LEGÉND–HOSSZÚ-FÖLDEK, A NEW OPEN-AIR AURIGNACIAN SITE IN THE CSERHÁT MOUNTAINS (NORTHERN HUNGARY)•

LEGÉND–HOSSZÚ-FÖLDEK, ÚJ NYÍLT SZÍNI AURIGNACIEN LELŐHELY A CSERHÁT HEGYSÉGBEN (ÉSZAK-MAGYARORSZÁG)

PÉNTEK, Attila

Kistarcsa, Hungary

E-mail: attila.pentek@yahoo.com

"Those people who think they know everything are a great annoyance to those of us who do."

– Isaac Asimov

Abstract

Thanks to intensive field surveys of recent years several chipped stone assemblages of Upper Palaeolithic character were found in the vicinity of Legénd village in Nógrád County (Northern Hungary). Among the located sites, a quite rich material stems from Legénd–Hosszú-földek. The majority of the assemblage, containing 1,782 artefacts, is made of local raw materials (limnic silicite and siliceous pebble), and the percental ratio of the local quartzite can also be regarded as high. Among the regional materials, derived from a distance of 25-100 km from the site, the presence of limnic silicite of Mátra Mountains origin must be emphasized. Although its percental ratio in the total assemblage is not significant, about one third of the tools are made of this raw material. Long distance raw materials, stemming from more than 100 km distance from the site are scarce with only one flake of felsitic porphyry and a dozen artefacts made of erratic flint of probably Polish origin. The amount of the Carpathian radiolarite is insignificant as well. Typologically, and on the basis of the tool-kit composition, the assemblage can be classified with quite high confidence to the Aurignacian industry. The industry of the site can unambiguously be defined as a flake-industry, the laminarity is quite low. In the tool composition, besides various burins, end-scrapers, end-scraper-burin combined tools, side-scrapers can also be found. Quite high is the number of elaborated, retouched, but only hardly classifiable or even unclassifiable artefacts. On the base of techno-typological considerations the assemblage can be assigned to the Aurignacian culture s. l.

Kivonat

Az elmúlt évek intenzív terepkutatásai folytán a Nógrád megyei Legénd község határában több kisebb felső paleolitikus leletanyag került elő. A felfedezett lelőhelyek közül Legénd-Hosszú-földek lelőhelyről került elő viszonylag gazdagabb pattintott kőeszköz együttes. Az 1782 darabos leletanyag döntő többsége helyi nyersanyagból, cserháti limnoszilicitből és kovakavicsból készült, ugyanakkor viszonylag magasnak mondható az ugyancsak helyi eredetű kvarcit kavics aránya is. A 25-100 km távolságból származó regionális nyersanyagok között jelentéktelen a kárpáti radiolarit mennyisége. Ki kell viszont emelni az összleletszámban ugyan nem számottevő, de az eszközök között jelentős számban előforduló mátrai eredetű limnoszilicit jelenlétét a lelőhelyen. A több mint 100 km távolságból származó távolsági nyersanyagok közül a kvarcporfírt egyetlen szilánk, az erratikus tűzkövet kilenc lelet képviseli. A homogén leletegyüttes egyértelműen a felső paleolitikumba sorolható, közelebbi kulturális és kronológiai besorolása azonban a felszíni gyűjtésből származó leletek alapján nem problémamentes. A lelőhely ipara egyértelműen szilánkiparként definiálható, a laminaritás igen alacsony. Az eszközkészletben a különböző vésők mellett, vakarók, vakaró-véső kombinált eszközök, kaparók találhatók. Igen magas a retusált, megmunkált, de pontosabban csak nehezen vagy egyáltalán nem klasszifikálható darabok száma. Tipológiailag és az eszközösszetétel alapján a lelőhely pattintott kőanyaga igen nagy valószínűséggel az Aurignacien kultúrába sorolható.

KEYWORDS: CSERHÁT MOUNTAINS, NORTHERN HUNGARY, UPPER PALAEOLITHIC, AURIGNACIAN, SILICEOUS PEBBLE, LIMNIC SILICITE OF MÁTRA MOUNTAINS

KULCSSZAVAK: CSERHÁT-HEGYSÉG, ÉSZAK-MAGYARORSZÁG, FELSŐ PALEOLITIKUM, AURIGNACIEN, NYERSANYAGFELHASZNÁLÁS

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The geographical location of the site

The site is situated in the Western Cserhát Mountains, at the eastern foothills of the Romhány Mountains and the Csővár-Faulting (Csővári-rög). The area is an eastward inclined hill-country, part of the Nézsa−Csővár Hills, characterized by high relative relief (up to 155 m/km^2) and high degree of fragmentation by valleys (6-7 km/km^2 valley density). The hills are made up of tectonically fragmented Triassic dolostones, covered by a thin layer of coarse siliciclastic sediments (i.e. pebble, cobble) that have strongly eroded by now, but are still exposed in numerous locations (Dövényi 2010, 677-679).

Legénd is located 5 km west of the Galga River, which follows a roughly N-S oriented asymmetric erosional valley developed in the late Pleistocene. This river forms both a geologic and geographic divide between the Central Cserhát Mountains of volcanic origin and the Western Cserhát Mountains, which is dominantly made up of Oligocene sediments. In the vicinity of the village the terrain is cut by the Szécsénke, Nógrádkövesd, as well as Sápi valleys and their numerous side valleys.

The site is situated 1 km south of Legénd on the southern ridge of a very characteristic, amphitheatre-like valley, which lies at the northern end of a plateau of great extent. The site, with its dimensions of 350×50-100 m, is located at an altitude of about 270 m a.s.l., in an important strategic position, from where the whole landscape can be controlled. Westward of the site, a system of dead-end valleys slashed by deep gullies can be found. Here is the source of one of two streamlets, which are running in the valley north of the site and converge about 500 m from the site. The Middle and Early Upper Palaeolithic sites of Vanyarc−Szlovácka-dolina (Markó 2007, 2012), Debercsény−Mogyorós (Markó 2009) and Szécsénke−Kis-Ferenc-hegy (Péntek & Zandler 2013) are typically located along dead-end valleys with asymmetric cross sections (Láng 1967, 37, 54). The same phenomenon can be observed at the Hont−Csitár site in the Ipoly Valley region (Zandler 2010) or at the Demjén−Szőlő-hegy site (Zandler 2006, 2012), near Eger, at the southern foothills of the Bükk Mountains.

Most certainly, the selection of Palaeolithic site locations was driven by practical considerations related to hunting strategy. Significant ethnoarchaeological data confirm that particularly the ephemeral hunting stations are often located in the vicinity of "topographical neuralgic loci" (tight valleys, dead-end valleys, shallows) (Baales 1999, 70-71, Bang-Andersen 2008, 66).

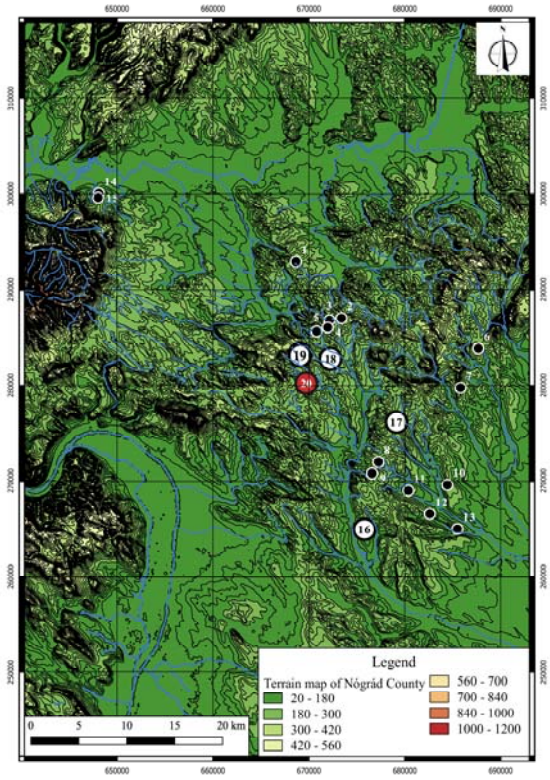

Fig. 1.: Late Middle Palaeolithic and Upper Palaeolithic sites in Nógrád County

1.: Debercsény−Mogyorós, 2.: Becske−Júlia-major, 3.: Becske 4., 4.: Becske−Büdös-tó-hegy alatt, 5.: Szécsénke−Visak, 6.: Buják−Szente, 7.: Bér−Szár-hegy, 8.: Acsa−Rovnya, 9.: Acsa−Provosznya, 10.: Erdőtarcsa−Daróci-hegy, 11.: Erdőkürt−Cigány-part, 12.: Kálló−Eresztvény, 13.: Verseg 3., 14.: Hont−Babat, 15.: Hont−Csitár, 16.: Galgagyörk−Csonkás-hegy site complex, 17.: Sites of the Vanyarc-type industry, 18.: Szécsénke Szeletian site complex, 19.: Legénd−Káldy-tanya Micoquian-Bábonyian site-complex, 20.: Legénd−Hosszú-földek

1. ábra: Késő középső és felső paleolitikus lelőhelyek Nógrád megye területén

The main significance of the site is the fact that in the region of the Western and Central Cserhát Mountains relatively few Early Upper Palaeolithic site was known (**Fig. 1**.). At the same time many younger Prehistoric, mainly Neolithic sites were recognised in the area (Péntek & Faragó 2015).

