15/4; 16/1; 16/4; 16/6; 16/8; 16/9; 16/10; 16/11; 17/1; 17/3; 17/4; 17/5; 18/1; 18/2; 18/3; 18/5; 19/1; 19/4; 19/5; 19/7; 19/8; 19/11; 23/1; 23/3; 23/7; 24/3 [Larina *et al.* 2008].
23. Orhei 1/1; 1/2; 1/3; 1/4; 1/5 1/6; 1/8; 1/9 [Popovich 2008].
24. Mocra 1/3; 1/6; 1/7; 1/8; 1/9; 1/12; 1/13; 1/14; 1/15; 3/1; 3/4; 3/6; 3/7; 3/8; 4/2 [Kashuba *et al.* 2001-2002].
25. Timkovo 1/1; 1/2; 1/4; 1/6 [Ostroverkhov *et al.* 1993].
26. Podoima 3/6; 3/7; 3/8 [Bubulich, Khakheu 2002].
27. Camenca 444/3; 445/7 [Kachalova 1974].
28. Cuzmin 1/2; 2/2; 2/6; 2/7; 3/1; 3/2; 4/1; 4/3; 4/4; 4/5 [Bubulich, Khakheu 2002].
29. Hristovaia 1/1; 1/2; 1/3; 1/4; 1/5; 1/6; 1/7; 1/8; 1/9 [Yarovoy 1980].
30. Ocnița 1/1; 1/3; 1/4; 1/7; 1/8; 1/9; 2/3; 2/4; 2/5; 2/6; 3/1; 3/3; 3/6; 3/8; 3/9; 3/10; 3/12; 3/13; 3/14; 3/15; 3/16; 4/1; 4/3; 4/4; 4/5; 4/6; 4/7; 5/4; 5/5; 5/6; 5/7; 5/8; 5/9; 6/3; 6/8; 6/9; 6/10; 6/11; 6/13; 6/16; 6/17; 6/18; 6/19; 6/20; 6/21; 6/22; 6/25; 6/27; 6/28; 7/1; 7/3; 7/4; 7/5; 7/6; 7/7; 7/8; 7/9; 7/10; 7/11; 7/12 [Manzura *et al.* 1992].
31. Prydnistrianske 4/3; 4/4; 4/6; 4/8; 4/9 [Włodarchak *et al.* 2015].
32. Sloboda Pidlisivska 2/?; 2/?; 2/?; 2/? [Potupchyk, Razumov 2014: 37].
33. Pidlisivka 1A; 1Aa; 1B 1/4; 1/8; 1/9; 1/10; 1/11 [Koško *et al.* 2014].
34. Severynivka 1/5; 2/1; 2/4; 2/5; 2/6; 2/7; 2/8; 2/9; 2/10; 2/11; 2/12; 2/13 [Harat *et al.* 2014].
35. Porohy 1/1; 1/2; 2/3; 2/4; 2/5; 2/6; 3/2 (1985 r.); 3/4 (1985 r.); 4/8 [Harat *et al.* 2014]; Porohy 3A (2011 r.); 3A/1; 3A/2 (?); 3A/3; 3A/7 (?); 3A/10; 3A/11; 3A/12; 3A/14 (?); 3A/15; 3A/17; 3A/18; 3A/19; 3A/20 [Razumov *et al.* 2011].
36. Dobrianka 1/4; 1/5; 1/6; 1/7; 1/8 [Harat *et al.* 2014].
37. Pysarivka 1/1; 1/2; 2/3; 3/1; 3/2; 3/3; 4/1; 4/2; 5/1; 5/2; 6/1; 6/2; 6/3; 7/2; 8/2; 9/2; 9/3 [Harat *et al.* 2014].
38. Klembivka 1/5 (?); 1/14; 1/15 [Razumov *et al.* 2013].

