

OBSIDIAN FINDS FROM THE EARLY NEOLITHIC SITE AT GRUMĂZEȘTI – DELENI, NEAMȚ COUNTY

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Abstract: The site of Grumăzești – Deleni (Neamț County) was excavated by Silvia Marinescu-Bîlcu during the late 1960s and 1970s. The excavations unearthed the remains of an Early Neolithic (Starčevo-Criș) settlement, as well as traces of occupation during the Bronze Age (Komariv and Noua cultures) and the 3rd–4th centuries AD. The excavator's field notes mention abundant obsidian finds associated with the Early Neolithic occupational layer. However, these original obsidian finds have been mislaid and were not available for analysis. During field surveys undertaken in the general area of the site in 2011 and 2017–2018, a further ten obsidian artefacts were recovered. Non-destructive Energy Dispersive X-ray Fluorescence (EDXRF) analysis of these new obsidian finds was undertaken using a Niton 'XL3t ultra' handheld portable XRF analyzer. Based on their geochemical and macroscopic characteristics they likely all originated in the Carpathian 1 source area.

Cuvinte-cheie: pXRF, surse de obsidian, neolitic timpuriu, România

Rezumat: Situl arheologic de la Grumăzești – Deleni (Județul Neamț) a fost cercetat de Silvia Marinescu-Bîlcu la finalul anilor '60 și pe durata anilor '70 ai secolului trecut. Cercetările au pus în evidență existența unui sit neolitic timpuriu atribuit culturii Starčevo-Criș și urme de locuire asociate epocii bronzului (culturile Komariv și Noua) precum și secolelor III–IV p. Chr. Notele de șantier ale Silviei Marinescu Bîlcu menționează numeroase piese de obsidian asociate nivelului neolitic timpuriu, care, din păcate, nu au putut fi regăsite. Periegezele desfășurate în 2011 și 2017–2018 au dus la recuperarea a 10 piese de obsidian. Pentru analiza EDXRF a acestor piese a fost utilizat un XRF portabil Niton 'XL3t ultra'. Pe baza caracteristicilor macroscopice și geo-chimice, obsidianul din care au fost făcute piesele provine din sursa carpatică C1.

INTRODUCTION

The site of Grumăzești – Deleni (Neamț County, 47°09'19" N, 26°24'42" E) is situated on the left bank of the Netezi creek, a tributary of the Topolița River (Fig. 1). The site was discovered in 1966, excavations started in 1968 and continued intermittently until 1978. During five field seasons nine trenches (SI–SIX) with four extensions (Cas 1 - Cas 4) were excavated (Fig. 2). The excavations unearthed the remains of an Early Neolithic (Starčevo-Criș) settlement, as well as traces of occupation during the Bronze Age (Komariv and Noua cultures) and the 3rd–4th centuries AD (Marinescu-Bîlcu 1975; 1993; Marinescu-Bîlcu, Beldiman 2000). A field survey undertaken by Vasile Diaconu aimed at establishing the full extent of the site took place in 2011 (Diaconu 2012), followed in 2017–2018 by further fieldwork with emphasis on geomagnetic survey carried out in collaboration with Regensburg University.

The archaeological evidence relating to the Early Neolithic settlement has been summarized in previous publications: Marinescu-Bîlcu (1975; 1993) and Dumitrescu

et alii (1983) provided brief descriptions of the site, the general chronology and the Early Neolithic pottery finds; A. Boroneanț (2012) presented a detailed account of the excavations with descriptions of the Early Neolithic features; while V. Diaconu (2012) reviewed the evidence from all the archaeological sites in the area, and the main categories of (published) Early Neolithic finds.

The general stratigraphy of the site (Fig. 3), which slopes from west to east, may be summarized as follows:

1. Vegetal topsoil containing a mixture of finds from different periods, resulting from plough disturbance;
2. Dark brown soil with very few features/finds, mostly dating to the 3rd–4th centuries AD;
3. Light brown soil containing mainly Early Neolithic and some Noua culture features and finds;
4. Yellow clayey soil, archaeologically sterile.

Most of the Early Neolithic material came from the 12 features that were clearly identified as Early Neolithic¹, and many fewer finds from the supposed 'cultural layer' (Boroneanț 2012). According to S. Marinescu-Bîlcu's field notes, the dwellings appeared as spatial concentrations of

¹ For a detailed description of the Early Neolithic features, see Boroneanț 2012, p. 27–32.