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## THE MIDDLE PRUT DEPRESSION. PRELIMINARY DATA ON NEW ARCHAEOLOGICAL FIELD SURVEYS\*\*\*

**Abstract:** The archaeological field survey within micro-zonal units may bring a relevant set of information for remodelling the inhabited spaces of the prehistorical period.

Presently, due to interdisciplinary research, we can access several working tools able to provide data on the presence of human communities in various territories. By joining these research methods, our purpose is to present in the following lines the methodological approach leading to the identification of these unpublished sites in the southwest of the Middle Prut Depression, a microregion extending in the northeast of Romania, in the northwest of the Republic of Moldova and the southwest of Ukraine.

According to the preliminary data obtained from the investigation of the archaeological material sampled, we attributed these unpublished archaeological sites to the late period of the Bronze Age, the Noua Culture (1600-1200 BCE).

The archaeological field survey is ongoing; thus, it will keep generating new data, to be presented gradually by the authors.

**Keywords:** archaeological research; microregion; human communities; interdisciplinary research; Middle Prut Depression; Late Bronze Age period

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### Introduction

The Middle Prut Depression was a very significant area for the cohabitation of human communities during the Bronze Age. The most visible traces left by their activity are the *cenușar* (ash-mound) shelters and flat or tumular necropolises. The

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preliminary results obtained through the literature confirmed the need to extend the periegetic research within this area, intensely inhabited across all historical eras.

Under these circumstances, we outlined a series of objectives that represented the foundation of the investigation: theoretical assessment, assembling a team, identification and research of archaeological heritage, additions to the database regarding local historical heritage, analysis of materiality and additions to the archaeological database.

The field survey relied on a theoretical framework, on result interpreting using competences and methodologies, cartographic utility management and heritage identification within this area.

### **Research methodology**

The first phase of our research consisted of studying satellite images within the geographical areas of the Middle Prut Depression. Through these extracted images, we identified several *cenușar* (ash-mound) structures, in the territory of the Hănești and Avrămeni communes, in areas where no one carried out any archaeological research. We assessed the potential points, and then we conducted a research documentation within the scientific bibliographical material.

According to the literature consulted, we noticed that these archaeological points are still unknown. The preliminary results obtained in the first research phase were completed by a thorough investigation, with the main purpose of confirming on site the potential settlements.

The next research phase consisted of sampling and analysing the archaeological material. The fragments identified were found disseminated in the entire perimeter of the dwellings, because over time, they were revealed by annual agrarian works. The archaeological material found at the surface was collected exhaustively, and the observations on the ceramics were made through the morphological details and decorative elements. The last phase of our research included the processing and recording of the archaeological material, allowing a cultural-chronological categorisation of the sites identified.

### **The geographical frame of reference**

The geographical unit of reference – the Middle Prut Depression – is situated between the localities of Rădăuți-Prut to the north, Stâncă-Ștefănești to the south, the Bașeu River and its left tributaries to the west-south-west, in the geographical subunit called the Bașeu Plain (a component of the Moldavian Plain/Jijia-Bahlui Hillplain), in the east of the Botoșani County, Romania, and the left tributaries of the river: Larga, Vilia/Furca, Lopatnic, Racovăț, Ciugur, Camenca, to the east, in the Northern Moldavian Plateau and Middle Prut Plain (the Briceni, Edineț and Râșcani districts,

the Republic of Moldova) and the southwest part of Ukraine (Raioanele Noua Suliță, Herța, Secureni, Chelmenți, Hotin) (*fig. 1*).

The Middle Prut Depression has a rich hydrographical network comprising the right and left tributaries of the Prut River, crossing the microregion on a distance of around 100 km: Rădăuți-Prut – km 290.43 from the source; Stânca-Ștefănești – km 389.06 km<sup>1</sup> (*fig. 2*).

