

## THE EARLY NEOLITHIC OF THE ROMANIAN IRON GATES. A BRIEF REVIEW

*Adina Boroneanț\**

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(Abstract)

The Iron Gates is one of few regions in Southeast Europe where Late Mesolithic and Early Neolithic are well represented. Still, both the origin and timing of the 'Neolithic' in the area are difficult to assess. The appearance of new cultural elements, including pottery, crouched burials and domesticates is believed to coincide with the spread of Starčevo-Körös-Criș farmers. The present papers briefly reviews the information on the Early Neolithic sites in the Iron Gates I and II areas.

### *Introduction*

The archaeology of the Iron Gates region owes almost everything to the construction of the two hydro-power stations and the respective dams, located at Gura Văii/Sip and on the Ostrovul Mare Island/Gogoșu, respectively.

In November 1963, the Socialist Republic of Romania and the Socialist Federative Republic of Yugoslavia signed an agreement regarding a project on the construction of a first hydro-electric power system in the Gura Văii – Sip km 943 area (Iron Gates I), to be followed by a second one, downstream, in the area of the 865–860 river km (Iron Gates II). The first stage of the project (Iron Gates I) developed between 1965–1971, while the second one (Iron Gates II) began in 1977 and was finished in general lines in 1985.

The rise in the Danube level with as much as 34 m at the dam and 12 m at the end of the reservoir of Iron Gates I, was going to flood both banks, affecting not only the human communities but also the archaeological sites. Under the circumstances, the Romanian Academy created the Iron Gates Complex Research Group, aiming to study the affected area in all its cultural and environmental aspects. Archaeological research (surveys and excavations) took place along the whole left bank of the river, an area stretching for more than 125 km, from Moldova Veche to the village of Șimian.

The second stage of the project, with a maximum rise in the Danube waters of 12 m at the Iron

Gates II dam included rescue excavations at Schela Cladovei, Ostrovul Mare (km 873, km 875 and Schela), Ostrovul Corbului on the left bank. As in the case of the Iron Gates I, on the Romanian bank certain sites were spotted with no time for further investigations. After the creation of the reservoir, Schela Cladovei was the only place where archaeological excavations continued (1982–1997, 2001–2002, 2007 present moment (within a Romanian–British joint project).

Much of the work undertaken in the study of the Early Neolithic pottery typology in the area is due to Professor Gheorghe Lazarovici, to whom this volume is dedicated.

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### *The sites (Fig. 1)*

#### **Iron Gates I area**

The sites and finspots listed within the Iron Gates I area were identified during field surveys and excavations undertaken mostly during the Iron gates I project. Exception take the sites

Henri Coandă St., Sector 1, Bucharest, Romania; e-mail: boro30@gmail.com.

\* "Vasile Pârvan" Institute of Archaeology (IAVP), 11

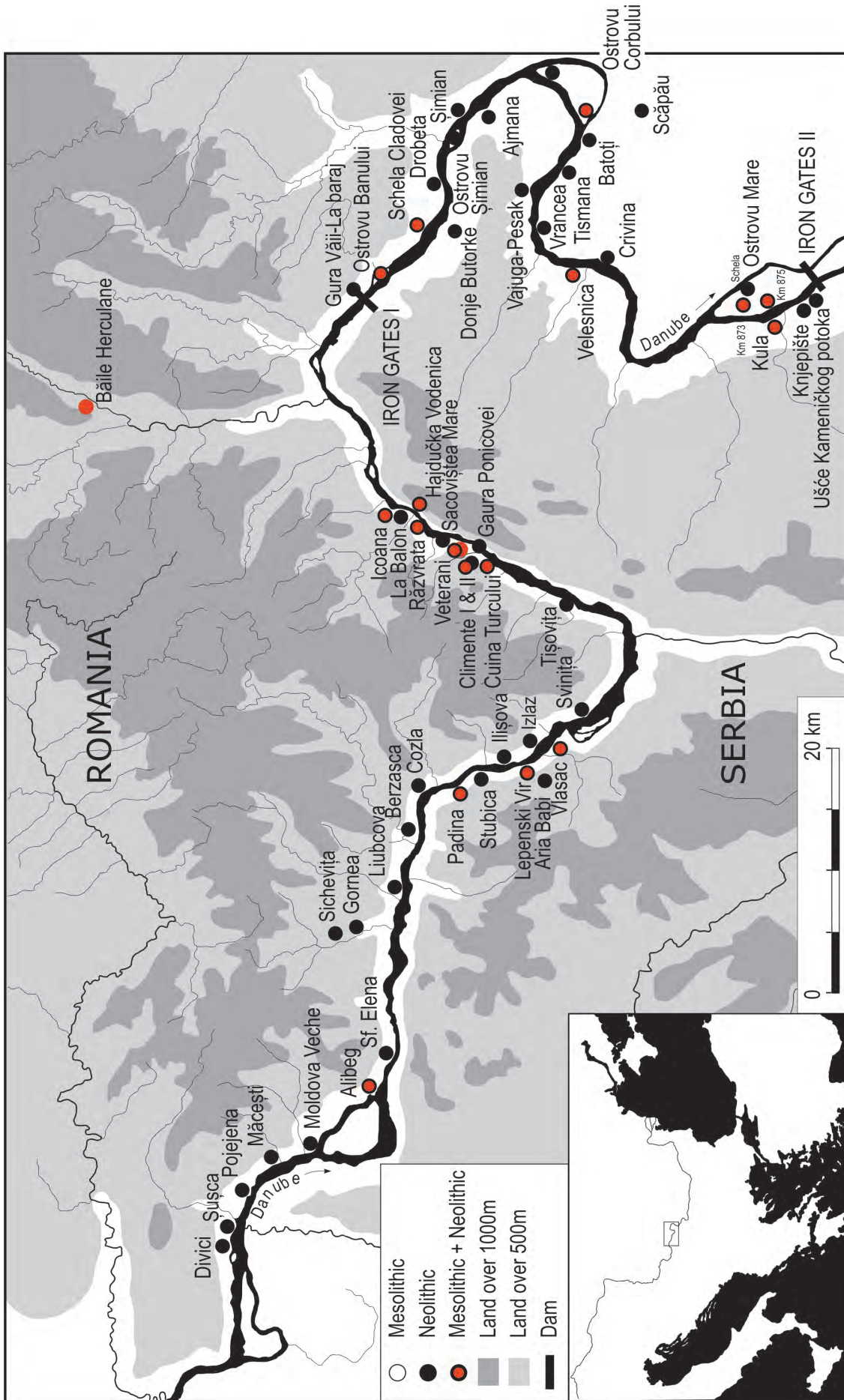


Figure 1. Map of the Mesolithic and Early Neolithic sites in the Iron Gates.

at Liubcova, Gornea and Pojejena where excavations continued into the 1980-es. On the Serbian right bank excavations (pertaining to the Early Neolithic) took place at Stubica, Lepenski Vir, Hajdučka Vodenica, and Padina.

### Iron Gates II area

Field surveys in 1971 by a group of archaeologists led by Expectatus Bujor in the upstream and downstream areas of the future Iron Gates II power station indicated the presence of several findspots with pottery sherds attributed to the Starčevo-Criș Early Neolithic. The finds are curated at IAVP.

Donje Butorke, Ajmana, Vajuga Pesak, Velesnica, Kula, Knjepište and Ušće Kameničkov potoka on the right bank of the Danube were investigated during this stage of the project, yielding Early Neolithic finds.

#### *Main characteristics (Romanian bank)*

**Architecture:** Circular sunken huts with/without hearths, surface rectangular wattle and daub dwellings, at times with stone paved floors; simple circular hearths or with stone lining.

**Osseous tools:** bone projectile points; fish-hooks on bone; antler harpoons; bone awls on split or whole metapodials with distal epiphyses.

**Stone tools:** polished stone axes, stone fishing weights, grinding stones and grinders, microlithic trapezes, use of yellow/grey spotted flint.

**Pottery:** ceramic vessels (undecorated, with plastic or painted decoration), zoomorphic figurines, various other small finds (fishing weights (?), perforated discs, etc.)

**Subsistence:** fish (catfish, sturgeon and carp)<sup>1</sup>, wild game (mainly red deer and wild boar), domestic species (sheep/goat, cattle, pig and dog<sup>2</sup>). Other wild species also occur in smaller frequencies.

**Human remains:** crouched/flexed inhumations were noted but as rare occurrences while secondary mortuary rites (disarticulated body parts) in apparently non-funerary contexts are more common.

**Body adornments:** disc-shaped green (malachite and schist) stone beads, button-shaped bone and stone beads, stone belt elements, perforated shell/bone/tooth pendants, *Antalis* tubular beads<sup>3</sup>.

<sup>1</sup> Analysis of lipid residues on Early Neolithic ceramics from five sites found in the Danube Gorges (Lepenski Vir, Vlasac, Aria Babi, Schela Cladovei and Velesnica) indicate an intensive use of ceramics for the preparation and consumption of fish-related foods (Cramp *et alii* 2019).

<sup>2</sup> Dog consumption was indicated at Icoana (Boroneanț – Bălășescu 2017).

