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## LITHIC ASSEMBLAGES OF THE LINEAR POTTERY CULTURE SETTLEMENT MODRYCHI-I

*A total of 145 flint items, as well as four obsidians and seven stone-made artefacts, were collected during the excavations on the Linear Pottery culture settlement Modrychi-I in Lviv Oblast, which is located within Ukrainian Outer Subcarpathia. The assemblage of flint and obsidian items has been analyzed as an integral complex that characterizes the material culture of the Neolithic settlement. The prevailing number of flint items such as cores, flakes and blades reflect on-site production. As for the obsidian artefacts, an attempt was made to establish the origin of raw materials.*

*Keywords: Outer Subcarpathia, Modrychi village, Linear Pottery culture, Neolithic, flint, obsidian, stone tools.*

### Introduction

In 2020, excavations were conducted by the Research Center “Rescue Archaeological Service” (Institute of Archaeology, the National Academy of Sciences of Ukraine) during the construction of a highway bypassing Truskavets, Drohobych district, Lviv Oblast, located within the Ukrainian Outer Subcarpathia (fig. 1). A settlement dated to the Neolithic period was discovered and sampled, through excavations, near the south-eastern outskirts of Modrychi village. The site contained objects and features identified as belonging to the Linear Pottery culture (LPC). The major proportion of the assembled collection of items (around 40%) consisted of lithic artefacts (flint and obsidian), which themselves are worthy of comprehensive typological analysis.

### Characteristics of the Neolithic site Modrychi-I

Before discussing the lithic assemblages, it is necessary to highlight some features of the Modrychi-I site which will allow these artefacts to be seen in the context of the site. The excavations, conducted in a single season, have exposed a sizeable area (1745 m<sup>2</sup>) of cultural deposits. In total, 137 archaeological features were revealed. The vast majority of them (130) consisted of postholes which comprised the foundation of two large above-ground dwellings — commonly referred to as *longhouses*. They had a rectangular shape, measuring 26.5 × 8 m and 24 × 7.5 m, and consisted of five parallel rows of postholes supplemented with ditches in some areas of the feature (fig. 2).

Such buildings are a common type of a dwelling house, well-known from the excavations at the LPC settlements in France, Holland, Germany, Czech Republic, Slovakia, Hungary and Poland (Modderman 1988; Czekaj-Zastawny 2008; Květina, Hrnčič 2013; Rück 2013; Pavlu 2016). The excavated settlements at this site are the first structures of this kind discovered in Ukraine.

Another category of features regularly encountered at the LPC settlements are large amorphous pits (from 5 to 13 m in length) within its spatial complex. These sunken features were used for storage of foodstuffs, material objects, or rubbish disposals. However, some researchers have assumed these kinds of objects may have functioned as pit-houses at the Neolithic settlements in Ukraine (Пастернак 1961, с. 181-183; Пелешишин 1999, с. 43-46). There were three such pits discovered at the Modrychi-I site, which contained majority of all pottery items and stone objects recovered from the settlement.

Flint and obsidian artefacts were found at several places. The spatial allocation has allowed to discern several areas within the excavation site where these items were accumulated (fig. 2). The spot of the highest concentration of items was discovered in the central portion of the *longhouse 1*, as well as at the outer perimeter of its eastern wall. It is here

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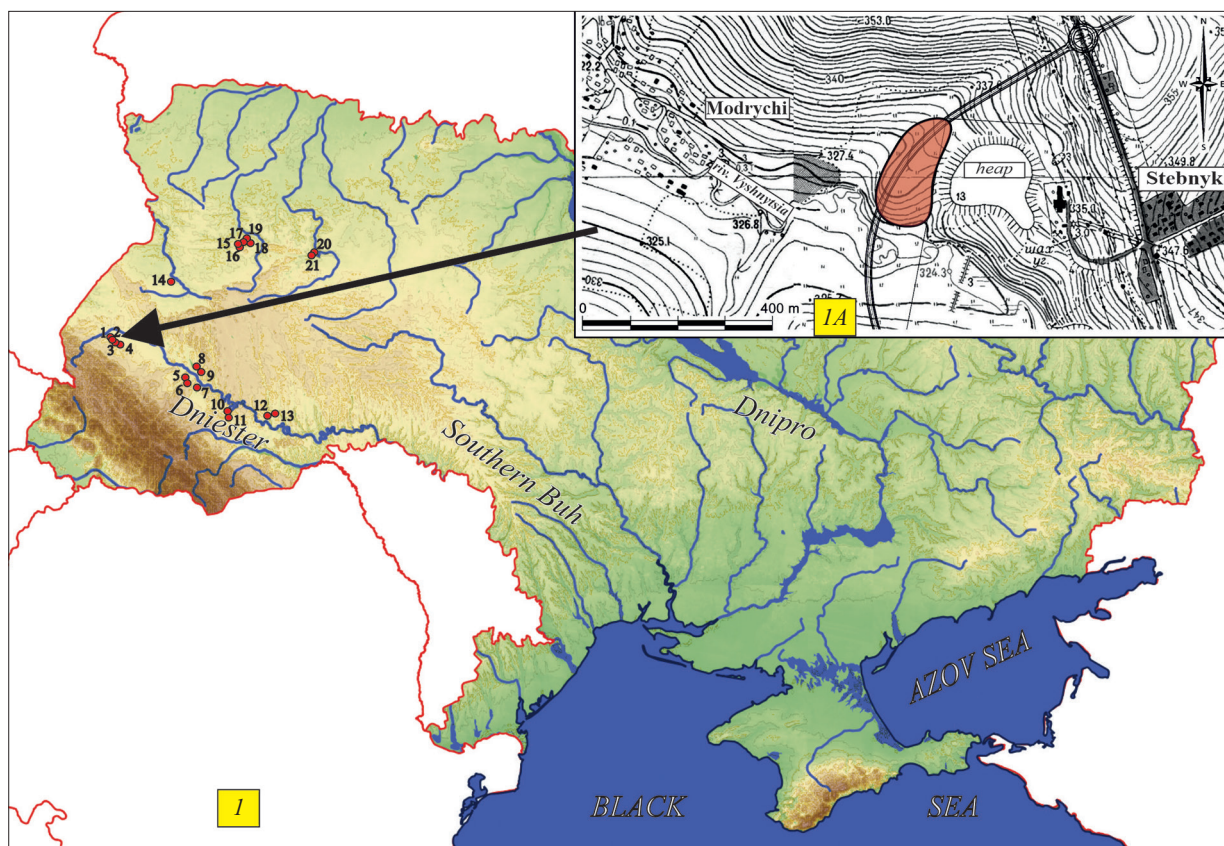