West Bank of the Prut

1. Corlăteni - 1949 1/3 [Burtănescu 2002].
2. Glăvănești-Vechi - 1949 1; 3; 1/10; 1/11; 1/17 [Burtănescu 2002].

Catacomb culture

Prut-Dniester Interfluve and Dniester Drainage Basin

1. Medveja 4/6 [Savva, Dergachev 1984].
2. Cotiujeni 1/1 [Agulnikov 1992].
3. Corjeuți 4/10 [Levițki, Demchenko 1994].
4. Tețcani [Yarovoy 1990].
5. Bezeda [Yarovoy 1990].
6. Hancăuți 1/8 [Dergachev 1982].
7. Corpaci 1/2; 1/3 [Dergachev 1982].
8. Cuconești Vechi 1/9; 3/7 [Yarovoy 1984]; 5/3; 5/7; 9/21A; 9/22; 9/27; 10/2; 16/3; 16/13; 18/1; 19/3 [Dergachev 1982; 1986].
9. Dumeni 1/4; 1/9 [Dergachev 1986]; 3/4 [Demchenko 1988].
10. Duruitoarea Nouă 1/4; 1/6; 2/2; 2/5; 3/2; 4/6 [Demchenko 1988; Demchenko 2007].
11. Codrul Nou 1/4; 1/5; 1/9; 2/3; 2/4; 2/5; 2/6; 2/7; 2/8; 3/1; 3/2; 3/3; 3/4; 3/10 [Yarovoy 1990; Dergachev 1986].
12. Cuzmin 2/5 [Bubulich, Khakheu 2002].
13. Ocnîța (Kamenka) 3/5 [Manzura *et al.* 1992].
14. Prydnistryanske 1/4 [Włodarchak *et al.* 2015; Klochko *et al.* 2015].
15. Pidlisivka 1/5(?) [Koško *et al.* 2014].

West Bank of the Prut

1. Corlăteni I 1/2 [Burtănescu 2002].
2. Slobozia Hănești 1/3 [Burtănescu 2002].
3. Iacobeni 1/19 [Burtănescu 2002].
4. Glăvănești-Vechi 1/13 [Burtănescu 2002].

Edineț culture

1. Brînzeni [Titov 1975].
2. Cuconești Vechi [Dergachev 1982].
3. Văratice 1/4; 1/7 [Demchenko 1989].
4. Cuconești Vechi II 4/ ? [Dergachev 1986].
5. Pruteni [Dergachev 1986].
6. Tochile-Răducani [Dergachev 1986].

Babyno culture**Prut-Dniester Interfluve and Dniester Drainage Basin**

1. Cotuijeni 1/4; 1/5; 3/1; 3/2 [Agulnikov 1992].
2. Corpaci 2/12; 2/2; 2/5 [Yarovoy 1984].
3. Cucuonești Vechi 4/2; 8/10; 9/2; 9/26; 9/28; 9/31 [Dergachev 1986].
4. Dumeni 74; 8/8; 8/10 [Savva 1992].
5. Duruitoarea Nouă 3/1 [Demchenko 2007]; Văratice 1/5 [Demchenko 1989].
6. Iabloana 1/5; 1/10 [Yarovoy 1983].
7. Bursuceni 1/13 (?) [Yarovoy 1979].
8. Brăviceni 3/2; 7/1; 7/7; 15/1; 15/2; 16/2?; 18/4 [Larina *et al.* 2008].
9. Ocnița (Camenca) 2/2; 3/2; 3/7; 4/2; 5/2; 6/7; 6/26; 7/13 [Manzura *et al.* 1992].
10. Pidlisivka 1/5; 1/7; 1/13(?)⁴ [Harat *et al.* 2014].
11. Severynivka 1/4; 2/2 [Harat *et al.* 2014].
12. Porohy 2/1(?); 3/5; 4/1; 4/5; 4/6(?); 4/9 [Harat *et al.* 2014]; Porohy 3A/5(?); 3A/8(?); 3A/22(?) [Razumov *et al.* 2011].
13. Dobrianka 1/1(?); 1/2; 1/3; 1/9(?); 1/10; 1/11 [Harat *et al.* 2014].
14. Pysarivka 8/4(?); 9/1(?) [Harat *et al.* 2014].
15. Klembivka 1/1; 1/2(?); 1/3(?); 1/6(?); 1/7(?); 1/8(?); 1/10(?); 1/11(?); 1/12(?); 1/13(?) [Razumov *et al.* 2013].

West Bank of the Prut

1. Corlăteni - 1949 1/3 [Burtănescu 2002].
2. Glăvănești-Vechi - 1949 1; 3; 1/10; 1/11; 1/17 [Burtănescu 2002].

Translated by Piotr T. Żebrowski

⁴ When publishing the materials; S. Razumov classified all burials with the deceased lying crouched on the side as the BC. In a number of cases; however; the present authors do not agree with this interpretation. In such cases; the burials are marked with a question mark.

REFERENCES

Agulnikov S.M.

1992 Issledovanie kurganov u s. Kotiuzhen. In: *Archeologicheskie issledovaniya v Moldavii (1986 g.)*, 104-120. Kishinev.

Agulnikov S., Mistreanu E., Popovici S.

2014 Cercetări de salvare la tumulul de la Rogojeni, r-nul Șoldănești. *Arheologia Preventivă în Republica Moldova* 1(1-2): 35-42.

Agulnikov S., Mistreanu E.

2014 Cercetările de salvare la tumulul de lângă S. Brîzenii Noi (r-nul Telenești). *Arheologia Preventivă în Republica Moldova* 1(1-2): 43-54.

Berezanskaya S.S., Otroschenko V.V., Cherednichenko N.N., Sharafutdinova I.N., (Eds)

1985 *Kultury epokhi bronzy na territorii Ukrainy*. Kyiv.

Basov V.M.