### **Research history**

The Middle Prut Depression has benefitted from archaeological research since the second half of the 19th century. The identification of the points with an archaeological potential within this area intensified between 1950-1980, in the Mitoc commune, Botoșani county<sup>2</sup>, Bădragii Vechi commune, district of Edineț, Rep. of Moldova<sup>3</sup>, Șaptebani commune, district of Râșcani, Rep. of Moldova<sup>4</sup> and the Vlăsinești commune, Botoșani county<sup>5</sup>. Research has pointed out Bronze Age archaeological sites in the field also through the research activity which has led to the development of the first archaeological repertory of the Botoșani county<sup>6</sup>.

In the period 1980-1990, it is worth mentioning the archaeological research in the Avrămeni commune, Duruitoarea Nouă commune, district of Râșcani, Rep. of Moldova<sup>7</sup>.

From 1990 to the present, research has been conducted in the following archaeological locations within the Middle Prut Depression: Crasnaleuca commune, Botoșani county<sup>8</sup> and Ripiceni commune, Botoșani county<sup>9</sup>. A special research activity was represented by the publication *RAJBT* (second edition), which entailed

<sup>1</sup> Maria Rădoane, Nicolae Rădoane, Dan Dumitriu, Ionuț Cristea, “Granulometria depozitelor de albie ale râului Prut între Orofteana și Galați,” *Revista de Geomorfologie*, nr. 8 (2007): 53-64.

<sup>2</sup> Nicolae Zaharia, “Descoperiri paleolitice în Moldova efectuate între anii 1952- 1957,” *Arheologia Moldovei*, I (1961): 16-19.

<sup>3</sup> Galina Smirnova, *Moghilinic culiturî Noua us. Stariie Badragi v. Moldavii-CSIA AN SSSR* (Moscvă, 1967), 112.

<sup>4</sup> Nicolae Chetraru, Isaac Rafalovici, *Dva moghilinica apohi pozdnei bronzî v Moldavii*, (Chișinev, 1969), 63.

<sup>5</sup> Filaret Aprotosoiaie, “Cercetări arheologice efectuate în împrejurimile orașului Săveni, ” în *Din trecutul județului Botoșani*, 1974, 157-175.

<sup>6</sup> Alexandru Păunescu, Paul Șadurschi, Vasile Chirica, *Repertoriul arheologic, al județului Botoșani*, vol. II (București, 1976), 46.

<sup>7</sup> Olga Larina, “Noviie curganție materialî âneolita-rannei bronzî na Prute,” *AIM*, 1974: 61-76.

<sup>8</sup> Lidia Dascălu, Florentin Burtănescu, “Crasnaleuca - La Coșeri, dép. de Botoșani,” *BullThrac*, nr.4 (1998): 16-17.

<sup>9</sup> Florentin Burtănescu, *Epoca timpurie a bronzului între Carpați și Prut cu unele contribuții la problemele perioadei premergătoare epocii bronzului în Moldova*, Biblioteca Thracologica XXXVII (București: Institutul Român de Tracologie, 2002), 130-132.

an improvement in the information available concerning the archaeological sites in the area<sup>10</sup>.

In the territory of the Hănești and Avrămeni communes, which we investigate, the archaeological research began in the second half of the 20th century<sup>11</sup>. Concerning the Hănești commune of the Botoșani county, we identified the following campaigns in the literature: an archaeological survey in the Cucuteni settlement placed on the bank of Lake Hănești; a systematic archaeological survey of certain tumuli placed in the point called *Dealul Mălăiște*<sup>12</sup>; a necropolis research attributed in the 4<sup>th</sup> century AD on the right bank of Bașeu, the *Moviliță* point<sup>13</sup>; archaeological research performed by the *RAJTB* collective in 1976<sup>14</sup>; field archaeological research (Octavian Liviu Șovan<sup>15</sup> and Vasile Diaconu<sup>16</sup>).

The Avrămeni commune has not benefitted over time from comprehensive archaeological research. The most relevant incursions were conducted in 1973-1975 and 1983 by the *Collective of the Archaeological Repertory of the Botoșani county*<sup>17</sup>. A testimony to the research is the publication of 40 archaeological points in the *Archaeological Repertory of the Botoșani county*<sup>18</sup>.