Fig. 1. Map of the location of the most famous sites of the “Music-Note” Pottery phase of the LPC in the Western part of Ukraine: 1 — Kulchytysi; 2 — Modrychi-I; 3 — Kotovane; 4 — Ulychne; 5 — Temyrivtsi-I; 6 — Medynia; 7 — Yezupil; 8 — Bilshivtsi; 9 — Tustan; 10 — Luka; 11 — Nezvysko; 12 — Blyshchanka; 13 — Bilche Zolote; 14 — Tadani; 15 — Baiv (ostriv); 16 — Ratniv-II; 17 — Hirka polonkaa; 18 — Holyshiv-II; 19 — Hnidavska Hirka; 20 — Ostroh; 21 — Mezhyrychi

Fig. 1a. Topographical map with the location of the Neolithic site Modrychi-I

the largest number of flint cores (7 of 8), debitage (72 items), and finished products (20 items) were collected. Although occurring in smaller quantities, retouched blades and debitage refuse, consisting of flakes and shatter, were distributed inside the perimeter of the *longhouse 2* (13 items), as well as in the filling of the large pit No. 12 (nine items), No. 14 (four items), and No. 15 (nine items). The rest of the flint artefacts were scattered randomly all over the excavation area.

As for the obsidian debitage elements and tools, of which only four were found at the site, their deposition is exclusively associated with the house features at the site. Two obsidian artefacts were found inside the posthole (1), and in the ditch (1), which comprised the walls of the *longhouse 1*. Two more obsidian items were discovered in the upper layer of the large pit No. 12, which partially overlaps the western wall of the *longhouse 2*.

Despite certain spatial dispersion, the assemblage of flint and obsidian products should be analyzed as an integral complex that characterizes the material culture of the Neolithic settlement Modrychi-I.

### Flint artefacts

The assemblage consists of 145 items which are related to flint knapping activities and includes debitage, as well as completed formal tools. Statistical data on the flint collection is presented in Table 1.

According to the statistics, the main part of the collection includes flintknapping debitage — 98 items, which is 67.5% of the total amount of flint artefacts. As for the raw material utilized at the site, Turonian high-quality flint of Volhynian or Podolian origin was selected. This material occurs in shades of gray to dark gray, or brownish-gray tones. As no specific geochemical analysis has been conducted upon the items recovered to this date, the lithic source was determined by judging by colour, transparency, texture, and thickness of the cortex to known Volhynian and Podolian lithic deposits. The exact whereabouts of their actual acquisition is questionable. It should be noted that the Modrychi-I site is located in close proximity to the area of well-known



Fig. 2. General plan of the excavation site with discovered features and distribution of the collected artefacts

Neolithic deposits and flint production centers in the Ivano-Frankivsk Oblast, such as Nyzhniv and

Vukivna (Конопля 1998, с. 154; Конопля та ін. 2015, с. 389-390). Conveniently the Modrychi-1

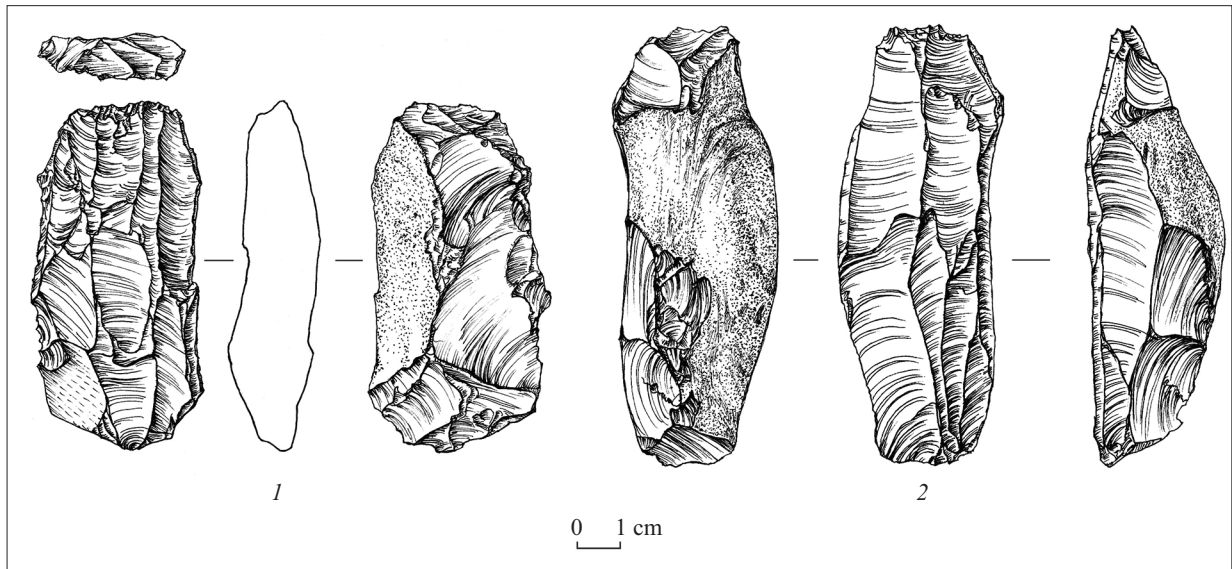


Fig. 3. Flint artefacts: 1, 2 — bi-directional prismatic cores

is near to and has a rather useful connection to the Dnister River Basin.

The secondary reduction phases which occur during flintknapping process was most-likely performed on-site which is evidenced by the eight cores recovered at the settlement. Among them, several different core types were distinguished accordingly to their

shapes: prismatic, unidirectional and bi-directional, displaying straight or oblique striking platforms (fig. 4: 2; 5: 1, 2), conical unidirectional (fig. 4: 1), cylindrical and amorphous. Almost all cores are exhausted and were exploited to obtain blades.

Two more prismatic cores were shaped from primary chunks, as they display a single platform

Table 1. Flint artefacts collection. Summarized data

Definition	Amount	%
<b>Debitage</b>	<b>98</b>	<b>67.5</b>
Flakes and chips	53	36.5
Chunks	1	0.6
Cores	8	5.5
Crested blades	3	2.0
Blades	8	5.5
Blades proximal fragment	9	6.2
Blades medial fragment	12	8.2
Blades distal fragment	3	2.0
Unidentified	1	0.6
<b>Tools</b>	<b>47</b>	<b>32.4</b>
Obliquely truncated blades	2	1.3
Retouched blades and fragments	16	11.0
Scrapers	12	8.2
Burins	1	0.6
Drills	1	0.6
Combined tools	2	1.3
Notched tools	1	0.6
Retouched flakes	10	6.8
Tool fragments	2	1.3
<b>Total</b>	<b>145</b>	<b>100</b>