<sup>3</sup> Mărgarit *et alii* 2021.

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There are several sites with burials or other finds that have been dated to the period between 6300 and 5900 cal BC; they are Padina, Vlasac, Lepenski Vir and Hajdučka Vodenica on the Serbian bank of the Danube, and Icoana and Cuina Turcului on the Romanian bank. Within this period, there are burials in both the Mesolithic and Early Neolithic traditions, Starčevo culture elements such as pottery and ground stone tools, while bones of caprines (sheep or goats) imply livestock raising<sup>4</sup>.

Faunal assemblages from settlements in the gorges and the downstream area indicate a Transitional Period<sup>5</sup>/Final Mesolithic<sup>6</sup> economy relying heavily on riverine resources (fish and shellfish), along with wild game including deer (red and roe), aurochs and wild boar. Domesticated dog is also present, with some evidence that it was exploited for meat. It is not until after 6000 BC that domesticated livestock are present with certainty, and in significant quantities. However, wild mammals remained important. More recent excavations (Schela Cladovei, Vlasac) and re-analyses of older material (Cuina Turcului, Icoana, Răzvrata, Ostrovul Banului, Vlasac, Velesnica) are now suggesting the presence of a wide range and higher abundance of aquatic species (including sturgeon, carp and catfish).

In addition to the archaeozoological evidence, bone collagen stable carbon, nitrogen and sulphur isotope analyses from Mesolithic, 'transitional' and Early Neolithic burials from numerous sites have shown a diachronic dietary shift, with a greater number of Neolithic individuals exhibiting more terrestrial-derived dietary protein<sup>7</sup>.

Recent studies of both ancient DNA and strontium isotope signatures from human tooth enamel now provide strong evidence for the interaction of immigrant farmers with local foraging communities. Genomic evidence from the Danube Gorges (over 50 individuals from six sites—Padina, Lepenski Vir, Vlasac, Hajdučka Vodenica, Schela Cladovei and Ostrovul Corbului) indicates admixtures between local foragers and incoming farmers<sup>8</sup>.

<sup>4</sup> Bonsall, Boroneanț 2018;

<sup>5</sup> Mesolithic-Neolithic Transformation Phase (Borić, Price 2013).

<sup>6</sup> Bonsall, Boroneanț 2018.

<sup>7</sup> Bonsall *et alii* 1997, 2000, 2015; Borić, Price 2013.

<sup>8</sup> González-Fortes *et alii* 2017; Mathieson *et alii*. 2018.



*Catalogue of sites***Iron Gates I**

**Alibeg**, Pescari commune, Caraş Severin County  
The archeological site from Alibeg was located in a floodable area at the foot of the Redut Hill, upstream of the Alibeg brook. Excavated by V. Boroneanţ in 1971, the top-most cultural layers had already been washed by the Danube waters.

**Architecture and pottery:** The Early Neolithic pottery (102 sherds) originated both from a layer of brown soil and the infill of dwellings C1 (circular stone lined hearth) and C2 (stone – lined rectangular hearth), attributed to the Final Mesolithic/Mesolithic-Early Neolithic Transition Phase<sup>9</sup>. No pottery was clearly associated to the floor of the two dwellings. The pottery has chaff as temper (and rarely sand), is mostly of the coarse type and undecorated. Exception make a few fragments with red slip both on the inner and the outer surfaces. The decoration included radial incisions, finger and nail impressions, and buttons. No painted pottery was found. The vessel shapes are globular, with straight or slightly profiled rims, flat bases and vertical handles. The present fragments fit well within the Starčevo-Criş II–III phases of Gh. Lazarovici<sup>10</sup>.

**Stone tools:** polished axe and grinding stone associated to rectangular dwelling C2.

**Ornaments:** two whitish-grey stone disc beads associated either to the Transitional Period or the Early Neolithic<sup>11</sup>.

**Absolute chronology:** Recent radiocarbon dates indicate the site was occupied at the end of the Transitional Period/Final Mesolithic and the beginning of the Early Neolithic (cca. 6000 cal BC<sup>12</sup>). No <sup>14</sup>C dates exist for the later Early Neolithic occupation.

References<sup>13</sup>: Boroneanţ 2012; Boroneanţ 2011; Boroneanţ *et alii* 2019, Boroneanţ 1973a; Gumă 1983; 1993; Lazarovici 1979; 1983; Luca 2004; Mărgărit *et alii* 2021; Petrovsky 1975.

**Berzasca – Şpiţ I (Ogaşul Odului)**, Berzasca commune, Caraş Severin County

Presence of Starčevo-Criş fragments is indicated in

<sup>9</sup> The date was assigned based on the architecture and inventory of the dwellings (Boroneanţ 2012) as well as on a recent radiocarbon date (RoAMS 690.53, 7118(45) BP, 6066 – 5902 calBC at 2σ (95,4%) obtained on an animal bone collected from the floor of C1.

<sup>10</sup> Lazarovici 1979.

<sup>11</sup> Boroneanţ *et alii* 2019, Mărgărit *et alii* 2021.

<sup>12</sup> See the footnote above.

<sup>13</sup> References are listed alphabetically.

publications. The findspot is covered by Danube waters at present.

References: Lazarovici 1979, 1983; Luca 2004.

**Climente I Cave**, Ogradena commune, Mehedinţi County

Climente I Cave is located on a slope of the Ciucarul Mare Mountain in the Cazanele Mari of the Iron Gates. The absolute altitude is 178 m while the relative one, before the rise of the Danube level, was 130 m. Thus, the cave was not affected by the flooding of the riverbanks. It has a length of 70 m, a width at the entrance of 5.35 m and a maximum height at the entrance of 2 m. The level difference between the entrance (lowest area) and the highest point is ca. 8 m. Archaeological excavations by Vasile Boroneanţ took place in 1965, 1968, 1969. The cultural sequence<sup>14</sup> of the cave (from the top to the base) revealed traces of medieval occupation (fragments of a hearth and pottery), Hallstatt, Verbicioara and Coşofeni cultural layers, an Early Neolithic Starčevo-Criş layer, an Epipaleolithic layer (separated from the Early Neolithic layer by an archaeologically sterile layer), an Upper Palaeolithic layer and finally, a Middle Paleolithic occupation.

**Structures**

The Early Neolithic finds came from both the cultural layer and the infill of a pit feature. A hearth is also mentioned. Located at the entrance of the cave, pit feature C1 was oval or circular (with a diameter of approx. 2 m) and with an alveolate base. The base of the feature showed traces of burning, ash and charcoal. The hearth located in the interior of C1 was also oval (0.65 × 0.55 m) with a slabstone placed at its centre.

**Pottery**

Another interesting find was the presence of group of conjoining pottery fragments. Three vessels were reconstructed, one of them being the published painted cup<sup>15</sup> – seen as Starcevo-Criş IIB<sup>16</sup>.

No other Early Neolithic finds are present in the IAVP collection.

References: Boroneanţ 2012; Boroneanţ 1968a, 1968b, 1978, 2000b; Lazarovici 1969, 1974, 1979.

**Cozla – Sirina**, Berzasca commune, Caraş Severin County

The findspot was located east of the village, on the left bank of the Sirina rivulet, north of the road.

<sup>14</sup> Boroneanţ 1968a, 1979, 2000a.

<sup>15</sup> Boroneanţ 2012, Lazarovici 1979.

<sup>16</sup> Lazarovici 1979.

Finds consisted of pottery fragments and flint implements. No other details are available  
References: Lazarovici 1977; 1979; 1983; Petrovszky 1975; Tudor 1965.

### **Cuina Turcului Rockshelter**, Dubova village, Mehedinți County

The archeological site of Cuina Turcului was located about half a kilometer downstream of the Danube entrance in the Cazanele Mari and 250 m from Gura Ponicevei Cave. It was situated on the slope of the Ciucarului Mare Mountain, only 12 m above the Danube. The site was investigated between 1964 – 1969. In 1972 it was flooded by the reservoir.

The identified stratigraphy included three Mesolithic horizons (I, IIa and IIb), overlapped by three early Neolithic Starčevo - Criș layers, overlain by more recent occupations (Coțofeni, Hallstatt, and medieval)<sup>17</sup>.

The finds of the Starčevo – Criș occupation (total thickness of maximum 2.5 m) consisted mainly of pottery as well as osseous artefacts, lithic industry, and body adornments. The archeological material uncovered during the 1965 – 1969 seasons is stored at the IAVP. Artefacts from the 1964 season are at the Museum of the Iron Gates Region in Drobeta-Turnu Severin.

#### **Pottery**

The pottery was recognized as phases II–IVA according to Gh. Lazarovici's typology<sup>18</sup>. Recent <sup>14</sup>C dates indicate the cave was still occupied at the end of the Final Mesolithic (ca. 6050) while the Early Neolithic occupation ended at ca. 5750 cal BC. The existence of a thin layer of sterile soil between the Mesolithic and Early Neolithic occupation may be indicative of a gap in the frequentation of the cave.