During the intensive field surveys several chipped stone assemblages with Upper Palaeolithic character have been collected in the vicinity of Legénd (**Fig. 2.**). Some of the localized sites were most likely ephemeral hunting stations. The lithic assemblage of Kétbodony−Halyagos-hegy has not been published yet and the processing and evaluation of the lithic assemblage of Legénd−Rovnya site has just recently been completed (Péntek & Zandler 2013; Péntek 2016).

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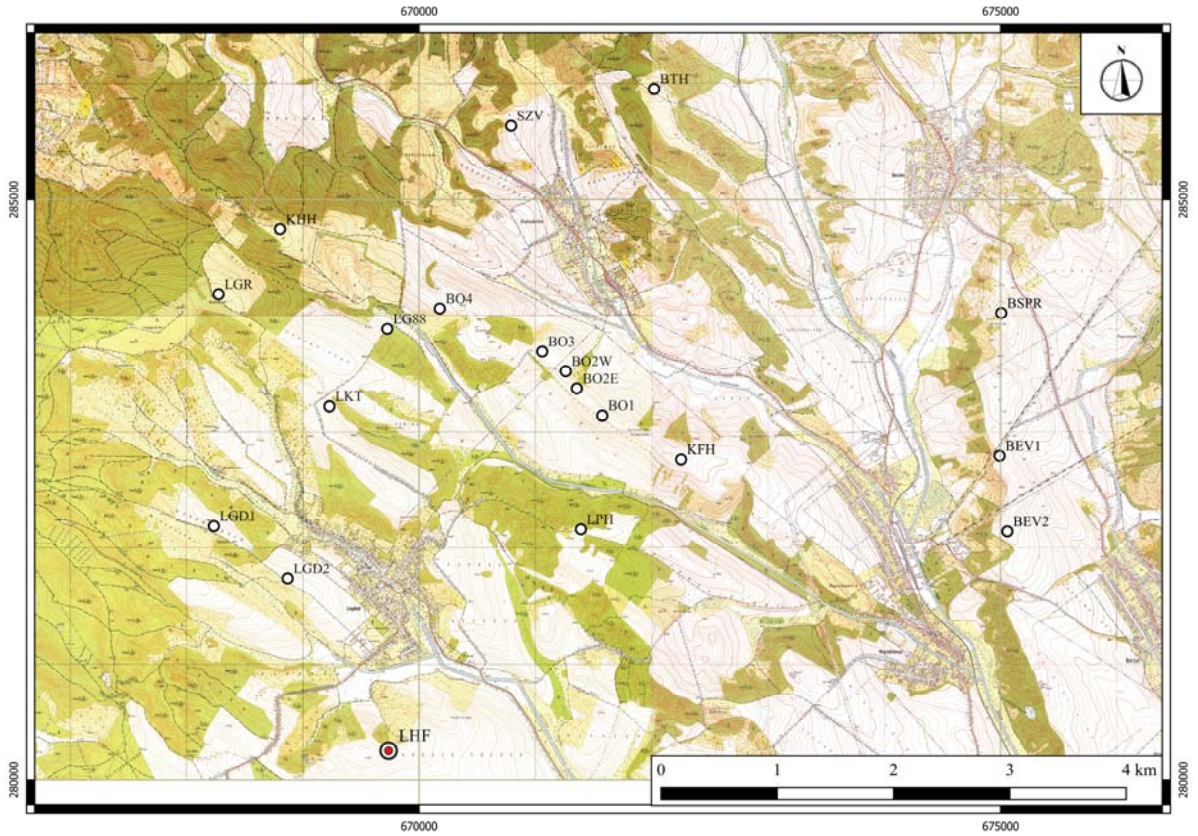

Fig. 2.: Palaeolithic environment of the site Legénd−Hosszú-földek (LFH)

BTH: Becske−Büdös-tó-hegy, BEV1: Bercel−Erdőben vége 1., BEV2: Bercel−Erdőben vége 2., BSPR: Bercel−Söprős, LGD1: Legénd−Gubányi-dűlő 1., LGD2: Legénd−Gubányi-dűlő 2., LGR: Legénd−Rovnya, LG88: Legénd−88., LKT: Legénd−Káldy-tanya, LPH: Legénd−Pápai-hegy, KHH: Kétbodony−Halyagos-hegy, BO1: Szécsénke−Berecz-oldal 1., BO2E: Szécsénke−Berecz-oldal 2E. (East), BO2W: Szécsénke−Berecz-oldal 2W. (West), BO3: Szécsénke−Berecz-oldal 3., BO4: Szécsénke−Berecz-oldal 4., SZV: Szécsénke−Visak

2. ábra: Paleolitikus lelőhelyek Legénd−Hosszú-földek környezetében

In connection with these sites it is worth mentioning that they are located at relatively high altitudes of 350-380 m a.s.l., which is unusual for Palaeolithic sites in the Cserhát Mountains. This circumstance is probably in relationship with the functional character of these sites. Upper Palaeolithic sites closest to the Legénd sites are found in the southern foothills of the Cserhát Mountains, the anabranches of the Galga River, the valley of the Ipoly River and the environment of Romhány in the south-eastern part of the Nógrád Basin.

Raw materials in the archaeological assemblage

In the lithic assemblage containing 1,782 artefacts eleven raw material types were identified macroscopically the rocks which could not be classified unambiguously were combined into a separate group. In the case of the great numbers of waste products, raw material lumps, splinters the main difficulty was to distinguish limnic silicite sorts of the Cserhát and Mátra Mountains, as well as the local limnic silicite and the siliceous pebble. Especially problematic was this in the case of heavily patinated artefacts of small dimensions. That is why the data enumerated in **Table 1.** are only of approximate, informative nature.

For the identification of the raw materials the modified and simplified classification of K. Simán (1991) will be used, which is based mainly on the radius of the raw material procurement areas, disregards the geographical situation and the availability of the raw material sources. Each raw material type (limnic silicite, andesite, quartzite and siliceous pebble) originating in the Cserhát Mountains can be collected from a distance of not greater than 25 km as the crow flies should be considered as local.

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Table 1.: Raw material distribution of the assemblage

1. táblázat: A leletanyag nyersanyageloszlása

	Local raw materials						Regional raw materials		Long distance raw materials			Unknown provenance		
	Cserhát-type limnic silicite	Andesite	Silicieous pebble	Nummulitic chert	Vein quartz	Quartzite	Mátra-type limnic silicite	Jasper	Felsitic porphyry	Carpathian radiolarite	Erratic flint	Unidentified	#	%
Tool	32	0	56	0	0	1	51	0	0	2	4	0	146	8.19
Flake core	15	1	9			2					1		28	1.57
Microblade core	5		2				2						9	0.51
Blade	22		12				12			1		1	48	2.69
Microblade core	5		4				1						10	0.56
Burin spall	3		2										5	0.28
Crested flake			1										1	0.06
Core rejuvenation flake	1												1	0.06
Flake (> 20 mm)	66		58			38	29		2	0	3	1	197	11.05
Flake (< 20 mm)	139		54			1	10		0	5	2		211	11.84
Waste product	824	3	202	2	1	50	33	2		6	2	1	1126	63.19
#	1112	4	400	2	1	92	138	2	2	14	12	3	1782	
%	62.4	0.22	22.45	0.11	0.06	5.16	7.74	0.11	0.11	0.79	0.67	0.17		