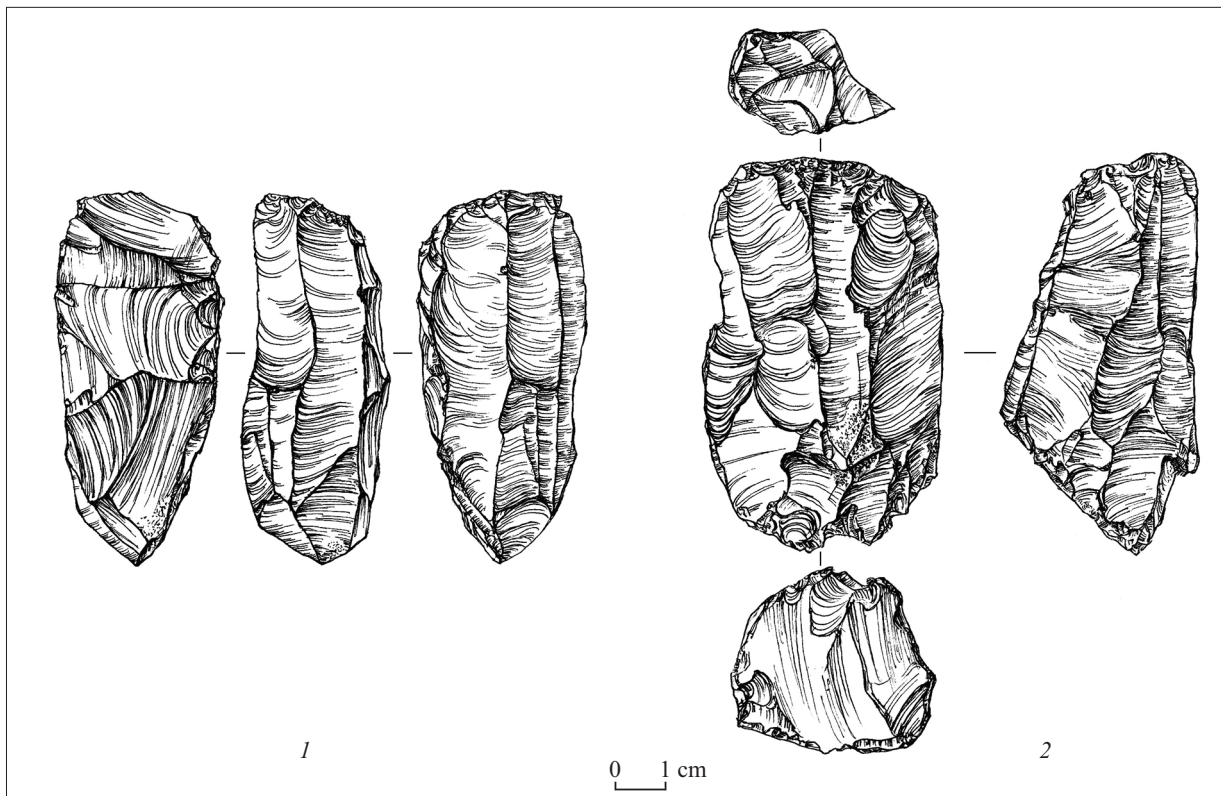


Fig. 4. Flint artefacts: 1 — a conical unidirectional core; 2 — a prismatic bi-directional core

face which was exploited to its maximum extent, whereas the backside partially or completely retain its intact yellowish cortex (fig. 3: 1, 2).

One of the cores is a distinctive cylindrical type with a single oblique striking platform. It has some natural flaws, such as voids and numerous fractures on the working surface. At the initial stage of knapping, this core probably had a prismatic shape and it is possible that the blades were removed from all aspects of the platform surface.

Only three examples of the crested blades were found at the settlement. Flakes make-up the largest category of the core derived products (Table 2). They comprise 53 pieces, or 36.5% of the entire flint collection. Primary and secondary flakes occur in almost equal numbers. Their length range is 2—5 cm. Flakes 0.7 to 1 cm are lacking, however two smaller chippings (less than 1 cm) were discovered. It is assumed that the initial phase of the core knapping could have taken place away from the site, where the material was procured, followed

by formal shaping of the cores and blade removal being carried out at the settlement.

16 blades and blade fragments were recovered from the settlement — 11% of the flint collection (Table 3). This category is 3.5 times smaller than the flake assemblage. It is comprised predominantly of blades displaying lateral, and bilateral dorsal scar patterns. The most common samples have a length of 1.3 cm or greater.

There are 47 retouched tools (32.4% of the entire flint assemblage), which were comprised of blades and flakes alike. Though the majority is represented by the tools, which were made on different blades fragments — 31 items (65.9% of the total number of tools).

Blades and blade fragments most frequently presented subparallel irregular dorsal retouch, both semi-abrupt or abrupt, as well as with marginal retouching (fig. 6: 8—12; 7: 1—7).

Predominant width seen on the retouched blades is 1.3 cm and bigger. One of the specimens is com-

Table 2. Flakes parameters

Flake type	< 0,7 cm (chippings)	0,7—1 cm	1—2 cm	2—3 cm	3—5 cm	> 5 cm	Total
Primary	-	-	3	10	11	-	24
Secondary	2	-	10	9	6	2	29

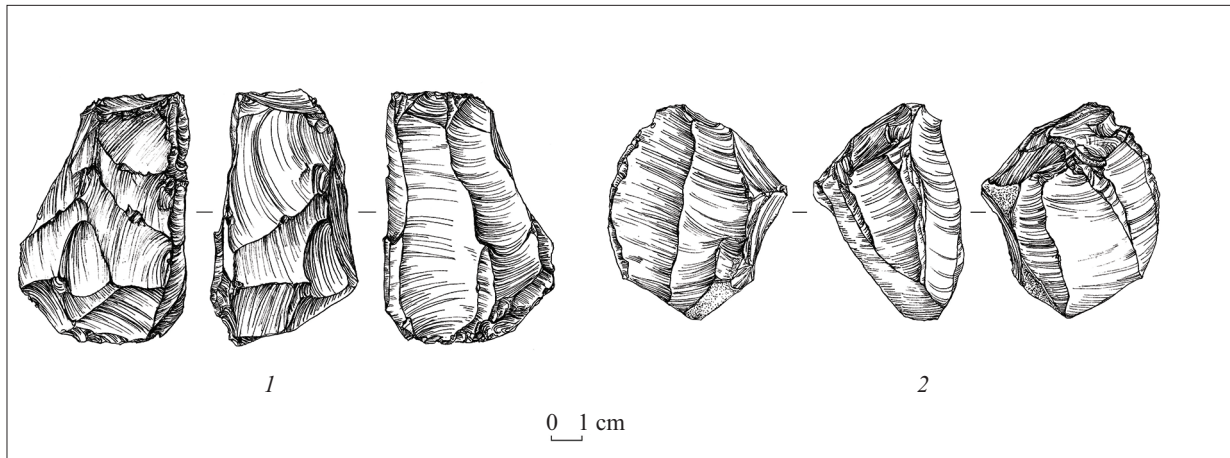


Fig. 5. Flint artefacts: 1, 2 — prismatic cores

plete, seven were made on the proximal fragments, two on the distal aspect, and three on the medial section. Two of the blades have their distal ends obliquely truncated (fig. 6: 2, 3, 4). Retouched micro-blades were not present in the assemblage.