The pottery (of all three alleged horizons) is very rich and with an impressive number of decorated fragments. However, there are few painted fragments (less than 15 fragments, of which 5 are very poorly preserved). A problem is related to the presence of late materials (Vinča A) in the Starčevo – Criș I–II levels. It is also noteworthy the mixture of ceramic fragments from other ages in the material marked as Starčevo – Criș. Another interesting matter is the presence of the “altar” fragments<sup>19</sup>. The initial publication<sup>20</sup> mentioned the discovery of several fragments/ altar legs seen as insignificant.

<sup>17</sup> Păunescu 1978.

<sup>18</sup> Lazarovici 1979.

<sup>19</sup> Jacobssen, Boroneanț 2010.

<sup>20</sup> Păunescu 1978.

Following the examination of the material 141 such fragments were collected: legs and fragments of the upper containers, Significantly, altar fragments from different Starčevo – Criș layers conjoined, indicating a stratigraphic problem. Gh. Lazarovici had already noticed material belonging from different phases (IIIA and IV) within the Starčevo – Criș horizon III<sup>21</sup>.

#### **Structures**

Several pits were excavated inside the rockshelter but their functionality was briefly discussed<sup>22</sup>.

Significant is the large number of Early Neolithic hearths identified: 38 hearths over the 190 m<sup>2</sup> of the shelter, of which 17 in the Starčevo – Criș I level, 2 in the Starčevo – Criș II level and 21 in the Starčevo – Criș III level. They are grouped only towards the west-center part of the shelter. The highest agglomeration appears in level I, while in level III a slight dispersion is observed towards the entrance.

**Osseous tools:** bone points.

**Stone tools:** Polished stone axes, grinding stones, grinders, and punchers came from all three Early Neolithic layers. The number of flaked lithics is significant<sup>23</sup>, there are both finished pieces (trapezes – 130, retouched blades – 173, composite elements – 21, scrapers – 13, burins-,3 denticulates – 33), and waste products<sup>24</sup>. The raw material used is very diverse: pre-Balkan flint, Șvinița blackish flint, radiolarite, obsidian, quartz and quartzite<sup>25</sup>. An important element of the Early Neolithic is the presence of obsidian. Forty-two pieces were identified in the IAVP collections. The presence of the cortex on some of the pieces, and the presence of cores indicates flaking took place inside the shelter. The obsidian came from the Carpathian sources C1 and C2<sup>26</sup>.

Another interesting feature is the presence inside the shelter of the only carved boulder, similar to those at Lepenski Vir, Padina and Velesnica (Transitional Period/Final Mesolithic), originating from a pit dated by A. Păunescu to the Halstatt period. Another large boulder with a circular depression, similar to those at Alibeg and Schela Cladovei was also found, from an unclear context context.

**Ornaments:** stone beads, button-shaped bone and stone beads, stone belt elements, perforated shell (*Lithoglyphus* sp., *Theodoxus danubialis*, *Columbella*

<sup>21</sup> Lazarovici 1979, Lazarovici, Lazarovici 2006.

<sup>22</sup> Boroneanț 2012.

<sup>23</sup> Păunescu 1970, 1978, 2000.

<sup>24</sup> Păunescu 1978.

<sup>25</sup> Boroneanț 2000a.

<sup>26</sup> Boroneanț, Bonsall 2021.

*rustica, Unio sp.*)/bone /tooth (*Vulpes vulpes*) pendants, *Antalis tubular* beads<sup>27</sup>.

**Human remains:** A. Păunescu<sup>28</sup> reported a few human remains (horizons II and III), teeth (layers I through III) and a fragmented skull nearby a hearth. Two samples (Criș levels I and III) dated were bones of young children whose presence was thought by the excavator to be related to the Early Neolithic use of the rockshelter. Based on the stable isotope data, the first individual (infant) most likely was a member of a Mesolithic fishing community, whereas the older child could have belonged to either a fisher or a farmer-fisher community (fresh reservoir effect – FRE and breast-feeding were taken into consideration)<sup>29</sup>.

References: Bonsall *et alii* 2015; Boroneanț 2012; Boroneanț, Bălășescu 2016; Boroneanț, Bonsall 2021; Boroneanț 1970a, 1978; 2000b; Jacobssen, Boroneanț 2010; Lazarovici 1979; Lazarovici, Lazarovici 2006; Mărgărit *et alii* 2021; Nicolăescu-Plopșor 1965a; Păunescu 1970, 1978.

**Divici**, Pojejena commune, Caraș Severin County

• **Divici** – *Bela Reka*

No precise information on the Early Neolithic occupation.

References: Boroneanț 2012; Lazarovici 1977, 1979; 1983.

• **Divici** – *Poreca*

The findspot was located 1 km west of Divici, in the direction to Baziaș, on the banks of the *Velika Reka* rivulet. Publications mention the presence of Early Neolithic “traces of occupation”. No further details.

References: Luca 2004, 2006; Țeicu 2003;

**Gaura Ponicevei (Gura Ponicevei Cave)**,

Dubova commune, Mehedinți County

Short-term rescue excavations took place between 1965–1974 at various moments. V. Boroneanț excavated in Liliaci Gallery between 1965–1968<sup>30</sup>. Presence of Early Neolithic pottery fragments<sup>31</sup> and the presence of an Early Neolithic layer of occupation<sup>32</sup> are noted.

<sup>27</sup> Mărgărit *et alii* 2021, 872, Table 1.

<sup>28</sup> Păunescu 1978.

<sup>29</sup> See Bonsall *et alii* 2015 for the complete discussion. Infant: OxA-19205, 7650 ± 36 BP, 6205–5780 cal BC, δ13C (‰) = -19.1, δ15N (‰) = 17.1; older child: 7324 ± 39, 7324 ± 39 BP, 5985–5735 cal BC, δ13C (‰) = -19.4, δ15N (‰) = 13.9.

<sup>30</sup> Boroneanț, Boroneanț 1969, 88.

<sup>31</sup> Boroneanț 1978, 178.

<sup>32</sup> Boroneanț, Boroneanț 1969, 88.

References: Boroneanț 2012; Boroneanț 1978; Boroneanț, Boroneanț 1969.

**Gornea**, Gornea commune, Caraș Severin County

• **Gornea** – *Căunița de Sus* was identified in 1968 and excavations took place between 1968 and 1970, on the middle terrace of the Danube, at present covered by the reservoir lake<sup>33</sup>. Pottery was initially assigned to the Starčevo IIB and IV phases<sup>34</sup>. Co-existence of Starčevo-Criș IV and Vinča A<sub>3</sub><sup>35</sup>.

**Structures:** sunken huts and later surface dwellings. References: Lazarovici 1974, 1977, 1983.

• **Gornea** – *Locurile Lungi* (see also *Cărămidărie*<sup>36</sup>) (located on the lower (floodable) terrace of the Danube, between the Camenița Valley and Liubcova village<sup>37</sup>) is today covered by the reservoir. It was investigated in 1969.

**Pottery** was assigned to the Starčevo IIB and III phases<sup>38</sup>.

**Structures:** a hut and several pits.

**Adornments:** *Spondylus* bracelet fragment.

**Human remains:** a burial.

References: Lazarovici 1974, 1979; Luca 2004b; Luca, Dragomir 1985; Petrovsky 1975.

• **Gornea** – *Vodneac* was located on the upper terrace of the Danube, north of the new road Moldova veche / Cozla, near Liubcova, west of Ogașul Ierbii<sup>39</sup>. The excavations of Gh. Lazarovici in 1969/1970 brought to light sporadic monochrome ceramic fragments seen as Starčevo-Cris IIA and B<sup>40</sup>.

References: Lazarovici 1977, 1979, 1983, Luca 2004; Petrovsky 1975; Roman 1976.

• **Gornea** – *Țărmuri*: located on the middle terrace of the Danube, left of the Gornea Valley, between the road and *Locurile Lungi*. Excavations in 1969, 1976–1978 yielded ceramic fragments and an axe made of soft white rock<sup>41</sup>.

References: Lazarovici 1977, 1979, 1983; Luca 2004; Petrovsky 1975.

• **Gornea** – *Cărămidărie* (within the findspot of *Locurile Lungi*)

Excavations uncovered huts, pits and an Early Neolithic burial.

References: Dragomir 1981; El Susi 1987;

<sup>33</sup> Lazarovici 1977, 19.

<sup>34</sup> Lazarovici 1974, 46; 1971, 20.

<sup>35</sup> Lazarovici 1979.

<sup>36</sup> According to Luca 2004, *Cărămidărie* was located within *Locurile Lungi* and hence some of the finds described here overlap.

<sup>37</sup> Petrovsky 1975, 377.

<sup>38</sup> Lazarovici 1979, 198.

<sup>39</sup> Petrovsky 1975, 377.

<sup>40</sup> Lazarovici 1977, 45.

<sup>41</sup> Lazarovici 1977, 45; 1979, 198.

Lazarovici 1975, 1977, 1979, 1983; Luca 2004; Luca, Dragomir 1985; Petrovsky 1975; Roman 1976.

**Gura Văii**, Gura Văii commune, Mehedinți County

Early Neolithic finds (pottery and a sandstone puncher) were reported during the works at the Iron Gates I hydroelectric power plant at **Gura Văii - Pe vale**<sup>42</sup>. The present author identified in the IAVP collection Early Neolithic sherds marked **Gura Văii - Baraj**: eight Starčevo-Cris ceramic fragments<sup>43</sup>.