Table 2.: Raw material distribution of the tools

2. táblázat: Az eszközök nyersanyageloszlása

	Local raw materials						Regional raw materials		Long distance raw materials			Unknown provenance		
	Cserhát-type limnic silicite	Andesite	Silicieous pebble	Nummulitic chert	Vein quartz	Quartzite	Mátra-type limnic silicite	Jasper	Felsitic porphyry	Carpathian radiolarite	Erratic flint	Unidentified	#	%
End-scraper made on blade	4		2				2			1			9	6.16
End-scraper made on flake	6		7				4				1		18	12.33
End-scraper - Burin combination	5		2				1						8	5.48
Burin	9		13				19				1		42	28.77
Side-scraper	2		2				5						9	6.16
Bifacial tool			1										1	0.68
Diverse other tools														
Retouched blade - burin combination							1						1	0.68
Retouched, truncated blade			1				1						2	1.37
Retouched blade			4				5						9	6.16
Retouched microblade	1		1										2	1.37
Retouched flake	2		8				2						12	8.22
Retouched, notched flake			1				1						2	1.37
Notched tool			2										2	1.37
Splintered piece							1						1	0.68
Backed piece	1		1				1						3	2.05
Naturally backed knife						1							1	0.68
Retouched piece	2		11				8			1	2		24	16.44
#	32	0	56	0	0	1	51	0	0	2	4	0	146	
%	21.92	0	38.36	0	0	0.68	34.93	0	0	1.37	2.74	0		100

The regional (mesolocal) group is formed by raw materials which can be collected from a distance of 25-100 km. This group contains all limnic silicite variants originating either from the Börzsöny, or from the Mátra Mountains or even from the area of the Hron River in Central Slovakia (Kaminská 2001, 84). The raw material sorts stemming from a distance greater than 100 kilometers make up the distal (long-range, extralocal) group. This group includes the felsitic porphyry (metarhyolite), obsidian and transcarpathian flint types. The Carpathian radiolarite definitely belongs in this group too.

Local raw materials

In terms of the entire lithic assemblage, the dominance of the limnic silicite is quite significant (62.4 %). The local limnic silicite originates with great probability from the vicinity of Püspökhatvan and Galgagyörk, from a distance of about 17-20 kilometers as the crow flies. In this area numerous limnic silicite are exposed on surface (Csongrádi-Balogh & Dobosi 1995; Markó 2005). This variant, covered with a bluish-white patina layer contains many inhomogeneities, fossil plant and mollusc remains (Markó 2005). In the case of tools and diverse elaborated artefacts the ratio of the limnic silicite is surprisingly low, only 21.92 %. This low ratio is almost unique at the Palaeolithic sites in the Cserhát Mountains. Somewhat similar asymmetric ratios are known at the site of Erdőkürt−Cigánypart, where leaf-shaped tools and Aurignacian tools are present too (Péntek & Faragó 2015).

The siliceous pebble makes up 22.45 % of the lithic assemblage, whereas in the case of the tools and diverse elaborated artefacts the ratio is much higher (38.36 %). With this high percental ratio it is the most frequent raw material among the tools. The most likely source of the siliceous pebble is the gravel exposed at a distance of 200-250 m to the southwest of the site. Its geological age is Upper Oligocene (Noszky 1940, 43-47) and belongs to either the Budafok Sandstone Formation (Hámor 1985, 234–236) or the Pétervásár Sandstone Formation (Hámor 1985, 230–231; Korpás 1998, 64–66). This gravel dominantly contains quartzite pebbles, but siliceous pebble of good knapping quality are abundant too. In the lithic assemblage only a small number of artefacts are covered in part with cortex, so the initial shaping of the cores presumably happened in the area of the gravel.

The ratio of the ninety-two quartzite artefacts, mostly flakes of great dimensions and amorphous splinters, comes out at a surprising 5.16 %. The most possible source is the above mentioned gravel next to the site. In relation to the amorphous quartzite pieces, it is necessary to make some remarks. On the one part, the quartz is a rigid mineral with microcrystalline variants containing small crystals visible only through microscopic examination being somewhat tougher than the macrocrytalline ones. That's why quartzite is much more brittle than siliceous rocks and during knapping it is disposed to break (Tallavaara et al. 2010, 2442-2443).

Consequently, at the current stage of the field research of the site, even the shapeless quartzite artefacts will be considered of anthropogenic origin. Among the tools there is only one made out of quartzite.

There are three raw material lumps and a single flake core made of andesite. The presence of the latter is somewhat surprising as apart from this artefact there are no knapping products of andesite at all in the assemblage. This fine-grained variant of andesite has a dark greyish-black colour, is covered by a light grey weathering layer, and has relatively good knapping properties. Such volcanic andesite can be found east of Galgagyörk, in the quarries of the Megyerke Valley, a distance of 20 km from the site (Szentes 1943, 8, Judik et al. 2001), and in the vicinity of Alsótold at the Nagy−Mező-hegy, at a distance of 35 km from the site (Noszky 1914, 314-317).

Regional raw materials

The sole limnic silicite, which is regarded as Mátra-type variant, is covered with a yellowish-brown or yellowish-white stripped, partially marbly, mosaic patterned patina. In the Cserhát Mountains it has been identified at the Palaeolithic sites of Legénd−Káldy-tanya (Markó & Péntek 2003-2004), Becske−Júlia-major (Péntek 2015b) and Szécsénke−Berecz-oldal (Péntek 2015c). This raw material makes up only 7.74 %, of the lithic assemblage but is much more common among the tools (34.93 %). There are no cores of this rock, and only in small quantity of it can be found among the waste products.

Distal raw materials

The felsitic porphyry, originating from the eastern part of the Bükk Mountains, from the environment of Bükkszentkereszt and Bükkszentlászló (Simán 1986; Markó et al. 2003; Tóth 2011) is represented in the lithic assemblage by two flakes (0.11 %). In the area of the Cserhát Mountains on the Palaeolithic sites related to the Micoquian-Bábonyian industry (Markó & Péntek 2003-2004), the Vanyarc-type industry (Markó 2007, 2012) and the Szeletian-like industries with leaf-shaped tools (Péntek & Zandler 2013) this distal raw material played a significant role.

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Fig. 3.: Selected end-scrapers

3/1: end-scraper made on blade, **3/2**: pointed end-scraper (grattoir ogival) made on blade, **3/3**, **/7-8**: end-scrapers made on blade, **3/4-6**: end-scrapers made on flake (**3/1**: radiolarite, **3/2**, **/7**: limnic silicite of Cserhát Mts., **3/3**, **/5**: limnic silicite of Mátra Mts., **3/4**, **/6**: siliceous pebble, **3/8**: errratic flint)

3. ábra: Válogatott vakarók

3/1: pengevakaró, **3/2**: pengén készült csúcsos vakaró (grattoir ogival), **3/3**, **/7-8**: pengevakarók, **3/4-6**: szilánkvakarók (**3/1**: radiolarit, **3/2**, **/7**: cserháti limnoszilicit, **3/3**, **/5**: mátrai limnoszilicit, **3/4**, **/6**: kovakavics, **3/8**: erratikus tűzkő)

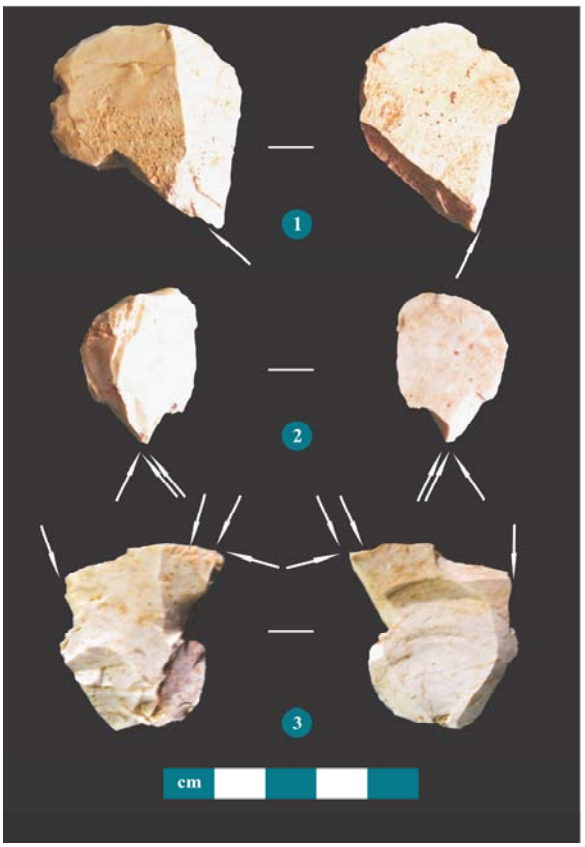

Fig. 4.: Selected tools

4/1-2: end-scraper–burin combination tools, **4/3**: double angular burin (**4/1**: siliceous pebble, **4/2, /3**: limnic silicite of Cserhát Mts.).