The types of end-scrapers on the settlement is quite representative. The majority of all end-scrapers represented in the assemblage have a convex cutting edge. The end-scrapers can be subdivided further to include eight end-scrapers on the blade (fig. 7: 8—14; 8: 3), three end-scrapers on the flake (fig. 7: 15, 16; 8: 2), and one double-ended scraper created on the circular flake (fig. 8: 1). Interestingly, there were no samples in the collection of side, or end-side type of end-scrapers.

Other noteworthy tools were: a burin on a broken blade, which was made through the application of irregular, abrupt dorsal retouch (fig. 6: 7); a double-notched tool made on the proximal fragment of a blade (fig. 8: 4); a drill or awl created from a bladelet through irregular, semi-abrupt as well as abrupt ventral retouch (fig. 6: 5). It should be noted, that the basal portion of the blade which was utilized to create the drill had been thinned beforehand by truncation. A similar technique is notable on other samples of tools from the site's collection.

The recycling and reuse of worn or previously discarded tools was also evident in the assemblage. This included two combined tools: a flint sickle insert made of a partially truncated blade (fig. 6: 1), and another sickle insert, created from a truncated burin (fig. 6: 6). The latter had its working edge partially removed by the notch, though previously it was applied as a sickle too, judging by gloss traces.

There is a small assortment of retouched flakes (fig. 8: 5—8). Mostly exhibiting marginal retouch, however, these flake removals are the result of the worn-out rather than knapping.

Finally, four flint artefacts in the assemblage display pot lidding and fire-related damage. They appear to be remains of an end-scraper, a retouched proximal fragment of the blade, a medial fragment of the blade, and a secondary flake. These items were not included in the general statistics of the flint collection.

### **Obsidian artefacts**

A distinctive aspect of the Modrychi-I site's material culture is the presence of products made of obsidian. They are represented by the medial fragment of a retouched blade (fig. 9: 3), a crested bladelet (fig. 9: 1), the proximal fragment of a microblade (fig. 9: 2), and a primary flake. It is possible that these artefacts appeared as the result of the exploitation of one and the same core as each item has consistent characteristics of colour, transparency, and luster. It is smokey dark gray in colour, with partially transparent lateral margins. This glassy substance is of high quality, significant density, and appears to be lacking any internal flaws. At present, the margins of these obsidian artefacts sharp margins lacking any obvious signs of deterioration. Among the four obsidian items recovered, three display remnants of yellowish-gray cortex on their dorsal scar patterns.

Unfortunately, raw material analysis was not performed, thus leaving the question of these obsidian artefact origins unanswered. Currently, there are three recorded obsidian deposits which are located relatively close to the Modrychi-I settlement. All of them are occurring in the Carpathian Basin specifically in Hungary (Tokaj Mountains), Slovakia (Lower Zemplín), and Ukraine (Vihorlat-Gutinian ridge) — respectively chemical

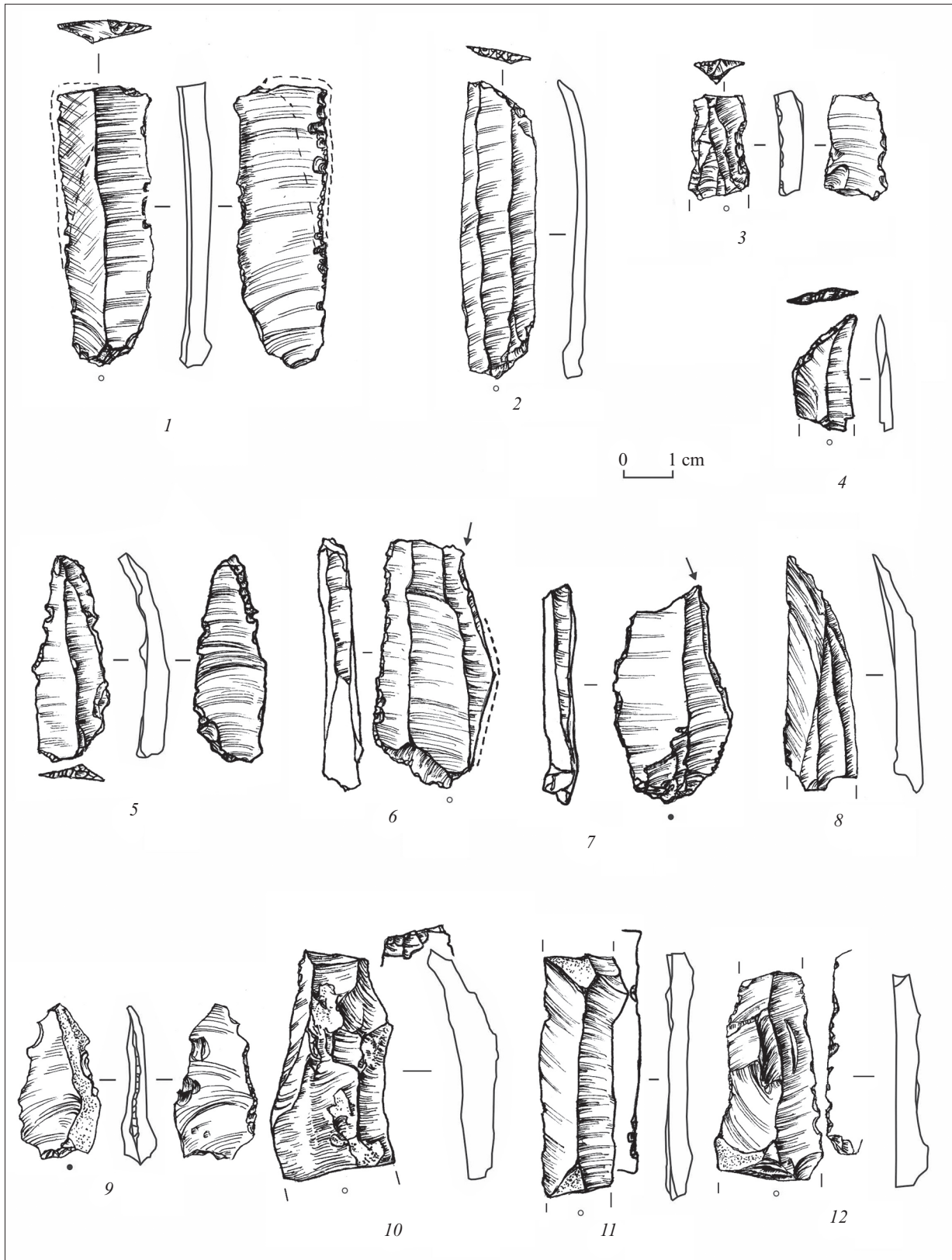


Fig. 6. Flint artefacts: 1 — sickle insert; 2, 4 — truncated blades; 5 — a drill or an awl on the distal part of a bladelet; 6 — a combined tool on the blade; 7 — a burin on the retouched blade; 3, 8—12 — retouched blades and bladelets

groups C1, C2, and C3 (Rosania et al. 2008). The closest is (roughly 120 km) the Carpathian obsidian deposits C1 and C3.