2006 Rol cheloveka v formirovanii vidovogo raznoobraziya sovremennykh ekosistem. In: *Dinamika sovremennykh ekosistem v golocene*, 41-45. Moskva.

Beylekchi V.S.

1992 Raskopki kurgana 3 u s. Mierkulesht. In: *Archeologicheskie issledovaniya v Moldavii (1986g.)*, 72-87. Kishinev.

Berg L.S.

1947 *Geograficheskie zony Sovetskogo Soyuza*, vol. 1. Moskva.

Berezanskaya S.S.

1986 Kultura mnogovalikovoy keramiki. In: S.S. Berezanskaya, V.V. Otroschenko, N.N. Cherednichenko, I.N. Sharafutdinova (Eds) *Kultury epokhi bronzy na territorii Ukrainy*, 5-43. Kyiv.

Bratchenko S.N., Shaposhnikova O.G.

1985 Katakombnaya kulturno-istoricheskaya obschnost. In: I.I. Artemenko, S.S. Berezanskaya, V.D. Baran, V.A. Anokin (Eds) *Arkheologia Ukrain-skoy SSR*, vol. 1: 403-419. Kyiv.

Bubulich V., Khakheu V.

2002 Issledovanie kurganov v Kamenskom rayone na levoberezhie Srednego Dnestra. In: N.A. Ketraru (Ed.) *Severnoe Prichernomore: ot eneolita k antichnosti*, 112-148. Tiraspol.

Burdo N.B., Polischuk L.Y.

- 2013 Tripolskaya kultura. In: S. Hansen, J. Chodorowski, S.D. Kryzhytskiy, G.Y. Ivakin (Eds) *Drevnie kultury Severo-Zapadnogo Prichernomoria*, 43-84. Odessa.

Burtănescu F.

- 2002 *Epoca timpurie a bronzului între Carpați și Prut cu unele contribuții la problemele perioadei premergătoare epocii bronzului în Moldova*. București.

Cherednichenko Y.A.

- 2014 Sabatinovskaya kultura v sisteme drevnostey bronzovogo veka yuga Vostochnoy Evropy. *Stratum plus* 2: 15-112

Cherniakov I.T.

- 1975 *Plemena Severo-Zapadnogo Prichernomoria v pozdnem bronzovom veke. Avtoreferat dissertatsii na soiskanie uchonoj stepeni kandidata istoricheskikh nauk*. Kyiv.

Glazov V., Kurchatov S.

- 2005 Tetskanskie kurgany. Novoe v pogrebalnom obriade sarmat Dnestrovsko-Prutskogo Regiona. *Revista Arheologică. Serie nouă* 1(1): 301-320.

Demchenko T.I.

- 1988 Issledovaniya kurganov v Ryshkanskom rayone. In: *Archeologicheskie issledovaniya v Moldavii* (1988 g.). Kishinev.
- 1989 Novyi pamiatnik edinetskoj kulturnoj gruppy. In: *Archeologicheskie issledovaniya v Moldavii* (1986 g.), 96-109. Kishinev.
- 2007 Archeologicheskie issledovaniya kurganov levoberezhia Srednego Pruta (raskopki 1982 i 1984 gg.). *Tyragetia. Serie nouă I (XVI)*: 195-215.
- 2008 K voprosu o kruge pamiatnikov Edinetskoj kulturnoj grupy. *Tyragetia. Serie noua II (XVII)*: 189-203.

Demchenko T.I., Levitskiy O.G.

- 2006 Kurgany u sela Burlienesht. *Revista Arheologică. Serie nouă* 2 (1-2): 293-327.

Dergachev V.A.

- 1973 *Pamiatniki epokhi bronzy. Arheologicheskaya karta Moldavii*, vol. 3. Kishinev.
- 1982 *Materialy raskopok arkheologicheskoy ekspeditsii na Srednem Prute (1975-1976 gg.)*. Kishinev.
- 1983 Katakombnaya kultura v Dnestrovsko-Prutskom mezhdureche In: *Pervobytnye drevnosti Moldavii*, 128-151. Kishinev.