4. ábra: Válogatott eszközök

4/1-2: vakaró-véső kombinációs eszközök, **4/3**: kettős sarkos véső (**4/1**: kovakavics, **4/2**, **/3**: cserháti limnoszilicit)

In Aurignacian-like industries this raw material was only used to a lesser extent (Markó et al. 2003, 299). Due to the fact that in the environment of Legénd and the neighbouring village Szécsénke there are several Palaeolithic sites affiliated with the above-mentioned industries, the presence of the two flakes can likely be regarded of secondary origin.

The exact provenance of the fourteen radiolarite artefacts (0.79 %) is unknown. Macroscopically all artefacts resemble Carparthian radiolarite the primary geological source of which is the Vlára Valley in the White Carpathians located 150-160 km north of the site in current Slovakia (Cheben & Cheben 2010).

There are twelve artefacts (0.67 %), including four tools, made of "northern" flint variants, possibly from the geological sources lying in southern Poland and Moravia. The erratic flint of Cretaceous Age most likely originated in the moraines of the Elster and Saale glaciations, whereas the Jurassic flint occurs primarily in on the Kraków-Częstochowa Plateau (Kozłowski 2013, 65).

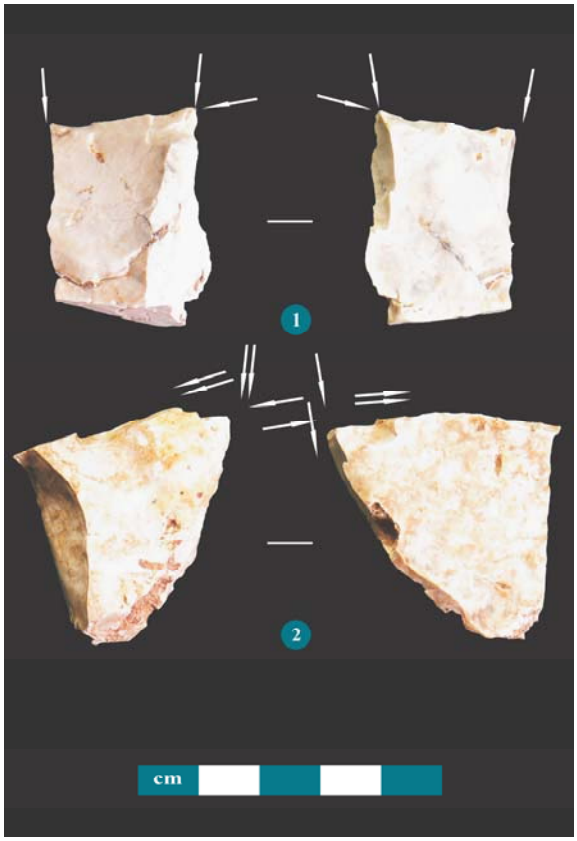

Fig. 5.: Burins made of limnic silicite of Mátra Mts.

5. ábra: Mátrai limnoszilicit vésők

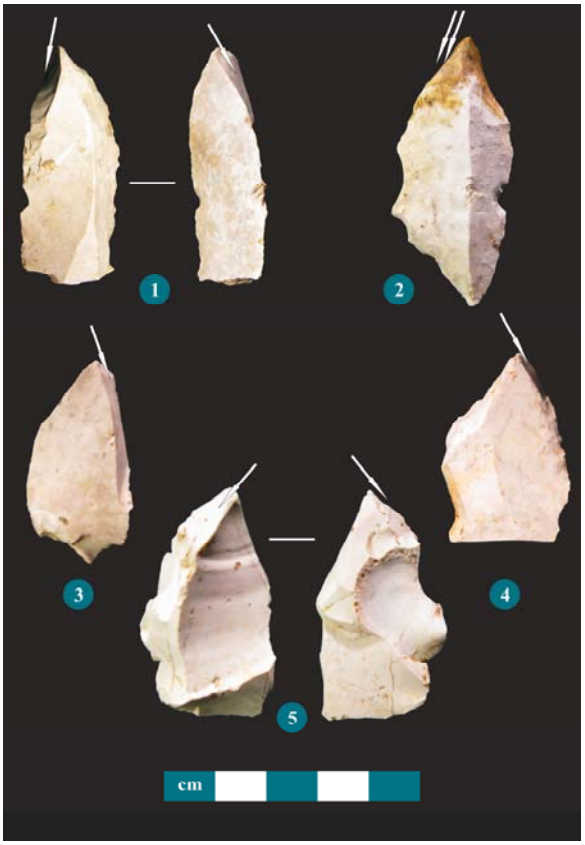

Fig. 6.: Selected burins

6/1, **/2**, **/4**: limnic silicite of Mátra Mts., **6/3**, **6/5**: siliceous pebble

6. ábra: Válogatott vésők

7/1, **/4**: cserháti limnoszilicit, **7/2**: mátrai limnoszilicit, **7/3**: kovakavics

The lithic assemblage

Technological and typological remarks

In the lithic assemblage there are thirty-seven cores. The majority of the pieces are flake cores (twenty-eight pieces), some of which might have served initially as blade core for laminar removals. Given the abundance of the local raw materials the exhaustion of the cores is hard to reconcile. Most of the cores are prismatic, unipolar forms with a single striking platform. Globular, orthogonal and discoid forms occur only sporadically. There is a pronounced raw material preference, fifteen cores are made of local limnic silicite, nine cores of siliceous pebble. There are two quartzite cores and one core made of andesite and erratic flint each (**Fig. 12/1-4.**).

There are nine unipolar microblade cores with a narrow striking platform (**Fig. 11/4-5.**). The phenomenon of disassociation between the detachment of blades, flakes and microblades is well known even in the early phase of the Aurignacian technocomplex (Arrizabalaga Valbuena & Maíllo-Fernández 2008). Cores with the same morphology can be found in several lithic assemblages like in the two lowermost Aurignacian layers, I and II, in Coşava (narrow-faced/burin like cores, Sitlivy et al. 2014a, 199, 200, Fig. 7:3-5; Sitlivy et al. 2014b, 38, 42. Fig, 6). Local raw materials have a clear dominance, five and two cores are made of limnic silicite and siliceous pebble respectively, two cores are made of Mátra-type limnic silicite.

There are forty-eight blades or blade fragments and ten microblades (or bladelets; less than ten millimeters wide small, narrow blanks) in the lithic assemblage. The laminarity should be regarded as relatively low.

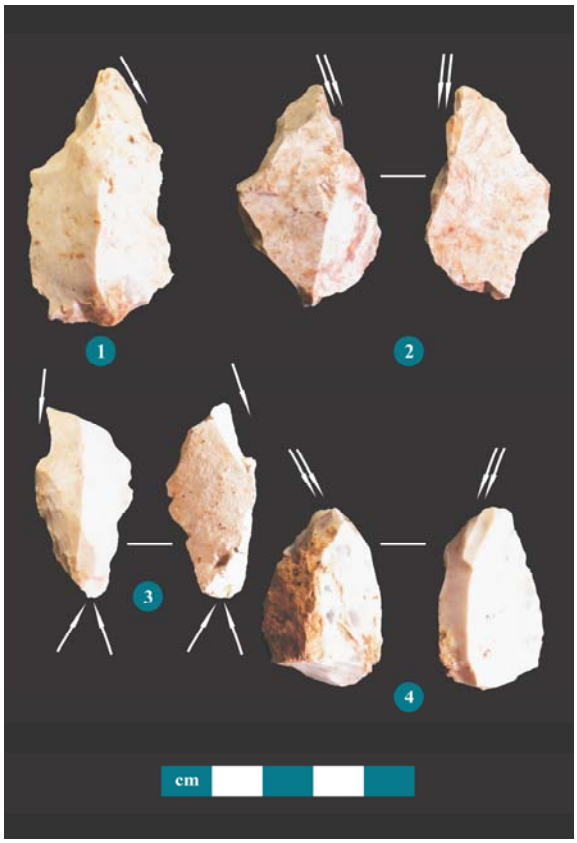

Fig. 7.: Selected burins

7/1, **/4**: limnic silicite of Cserhát Mts., **7/2**: limnic silicite of Mátra Mts., **7/3**: siliceous pebble

7. ábra: Válogatott retusált pengék

7/1, **/4**: cserháti limnoszilicit, **7/2**: mátrai limnoszilicit, **7/3**: kovakavics

Fig. 8.: Selected retouched blades

8/1: retouched blade–burin combination tool, **8/2-5**: retouched blades; **8/1**, **/3**: limnic silicite of Mátra Mts., **8/2**, **/4-5**: siliceous pebble

8. ábra: Válogatott retusált pengék

8/1: retusált penge-véső kombinációs eszköz, **8/2-5**: retusált pengék (**8/1**, **/3**: mátrai limnoszilicit, **8/2**, **/4-5**: kovakavics)

Some of the tools were made on blade blank, there are nine end-scrapers made on blade (**Fig. 3/1-3**.), a retouched blade and burin combination tool (**Fig. 8/1.**), retouched blades (**Fig. 8/2,4.**), truncated blade (**Fig. 8/3.**) and classical Aurignacian blade (**Fig. 8/5.**). There are two fragments of retouched microblades and three fragments of blunted microblades as well. As a general rule the blade(let)s and even the flakes are lipped indicating that during knapping the technique of direct percussion with soft hammer was applied. In the assemblage there is a single crested flake of siliceous pebble (**Fig. 11/6**).