In Ukraine, obsidian occurs in the area around Rokosovo and Malyi Rakovets in the Transcarpathian region. According to the nomenclature of

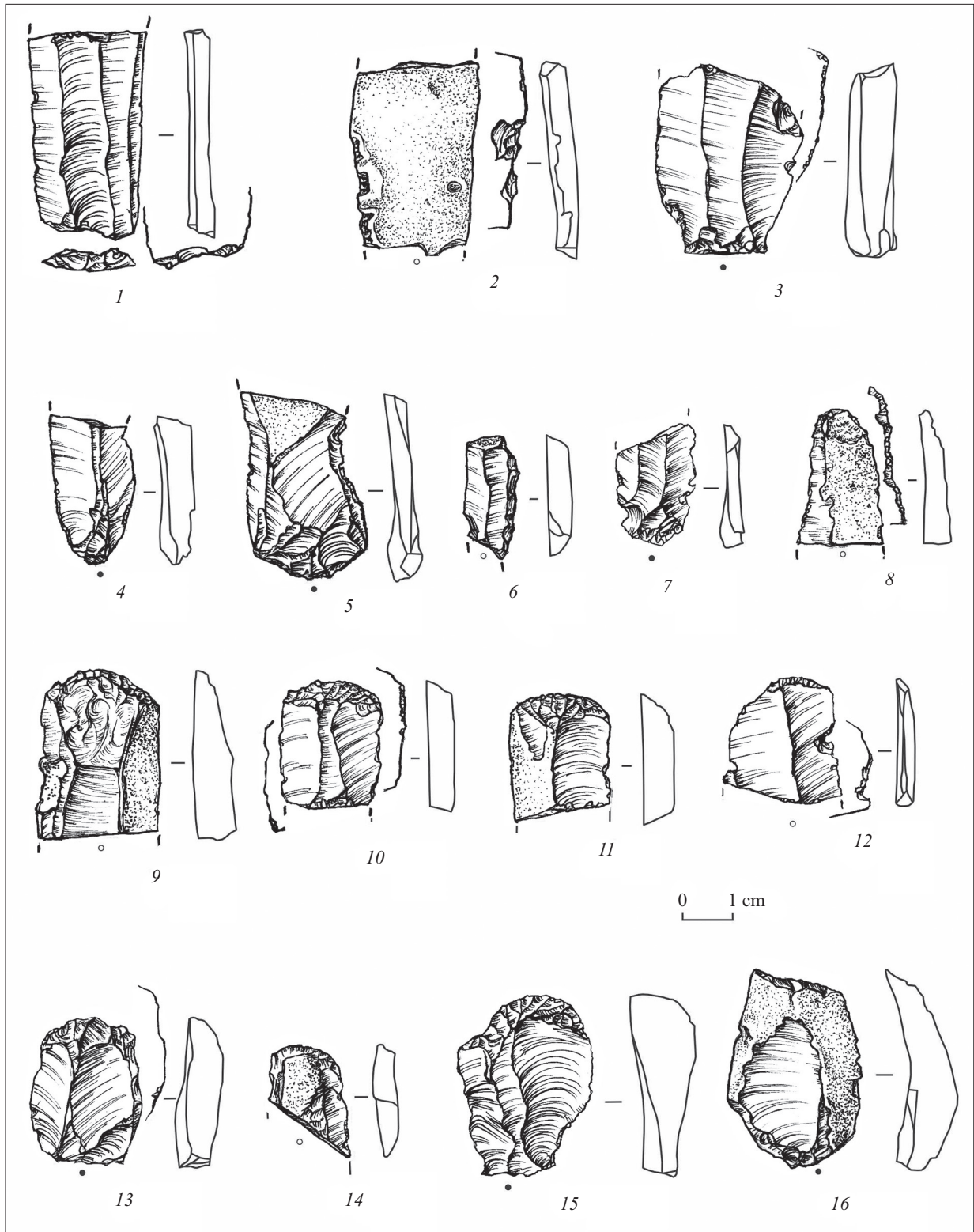


Fig. 7. Flint artefacts: 1–7 — retouched blade fragments; 8–16 — scrapers

R. E. Taylor, this obsidian is classified as “Carpathian III” (Рац 2009, с. 276).

Generally, at archaeological sites of the Middle Palaeolithic in the Ukrainian Transcarpathia region, obsidian artefacts usually dominate in lithic complexes. For instance, summarized data from Rokoso-

vo-I-XV sites implicate that obsidian was utilized to produce 87.72% of all lithic products (Вотякова 2012, с. 8, таблиця 1). A similar percentage (85.5%) in preferential selection of obsidian for tool stone is confirmed on the Malyi Rakovets IV site (Рижов 2015). It has become clear that obsidian, of the C3