- 1986 *Moldaviya i sosednie territorii v epokhu bronzy*. Kishinev.
- 1994 Epoca bronzului. Perioda timpurie. *Thraco-Dacica XV*: 1-2.
- 1997 *Metallicheskie izdeliya k probleme genezisa kultur rannego galshtata Karpato-Danubio-nordpontiyskogo Regiona*. Kishinev.
- 1999 Osobennosti kulturno-istoricheskogo razvitiya Karpato-Podnestrovia. K probleme vzaimodeystviya drevnikh obschestv Sredney, Yugo-Vostochnoy i Vostochnoy Evropy. *Stratum plus 2*: 169–221.
- 2010 *Topory-kelty pozdney bronzy Karpato-Podunavia*. Vol. 1. Kishinev.
- 2010 Evoluția comunităților patriarhale. Epoca bronzului. In: *Istoria Moldovei*. 305-308. Chișinău.
- Dylis N.V.
- 1970 Biogeotsenoz. In: *Bolshaya sovetskaya entsiklopediya*. vol. 3, 330-332. Moskva.
- Fedotov S.V.
- 2008 Vertikalnaya differentsiatsiya landshaftov i problema granits prirodnykh zon v tsentre Russkoy ravniny. *Vestnik Voronezhskogo gosudarstvennogo Universiteta. Seriya geografiya. Geoekologiya 2*: 5-12.
- Glazov V., Kurchatov S.
- 2005 Tetskanskies kurgany. Novoe v pogrebalnom obriade sarmat Dnestrovsko-Prutskogo Regiona. *Revista Arheologica. Serie nouă 1(1)*: 301-320.
- Harat K., Potupczyk M., Razumow S.
- 2014 Charakterystyka źródeł archeologicznych pozyskanych w latach 1984-1993. In: A. Koško, M. Potupczyk, S. Razumow (Eds) *Naddniestrzańskie kompleksy cmentarzysk kurhanowych społeczności z III i z pierwszej połowy II tysiąclecia przed Chr. w okolicach Jampola, obwód winnicki*. *Archaeologia Bimaris – Monografie 6*, 45-204. Poznań.
- Ivanova S.V.
- 2013 Katakombnye kultury. In: S. Hansen, J. Chodorowski, S.D. Kryzhytskiy, G.Y. Ivakin (Eds) *Drevnie kultury Severo-Zapadnogo Prichernomoria*, 255-275. Odessa.
- 2014 Stan badań nad osadnictwem kultur jamowej i katakumbowej w zlewni dolnego Dniestru. In: A. Koško, M. Potupczyk, S. Razumow (Eds) *Naddniestrzańskie kompleksy cmentarzysk kurhanowych społeczności z III i z pierwszej połowy II tysiąclecia przed Chr. w okolicach Jampola, obwód winnicki*. *Archaeologia Bimaris – Monografie 6*, 17-34. Poznań.
- Kachalova N.K.
- 1974 *Ermitazhnaya kollektsiya N.E. Brandenburga*. Moskva.

Kaiser E.

2003 *Studien zur Katakombengrabkultur zwischen Dnepr und Prut. Archäologie in Eurasien* 14. Mainz.

Kashuba M.T., Kurchatov S.I., Scherbakova T.A.

2001-2002 Kochevniki na zapadnoy granitse Velikoy stepi (po materialam kurganov u s. Mocra). *Stratum plus* 4: 180-252.

Ketraru N.A., Khakheu V.P.

1990 Chokyltianskie kurgany. In: *Archeologicheskie issledovaniya v Moldavii (1990 g.)*, 49-73. Kishinev.

Ketraru N.A., Nikolaeva N.A., Podolskiy N.L., Safronov V.A.

1975 Kurgany u s. Starye Kukoneshty Edinetskogo rayona MSSR. *Arheologicheskie otkrytiya (1974 g.)*: 438.

Klochko V.I., Koško A., Potupchyk M.V., Włodarczak P., Żurkiewicz D. Ivanova S.V.

2015 Tripolye (Gordinești group), Yamnaya and Catacomb culture cemeteries, Prydnistryanske, site 1, Yampil Region, Vinnitsa Oblast: an archaeometric and chronometric description and a taxonomic and topogenetic discussion. In: A. Koško (Ed.) *Podolia as a Cultural Contact Area in the 4th/3rd-2nd Millennium BC. Baltic-Pontic Studies* 20: 183-255.

Klochko V.I., Koško A., Razumov S.M., Włodarczak P., Żurkiewicz D.

2015a Eneolithic, Yamnaya and Noua culture cemeteries from the first half of the 3rd and the middle of the 2nd millennium BC, Porohey, site 3a, Yampil Region, Vinnitsa Oblast: archaeometric and chronometric description, ritual and taxonomic-topogenetic identification. In: A. Koško (Ed.) *Podolia as a Cultural Contact Area in the 4th/3rd-2nd Millennium BC. Baltic-Pontic Studies* 20: 78-141.

2015b Eneolithic, Babyno and Noua culture cemeteries, Klembivka, site 1, Yampil Region, Vinnitsa Oblast: archaeometry, taxonomy and topogenetics. In: A. Koško (Ed.) *Podolia as a Cultural Contact Area in the 4th/3rd-2nd Millennium BC. Baltic-Pontic Studies* 20: 142-182.

Koško A. Klochko V.I.

2009 Transit routes between the Baltic and Black Seas: early development stages – from the 3rd to the middle of the 1st millennium BC. An outline of research project. In: A. Koško, V.I. Klochko (Eds), *Routes between the Seas: Baltic-Bug-Boh-Pont from the 3rd to the Middle of the 1st Millennium BC. Baltic-Pontic Studies* 14: 9-18.