Typologically the 145 formal tools have beyond peradventure Palaeolithic characteristics. Among the tools six basic classes can be distinguished (**Table 2.**).

End-scrapers

The number of the end-scrapers is twenty-seven (18.49 % of the tools); nine of them are made on blade (6.16 % of the tools) and eighteen are made on flake (12.33 % of the tools). There is a quite pronounced raw material preference: the local raw materials dominate (nineteen pieces) over the regional (six pieces) and long distance (two pieces) ones. In the case of the local limnic silicite, the ratio between the end-scrapers made on blade and made on flake is balanced (four and six pieces respectively). Due to the fact that the siliceous pebbles of good knapping quality have relative small dimensions, there are more end-scrapers made on flake of this raw material.

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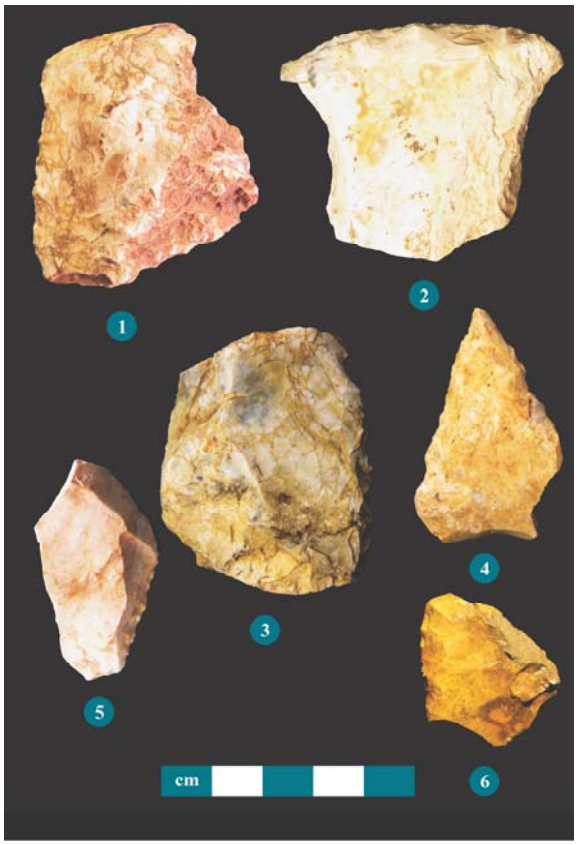

Fig. 9.: Selected side-scrapers

9/1, **/3-4**: limnic silicite of Mátra Mts., **9/2**, **/6**: siliceous pebble, **9/5**: limnic silicite of Cserhát Mts.).

9. ábra: Válogatott kaparók

9/1, **/3-4**: mátrai limnoszilicit, **9/2**, **/6**: kovakavics, **9/5**: mátrai limnoszilicit

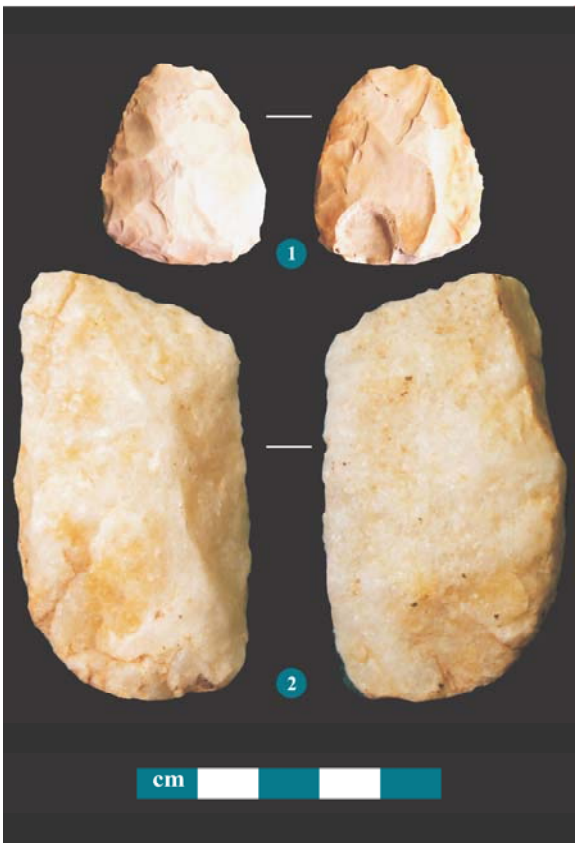

Fig. 10.: Other tools

10/1: Bifacial tool made of siliceous pebble, **10/2**: Quartzite knife with natural back.

10. ábra: Egyéb eszközök

10/1: Kovakavics bifaciális eszköz, **10/2**: Természetes hátú kvarcit kés

The blades which served as blanks for the end-scrapers made on blade, are all products of a developed blade debitage. Two artefacts have two debitage guiding ridges with trapezoid cross sections. Six pieces have only one ridge, four of them have asymmetric, two have symmetric triangular cross sections. One piece has three ridges with approximately trapezoid cross section. There is a very typical culture specific piece, a double Aurignacian end-scraper made on a radiolarite blade with two ridges and with regular trapezoid cross section. The distal working edge is slightly curved, the proximal one is fairly straight, both working edges have high, steep retouch, the lateral edges are also retouched (**Fig. 3/1**). There is an *ogival* end-scraper on blade with approximately trapezoid cross section. The two lateral edges are convergent, the working edge is also pointed. Its base is intentionally broken, both lateral edges are retouched in their entire length. The retouch is steep and was renewed several times because of wearing (**Fig. 3/2**).

All end-scrapers made on flake have only roughly shaped asymmetric working edges. There is an atypical nosed end-scraper with definitive microblade core character. The artefact can be considered as pre-form as only the pre-shaping had occurred (Bon 2000; *ébauche de caréné*, Le Brun-Ricalens 2005, 171). Another artefact, an atypical carinated end-scraper made of limnic silicite of very good quality, has some tiny scars on its base. The tool can be regarded as an end-scraper–burin combination tool, but because of its morphology it is more likely that it was a microblade core with both "working edges" serving as the base for microblade removals. As end-scraper, with a working edge renewed multiple times, it might have only served after the exhaustion, in the recycling phase.

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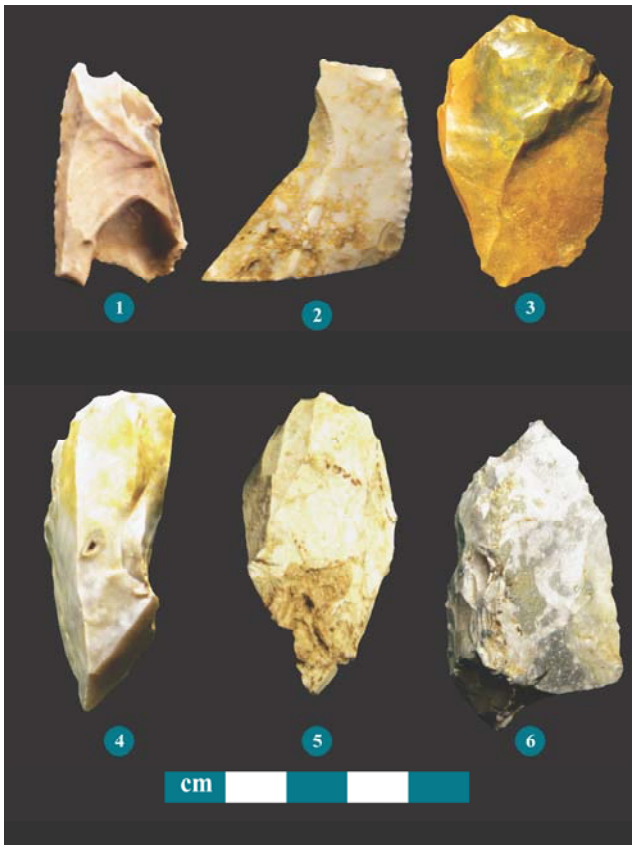

Fig. 11.: Tools and cores

11/1-3: Selected tools, **11/4-5**: Microblade cores, **11/6**: Crested flake of siliceous pebble. (**11/1**, **/3-4**: limnic silicite of Mátra Mts., **11/2**, **/6**: siliceous pebble, **11/5**: limnic silicite of Cserhát Mts.).