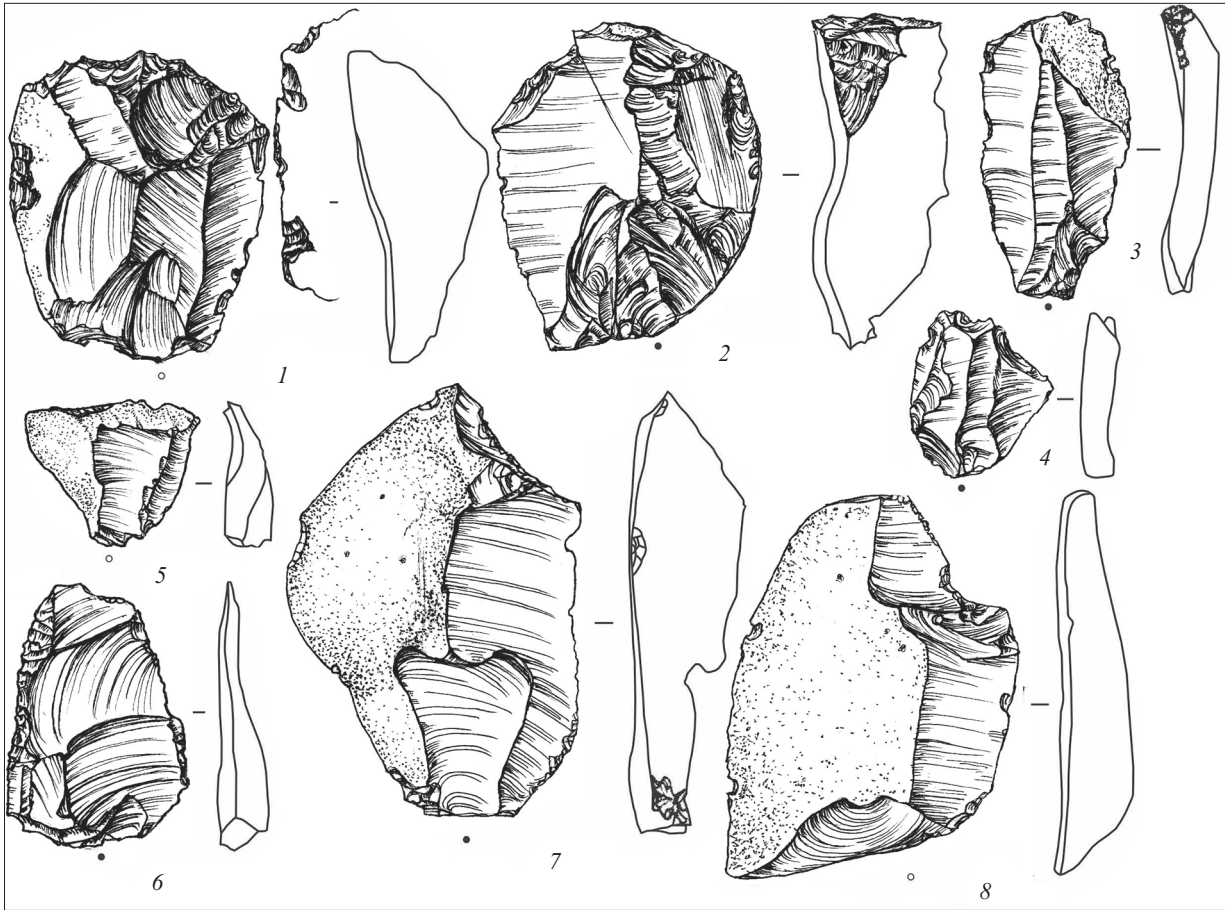


Fig. 8. Flint artefacts: 1–3 — scrapers; 4 — a double-notched tool; 8–16 — retouched flakes

chemical group, was utilized for tool production in local settlements. However, one should consider this source unlikely as it pertains to the Modrychi-I site as obsidian from Ukrainian Transcarpathia deposits is of rather poor quality, and is identifiable by its opaque and crusty mineral structure.

Examining recovered lithic materials from the Neolithic settlement near Medynia village (Halych region, Ivano-Frankivsk Oblast) V. Konoplia suggested that the origins of this obsidian should be sought in the North-Eastern Slovakia, in the Zemplín Mountains (Конопля 2010, с. 393). A similar assumption was made concerning the obsidian blade which was found at the LPC settlement Blyshchanka alongside the Seret River in Ternopil region (Конопля 2008, с. 208). The same researcher obtained and published a fairly large collection of obsidian artefacts, including cores, blades, and tools, after the survey studies at the LPC site near Ulychne village in the Drohobych region, just 13 km away from the Modrychi-I site. He suggested again that the raw material was obtained from Slovakian obsidian deposits (Конопля 1999, с. 131-132)

A single obsidian core was found at the multilayered site Hnidavska Hirka near Lutsk (Volyn Oblast) inside the storage pit belonging to the horizon of the LPC settlement (Златогорський, Бардецький 2010, с. 106).

Five obsidian flakes were collected by the expedition of the National Reserve “Davnij Halych” at the multilayered settlement Bilshivtsi (Kuty locality) in the Ivano-Frankivsk Oblast. The Neolithic deposits of this site were attributed to the Music-Note Pottery phase of the LPC. These items, together with several distinctive pieces of ornamented vessels, were considered indications of contact between the local population and the Tiszadob culture in Central Europe (Ткачук, Кочкін, Щодровський 2017, с. 34).

Obsidian artefacts were found at numerous LPC settlements in the South-Eastern Poland, such as Łoniowa, site-18 (Czekaj-Zastawny, Mitura, Valde-Nowak 2009, s. 198, fig. 21), Rzeszów, site-16 (Kadrow 1990, p. 33), Olszanica, site-4 (Milisauskas 1983). Since these settlements are situated in close vicinity to the obsidian deposits of the Slovakian C1 group (Zbudza, Zalužice), the number of products

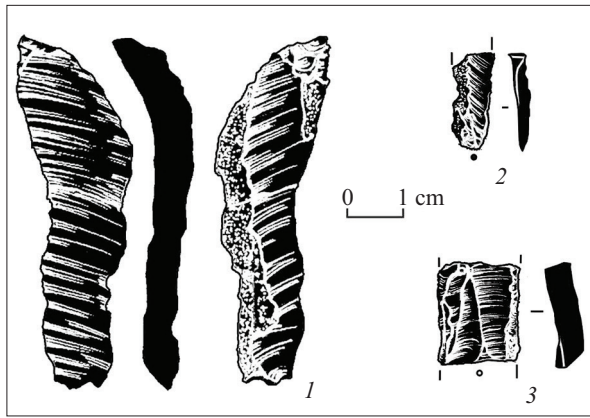


Fig. 9. Obsidian artefacts: 1 — a crested bladelet; 2 — a fragment of a microblade; 3 — a fragment of a retouched blade

from this material source sometimes reaches as high as 99% of the entire lithic collection (Kaczanowska, Kozłowski, Wasilewski 2015, p. 172). However, in Olszanica and Łoniowa, obsidian artefacts were concentrated just in a few longhouses, which led to the conclusion that perhaps only some families or groups were allowed access to, or could use it as a raw stone (Титов 1996, с. 166).

Polish scientists, then speaking of obsidian imports at the LPC settlements, emphasize that the increase in its supply occurs at the end of the Music-Note Pottery phase (Szeliga, Zakościelna 2019, p. 198). The origin of the raw materials is considered from Slovakian C1 as well (Ibid., p. 200). The influx of exotic lithic materials at the settlements of the South-Eastern Poland is explained by the renewed contacts with the younger phase of the Alföld-LBK, specifically with the bearers of the Bükk culture (Ibid., p. 188).

The quality of obsidian sample is very important in the identification of its origin source and its connection to one of the three known deposits. The best and most common obsidian source is that of the C1 group which is described as being homogeneous, highly vitreous, and translucent in structure, making it a desirable as well as suitable for the creation of artefacts as those recovered from the Modrychi-I site. Whilst the other two sources in the Ukraine Transcarpathian region, as well as the

Hungarian Tokaj Mountains produces an opaque obsidian (Rosania et al. 2008).