References: Boroneanț 2012; Lazarovici 1979.

**Icoana (La Icoană)**, Ogradena commune, Mehedinți County

The open-air site of Icoana (currently covered by the reservoir) was located at the foot of Ciucaru Mic Mountain, in the area of Cazanele Mici, at approx. 100 m from river km 966. The general stratigraphy of the site consisted of a discontinuous top layer with medieval and Hallstatt material; a discontinuous Early Neolithic Starčevo – Criș occupation and two Mesolithic horizons<sup>44</sup>.

The Early Neolithic finds consisted of fragments of Starčevo – Criș pottery, abundant lithic material (quartz and flint) and faunal remains.

**Pottery** from the cultural layer was tempered with chaff and rarely small pebbles. All categories of pasta are present: fine, medium and coarse. Most of the fragments were undecorated, but some had a reddish / orange slip on the inside and outside. Rare decoration included nail impressions and pinches.

#### **Structures**

One dwelling (C5)<sup>45</sup>, rectangular with rounded corners (2.5 × 1.7 m × 0.8 m) penetrated ca. 20 cm in the Mesolithic level. Rare ceramic fragments and many microlithic flint flakes were observed on the floor. The presence of ceramics painted in dark colours indicates Starčevo – Cris IIB – IIIA at the earliest.

The infill of dwelling C7 contained lots of ashes and charcoal. On the floor, coarse pottery sherds were few and small, decorated with nail impressions and tempered with chaff and sand. A yellowish slip was noted on the outside and a dark brown one on the inside. Fine pottery, with slight burnish on the outside, blackish on the inside and chaff tempered was also noted.

<sup>42</sup> Lazarovici 1979.

<sup>43</sup> Boroneanț 2012, 202.

<sup>44</sup> Boroneanț 2012, Boroneanț, Bonsall 2016.

<sup>45</sup> Boroneanț 2012, 128.

**Stone artefacts:** From the floor of C7 were recovered two stone axes, flint flakes and a fragment of a grinding stone<sup>46</sup>.

References: Bolomey 1973a; 1973b; Boroneanț 2012; Boroneanț, Bonsall 2016; Boroneanț 1968b; Lazarovici 1977, 1979.

**Ilișova**, Ilișova commune, Mehedinți County

#### • *Findspot of unknown location*

In 1970 V. Boroneanț carried out a sounding (1.5 × 6 m) on the bank of the Danube. The excavation stopped at a maximum depth of 1.85 m (in two control surfaces), due to water infiltration, with no other results.

The stratigraphic sequence was as follows: 1. 0-0.30 m – recent humus with fragments of coal of variable size, mixed finds; 0.30-0.75 m – recent humus (without coal), mixed finds; 2. 0.75–1.00 m – alluvial soil, archaeological sterile; 3. 1.00–1.40 m – sandy fluvial soil with traces of coal, contained small Criș ceramic fragments at a depth of approx. 1 m; 4. 1.40–1.55 m – layer of archeologically sterile reddish sand; 5. 1.55–1.65 m, yellowish-brown clayey layer impermeable with calcareous concretions. Finds consisted of animal bones and an indeterminate ceramic fragment.

The findspot was covered by the reservoir.

References: Boroneanț 2012.

**Ilișova – Piatra Ilișovei (Ilișova, Elișova).**

According to Gh. Lazarovici, the findspot was in the proximity of the former border check-point. Among other archeological materials there were Starčevo-Criș finds.

References: Boroneanț 2012; Lazarovici 1977.

**La Balon (Mraconia)**, Ogradena commune, Mehedinți County

At the flow of the Mraconia into the Danube, were noted Early Neolithic sherds and a burial<sup>47</sup>. No investigations followed, and the findspot was covered by the Danube.

References: Boroneanț 2012; Boroneanț 1968; Lazarovici 1979.

**Liubcova-Ornița**, Berzasca commune, Caraș Severin County

Excavations by E. Comșa<sup>48</sup> in 1961, 1965–1967 who mentions a Starčevo-Criș pit on the area of the Vinča settlement. Subsequent archaeological

<sup>46</sup> Boroneanț 2012, 130.

<sup>47</sup> Boroneanț 2012.

<sup>48</sup> Comșa 1966, 7.



research by S.A. Luca<sup>49</sup>. Five cultural levels were distinguished (one Starčevo-Criș and four Vinča).

**Pottery** (bowls, pots, pedestalled cups, oven pots) was assigned to Starčevo IIIB<sup>50</sup>. Decoration included barbotine.

**Structures:** semi-sunken huts.

**Osseous tools:** bone awls and spatula.

**Stone tools:** polished axes from local raw material. No specific information on the knapped lithics. Raw material was identified as local Banat flint. Possible presence of obsidian.

Materials Located at the IAVP and Museum of Mountaineous Banat, Reșița.

References: Boroneanț 2012; Boroneanț 1968b; Comșa 1966, 1968; Lazarovici 1983, Luca 1998.

**Măcești** (incorporated to Moldova Nouă), Caraș Severin County

Starčevo-Criș (?) site, not investigated.

References: Comșa 1969; Lazarovici 1977, 1979, 1983.

**Moldova Veche**, Caraș Severin County

• **Moldova Veche** – *Vatra satului* – identification of a Starčevo-Criș settlement, no further details exist<sup>51</sup>.

• **Moldova Veche** – *La Rât (Km 102)*, 150 m south of the road.

The site (investigated by Gh. Lazarovici in 1970, 1975–1976, 1978) was located on the lower terrace of the Danube, in front of Apartment Block 5.

**Structures:** Six dwellings of variable sizes were uncovered (four investigated). One of them contained a bread-oven (0.90 m diameter, height 0.30 m) which contained a few sherds at the mouth<sup>52</sup>.

**Pottery** from the site was assigned to Starčevo IIIB-IVA with Vinča A2 imports<sup>53</sup>. Later excavations uncovered a bucrania<sup>54</sup>.

References: Lazarovici, 1974, 1975, 1979, 1983; Nicolăescu-Plopșor 1965a;

• **Moldova Veche** – *Ostrov*

Microlithic lithic artefacts were recovered from a sand dune on Decebal Island where traces of early Neolithic habitation had been observed.

References: Lazarovici 1977.

**Ostrovul Banului (Ostrovul Golu)**, Gura Văii commune, Mehedinți County

The island is located about 1 km downstream from the Iron Gates I dam.

Research carried out by Mișu Davidescu at the Roman-Byzantine fortress in 1965 also uncovered Neolithic and Hallstatt finds<sup>55</sup>. Archaeological excavations were carried out on four sectors (marked from A to D from upstream to downstream). Four occupation levels were identified.

**Structures:** Twenty-five excavated features (sunken huts and surface dwellings) in total were attributed to the Early Neolithic. In Sector A four complexes were identified as rectangular “stone platform dwellings” with pillar holes. For two other dwellings a brief description of the pottery is available. Many of the rest were waste pits.

**Pottery** was assigned to Phase III.

**Stone tools:** Polished axes, fishing weights, knapped industry – blade-like industry, trapezes, scrapers<sup>56</sup>.

References: Nicolăescu-Plopșor 1965a; Lazarovici 1969, 1971, 1975, 1979; Roman, Boroneanț 1974.

**Pojejena (de Sus)**, Pojejena commune, Caraș Severin County

• **Pojejena** – *Nucet*, (400 m NE of the medieval ruins on the Danube bank) was a settlement with three layers of Early Neolithic occupation.

Soundings were carried out by Gh. Lazarovici in 1970<sup>57</sup> and rescue excavations were conducted by S.A. Luca in 1986.

**Structures:** a sunken hut (level II – top) and a dwelling with stone platform (level I – lower)<sup>58</sup>.

**Pottery:** assigned to IIB and IIIB-IV A

**Bone tools:** bone awls and spatula

• **Pojejena** – *findspot towards Șușca*, flooded by the waters of the reservoir lake<sup>59</sup>. No other information available.

References: Nicolăescu-Plopșor 1965a; Lazarovici 1975; 1979, 1983, Luca 1995.

**Răzvrata**, Ogradena commune, Mehedinți County

Răzvrata was located on the left bank of the Danube, in the area of the Cazanele Mici of the Iron Gates region. A few hundred meters downstream were the sites of Icoana on the Romanian bank, and Hajdučka Vodenica on the Serbian one.

<sup>49</sup> Luca 1985, 1987, 1990.

<sup>50</sup> Lazarovici 1983, 21; Luca 1998, 97–98.

<sup>51</sup> Lazarovici 1979, 202.

<sup>52</sup> Lazarovici 1979, 27.

<sup>53</sup> Lazarovici 1975, 11; 1983, 22.

<sup>54</sup> Lazarovici 1983, 13, footnote 48.

<sup>55</sup> Roman, Boroneanț 1974, 117.

<sup>56</sup> Lazarovici 1979.

<sup>57</sup> Lazarovici 1979, 205, no. 67.

<sup>58</sup> Luca 1995.