Koško A., Potupczyk M., Razumow S. (Eds)

2014 *Naddniestrzańskie kompleksy cmentarzysk kurhanowych społeczności z III i z pierwszej połowy II tysiąclecia przed Chr. w okolicach Jampola, obwód winnicki. Z badań nad północno-zachodnią rubieżą osadnictwa kręgu kultur „wczesnobrązowych” strefy pontyjskiej. Badania z lat 1984-2014. Archaeologia Bimaris – Monografie 6. Poznań.*

Kremenetskiy K.V.

1991 *Paleoekologiya drevneyshikh zemledeltsev i skotovodov Russkoy ravniny. Moskva.*

Krushelnytska L.

2006 *Kultura Noa na zemliakh Ukrayiny. Lviv.*

Kulpin E.S.

2001 *Tsivilizatsionnyi fenomen Zolotoy Ordy (Kolonizatsiya yuzhnorusskikh stepey v XIII–XV vekakh). Obschestvennye nauki i sovremennost 3: 74-88.*

Kurchatov S.

2006 *Issledovanie kurganov epokhi bronzы na Srednem Prute. Revista Arheologică. Serie nouă II (1-2): 263-287.*

Larina O.V.

1989 *Novye kurgannye materialy eneolita-ranney bronzы na Srednem Prute. In: Archeologicheskie issledovaniya v Moldavii (1989 g.), 61-78. Kishinev.*

2003 *Pozdnetripolskoe pogrebenie gordineshtskogo tipa na Dnestre. In: E. Sava (Ed.) Interferențe cultural-chronologice în spațiul nord-pontic, 57-80. Chișinău.*

Larina O., Manzura I., Khakheu V.

2008 *Brevichenskie kurgany. Kishinev.*

Levinskiy A.N., Tentiuk I.S.

1990 *Issledovanie kurganov u s. Mierkulesht. In: Issledovaniya molodykh uchenykh Moldavii, 93-100. Kishinev.*

Levițki O., Demcenko T.

1994 *Grupul tumular de la Corjeuți-Briceni (R. Moldova). Memoria Antiquitatis XIX: 213-233.*

Lytvynenko R.O.

2009 *Kulturne kolo Babyne (za materialamy pokhovalnykh pamiatok). Avtoreferat na zdobuttia stupenia doktora istorychnykh nauk.* Kyiv.

Machnik J.

1991 *The earliest Bronze Age in the Carpathian Basin.* Bradford.

Makohonienko M., Hildebrandt-Radke I.

2014 Kontekst przyrodniczy i perspektywy studiów paleośrodowiskowych stanowiska kultury jamowej w Pidlisiwce nad Dniestrem, zachodnia Ukraina. In: A. Koško, M. Potupczyk, S. Razumow (Eds) *Naddniestrzańskie kompleksy cmentarzysk kurhanowych społeczności z III i z pierwszej połowy II tysiąclecia przed Chr. w okolicach Jampola, obwód winnicki. Z badań nad północno-zachodnią rubieżą osadnictwa społeczności kręgu kultur „wczesnobrzązowych” strefy pontyjskiej. Badania z lat 1984-2014. Archaologia Bimaris – Monografie 6*, 247-274. Poznań.

Manzura I.V., Klochko E.O., Savva E.N.

1992 *Kamenskie kurgany.* Kishinev.

Milkov F.N.

1951 Lesostepnoy landshaft i ego zonalnoe podrazdelenie. *Izvestiya AN SSSR. Seriya geografiya* 5: 3-14.

Nikolaeva N.A., Safronov V.A.

1976 Kurgany u s. Dumeny Ryshkanskiego rayona. In: *Archeologicheskije issledovaniya (1976 g.)*, 472-473. Moskva.

Ostroverkhov A.S., Subbotin L.V., Subbotin A.V.

1993 Kurgan epokhi bronzы-eneolita u s. Timkovo. In: *Arkheolohichni doslidzhennia v Ukrayini v 1991 roku*: 83-84. Lutsk.

Pâslaru I.

2006 *Cultura Delacău-Babino.* Mangalia.

Popovich S.

2008 Issledovaniya kurgana u s. Orhey. *Revista Archaeologica. Serie nouă* IV(1): 93-99.

Potupczyk M., Razumow S.

2014 Zgrupowanie cmentarzysk kurhanowych w rejonie jampolskim. In: A. Koško, M. Potupczyk, S. Razumow (Eds) *Naddniestrzańskie kompleksy cmentarzysk kurhanowych społeczności z III i z pierwszej połowy II tysiąclecia przed Chr. w okolicach Jampola, obwód winnicki. Z badań nad północno-zachodnią rubieżą osadnictwa społeczności kręgu kultur*

„wczesnobrzązowych” strefy pontyjskiej. *Badania z lat 1984-2014. Archaologia Bimaris – Monografie 6*: 35-40.