#### Archaeological data

In the spring of 2021, we conducted (with the research team) periegetic investigations in the communes of Avrămeni and Hănești within Botoșani county, Romania. The first objectives of our activity were as follows: defining site planimetry, determining the cultural-chronological characteristic of the sampled material and identifying the conservation of the archaeological sites. Through such non-invasive

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<sup>10</sup> Octavian Liviu Șovan, *Repertoriul Arheologic al Județului Botoșani*, ediția a II-a (Botoșani, 2016).

<sup>11</sup> Nicolae Zaharia, "Recunoașteri arheologice executate de colectivul Muzeului de antichități din Iași, în anul 1953, în cuprinsul Moldovei," *SCIVA*, nr. 6 (1955): 902-903.

<sup>12</sup> Nicolae Zaharia, Emilia Zaharia, "Contribuții privind rezultatele unor cercetări arheologice în Câmpia Jijiei Superioare din jud. Botoșani," în *Din trecutul județului Botoșani*, nr. 1, 1974, 135-156; Burtănescu, *Epoca timpurie*, 459-468.

<sup>13</sup> Nicolae Zaharia, Emilia Zaharia, Octavian Liviu Șovan, "Necropola din secolul al IV-lea d .Chr. de la Hănești (județul Botoșani)," *ArhMold.*, nr. XVI (1993):151-187.

<sup>14</sup> Alexandru Păunescu, Paul Șadurschi, Vasile Chirica, *Repertoriul arheologic al județului Botoșani*, vol. 1 (București, 1976).

<sup>15</sup> Octavian Liviu Șovan, *Necropola de tip Sântana de Mureș-Černjachov de la Mihălășeni (județul Botoșani)* (Târgoviște: Editura Cetatea de Scaun, 2005).

<sup>16</sup> Vasile Diaconu, *Hănești-Botoșani. Mărturii arheologice și istorice* (Piatra-Neamț: Editura „Constantin Matasă”, 2010).

<sup>17</sup> Păunescu, Șadurschi, Chirica, *Repertoriul*, 43-46.

<sup>18</sup> Șovan, *Repertoriul*, 26-47.

research, we retrieved a significant batch of ceramic material, lithic pieces and osteological materials, which we ascribe to late Bronze Age (the Noua Culture).

From a geographical perspective, the archaeological sites are placed in the Bașeu Plain (a subunit belonging to the Jijia Plain, also known as the Moldavian Plain, part of the Middle Prut Depression microregion).

The Avrămeni Point – *South of Avrămeni* (geographical coordinates: 47°58'18.78"N; 26°58'31.14"E, from the homonymous commune located 3.5 km SSE from the current built-in area of the Avrămeni village, on the interfluvium situated between the Avrămeni creek and a left tributary of it, north from the pond formed (*fig. 3*).

In the perimeter of these locations, we identified a large number of ceramic materials and osteological fragments, carried around and destroyed by annual agricultural activities. The items identified were washed, sorted and prepared for scientific valorisation. At the first contact with these settlements, we have noticed that the amount of material is different by size (*fig. 4*).

The artefacts sampled comprise handmade ceramic fragments made of silex and several osteological remains (*fig. 5*). The archaeological material was categorised chronologically within the Late Bronze Age period, the Noua Culture (1600-1200 BCE).

The Borolea site- *Valea Avrămeni* (geographical coordinates: 47°57'18.73"N; 26°59'35.89"E), from the Hănești commune, was identified 1.8 km WNW away from the built-in area of the village of Borolea and 1.3 km west from the Borolea forest, at the boundary with the Miron Costin commune, on the eastern slope of a hilltop affected by erosion at the level of the Hârtoș creek sources (*fig. 6-7*).