<sup>59</sup> Lazarovici 1979, 205, no. 67.



An Early Neolithic occupation is mentioned in relation to Răzvrata, based on pottery finds<sup>60</sup>. The main excavator, V. Boroneanț, mentions one flint tool possibly related to an Early Neolithic occupation, collected from an alluvial sediment. But no Early Neolithic pottery finds or other finds indicative of the presence of Early Neolithic occupation were found in the existing collection<sup>61</sup>.

References: Boroneanț 2017, Boroneanț 1973a, Lazarovici 1975; 1979.

**Ribici** – *Mila 1069 (Foișorul grănicerilor)*, between Divici and Baziaș, Caraș Severin County

Prehistoric pottery was observed in a trace left by the excavator for the elevation of the road, probably coming from two layers of culture, one Neolithic Starčevo-Criș or Vinča and another Hallstatt or Dacian. Find spot not investigated and covered by reservoir lake. The collected material was not found in the IAVP deposit.

References: Boroneanț 2012.

**Sacoviște (Săcovișteea Mare/Cotul Mare)**,

Dubova commune, Mehedinți County

Located “*In the proximity of the Thracian-Illyrian tomb*”<sup>62</sup>. Gh. Lazarovici<sup>63</sup> mentions a personal, unpublished findspot “*located on the rocks in the area between the Cazanele Mici și Mari where the Danube is at its narrowest*”<sup>64</sup>. The resulting pottery was blackish-brown, poorly fired. It was initially classified as Starčevo-Criș I<sup>64</sup>, but later reconsidered, on the basis of analogies with material from Moldova Veche, as Starčevo IIIB<sup>65</sup>, Starčevo III–IV<sup>66</sup> and Starčevo IV<sup>67</sup>. The recovered material is largely unpublished.

References: Boroneanț 2012; Boroneanț 1968b; Lazarovici 1969, 1971, 1975, 1983, 1984, Comori 1978.

**Sfânta Elena**, Coronini commune, Caraș Severin County

Starčevo-Criș settlement. No other information available. Findspot covered by reservoir lake.

References: Lazarovici 1977, 1979, 1983; Luca 2004.

**Sichevița**, Sichevița commune, Caraș Severin County

**Sichevița** – *Consiliul Popular (Primărie) / Magazinul Alimentar*.

Site discovered when digging the foundations of the local store, in the 1970-es. No further details. References: Dragomir 1981; Lazarovici 1983; Gumă 1993; Luca 2004.

**Socol** – *Kruglița de Mijloc*, commune, Caraș Severin County

A Starčevo-Criș settlement was discovered within the locality. Field-survey Gh. Lazarovici – in 1969. Unpublished material, location unknown.

References: Lazarovici 1983; Țeicu 2001.

**Șușca**, Pojejena commune, Caraș Severin County

At the river km 111, on a slope ca. 10 m away from the old road, “a small feature” was observed<sup>68</sup>. No further details.

References: Nicolăescu-Plopșor 1965a; Lazarovici 1979, 1983.

**Șvinița (Balon)** – *Islaz*; Șvinița commune, Mehedinți County

The early Neolithic settlement was located at the confluence of the Trescavăț brook into the Danube. No other details.

In the IAVP collection are stored nine pottery fragments from a field survey by Vasile Boroneanț in 1966. Five were red slipped, with pebbles and chaff as temper. No decoration.

References: Boroneanț 2012; Lazarovici 1977.

**Țișovița**, *findspot of unknown location*, Caraș Severin County

Located on the bank of the Danube<sup>69</sup>. No other details are known.

**Veterani Cave (Peștera lui Maovăț)**, Dubova commune, Mehedinți County

The cave is located in the Ciucarul Mare massif, at the base of the wall called Pânza Curii, 500 m downstream of the Ponicova cave and 800 m northeast of the Climente II cave<sup>70</sup> at an absolute altitude of 73 – 75 m.

The interior of the cave was reinvestigated in 1964 by a team led by CS Nicolăescu-Plopșor. In 1965 – 1966 D. V. Rosetti and Fl. Mogoșanu carried out excavations inside the cave, and in 1968 – 1969 the excavations continued inside and outside (with the

<sup>60</sup> Luca *et alii* 2011, 112, cat. no. 209, quoting Lazarovici 1979.

<sup>61</sup> Boroneanț 2017.

<sup>62</sup> Boroneanț 2012; Boroneanț, 1968b, 8.

<sup>63</sup> Lazarovici 1975, 11, footnote 52.

<sup>64</sup> Lazarovici 1969, 21, 24.

<sup>65</sup> Lazarovici 1974, 46.

<sup>66</sup> Lazarovici 1975, 12.

<sup>67</sup> Comori 1978, 54.

<sup>68</sup> Nicolăescu-Plopșor 1965a, 396.

<sup>69</sup> According to the map in the Atlas ..., 78.

<sup>70</sup> Boroneanț 2000b, 89; 2000a, 42.

participation of Nubar Hamparțumian in 1968 and V. Boroneanț in 1969). The results of these investigations are largely unpublished. The stratigraphy was later correlated with the lithic typology and ceramic analysis indicating occupations from the Upper Paleolithic, Early Neolithic Starčevo – Criș, Bronze Age (Coțofeni culture), Hallstatt (Basarabi culture), Dacian, Daco-Roman, Byzantine, medieval and modern ages. Traces of the old sections are still visible to the left of the entrance gallery and in the great hall. No other details.

References: Nicolaescu-Plopșor 1965a; Boroneanț 1978; 2000b; Tudor *et alii* 1965; Lazarovici 1969, 1971, 1975, 1981, 1982, 1983, 1987 (1988); 1995; Păunescu 1970, 1978.

## II. Iron Gates II

**Batoți**, Devesel commune, Mehedinți County

**Batoți – km 908**, findspot „*Drumul împărătesc*”

– one fragment of body with thin walls, chaff tempered, colour light brown, globular vessel.

**Batoți – km 909.7**, findspot on the Dunărea Mică branch, 20 m away from the former cooperatist stables, on the left side of the road

– one base fragment, inner and outer slip, chaff tempered, reddish colour.

– one body fragment, chaff tempered, black polished on the outside, reddish on the inside, no slip.

References: Boroneanț 2012.

**Crivina – km 894.6**, Crivina commune, Mehedinți County

– one body fragment, chaff tempered, reddish colour; one blade of Balkan flint;

– one rim fragment decorated with a band with finger impressions, chaff tempered, colour light brown.

References: Boroneanț 2012.

**Izvorul Frumos**, Burila Mare commune, Mehedinți County, findspot unknown

– one vessel base, D = 25 cm, sand paste and small chaff.

**Izvorul Frumos – km 880** – at the mouth of the Izvorul Brook

– 13 Starčevo-Criș pottery fragments (including two pot bases), mixed with medieval and Bronze Age pottery.

**Izvorul Frumos – km 884**

– one body sherd, reddish slip on the inside, chaff tempered.

References: Boroneanț 2012.

**Ostrovul Corbului**, Hinova commune, Mehedinți County

The island was located between the River Km 916 and River KM 911. The two points of interest for the present work, **Botul Piscului (km 916)**, Early Neolithic) and **Botul Cliuciului (km 911)**, Mesolithic, Early Neolithic) were identified following a field survey in 1970<sup>71</sup>.

• **Ostrovul Corbului – Botul Piscului (km 916)** was identified by P. Roman. No archaeological excavations took place at Botul Piscului and has not been researched archaeologically, but P. Roman<sup>72</sup> mentioned on the Danube beach the presence of archeological materials belonging to the Starčevo – Criș and Vinča, as well as some Dacian remains.

• **Ostrovul Corbului – Botul Cliuciului/La Cliuci (km 911)**

Archaeological research took place between 1970 – 1979 and 1980. At Botul Cliuciului, excavations were carried out in two sectors: A and B of which only Sector A featured Early Neolithic finds and features. The stratigraphic sequence of Sector A<sup>73</sup> indicated (bottom to top): Mesolithic, Early Neolithic, Final Eneolithic (cemetery), Coțofeni III and Final Glina occupations, Early Gârla Mare traces, Hallstatt features, Daco-Roman and migration occupations.

Information on the Early Neolithic for this site is scarce: the area occupied by the settlement was estimated at about 4,500 m<sup>2</sup> of which 2,000 m<sup>2</sup> had already been destroyed by the Danube<sup>74</sup>. Two cultural horizons were identified. The eastern part of the site (trenches SXIIk, SI, SVI, SVII) displayed a 40 cm thick cultural layer, at times with complete vessels. In the highest area of Sector A, the Starčevo – Criș reached a variable thickness of 15 – 50 cm (sometimes directly overlapping the Mesolithic layer) with pit features. The Neolithic layer was black-gray in color, rich in humus, and contained significant amounts of pottery, bone, and quartz. In SXVII two horizons were again recognized. No reference is made to the existence of dwellings, only to circular pits, of variable dimensions. Their infill comprised ceramic fragments, lithics, and faunal remains. The base of one pit (with an investigated length of 4 m) was covered with stones – suggestive of a dwelling with a stone floor similar to those at Ostrovul Banului<sup>75</sup>. The Early Neolithic pottery is poorly described: some

<sup>71</sup> Roman 1996, 14.