Pustovalov S.Z.

2001-2002 Dynamika izmeneniy klimata srednego golocena i nekotorye problemy sotsialno-ekonomicheskikh rekonstruktsiy katakombnogo obschestva Severnogo Prichernomia. *Stratum plus 2*: 317–334.

Rafalovich I.A., Ketraru N.A.

1966 Iz istorii arkheologii i kraevedeniya Moldavii. In: *Problemy geografii Moldavii*, vol. I, 108-111. Kishinev.

Rassamakin Y.Y.

1994 The main directions of the development of early pastoral societies of northern Pontic Zone: 4500-2450 BC (Pre-Yamnaya Cultures and Yamnaya Culture). In: A. Koško (Ed.) *Nomadism and Pastoralism in the Circle of Baltic-Pontic Early Agrarian Cultures: 5000–1650 BC. Baltic-Pontic Studies 2*: 29-70.

1997 Svit skotariv. In: *Davnia istoriya Ukrayiny*, vol. 1, 273–301. Kyiv.

Razumov S., Koško A., Karnaukh E., Manigda O.

2013 *Zvit pro robotu spilnoyi ukrayinsko-polskoyi Yampilskoyi arkheolohichnoyi ekspeditsii v 2012 rotsi* (held in the archives of IA NANU). Kyiv.

Razumov S.M., Koško A., Karnaukh E.G.

2012 *Doslidzhennia kurhanu bilia s. Porohy Yampilskoho rayonu Vinnitskoyi Oblasti* (held in the archives of IA NANU). Kyiv.

Roman P.

1994 Bronzul timpuriu. In: *Enciclopedia arheologiei și istoriei a României*, 212-213. București.

Safronov V.A.

1975 Kurgany u s. Starye Kukoneshty Edinetskogo rayona Moldavskoy SSR (s soavtorami). In: *Arkheologicheskie otkrytiya 1974 goda*. Moskva.

1976 Kurgany u s. Dumiany Ryshkanskiego rayona Moldavskoy SSR. In: *Arkheologicheskie otkrytiya 1975 goda*. Moskva.

Savva E.N. (= Sava E.)

1992 *Kultura mnogovalikovoy keramiki Pruto-Dnestrovskogo mezhdurechia*. Kishinev.

2002 *Die Bestattungen der Noua-Kultur. Ein Beitrag zur Erforschung spätbronzezeitlicher Bestattungsriten zwischen Dneestr und Westkarpaten. Prähistorische Archäologie in Südosteuropa 19*. Kiel.

Savva E.N., Dergachev V.A.

1984 Raskopki kurganov u s. Medvezha. In: *Kurgany v zonakh novostroek Moldavii*, 98-108. Kishinev.

Sava E., Agulnikov S.

2003 Contribuții noi la definirea ritului funerar de tip Sabatinovka. In: E. Sava (Ed.) *Interferențe cultural-cronologice în spațiul nord-pontic*, 113-138. Chișinău.

Sava E., Kaiser E.

2011 *Poselenie s „zolnikami” u sela Odaia-Michurin, Respublika Moldova (Arkheologicheskie i estestvennonauchnye issledovania)*. Biblioteca „Tyragetia” XIX. Chișinău.

Shabanova G.A., Izverskaya T.I., Gendov V.S.

2014 *Flora i rastitelnost Budzhakskikh stepey Respubliki Moldova*. Kishinev.

Sveshnikov I.K.

1974 *Istoriya naseleennia Peredkarpattia, Podillia i Volyni v kintsi III – na pochatku II tysiacholittia do nashoyi ery*. Kyiv.

1990 Kultura mnogovalikovoy keramiki. In: E.A. Balaguri, O.P. Chernykh (Eds) *Arkheologiya Prikarpatia, Volyni i Zakarpatia. Eneolit, bronză i rannee zhelezo*, 74-76. Kyiv.

Titov V.S.

1975 Otkrytie novoy kultury ranney bronzy v Moldavii. In: *Arkheologicheskie issledovaniya (1974 g.)*. Moskva.

Topal D.A., Tserna S.V.

2010 Pozdnetripolskiy mogilnik i poseleniya u s. Kunicha (Floreshtskiy r-n, Respublika Moldova). *Stratum plus* 2: 281-298.

Toshev G.N.

1981 O pamiatnikakh katakombnoy kultury na territorii Severo-Zapadnogo Prichernomoria. In: *Drevnosti Severo-Zapadnogo Prichernomoria*, 63-71. Kyiv.

1982 *Sredniy period bronzovogo veka Severo-Zapadnogo Prichernomoria. Avtoreferat dissertatsii na soiskaniye uchonoy stepeni kandidata istoricheskikh nauk*. Kyiv.