Therefore, V. Konoplia's theory should be supported concerning the supply of obsidian raw materials from the territory of modern North-Eastern Slovakia. This coincides with the conclusions of Polish colleagues, as shown above. Other options, however, should also be taken into account.

Noteworthy are the seven obsidian artefacts discovered at the Neolithic settlements in the Lower Dnipro area, specifically Semenivka-I and Lysa Hora (Biagi et al. 2014). According to the results of the LA-ICP-MS analysis, obsidian items from the Lysa Hora site (Azov-Dnipro culture) appeared to have been procured from different obsidian flows exploited from several locations. Four blade fragments have shown parameters corresponding with the obsidian deposits from the Armenian Syunik mountains. Another medial fragment of a blade has been attributed to the deposit in the Baksan district of Kabardino-Balkarian Republic (Russia) by its chemical composition signature. Finally, one intact blade did not share any chemical characteristics of any known Caucasian obsidian deposits. This prompted the authors of the study to look for the connections with Carpathian obsidian, especially with the Rokosovo sites in the Transcarpathian region (Biagi et al. 2014, p. 5). The C3 chemical group of raw obsidian was identified in 2008 (Rosania et al. 2008). Presently, it has been acknowledged that, regardless of existing local obsidian deposits, Neolithic sites in the Ukrainian Transcarpathian region mostly exploited the obsidian of the C1 group (Rácz 2018, p. 186).

Similar tendencies in the consumption of versatile raw obsidian sources were observed during the studies at Neolithic and Chalcolithic settlements in Bulgaria, such as the localities of Ohoden, Dzhulyunit-sa, Varna, and Dzherman. The material assemblage of these sites contains obsidian artefacts originating from at least three deposits — Aegean, Anatolian, and Carpathian (Bonsall et al. 2017, p. 2). Bulgarian scientists likewise noticed the predominant position of obsidian C1, suggesting that it has better flaking

Table 3. Blades parameters

Fragment	Microblade	Bladelet	Blade
Complete	1	1	6
Proximal	—	1	8
Medial	—	2	10
Distal	—	2	1

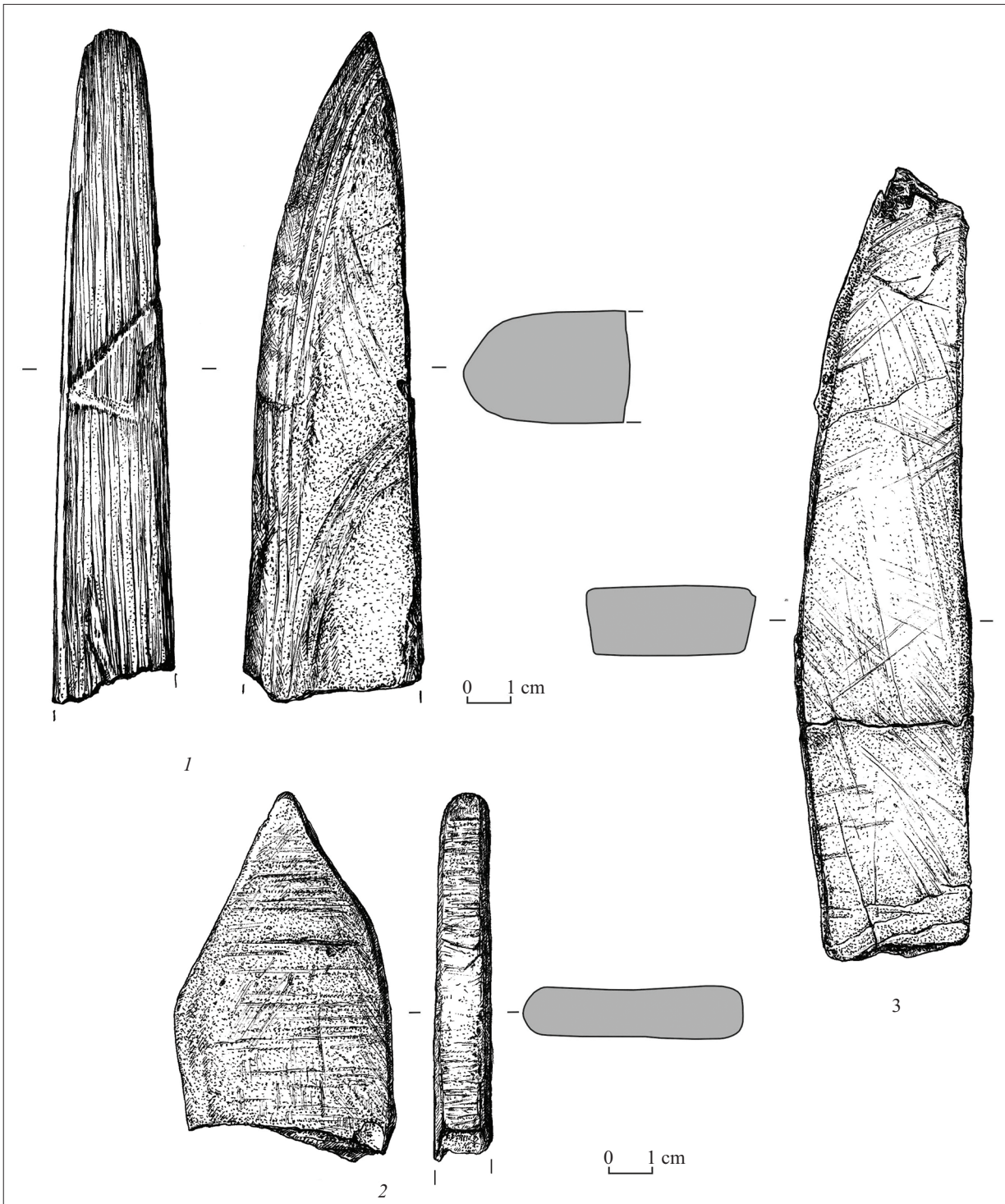


Fig. 10. Stone artefacts: 1 — an adze; 2—3 — abrasive tools

properties and was therefore more frequently utilized to obtain blades and bladelets (Ibid., p. 5).

In the monography “The Neolithic of the Carpathian Basin” V. Titov mentioned examples of obsidian influx from Aegean Miletus island not only in the Balkan Peninsula, but also in Transylvania (Титов 1996, с. 165). When speaking of the early Neolithic in the Carpathian region, he provided in-

formation about a significant percentage of obsidian products from the Tokaj material sources (probably type C2) at the settlements of the Criş/Körös culture (Ibid., p. 165). Hence, at the settlement of Méhtelek (Hungary) the percentage of Tokaj obsidian items reach the amount of 60.2% (Biagi, Starnini 2010, p. 120). At settlements of the later phase of the Körös culture and that of the early the LPC, the per-

centage of the obsidian artefacts sometimes reaches over 90% (Kaczanowska, Kozłowski 2010, p. 254).