<sup>72</sup> Roman 1996, 17

<sup>73</sup> Roman 1996, 17.

<sup>74</sup> Roman 1996, 29.

<sup>75</sup> Boroneanț 2012, 185–188.

fragment originating from large decorated vessels, fragments of trays decorated with alveoli, and fragments of altars similar to those from Cuina Turcului.

The burials identified and published as Early Neolithic<sup>76</sup> are in fact of Final Mesolithic date<sup>77</sup>.

References: Boroneanț 2012; Lazarovici 1969; 1975; 1979; Mogoșanu 1978; Păunescu 1990; 1983; Roman, Păunescu 1996; Roman *et alii* 1992; Roman, Dodd-Oprîțescu 2008.

### **Ostrovul Mare**, Gogoșu commune, Mehedinți County

Located between the branches of the Danube this was the largest island in the area, with a length of approx. 17.9 km and a width of 7 km. Archaeological rescue excavations took place between 1977 and 1981, triggered by the future creation of the Iron Gates II reservoir. Unfortunately, very little of the field documentation still exists.

Three findspots with Early Neolithic habitation were identified: **Km 875**, **Botul Piscului** and **Schela**. The archaeological material from point Km 875 is curated at the IAVP.

• **Ostrovul Mare – Km 875** was located halfway between the village and the northern end of the island, on the Great Danube.

Level III – hearths with and without stone border, or with a border made of spaced, rectangular stones. At this level there are ceramic fragments (corroded) black in the fresh break, rudimentarily burned, with chaff remains in the paste.

The flint industry is different from the one in the Cazane: more trapeze-shaped implements made of Balkan flint. All the elements are consistent with a possible Early Neolithic contact, as suggested by the presence of pottery. Quartz and quartzite rocks still have an important part. The number of antler and bone tools is declining. Level III contained an object of green shale stone, well sanded and polished, with a semicircular recess in the upper part and a zig-zag ornament on one of the flattened sides, and in the upper part towards the top, a carved spiral. Analogous to Vlasac and Lepenski Vir – probably also during the contact period.

• **Ostrovul Mare – Botul Piscului** (on the bank of the Small Danube, towards Țigănești) – the executed sections indicated an Early Neolithic level. Unpublished material.

• **Ostrovul Mare – Schela** (100 m from the ferry pontoon)

Location: on the Smaller Danube 100 m from the ferry pontoon to Gogoșu. M. Nica conducted a survey at the Neolithic site.

Partially investigated in 1978, Starčevo Criș settlement, unique material.

Unpublished material. Location: unknown, possibly MRPF

References; Boroneanț 1980; 1983; Boroneanț *et alii* 1979; 1982; Stîngă 1986.

### **Ostrovul Șimian**, Șimian commune, Mehedinți County

Archaeological excavations were carried out at the upstream end of the island<sup>78</sup> by Gh. Popilian, but results remained unpublished. In the IAVP collection were recovered Early Neolithic pottery fragments marked *Ostrovul Șimian, 1967, S5, southern cassette (hut) 0.40 m*, mixed with Iron Age ones. Two are burnished, sand tempered and well fired, badly burned. A vessel base preserved the textile imprints.

References: Boroneanț 2012.

### **Scăpău** – *Ogaș Colnic*, Devesel commune, Mehedinți County

The IAVP collections preserves a few Starčevo-Criș fragments associated with ceramic fragments from various ages (Hallstatt, medieval) from the above mentioned survey.

### **Schela Cladovei**, Drobeta Turnu-Severin, jud. Mehedinți

#### • **Schela Cladovei** – *Canton*

The site occupies an alluvial flat bordering the Danube, which is probably part of the pre-dam floodplain. This feature is underlain by 1.5–2.0 m of silty Holocene river alluvium resting upon older, very poorly sorted fluvial gravels that show evidence of having been deposited in a periglacial environment. During the Holocene the fine alluvial sediments were transformed into a calcareous brown earth soil eliminating all traces of the original sedimentary stratification. On the basis of these excavations, V. Boroneanț identified three main periods of occupation at Schela Cladovei: Dacian, Early Neolithic (Starčevo-Criș) and Mesolithic with sporadic traces of mediaeval and modern occupations. Within the Early Neolithic he recognized two phases (Criș I and II), while two phases of Mesolithic occupation (I and II) were also distinguished<sup>79</sup>.

<sup>76</sup> Păunescu 1996; Roman, Dodd-Oprîțescu 2008.

<sup>77</sup> Bonsall *et alii* 2018.

<sup>78</sup> Atlas..., Pl. LXI, 79.

<sup>79</sup> Boroneanț 2000a, Boroneanț, Davidescu 1968.



Excavations at Schela Cladovei from 1992 onwards have found no evidence of discrete phases of occupation during either the Mesolithic or the Early Neolithic.

Eleven Early Neolithic potsherds were subjected to petrographic analysis indicating that the ceramics were made with the same recipe that was used by Starčevo-Körös-Criș potters elsewhere in southeastern Europe. The SEM-EDX analysis showed one of the earliest uses of Mn-rich black pigments to decorate Neolithic European ceramics. Organic residue analyses detected dairy, non-ruminant and ruminant adipose fats. This is suggestive of the fact that Early Neolithic potters at the Iron Gates, although able to make coarse and more sophisticated painted ceramics, did not make specific vessels for a specific use<sup>80</sup>.

#### Pottery and architecture

Two horizons were attributed to the Early Neolithic occupation. The lower one (Criș I seen as Starčevo – Criș IIb according to D. Garašanin's typology<sup>81</sup>, respectively IIA – according to Gh. Lazarovici<sup>82</sup>) was characterized by sunken huts with fine ceramics, well worked and white painting on a polished red background. The upper one, (Criș II – phase IIb<sup>83</sup> or IIIA – IV<sup>84</sup>) yielded a coarser pottery, painted in dark shades on a light background. The latter horizon contained “huts” as well as surface dwellings (postulated by the presence of pits for fixing the supporting pillars) and hearths.

**Osseous tools:** antler harpoon<sup>85</sup>, bone points (projectile and awls)<sup>86</sup>.

**Stone tools:** polished axes and “chisels”, flint trapezes, a significant number of fishing weights, use of Balkan flint.

**Burials:** several crouched burials were assigned to this period based on body position and depth of skeleton<sup>87</sup>.

**Ornaments:** disc beads made of malachite and green schist (Boroneanț *et alii* 2019).

**Subsistence:** Analysis of lipid residues on Early Neolithic ceramics from Schela Cladovei indicate the use of ceramics for the preparation and consumption of fish-related foods<sup>88</sup>. Faunal remains indicate the consumption of wild game and domestic animals.

<sup>80</sup> Spataro *et alii* 2019.

<sup>81</sup> Garašanin 1954.

<sup>82</sup> Lazarovici 1979, 1983.

<sup>83</sup> Garašanin 1954.

<sup>84</sup> Lazarovici 1979, 1983.

<sup>85</sup> On display in the museum located within the Iron Gates I powerstation.

<sup>86</sup> Boroneanț *et alii* 2018.

<sup>87</sup> Boroneanț 2012.

<sup>88</sup> Cramp *et alii* 2019.

**Chronology:** A large series of single-entity AMS <sup>14</sup>C dates on animal and human bone from Schela Cladovei indicates that Mesolithic activity occurred between c. 9200–8200 cal BP, and Early Neolithic occupation between ca. 7950–7750 cal BP<sup>89</sup>.

Material located at MRPF and IAVP.

References: Boroneanț 2012; Mărgărit *et alii* 2019; Davidescu 1965; Davidescu, Boroneanț 1968; Boroneanț 2000a; Lazarovici 1969, 1971, 1974, 1975; 1979, 1983; Spataro *et alii* 2019.

#### • Schela Cladovei – Lutărie

Apparently a distinct findspot, there are no further details. It may have been located west of the pumping station, part of Schela Cladovei – Canton.

References: Boroneanț 2000a.

#### Șimian, commune Șimian, Mehedinți County

Among the collected archeological materials from 1971 field survey, Starčevo-Criș pottery predominates.

• Two findspots (*River Km 924* and *923*) yielding Starčevo-Criș pottery were identified on the Danube bank at approx. 3–4 km downstream of the village<sup>90</sup>.

• *River Km 925* – Starčevo-Criș settlement indicated by the presence of a sunken dwelling. Pottery was assigned to Starčevo-Criș phases III–IV.

References: Boroneanț 2012; Neagoe 2008.

#### Tismana – km 905,8 (*La Cetate*), Devesel commune, Mehedinți County

Early Neolithic materials were found in the IAVP collection: – seven Starčevo-Criș fragments, chaff tempered with rare medium sized pebbles. A fragment with an incised linear decoration stands out. References: Boroneanț 2012.

#### Vrancea, Burila Mare commune, Mehedinți County

Pottery sherds were found in IAVP collection at:

• **Vrancea- km 901.5** – one fragment with pebble and sand tempering.