11. ábra: Eszközök és magkövek

11/1-3: Válogatott eszközök, **11/4-5**: Lamella magkövek, **11/6**: Gerincszilánk (**11/1**, **/3-4**: mátrai limnoszilicit, **11/2**, **/6**: kovakavics, **11/5**: cserháti limnoszilicit)

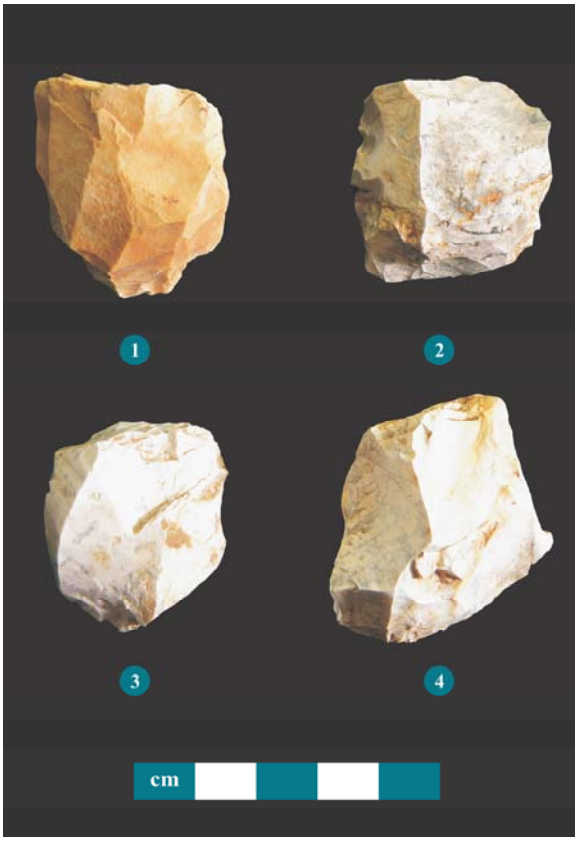

Fig. 12.: Selected cores of siliceous pebble

12. ábra: Válogatott kovakavics magkövek

There is a combination tool in badly broken state made of local limnic silicite. Its working edge is straight, very steep, several times renewed. The distal end of the right lateral edge is elaborated with a stepped, side-scraper-like retouch. On its damaged proximal end tiny microblade detachments can probable be observed. The working edge of a piece made of siliceous pebble is oblique, rightwards ascending, very steep, and renewed several times. Its base is intentionally broken (**Fig. 3/4**). A piece made of Mátra-type limnic silicite has a curved working edge with semi-abrupt retouch, the base and the right lateral edge is broken (**Fig. 3/5**).

Burins

With forty-two pieces (28.77 % of the tools) this is the most populous tool category. In the raw material utilization, a peculiar dichotomy can be observed. Besides the local raw materials (limnic silicite: nine pieces, siliceous pebble: thirteen pieces), nearly half of the burins are made of Mátra-type limnic silicite (nineteen pieces). There is a single burin made of erratic flint. Such high ratio of the Mátra-type limnic silicite use occurs only in retouched blades.

The majority of the burins (twenty-nine pieces) are made on flakes, only slightly more than one third of them (thirteen pieces) are made on blades. Morphologically the burins are very diverse; one fourth of them are angled burins, there are also dihedral burins. Among these types there are some multiple burins with two or three burin blows too. The separation of the latter type from the Vachons burins is not always unambiguous. There are further nine burins on truncation and only two burins on break (*burin sur cassure*). One of them is a double angled burin on break, made on an intentionally broken blade (**Fig. 5/1.**). Another double burin is

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made on a Mátra-type limnic silicite flake. On the distal end of its left edge there is an angular burin and on the right edge there is a dihedral burin (**Fig. 4/3.**). There are eight carinated burins, "*burin caréné*" and "*burin busqué*" as well. In some cases, the burins were renewed, secondary or tertiary burin blows can be seen (**Fig. 5/2.**). The right edge of a burin on break is retouched and due to usage it bears some "pitting". Its base is intentionally broken (**Fig. 6/1.**). The base of a double angle burin is finely elaborated, the left edge is retouched, the right edge has an inverse retouch, struck from the dorsal surface (**Fig. 6/2.**). There is a double burin made on flake, at the left edge of its distal end there is a burin on an oblique truncation, its base forming a dihedral burin. Both edges proximal to the base are retouched (**Fig. 7/3.**).

End-scraper – burin combination tools

This tool category contains eight artefacts (5.48 % of the tools), seven of which are made on flake and one made on blade. Five pieces are made of local limnic silicite, two pieces of siliceous pebble and one piece of Mátra-type limnic silicite. On the base of these combination tools, in one case there is an angle burin (**Fig. 4/1.**), in another case there is a simple dihedral burin (**Fig. 4/2.**).

Side-scrapers

There are nine tools in this category (6.16 % of the tools). Two pieces are made of local limnic silicite and siliceous pebble each and five pieces of Mátra-type limnic silicite. In spite of the relative low amount of this tool type, there is a great morphological variety. There is a straight side-scraper made of Mátra-type limnic silicite on a thick, massive flake. Its left edge is retouched, the right part of the flake was not elaborated at all and shows the typical inhomogeneities of this raw material type (**Fig. 9/1.**). A transversal side-scraper made on a large siliceous pebble flake has a somewhat unusual form, both lateral edges are concave and retouched (**Fig. 9/2.**). There is a double side-scraper made on a thick flake of Mátra-type limnic silicite. Both edges are retouched, the left one has a semi-abrupt retouch (**Fig. 9/3.**). One convergent side-scraper is made on a thick flake of Mátra-type limnic silicite. The lateral edges are semi-abruptly retouched, the base is also retouched and the bulb is struck off (**Fig. 9/4.**). The retouched right edge of a side-scraper is curved, the unelaborated left edge might have been a natural back, its distal end is broken. It has a plain, lipped butt (**Fig. 9/5.**). There is a distal fragment of a straight side-scraper made of siliceous pebble. On the right side of the piece there are the remains of the pebble cortex (**Fig. 9/6.**).

Bifacial tool

The single bifacial tool (0.68 % of the tools) in the assemblage is a leaf-shaped tool of small dimensions made of siliceous pebble. The tool has a subtriangular shape, its base and distal end are rounded. The whole dorsal surface is finely elaborated, the ventral surface is partially thinned. The right edge is retouched, the left one is bifacially retouched and the base is also retouched with the bulb eliminated. On the ventral surface, proximal to the base, there is a frostbite "pitting" (**Fig. 10/1.**).

Other tools ('diverse')

This mixed category contains fifty-nine pieces (40.41 % of all tools) of non-formal tools, all hardly classifiable tools and their fragments. A very pronounced raw material utilization can be observed: most tools are made of siliceous pebble (twenty-nine pieces) and Mátra-type limnic silicite (twenty pieces). All other raw material types are present only in traces, even the local limnic silicite with six pieces is subordinate.

Among the diverse tools there is an unusually retouched blade–burin combination (**Fig. 8/1.**), a retouched and obliquely truncated blade (**Fig. 8/3.**) and two notched tools. There are nine retouched blades, two retouched microblades, two retouched and notched flakes and three backed microblades.

The only quartzite tool in the assemblage is also classified into this tool category. It is a knife with natural back (*couteau à dos naturel*) made on a great flake. The unworked left edge is rectilineal, slightly curved proximal to the base and might have served as natural back. The straight-lined right edge is also unworked. The base and the left edge is partially covered by the original pebble cortex (**Fig. 10/2.**).

Discussion

From the perspective of raw material utilization the lithic assemblage shows very interesting characteristics. In terms of the total assemblage the local Cserhát-type limnic silicite has a clear dominance (62.40 %) over the siliceous pebble (22.45 %) and the abundance of Mátra-type limnic silicite is relative low (7.74 %). However, among the tools the share of these three raw material types shows different distribution: thirty-two tools are made of local limnic silicite (21.92 %), fifty-six tools are made of siliceous pebble (38.36 %) and fifty-one tools of Mátra-type limnic silicite (34.93 %). The high percental ratio of the latter, more distal material suggests that at least part of the tools made of Mátra-type limnic silicite arrived at the site as ready-made tools. The high ratio of the siliceous pebble may be explained as a peculiar raw material use tradition, but it seems more likely that in an opportunsitic manner the hunter-gatherer groups preferred the siliceous pebbles of the nearby

gravel over the local limnic silicite. It is worth considering the question of the lack of local knowledge, of the "know-how", that is the limnic silicite outcrops or deposits in the Cserhát Mountains were partly unknown.