1986 Kurgany epokhi bronzy u oz. Yalpug In: *Arkheologicheskie otkrytia 1984 g.* Moskva.

1986 Zapadnye sviazi kultury mnogovalikovoy keramiki v Severo-Zapadnom Prichernomorie. In: *Issledovaniya po arkheologii Severo-Zapadnogo Prichernomoria*, 104-115. Kyiv.

1987 *Sredniy period bronzovogo veka Yugo-Zapada SSSR* (held in the archives of INION AN SSSR.19.06.1987 g., № 29903.)

Włodarczak P., Klochko V., Koško O., Potupchuk M.

2015 *Zvit pro rozkopky kurhaniv bilia sela Pridnistrianske Yampilskoho rayonu Vinnitskoyi Oblasti u 2014 rotsi* (held in the archives of IA NANU). Kyiv.

Yarovoy E.V.

1979 Nakhodki sharovidnykh amfor v Moldavii. In: *Problemy epokhi bronzy yuga Vostochnoy Evropy* 35. Donetsk.

1979a Okhrannye raskopki kurgana u s. Bursucheny. In: *Arkheologicheskiye otkrytiya 1978 goda*, 491-492. Moskva.

1980 Kurgan yamnoy kultury u s. Hrustovaya. In: *Arkheologicheskie issledovaniya v Moldavii (1974-1975 gg)*, 45-58. Kishinev.

1983 Kurgan epokhi ranney bronzy u s. Yablona. In: *Archeologicheskie issledovaniya v Moldavii (1983 g.)*, 193-210. Kishinev.

1984 Pogrebalnyi obriad nekotorykh skotovodcheskikh plemen Srednego Pruta (po materialam raskopok kurganov u s. Korpach). In: I.I. Artemenko (Ed.) *Kurgany v zone novostroek Moldavii: 37-75*. Kishinev.

1990 *Kurgany epokhi eneolita-bronzy Nizhnego Podnestrovia*. Kishinev.

1990a K voprosu o zapadnoy granitse katakombnoy kulturno-istoricheskoy Oblasti. In: O.G. Shaposhnikova, V.V. Otroschenko, S.Z. Pustovalov, G.N. Toshev, G.I. Shapovalov (Eds) *Problemy izucheniya katakombnoy kulturno-istoricheskoy obschnosti*, 114-116. Zaporozhe.

1990b Katakombnye pogrebeniya leso-stepnoy Moldavii. In: O.G. Shaposhnikova, V.V. Otroschenko, S.Z. Pustovalov, G.N. Toshev, G.I. Shapovalov (Eds) *Problemy izucheniya katakombnoy kulturno-istoricheskoy obschnosti*, 116-119. Zaporozhe.

Yarovoy E.V., Tserna S.V., Popovich S.S.

2012 Pozdnetripolskiy mogilnik u s. Oksentia (Dubossarskiy rayon, Respublika Moldova). *Stratum plus* 2: 287-302.

Zhurnal Raskopok Brandenbura

1908 *Zhurnal Raskopok N.E. Brandenbura 1888-1902 gg*. Sankt Peterburg.

LIST OF AUTHORS

Maciej Chyleński
Department of History
Institute of Prehistory, Faculty of History
Adam Mickiewicz University
Umultowska 89
61-614 Poznań, Poland
maciejchylenski@gmail.com

Tomasz Goslar
Faculty of Physics
Adam Mickiewicz University
Umultowska 85
61-614 Poznań, Poland
tomasz.goslar@radiocarbon.pl

Marta Gwizdała
Institute of Prehistory, Faculty of History
Adam Mickiewicz University
Umultowska 89
61-614 Poznań, Poland
marta-gwizdala@wp.pl

Svetlana V. Ivanova
Institute of Archaeology
National Academy of Science of Ukraine
Heroyiv Stalingrada 12
04210 Kyiv, Ukraine
svi1956@gmail.com

Mattias Jakobsson
Department of Organismal Biology
and SciLifeLab
Uppsala University
Norbyvägen 18C
SE-752 36 Uppsala, Sweden
mattias.jakobsson@ebc.uu.se

Anna Juras
Department of Human Evolutionary Biology
Institute of Anthropology, Faculty of Biology
Adam Mickiewicz University
Umultowska 89D
61-614 Poznań, Poland
ajuras.anthropology@gmail.com

Viktor I. Klochko
Department of Archaeology
National University of Kyiv-Mohyla Akademy
Skovorody 2
04665 Kyiv, Ukraine
vklochko@ukr.net

Aleksander Koško
Institute of Prehistory
Adam Mickiewicz University
Umultowska 89D
61-614 Poznań, Poland
antokol@amu.edu.pl

Liudmyla V. Litvinova
Department of Bioarchaeology
Institute of Archaeology
Ukrainian Academy of Science
Geroiv Stalingradaave. 12
04210 Kyiv, Ukraine
litvinovalv@ukr.net