From the perspective of the ceramic material sampled, the predominant forms are the sack-shaped and pot-shaped vessels with a profiled body (*fig. 8*). A significant part of the ceramic material retrieved from the surface of the settlement belongs to the coarse category. In some cases, the outer surface of the vessels features fine vertical striations from the tools used for finishing. On a preliminary examination of the osteological material, we have determined that it belonged mainly to large-sized horned animals.

The lithic material comprising mostly atypical items (processing debris) also includes finished tools, among which we mention: a blade, an axe fragment and a possible percussion tool.

Borolea- *Pe deal* (geographical coordinates: 47°56'54.83"N; 26°59'35.36"E) identified 2 km WNW from the built-in area of the village of Borolea and 1.4 km west from the Borolea forest, at the eastern limit of a hilltop affected by erosion on the right side of the Avrămeni creek (*fig. 9-10*). Upon studying the ceramic material, the

dominant forms were the sack-shaped vessels, decorated with pierced bands (*fig. 11*). We also found osteological material from large cattle and ovicaprine.

From a topographical perspective, the archaeological points identified in the territory of the Hănești and Avrămeni communes occupy open surfaces on the smooth hilltop slopes near water streams. The dwellings were quadrilateral sheds comprising materials found in the proximity (clay, reed, bulrush, etc). Concerning their distribution, there were two main spaces inside (i.e., the area for the livestock and the shepherds' sleeping area)<sup>19</sup>.

Given that animal breeders migrated regularly with their herds in search for pasturing areas, they set fire to such sheds repeatedly, which led to the accumulation of an impressive amount of ash. The archaeological materials identified within these sites show relevant data on the economy of the Noua Culture communities, whose main occupation was animal breeding and whose secondary occupations included tool manufacturing (using the raw materials at hand).

From the perspective of human habitation dynamic, the Bronze Age communities settled in areas favourable to the practice of activities ensuring survival. Hence, these sites are found mostly near rivers, which benefitted from vast pasturing areas, vital for feeding the livestock herds. From the standpoint of the conservation degree, the sites identified in the territory of the Hănești and Avrămeni communes are subjected regularly to the destructions caused by intense agricultural works and by natural factors (landslides also damage these sites).

### Conclusions

Given the current state of research, we inventoried in the territory of the Hănești and Botoșani communes three unpublished archaeological sites attributed to Bronze Age. Because their economy relied mainly on animal breeding, the Noua culture communities founded their settlements on smooth slopes near the water streams comprising floodplains and terraces, allowing the practice of animal breeding. Given their location in an area where natural resources were abundant, the Bronze Age communities valued various materials to build their houses and tools. The unperishable clay and stone items preserved within these sites represent records of these activities. We focused on identifying potential archaeological sites in the area, fearing the danger of losing relevant data on the prehistorical human communities. Therefore, we have the moral obligation of continuing these approaches at a micro-zonal level, which will contribute beyond doubt to the clarification of historical ambiguities.

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<sup>19</sup> Ion Chelcea, "Păstoritul în nord-estul regiunii Iași," *Muzeul Satului*, I (1966): 93-116.

To the detriment of the information featured in this preliminary stage of our research, we state that the Bronze Age records identified in this geographical area, corroborated with other presences within the surrounding geographical areas, will represent the foundation of future studies focusing on the dynamic of these communities in a vast geographical area.