However, there are several other circumstances against the "base camp" character of the site and rather support the validity of the second alternative. Such circumstances are the relative small lithic assemblage and the relative low number of tools. The artefacts are present at relatively low intensity continously in an area of at least 350×50-100 m dimensions, which is covered by loessy soil of unknown thickness. It is very likely that the site is in fact a "palimpsest", bears the traces of more than one visit. Respecting these statements, the available lithic assemblage can not be considered inevitably representative. Conclusions also can not be drawn given that other lithic assemblages with similar characteristics are not known nearby, neither at the southern foothills of the Mátra Mountains, nor in the area of the Bükkalja until now.

Typologically the lithic assemblage seems fairly homogeneous. Among the tools the Upper Palaeolihic types, end-scrapers, burins, retouched blades and microblades dominate. At the same time the assemblage reflects a typical flake-industry with the low laminarity. Characteristical, culture specific tools are partly lacking. The number of Aurignacian carinated and nosed end-scrapers is low, the marginal retouched microblades and Dufour microblades occur only in small amounts, mostly in broken form. There is a single aurignacoid, high, double end-scraper made of Carpathian radiolarite.

The side-scrapers are general types, without specific peculiarities characteristic to the Middle Palaeolithic or Early Upper Palaeolithic. There is a single bifacial leaf-shaped tool made of local siliceous pebble. The presence of bifacial tools, leaf-shaped tools in the Upper Palaeolithic, even though not typical, is not without precedent. In the upper (Aurignacian II.) layer of the Istállóskő cave site, Middle Palaeolithic and bifacial tools, Moustérian points and fragments of leaf-points, made from radiolarite and felsitic porphyry were excavated by L. Vértes in 1950-51 (Vértes 1955, 121,127; Markó 2015,19, Fig. 6.). However, according to A. Markó the upper layer can not be considered Aurignacian at all (ibid. 32).

Leaf-shaped tools are known from Aurignacian open-air sites in the Košice Basin, in the Vihorlát Mountains (Kaminská 1990) and in the Oaş Mountains (Bitiri 1972: 30–41). According to L. Bánesz, in the assemblage of Bárca I "Grube 3", bifacial artefacts, made of felsitic porphyry and radiolarite showing Szeletian influence are also present (Bánesz 1968, 142, Abb. 31:5, 31:1, 3). In the assemblage of Bárca II "Komplex III", a Szeletian leaf-point-like artefact made of chocolate brown radiolarite was described (Bánesz 1968, 158, Abb. 46:16). In A. Markó's opinion, the bifacial tools of the upper layer of the Istállóskő cave site should be regarded as integral elements also from a cultural point of view (Markó 2015: 30-31). In the Cserhát Mountains, there are several open-air Palaeolithic sites with aurignacoid lithic assemblages and bifacial tools. At Acsa−Rovnya there are several bifacial tools and leaf-points made of felsitic porphyry (Dobosi 2008, 2010, 2013).

Because of the relative intensive quartzite utilization at Legénd-Hosszú-földek, the backed knife (couteaux à dos) may, despite its archaic features, be part of the Upper Palaeolithic assemblage. Quartzite raw material has mostly been known from assemblages of Middle Palaeolithic character, usually as rough-and-ready, ad hoc tools or unworked flakes. In the assemblage of Bárca II "Komplex III" significant number of triangular, bicuspid (double-pointed) and pentagonal quartzite pieces can be found. They are generally massive artefacts with thick base, but smaller flakes and even blades also occur (Bánesz 1968, 164, Abb. 46:1, 2, 5, 7-10, 12, 14, 15, Abb. 48: 2, 5: Abb. 49; 1,2). At the "Komplex IV", beside the triangular or bicuspid artefacts, there are also two retouched points with Levallois characteristics (Bánesz 1968, 171, Abb. 51:8, 20). Among the stray finds there is a real "gigantolith" of great dimensions (122×68×45 mm), which resembles a hand-axe or a pre-core (Bánesz 1968,176, Abb. 54:12).

Comparing the lithic assemblage of Legénd−Hosszú-földek with collections of aurignacoid characteristics of other nearby open-air Palaeolithic sites, first of all the open-air site of Acsa−Rovnya comes to mind. Excavations at this site were carried out in 2002 and 2004 by V. T. Dobosi. The published lithic assemblage of the site, mostly from the surface collection, contains 7,390 artefacts including 537 tools. The dominant raw material is the local limnic silicite (96.63 %), the proportion of other raw materials is negligible. In the qualitative and quantitative indices the type-spectrum of the tool-kit differs notably from the classical patterns, the main culture specific types are lacking. There are no finely elaborated microlithic blades and points of Krems-Dufour type typical of the Early Aurignacian. Aurignacian blades or strangulated blades are not present at all and the laminarity index of the industry is low. The percental ratio of the end-scrapers among all tools is 60.89 %, that of the burins is 10.24 % and that of blades and elongated flakes is 9.63 %. The ratio of Middle Palaeolithic side-scrapers is relative high (7.45 %). This phenomenon is well known at the Aurignacian sites of the Košice Basin (Kaminská 1990, 10) and especially in Moravia, in the Early Aurignacian industry of Vedrovice II. or

Kupařovice I. (Valoch et al. 1985). The percental ratios of side-scrapers are high in the two lower layers of Coşava (10 % and 12 % respectively). Mostly made on flake, they are morphologically diverse and give the industry an archaic character (Sitlivy et al 2014a, 202, 205, Fig. 11.).

According to V. T. Dobosi, the presence of bifacial working and leaf-points in the lithic assemblage of Acsa−Rovnya may allude to a possible connection with the contemporary Szeletian culture. On the basis of the technological and typological features of the assemblage, the site is classified as "Aurignacien II" (*aurignacien récent ou aurignacien II*) sensu Djindjian et al. 1999. Its absolute age is the Arcy interstadial, ca. 32-28 ky BP (Dobosi 2010:13, after Djindjian et al. 1999, 165).

K. Zandler in his study dealing with the Palaeolithic sites in the environment of Eger devotes a separate chapter to the lithic assemblages of Aurignacian sites. Mainly in the area of Andornaktálya, Demjén and Egerszalók, there are several lithic assemblages containing definite Aurignacian components in the form of high, nosed and carinated end-scrapers and blades with Aurignacian retouch. The laminarity index is usuallly low (< 10 %), the majority of the tools are made on flake blanks. The study was not concerned much with the used lithic reduction process, with the cores and with other technological questions, because most assemblages are considered to be mixed.

At the same time, the observations on the aurignacoid tools and the generalizations deducted from these observation, indicate the existence of a peculiar raw material procurement strategy. In the aurignacoid assemblages various hydroquartzite and limnic quartzite variants dominate, which originate partly from the area of Miskolc−Avas hill, Korlát−Ravaszlyuk-tető and from the southern foothills of the Mátra Mountains. Local raw materials occur only in small amounts and distal materials are not present at all (Zandler 2012, 18-24).

At the open-air site of Andornaktálya−Zúgó-dűlő near Eger the lithic assemblage contains 1,540 artefacts, mostly stemming from surface collections. In the raw material composition of the total assemblage the percental ratios of regional and long distance raw materials are surprisingly high. Obsidian, primarily the C1-type Slovakian obsidian dominates (25.57 %), followed by erratic flint, mainly from Silesia (22.52 %). Various local hydroquartzite and limnic quartzite variants originating from the Avas hill by Miskolc and from the southern foothills of the Bükk Mountains have a share of 21.35 %. In the raw material composition of the tools, the ratio of the raw material types of the Tokaj-Eperjes Mountains, the obsidian and a hornstone of brown, greyish-brown or greenish-brown colour from the valley of the Ondava River by Svidnik (Kaminská et al. 2000) is 21.3 %.

The share of tools made of erratic flint, stemming from a distance of 350-400 km from the site is the highest (28.7 %). All group of all other raw material types, which include the hydroquartzite and limnic quartzite variants, vein quartz, quartzite, limestone, chalcedony, has a share of 25.5 %. Here the hydroquartzite and limnic quartzite variant are dominant, the others have only a subordinate role.

In the case of the obsidian and erratic flint the whole lithic reduction sequence (chaîne opératoire) can be reconstructed, just as if they were local raw materials. But in contrast to local materials, the exploitation grade of obsidian and erratic flint is clearly higher. In the tool-kit composition, the end-scrapers dominate (58.5 %), followed by side-scrapers (16.0 %) and burins (15.1 %) (Kozłowski & Mester 2003–2004; Kozłowski et al. 2009; Mester 2009; Mester & Kozłowski 2014).