In some cases, the supply of obsidian traveled great distances from their originating source. This is evidenced at the Neolithic settlement Pirozza (Spalmatore), located on the Ustica island in the north of Sicily. Following the analysis of obsidian artefacts (28 in total), the majority appeared to be derived from the Lipari Island that is 158 km south-east of Ustica. However, 11% of those obsidian items of the analyzed source belong to Pantelleria island deposits, which is located between Sicily and the Tunisian coast approximately 250 km south-west of Ustica. This example validates the transport of obsidian by sea, and from various deposits at considerable distances (Foresta Martin, Tykot 2019, p. 16).

In the Early Neolithic period (the Stentinello culture), obsidian products from deposits of Lipari island were traded or distributed to the Central and Southern Italy. In the Middle Neolithic, obsidian distribution ranged from the Northern Italy to as far as the Southern France, i.e. spanning a distance of more than 800 km from its source of origin (Quero, Martinelli, Giordano 2019, p. 79).

### *Stone artefacts*

It is necessary to review the stone tools collection in order to fully comprehend the entire lithic industrial complex at the Neolithic site Modrychi-1. There was rather a small sample of such items discovered during the excavations. Many stones, mostly river derived pebbles, were found deposited amongst the cultural layers, and especially in the filling of the storage pit. However, only a minor portion of them have any evidence of being utilized as tools for any length of time.

The most noteworthy is a stone tool (axe or adze) bearing the morphological silhouette of a “shoemaker’s last”, which was created from a tabular piece of fine-grained gray sandstone 13.8 × 3.6 × 2.5 cm in size (fig. 10: 1). Its dorsal face has a slightly convex profile and there are no signs of worn-out. The opposite ventral face is flat and it was extensively ground down. The sides of the bar also have traces of usage. O. Larina has ascribed tools with similar shape, though made of chert mineral, as a chisel of the type 1, Subtype A-a (Ларина 1999, с. 50).

Other notable items include a knapping hammerstone created from a naturally occurring oval chert pebble, the opposite ends of which have trac-

es of percussive use and battering, as well as two fragments of abrasive tools made of fine-grained sandstone. One is oval in the shape and it was made on a flattened sandstone tile. It displays linear striations derived from grinding use on the ventral face, as well as the oblique sides (fig. 10: 2). Another abrasive tool was formed of the oblong bar of the fine-grained light brown sandstone, which is rectangular in cross section. It was broken in two parts more recently (fig. 10: 3). The last item has only light striations on its lateral edges created from use while grinding.

The filling of the large storage pit No. 12 contained several stone artefacts. One of them is a reasonably large (18 x 22 x 5 cm) grinding stone with a polished upper surface which is slightly concave as a result of grinding wear-out. Deposited next to it was a ground stone with an elongated spherical shape 10 x 8 x 6 cm in size, likely the hand-held portion of this grinding set up. Another polished grinder stone (25 x 15 x 5.5 cm) was discovered in the same storage pit just slightly deeper than the first one. All three artefacts were made of the fine-grained gray sandstone.

### *Conclusions*

In general, the assortment of flint, obsidian, and other stone artefacts is typical for the most LPC sites. To a greater or lesser extent, all categories of tools represented are inherent to this culture.

The prevailing number of flint items such as cores, flakes, and blades reflect on-site production of these objects. However, the initial phases of the blade core production are absent from the collection and thusly occurred at the quarry site or place of raw material procurement.

The production method on all cores was amplified indirect percussion. All of the cores excavated were nearly exhausted, with the expected stigmata of the blade removal. The majority of tools were produced on blades. There are samples which could have been used for a variety of tasks, such as agricultural uses (sickle inserts), bone and wood working (end-scrapers, notched tool, and drills), meat and hide processing (end-scrapers, notched burins). No specific hunting tools were found, transverse arrowheads or otherwise.

The presence of obsidian artefacts at the settlement Modrychi-1 suggest the existence of contact with the population of the inner Carpathian basin, most likely the territory of the modern North-Eastern Slovakia. Cortical remnants existing on the dorsal surfaces of several artefacts indicate that

some phases of core trimming and tools making were performed on-site. There is no evidence in the debitage or exhausted cores that would indicate they arrived on site in an unmodified state.

Stone adzes, as well as the abrasive tools of fine-grained sandstone may have been utilized in wood, or bone working. However, traceological studies are needed to obtain more accurate information.

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## КАМ'ЯНІ ЗНАХІДКИ З ПОСЕЛЕННЯ КУЛЬТУРИ ЛІНІЙНО-СТРІЧКОВОЇ КЕРАМІКИ МОДРИЧІ-1

Під час розкопок поселення культури лінійної кераміки Модричі-1 на Львівщині, що розташоване на території Українського Прикарпаття, було зібрано колекцію виробів із кременю (загалом 145 одиниць), обсидіану (чотири одиниці) та каменю (сім одиниць). Більшість із них знайдено в центральній частині класичного наземного «довгого будинку» культури лінійно-стрічкової кераміки (КЛСК) та поруч із його східною стіною. Поселення КЛСК із «довгими будинками» до цього часу в Україні не досліджувалися.

Аналіз крем'яного інвентарю дозволяє зробити припущення про те, що процес розщеплення кременю та отримання заготовок міг відбуватися безпосередньо в межах пам'ятки. Водночас не виключається, що початкова фаза оформлення нуклеусів відбувалася поза поселенням, звідки вони надходили для подальшої обробки. Відзначено доволі високий коефіцієнт готових знарядь на відшепах і ретушованих частин пластин.

Стосовно обсидіанових артефактів було зроблено спробу встановити джерело ймовірного надходження сировини. Серед найбільш територіально наближених розглянуто родовища обсидіану в Карпатському басейні, розташовані в Угорщині (Токайські гори), Словаччині (Нижній Земплін) та Україні (Вигорлат-Гутинський хребет) — відповідно, хімічні групи С1, С2 та С3.

У колекції кам'яних знарядь відзначено знахідку сокири-гесла, а також точильні камені, розтирачі й зернотерки, виготовлені з дрібнозернистого пісковика.

Загалом, асортимент крем'яних, обсидіанових та кам'яних артефактів характерний для значної частини пам'яток «нотної» фази КЛСК. Більшою чи меншою мірою представлені всі категорії виробів, притаманні для цієї культури.

*Ключові слова:* Прикарпаття, с. Модричі, культура лінійної кераміки, неоліт, кремень, обсидіан, кам'яні знаряддя.

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