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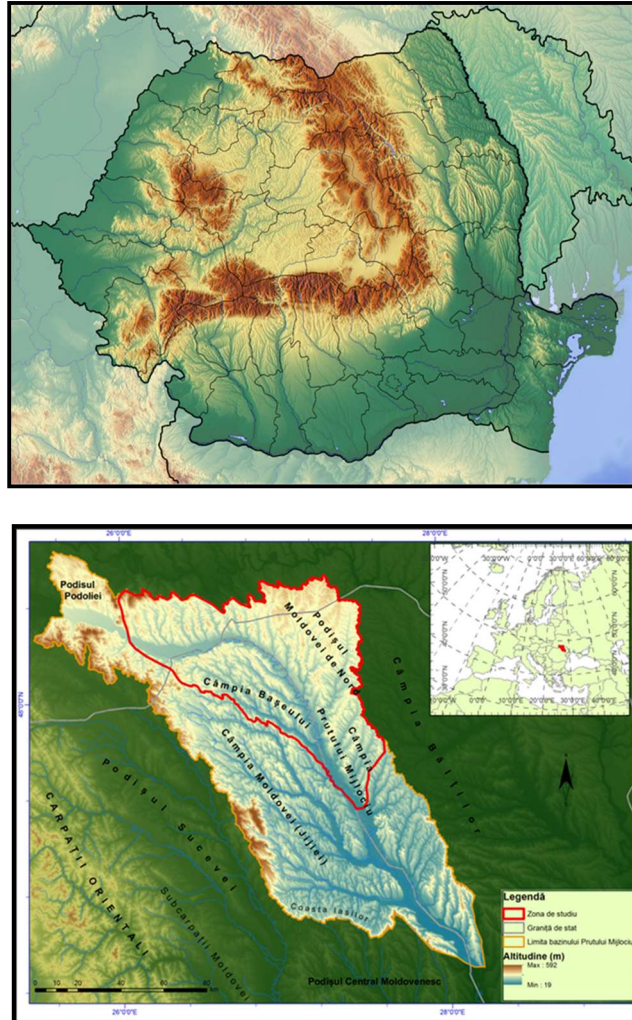


Fig. 1. The Middle Prut Depression.





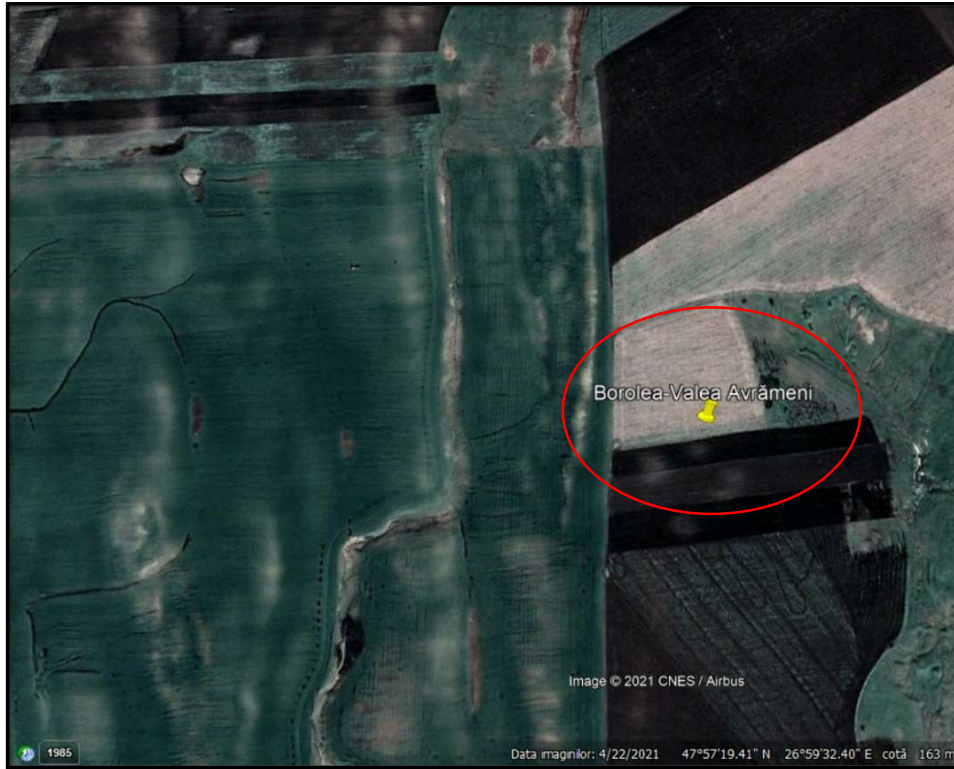
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