Sylwia Łukasik
Department of Human Evolutionary Biology
Institute of Anthropology, Faculty of Biology
Adam Mickiewicz University in Poznań
Umultowska 89D
61-614 Poznań, Poland
lukasik@amu.edu.pl

Helena Malmström
Department of Organismal Biology
and SciLifeLab
Uppsala University
Norbyvägen 18C
SE-752 36 Uppsala, Sweden
helena.malmstrom@ebc.uu.se

Mykhailo V. Potupchik
Department of Culture and Arts
Khmelynske St. 7
21036 Vinnitsa, Ukraine
m_potupchik@ukr.net

Serhiy M. Razumov
Taras Shevchenko University
October 25 128
3300 Tiraspol, Moldova
razum_22@rambler.ru

Marzena Szmyt
Institute of Eastern Studies
Adam Mickiewicz University
Umultowska 89D
61-614 Poznań, Poland
marzena@amu.edu.pl

Gennadiy N. Toshev
Zaporizhya National University
Zhukovskogo Street 66
69063 Zaporizhzhya, Ukraine
gent51@mail.ru

Piotr Włodarczak
Institute of Archaeology and Ethnology
of Polish Academy of Sciences
Centre for Mountains and Uplands
Archaeology in Kraków
Sławkowska 17
31-016 Kraków, Poland
wlodarczak.piotr@gmail.com

Danuta Żurkiewicz
Institute of Prehistory
Adam Mickiewicz University
Umultowska 89D
61-614 Poznań, Poland
danuta@amu.edu.pl

- Vol.1: *Weapons of the Tribes of the Northern Pontic Zone in the 16th–10th Centuries BC.*, by Viktor I. Klochko.
- Vol.2: *Nomadism and Pastoralism in the Circle of Baltic–Pontic Early Agrarian Cultures: 5000–1650 BC*, edited by Aleksander Koško.
- Vol.3: *Cemeteries of the Sofievka type: 2950–2750 BC*, edited by Aleksander Koško.
- Vol.4: *Eastern Exodus of the Globular Amphora People: 2950–2350 BC*, edited by Aleksander Koško.
- Vol.5: *Beyond Balkanization*, edited by Lucyna Domańska, Ken Jacobs.
- Vol.6: *The Trzciniec Area of the Early Bronze Age Civilization: 1950–1200 BC*, edited by Aleksander Koško.
- Vol.7: *The Foundations of Radiocarbon Chronology of Cultures Between the Vistula and Dnieper: 3150–1850 BC*, edited by Aleksander Koško.
- 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 Koško.
- Vol.10: *Weaponry of Societes of the Northern Pontic Culture Circle: 5000–700 BC*, by Viktor I. Klochko.
- Vol.11: *Fluted Maces in the System of Long-Distance Exchange Trails of the Bronze Age: 2350–800 BC*, edited by Aleksander Koško.
- Vol.12: *The Foundations of Radiocarbon Chronology of Cultures Between the Vistula and Dnieper: 4000–1000 BC*, edited by Aleksander Koško and Viktor I. Klochko.
- Vol.13: *Funeral Rites of the Catacomb Community: 2800–1900 BC Ritual, Thanatology and Geographical Origins*, by Katarzyna Ślusarska.
- Vol.14: *Routes between the Seas: Baltic-Bug-Boh-Pont from the 3rd to the Middle of the 1st Millennium BC*, edited by Aleksander Koško and Viktor I. Klochko.
- Vol.15: *‘Cord’ Ornaments on Pottery in the Vistula and Dnieper Interfluvial Region: 5th – 4th Mill. BC*, edited by Aleksander Koško and Marzena Szmyt.
- Vol.16: *Flint Atreifacts of Northern Pontic Population of the Early and Middle Bronze Age: 3200–1600 BC*, by Serhiy M. Razumov
- Vol.17: *Wood Tar in the Dnieper and Elbe Communities: VI – II Millenium BC*, by Sławomir Pietrzak
- Vol.18: *The Ingul-Donets Early Bronze Civilization as Springboard for Transmission of Pontic Cultural Patterns to the Baltic Drainage Basin 3200–1750 BC*, edited by Aleksander Koško and Viktor I. Klochko.
- Vol.19: *Reception Zones of ‘Early Bronze Age’ Pontic Culture Traditions: Baltic Basin – Baltic and Black Sea Drainage Borderlands, 4/3 Mill. to First Half 2 Mil. BC*, edited by Aleksander Koško and Viktor I. Klochko.

Orders regarding *Baltic-Pontic Studies* should be adressed 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 (1-19) are available online at the Adam Mickiewicz University Repository (AMUR): repozytorium.amu.edu.pl

This publication constitutes the fruits of the National Programme for the Development of the Humanities (grant no. 0108/NPH3/H12/82/2014).