• **Vrancea – km 902:** 13 fragments (2 rims, 9 body sherds, one fragment from an oven pot, one fragment from the recipient of an altar) chaff /chaff and pebble tempered. One body fragment was red slipped. The altar fragment showed an applied band as decoration nearby the leg.

• **Vrancea – km 902.1** – one neck fragment, tempered with pebbles.

References: Boroneanț 2012.

<sup>89</sup> Bonsall 2008.

<sup>90</sup> Repertoriu.

## REFERENCES

- Repertoriu mss.  
Repertoriul Arheologic al României, Arhiva Institutului de Arheologie "Vasile Pârvan".
- Atlas 1973  
Atlasul Complex „Porțile de Fier”, Bucharest (1973).
- Comori 1978  
Comori arheologice din Regiunea Porțile de Fier, Bucharest (1978).
- Bolomey 1973a  
A. Bolomey, An outline of the late Epipaleolithic economy at the Iron Gates: the evidence on bones, *Dacia* N.S. XVII (1973), 41–52.
- Bolomey 1973b  
A. Bolomey, The present stage of knowledge of maximal exploitation during the Epipaleolithic and earliest Neolithic on the territory of Romania in *Domestikations Forschung und Geschichte der Haustiere*, Congres des Musees d'Agriculture, Budapest (1973), 197–203.
- Bolomey 1983  
A. Bolomey, L'Homme et son environnement au Pleistocene, in V. Dumitrescu, A. Bolomey, F. Mogoșanu, *Esquisse d'une Préhistoire de la Roumanie jusqu'à la fin de l'Age du bronze*, Bucharest (1983), 12–28.
- Bonsall 2008  
C. Bonsall, The Mesolithic of the Iron Gates. (G. Bailey, P. Spikins), *Mesolithic Europe* (2008), 238–279.
- Bonsall et alii 1997  
C. Bonsall, L. Rosemary, K. McSweeney, S. Carolina S., Douglas H., V. Boroneanț, L. Bartosiewicz, R. Petitt., J. Chapman, Mesolithic and Early Neolithic in the Iron Gates: A Paleodietary Perspective. *JEA* 5, (1997), 50–92.
- Bonsall et alii 2015  
C. Bonsall, R. Vasić, A. Boroneanț, M. Roksandic, A. Soficaru, K. McSweeney, A. Evatt, U. Agurajua, C. Pickard, V. Dimitrijević, T. Higham, D. Hamilton, G. Cook, New AMS 14C dates for human remains from Stone Age sites in the Iron Gates reach of the Danube, southeast Europe, *Radiocarbon* 57/1 (2015), 33–46.
- Bonsall et alii 2000  
Bonsall, C., Cook, G., Lennon, R., Harkness, D., Scott, M., Bartosiewicz, L., McSweeney, K., 2000. Stable isotopes, radiocarbon and the Mesolithic–Neolithic transition in the Iron Gates. *DP 27* (2000), 119–132.
- Bonsall et alii 2016  
C. Bonsall, A. Boroneanț, A. Simalcsik, T. Higham, Radiocarbon dating of Mesolithic burials from Ostrovul Corbului, (K. Bacvarov, R. Gleser), *Southeast Europe and Anatolia in prehistory. Essays in honor of Vasil Nikolov on his 65th anniversary*, Universitätsforschungen zur prähistorischen Archäologie, Band 293, Aus der Abteilung für Ur- und Frühgeschichtliche Archäologie der Universität Münster (2016), 23–50.
- Borić–Price 2013  
D. Borić, T.D., Price, Strontium isotopes document greater human mobility at the start of the Balkan Neolithic. *ProcNAS* 110 (9) (2013), 3298–3303.
- Boroneanț 1968a  
V. Boroneanț, Descoperiri gravetiene în peștera lui Climente. *RevMuz*, 6, anul V (1968), 6–8.
- Boroneanț 1968b  
V. Boroneanț, Neoliticul timpuriu în zona Porțile de Fier, *Comunicări*, Seria arheologică, Craiova, VII (1968), 542–546.
- Boroneanț 1970a  
V. Boroneanț, La civilisation Criș de Cuina Turcului, *Actes du VIIe Congres International des Sciences Prehistoriques et Protohistoriques*, Prague, I, 1966, p. 407–410.
- Boroneanț 1970d  
V. Boroneanț, Note de săpătură, Ilișova 1970. Carnet Șvinița, *Arhiva Institutului de Arheologie Vasile Pârvan* (1970).
- Boroneanț 1973a  
V. Boroneanț, Recherches archéologiques sur la culture Schela Cladovei de la zone des Portes de Fer, *Dacia* N.S., XVII, 5–39.
- Boroneanț 1978  
V. Boroneanț, Descoperiri arheologice în unele peșteri din defileul Dunării, *Speologia*, Serie Monografică (1979), 140–181.
- Boroneanț 2000a  
V. Boroneanț, *Paléolithique supérieur final et Epipaléolithique dans la zone des Portes de Fer*, ed. Silex, București (2000).
- Boroneanț 2000b  
V. Boroneanț, *Arheologia pesterilor și minelor din România*, CIMEC, București (2000).
- Boroneanț–Davidescu 1968  
V. Boroneanț, M. Davidescu, Două bordeie dacice la Schela Cladovei, Tr. Severin, *Apulum*, VII (1968), 235–260.
- Boroneanț V. – Boroneanț C. 1969  
V. Boroneanț, C. Boroneanț, Cercetări arheologice în Cazanele Mari, *RevMuz*, 5 (1969), 88–89.
- Boroneanț 2011  
A. Boroneanț, The Mesolithic in Banat. (N. Tasic, Fl. Drașovean), *The Prehistory of Banat, I. The Paleolithic and the Mesolithic*, Bucharest (2011), 104–141, 212–235.

- Boroneanț 2012  
A. Boroneanț, *Aspecte ale tranziției de la mezolitic la neoliticul timpuriu în zona Porțile de Fier*, Museum Banaticum Timesiense. *BHAB*, LII, Cluj-Napoca (2012).
- Boroneanț 2017  
A. Boroneanț, Răzvrata revisited—a supplementary account of the excavation, (M. Mărgărit, A. Boroneanț), *From hunter-gatherers to farmers: human adaptations at the end of Pleistocene and the first part of the Holocene: Papers in Honour of Clive Bonsall*, Târgoviște (2017), 65–80.
- Boroneanț–Bălășescu 2016  
A. Boroneanț, A. Bălășescu, Materialul faunistic din nivelurile neolitice timpurii din adăpostul sub stâncă de la Cuina Turcului. Alexandra Bolomey in memoriam. *MCA*, S.N. 12 (2016), 27–44.
- Boroneanț–Bonsall 2016  
A. Boroneanț, C. Bonsall, The Icoana burials in context. In: Grünberg, JM, editor. *Mesolithic Burials—Rites, Symbols and Social Organisation of Early Postglacial Communities*. Halle: Landesmuseum für Vorgeschichte Halle (Saale) (2016), 757–760.
- Boroneanț–Bonsall 2021  
A. Boroneanț, C. Bonsall, Provenance analysis of obsidian from Stone Age sites in the Iron Gates region: a preliminary report, (K.T. Biró, A. Markó), *Beyond the Glass Mountains: Papers Presented for the 2019 International Obsidian Conference*, 27–29 May 2019, Sárospatak. Budapest, Hungarian National Museum (2021), 47–55.
- Boroneanț *et alii* 2019  
A. Boroneanț, M. Mărgărit, C. Bonsall, Discoidal beads: novel elements of the Starčevo Early Neolithic package, (V. Sirbu, A. Comșa, D. Hortopan), *Digging in the past of Old Europe: Studies in Honor of Cristian Schuster at his 60th anniversary*, Brăila (2019).
- Comșa 1966  
E. Comșa, Materiale de tip Starčevo descoperite la Liubcova. *SCIV* 17/2 (1966), 355–361.
- Comșa 1969  
E. Comșa, L'usage de l'obsidienne à l'époque néolithique dans le territoire de la Roumanie. *AAC* XI/1 (1969), 5–16.
- Cramp *et alii* 2019  
L. J. E. Cramp, J. Ethier, D. Urem-Kotsou, C. Bonsall, D. Borić, A. Boroneanț, R. P. Evershed, S. Perić, M. Roffet-Salque, H. L. Whelton, M. Ivanova, Regional diversity in subsistence among early farmers in Southeast Europe revealed by archaeological pottery organic residues, *Proceedings of the Royal Society B*, 286/1894 (2019), <http://doi.org/10.1098/rspb.2018.2347>.
- Davidescu 1965  
M. Davidescu, O așezare de tip Criș la Turnu Severin. *RevMuz* 3/6 (1966), 547–549.
- Dragomir 1981  
I. Dragomir, Noi descoperiri arheologice în hotarul localităților Gornea și Sichevița. *Banatica*, 6 (1981), 463.
- El Susi 1987  
G. El Susi, Economia animalieră a comunității vinciene timpurii de la Gornea-Căunița de Sus. *Banatica* 9 (1987), 43–56.
- Garașanin 1954  
D. Garașanin, *Starčevačka Kultura*, Ljubljana Univerzita (1954).
- González-Fortes *et alii* 2017  
G. González-Fortes, E. R Jones, E. Lightfoot, C. Bonsall, C. Lazar, A. Grandal-d'Anglade, M.D Garralda, L. Drak, V. Siska, A Simalcsik, A. Boroneanț, J.R. Vidal Romaní, M. Vaqueiro Rodríguez, P. Arias, R. Pinhasi, A. Manica, M. Hofreiter, Paleogenomic evidence for multi-generational mixing between Neolithic farmers and Mesolithic hunter-gatherers in the Lower Danube Basin, *Current Biology* 27/12 (2017), 1801–1810.
- Gumă 1983  
M. Gumă, Contribuții la cunoașterea culturii Basarabi în Banat. *Banatica* 7 (1983), 65–138.
- Gumă 1993  
M. Gumă, Civilizația primei epoci a fierului în sud-vestul României, *BT* 4 (1993).
- Jacobssen–Boroneanț 2010  
P. Jacobssen, A. Boroneanț, Set in clay: altars in place at Cuina Turcului, Iron Gates Gorge. *Studii de Preistorie* 10 (2010), 33–44.
- Lazarovici 1969  
Gh. Lazarovici, Cultura Starčevo–Criș în Banat. *AMN* 6 (1969), 3–26.
- Lazarovici 1971  
Gh. Lazarovici, Unele probleme ale neoliticului din Banat. *Banatica* I (1971), 17–69.
- Lazarovici 1974  
Gh. Lazarovici, Cu privire la neoliticul din Banat. *Tibiscus* 3 (1974), 45–63.
- Lazarovici 1977  
Gh. Lazarovici, *Gornea–Preistorie* (1977).
- Lazarovici 1979  
GH. Lazarovici, *Neoliticul în Banat* (1979).
- Lazarovici 1983  
Gh. Lazarovici, Neoliticul timpuriu din zona Porților de Fier (Clisură). *Banatica* 7 (1983), 9–34.
- Lazarovici C.-M. – Lazarovici Gh. 2006  
C.-M. Lazarovici, Gh. Lazarovici, *Arhitectura neoliticului și epocii cuprului din România*, vol. I, Iași (2006).



