

SOURCING OBSIDIAN ARTEFACTS FROM EARLY NEOLITHIC SITES IN SOUTH-CENTRAL ROMANIA

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Abstract: Portable X-ray fluorescence spectroscopy (pXRF) was used to reveal the chemical signatures of 60 obsidian artefacts from two Early Neolithic sites in the Muntenia region of southern Romania – Uliești in Dâmbovița County and Măgura – Buduiasca in Teleorman County. The results show that the Starčevo-Criș communities at both sites used obsidian that originated from geological sources in the Carpathians. Obsidian from the C1 and C2 source areas occurs at Măgura, while only C1 obsidian has been documented in the much smaller assemblage from Uliești. We consider the implications of these results for obsidian procurement patterns documented among the earliest farmers of the northern Balkans.

Cuvinte-cheie: pXRF, surse de obsidian, neolitic, Starčevo-Criș, sud- centrul României

Rezumat: Spectrometrul portabil cu raze X (pXRF) a fost utilizat pentru a determina semnătura chimică a 60 de piese din obsidian provenind din două situri neolitice timpurii din Muntenia, sudul României: Uliești din județul Dâmbovița și Măgura – Buduiasca din județul Teleorman. Conform rezultatelor obținute, comunitățile Starčevo-Criș din ambele localități au folosit obsidian care provenea din surse geologice carpatice. Obsidianul din zonele sursă C1 și C2 apare la Măgura, în timp ce numai obsidianul de tip C1 a fost documentat în ansamblul litic mult mai redus de la Uliești. Sunt discutate apoi implicațiile acestor rezultate pentru modelele de obținere a obsidianului de către comunitățile neolitice timpurii din zona nord-balcanică.

INTRODUCTION

Geochemical fingerprinting is acknowledged to be the most accurate means of determining the provenance of lithic raw materials used by prehistoric societies and has been used extensively in obsidian research in Europe and the Near East. In this paper we present the results of a geochemical characterization study of obsidian artefacts from two Early Neolithic sites (Uliești and Măgura – Buduiasca) in the Muntenia region of southern Romania.

While over fifty Early Neolithic sites have been recorded in south-central Romania (Muntenia and Oltenia east of the Jiu River valley), less than one-third have been excavated systematically and obsidian has been reported from only nine sites, invariably in only very small quantities. This situation is mirrored on the Danube Plain of northern Bulgaria where obsidian has been reported from just two Early Neolithic sites, again in very small amounts (Table 1; Fig. 1). The scarcity of obsidian in Early Neolithic contexts in the Lower Danube Basin contrasts with the prominence of "Balkan flint" in Early Neolithic chipped stone assemblages across the region. Distance to source and "competition" from other high-quality lithic resources were perhaps factors influencing this pattern. Obsidian sources in the Carpathian Mountains in Hungary and Slovakia are 500–700 km distant from the sites considered here, while the Balkan flint sources along the Danube at Nikopol in Bulgaria and Ciuperceni in Romania are very much nearer.

SITES AND SAMPLES

Uliești (Dâmbovița County)

Surface archaeological survey in Uliești commune, ca. 37 km south of Târgoviște, identified traces of Early Neolithic settlement on an elevated alluvial terrace above the River Neajlov. The richest concentration of finds occurred in an area measuring approximately 150 × 70 m centred on 44°34'37.21" N, 25°25'38.99" E, ca. 650 m east of the village of Croitori; the finds included lithic artefacts and sherds of chaff-tempered pottery typical of the Starčevo-Criș culture. A second artefact concentration was found ca. 700 m downstream on the same terrace feature (44°34'16.16" N, 25°26'6.22" E), opposite the village of Corbii Mari – Petrești, and comprised a few Starčevo-Criș-type sherds and lithics, mixed with material of medieval to modern date. Among the lithic artefacts recovered from the two artefact scatters were 22 made of imported "Balkan flint" and four of obsidian – three from Uliești – Croitori and one from Corbii Mari – Petrești (Fig. 2). From the characteristics of the pottery sherds, the Early Neolithic finds from Uliești and Corbii Mari were attributed to the Starčevo-Criș III phase (Ilie, Niță 2014, p. 64).