- Luca 1995  
S.A. Luca, Așezarea aparținând culturii Starcevo–Criș de la Pojejena–“Nucet” (jud. Caraș–Severin). *Banatica* 13/1 (1995), 5–22.
- Luca 2004a  
S.A. Luca, *Arheologie și istorie (I), Descoperiri din județul Caraș-Severin*, Bibliotheca Septemcastrensis, VII (2004).
- Luca 2004b  
S.A. Luca, About a new archeological discovery from Gornea-Locurile Lungi (Caraș-Severin County), S.A. Luca, *Art and religious beliefs in the Neolithic and Aeneolithic from România*, Sibiu (2014), 13–16.
- Luca 2006  
S.A. Luca, *Descoperiri arheologice din Banatul Românesc*, Sibiu (2006).
- Luca–Dragomir 1985  
S.A. Luca, I. Dragomir, Despre o nouă descoperire arheologică de la Gornea–Locurile Lungi, *Banatica* 8 (1985), 73–75.
- Luca *et alii* 2011  
S. A. Luca, C. I. Suci, F. Dumitrescu-Chioar, Starcevo Criș Culture in Western Part of Romania: Transylvania, Banat Crișana, Maramureș, Oltenia and Western Muntenia: repository, distribution map, state of research and chronology. (S. A. Luca, C. I. Suci), *The First Early Neolithic sites in Central/Southeast European transect*, Volume II, Early Neolithic (Starcevo–Criș) sites on the territory of Romania, BAR Series 2188 (2011), 7–19, 79–13.
- Mathieson *et alii* 2018  
I. Mathieson, S. Alpaslan-Roodenberg, C. Posth, A. Szécsényi-Nagy, N. Rohland, S. Mallick, I. Olalde, N. Broomandkoshbacht, F. Candilio, O. Cheronet, D. Fernandes, M. Ferry, B. Gamarra, G. González Fortes, W. Haak, E. Harney, E. Jones, D. Keating, B. Krause-Kyora, I. Kucukkalipci, M. Michel, A. Mittnik, K. Nägele, M. Novak, J. Oppenheimer, N. Patterson, S. Pfrengle, K. Sirak, K. Stewardson, S. Vai, S. Alexandrov, K.W. Alt, R. Andreescu, D. Antonovic', A. Ash, N. Atanassova, K. Bacvarov, B.G. Mende, H. Bocherens, M. Bolus, A. Boroneant, Y. Boyadzhiev, A. Budnik, J. Burmaz, S. Chohadzhiev, N.J. Conard, R. Cottiaux, M. C' uka, C. Cupillard, D.G. Drucker, N. Elenski, M. Francken, B. Galabova, G. Ganetsovski, B. Gély, T. Hajdu, V. Handzhyiska, K. Harvati, T. Higham, S. Iliev, I. Jankovic', I. Karavanic', D.J. Kennett, D. Koms' o, A. Kozak, D. Labuda, M. Lari, C. Lazar, M. Leppek, K. Leshtakov, D. Lo Vetro, D. Los, I. Lozanov, M. Malina, F. Martini, K. McSweeney, H. Meller, M. Menpus' ic, P. Mirea, V. Moiseyev, V. Petrova, T.D. Price, A. Simalcsik, L. Sineo, M. S' laus, V. Slavchev, P. Stanev, A. Starovi, T. Szeniczey, S. Talamo, M. Teschler-Nicola, C. Thevenet, I. Valchev, F. Valentin, S. Vasilyev, F. Veljanovska, S. Venelinova, E. Veselovskaya, B. Viola, C. Virag, J. Zaninovic', S. Zäuner, P.W. Stockhammer, G. Catalano, R. Krauß, D. Caramelli, G. Zarin, a, B. Gaydarska, M. Lillie, A.G. Nikitin, I. Potekhina, A. Papathanasiou, D. Boric', C. Bonsall, J. Krause, R. Pinhasi, D. Reich, The genomic history of Southeastern Europe. *Nature* 555 (2018), 197–203.
- Mărgărit *et alii* 2021  
M. Mărgărit, A. Boroneanț, C. Bonsall, Stone and osseous adornments in the Mesolithic and Early Neolithic of the Iron Gates. *Open Archaeology* 7 (2021), 779–797, <https://doi.org/10.1515/opar-2020-0168>.
- Mogoșanu 1978  
F. Mogoșanu, Mezoliticul de la Ostrovul Corbului, o noua așezare de tip Schela Cladovei. *SCIVA*, 29/3 (1978), 335–351.
- Neagoe 2008  
M. Neagoe, Locuirea Criș de la Șimian, județul Mehedinți, km fluvial 925. *Studii și comunicări. Seria Arheologie și Istorie Veche*, Muzeul Olteniei Craiova, XV (2008), 1–7.
- Nicolăescu Plopșor 1965  
C.S. Nicolăescu-Plopșor, Cercetările arheologice de la Cazane. *SCIVA*, 16/2 (1965), 407–411.
- Păunescu 1970  
A. Păunescu, Epipaleoliticul de la Cuina Turcului-Dubova. *SCIV*, 21/1 (1970), 3–29.
- Păunescu 1978  
A. Păunescu, Cercetările arheologice de la Cuina Turcului Dobova, *Tibiscus*, Istorie 5, Volum închinat celei de-a 60 aniversări a Unirii (1978), 11–56.
- Petrovsky 1975  
R. Petrovsky Contribuții la repertoriul arheologic al localităților județului Caraș-Severin din paleolitic până în secolul al V-lea î.e.n (partea I). *Banatica*, 3 (1975), 365–378.
- Roman 1976  
P. Roman, *Cultura Coțofeni*, Biblioteca de Arheologie 26, Ed. Acad. RSR, București (1976).
- Roman 1987  
P. Roman, Despre istoricul cercetărilor și stratigrafia unor așezări din Ostrovul Corbului. *SCIVA* 38/4 (1987), 335–365.
- Roman 1996  
P. Roman, *Ostrovul Corbului*, București (1996).
- Roman–Boroneanț 1974  
P. Roman, V. Boroneanț, Locuirea neolitică de la Ostrovul Golu. *Drobeta I* (1974), 117–128.
- Roman, Dodd–Oprițescu 2008,  
P. Roman, A. Dodd–Oprițescu, *Ostrovul Corbului*

*între km fluviali 911–912. Morminte și unele așezări preistorice*, București (2008).

Spataro *et alii* 2019

M. Spataro, M. Cubas, O.E. Craig, J.C. Chapman, A. Boroneant, C. Bonsall, Production and function of Neolithic black-painted pottery from Schela Cladovei (Iron Gates, Romania). *Archaeol Anthropol Sci* 11 (2019), 6287–6304. <https://doi.org/10.1007/s12520-019-00918-0>.

Tudor 1965,

D. Tudor, Cercetări Arheologice în Zona Viitorului Lac de Acumulare al Hidrocentralei „Porțile de Fier”. *SCIV* 16/2 (1965), 395–406.

Țeicu 2003,

R. Țeicu, Contribuții la repertoriul arheologic al Banatului montan. *Banatica* 16 (2003), 339–376.