The radiocarbon age of the site, made on charcoal samples, is 30,180 ± 330 BP (Budek & Kalicki 2003–2004). Typologically the whole lithic assemblage can be attributed to the younger Aurignacian/Epi-Aurignacian (Mester 2009: 240). „à propos des éléments diagnostiques de l'outilage du niveau supérieur d'Andornaktálya, l'analogie avec l'industrie du niveau de Kašov en Slovaquie de l'est a également été relevée. …" (Mester & Kozłowski 2014, 363).

The raw material utilization of lithic assemblages from Nagyréde−1 and Nagyréde−2 open-air sites near Gyöngyös (1,305 and 1,885 artefacts, respectively) is characterized by the overwhelmingly high share of the local hydroquartzite, limnic quartzite and geyserite (95.9 % and 90.8 %). The potential geological sources are found in the environment of Gyöngyöspata, Gyöngyössolymos and Gyöngyöstarján, at a distance of 7-8 km from the sites as the crow flies. All these raw material types contain abundant fossil plant and mollusc remains (Gutay 2007, 130). The relative bad knapping quality of these raw materials explains the high percental ratio of the waste products (38.8 % and 36 %, respectively). Other raw material types are represented by only a few pieces, only the share of erratic flint (8.4 %) at the site of Nagyréde−2 is worth mentioning.

At Nagyréde−1, in the raw material composition of the tool-kit containing 112 formal tools, the share of local volcanic raw materials is 84 %, those of erratic flint (2.2 %) and radiolarite (7.1 %) are higher than their shares in the total.

Table 3.: Tool type spectrum of open air Aurignacian sites.

3. táblázat: Nyílt színi Aurignacien lelőhelyek eszköz-spektruma

Site	#	End-scraper %	Burin %	Side-scraper %	Bifacial tool %	Retouched blade/flake %	End-scraper - Burin combination	Diverse / other tools
Acsa	537	60.89	10.24	7.45	1.30	18.99	0.00	1.12
Andornaktálya **	129	27.13	17.83	13.95	0.78	10.08	0.00	30.23
Nagyréde 1 *	112	58.93	10.71	7.14	0.00	9.82	0.00	13.30
Nagyréde 2 *	76	54.43	6.33	2.53	0.00	24.10	1.30	11.36
Legénd	146	18.49	28.77	6.16	0.68	19.18	5.48	21.23
Average		43.97	14.78	7.45	0.55	16.43	1.36	15.45
Deviation		19.70	8.85	4.13	0.56	6.26	2.37	10.94
Coefficient of variation %		44.80	59.92	55.46	100.75	38.12	175.01	70.81

* Lengyel et al. 2006; ** Kozłowski-Mester 2003-2004 (surface collection of Gy. Salétli Gy. and excavated artefacts)

There is a significant shift in raw material composition at Nagyréde−2. Here in the tool-kit made up of seventy-nine formal tools, the share of local raw materials of volcanic origin is down to 58.2 %. In connection with this decrease, the ratio of the erratic flint increased to 38 %.

The flakes dominate in both lithic assemblages, the laminarity is low, blades, especially microblades occur only in small amounts. The number of cores is remarkable at both sites, most of them, especially at Nagyréde−2, are flake cores. The majority of the tools are made on flake blanks. At Nagyréde−1 various end-scrapers dominate (59 %) followed by burins (10.7 %) and side-scrapers (7.14 %). At Nagyréde−2 the percentage of the end-scrapers is 54.4 %, that of the burins is 6.3 % and that of the side-scrapers is relative low: 1.78 % (Lengyel et al. 2006). The share of the Aurignacian carinated and nosed end-scrapers is rather high in both assemblages: 24-25 %.

At Nagyréde−1, among the burins the dihedral ones are the most frequent, whereas at Nagyréde−2 there are less burins and most of them are made on break. There are only a few blades resembling Aurignacian blades. The sites were classified into the Aurignacian II phase (Djindjian 1993) or into the "classic" pan-european Aurignacian phenomenon (Kozłowski & Otte 2000).

In relation to the above briefly reviewed sites, it can be stated that generally the non-local raw material types dominate. The raw material distribution at the site of Andornaktálya−Zúgó-dűlő and the high percental ratio of the tools made of erratic flint at Nagyréde−2 may be related to an extraordinarily high group mobility, not observed at other Palaeolithic sites. The situation is very similar in connection with various hydroquartzite and limnic quartzite variants. This represents a clear-cut eastwards orientation without the presence of volcanic raw materials from the southern Mátra Mountains or those of the Cserhát Mountains.

In the above discussed lithic assemblages, the percental ratio of the tools is relatively consistent: Acsa−Rovnya (7.27 %), Nagyréde−1 (8.58 %), Nagyréde−2 (4.19 %), at the surface collection of Andornaktálya−Zúgó-dűlő (6.81 %). All of these being very similar to the 7.05 % at Legénd−Hosszú-földek. These values can be considered as normal, both for surface collections and excavated assemblages.

The general tool-kit composition or type spectrum of these sites is presented in **Table 3**. (after Lengyel et al. 2006; Kozłowski & Mester 2003-2004; Dobosi 2013: 58, Table 6.). It is apparent, that with the exception of Legénd−Hosszú-földek, the end-scrapers of various types dominate in lithic assemblages of all other sites. The ratio of the burins is the lowest at Nagyréde−2 (6.33 %), at Andornaktálya−Zúgó-dűlő it is 17.83 % and it is the highest at Legénd−Hosszú-földek with 28.77 %. The ratio of the side-scrapers is the lowest again at Nagyréde−2 (2.53 %), at Legénd−Hosszú-földek it has an average value of 6.16 %, it is the highest at Andornaktálya−Zúgó-dűlő (13.95 %). The ratios of the retouched blades and flakes are relative high in all assemblages. The lowest value comes from Nagyréde−1 (9.82 %) and the highest value (24.1 %) is from Nagyréde−2. It is noteworthy, that the combination tools of end-scraper and burin are present only at Nagyréde−2 and Legénd−Hosszú-földek. Because of the abundant unclassifiable, unidentifiable artefacts, the share of diverse, other tools is highest (24.76 %) at Legénd−Hosszú-földek.

Table 4.: Correlation between the sites according to the tool type spectrum

4. táblázat: Nyílt színi Aurignacien lelőhelyek korrelációja az eszköz-spektrum alapján

	Acsa	Andornaktálya	Nagyréde 1	Nagyréde 2	Legénd
Acsa		0.48097	0.95667	0.96257	0.32171
Andornaktálya	0.48097		0.66813	0.56501	0.70056
Nagyréde 1	0.95667	0.66813		0.94425	0.3884
Nagyréde 2	0.96257	0.56501	0.94425		0.40469
Legénd	0.32171	0.70056	0.3884	0.40469	

At the same time, it is visible in **Table 3**., that the deviation is great for all tool types. **Table 4**. shows statistical correlations of the type spectrum of the tools between the sites. It is plain to see, that a strong connection (Pearson's r correlation coefficient greater than 0,94) exists only between the sites of Nagyréde−1 and Nagyréde−2, furthermore between these sites and the site of Acsa−Rovnya. Because of the relative low percental ratio of the end-scrapers and high burin ratio, the site of Legénd−Hoszú-földek has the closest connection with Andornaktálya−Zúgó-dűlő. However, this connection can only be regarded as moderate with a correlation coefficient of 0,71).

At the site of Legénd−Hosszú-földek, the ratio of the tools in the lithic assemblage is similar to that in other nearby Aurignacien sites (7.05 %), but the tool-kit composition (dominance of the burins) and especially the raw material utilization (significant use of local raw materials) is very different from the other discussed sites. The artefact occurrence at the site, in an area of about 350×50-100 m extent has a low intensity, but good continuity. At this point it can not be decided unambiguously, whether the site should be interpreted as the trace of one long term residence, or that of several short-term residences. Due to the unique tool type spectrum, the specific character of the site, even as an ephemeral hunting-station, can not be excluded. The interpretation as a workshop, however, is not likely. However, it is rather presumable, that the carriers of this industry were closely related to groups in the southern foothills of the Mátra or Bükk Mountains. They may have arrived at the site as a "pioneer" hunter-gatherer group, perhaps spending a longer time. Potentially, these may have been regular, seasonal, presumably hunting-oriented visitations in the Cserhát Mountains.

The lithic assemblage of Legénd−Hosszú-földek is regarded as homogeneous and on the basis of techno-typological considerations, the presence of carinated burins and narrow faced, burin-like microblade cores as well as few retouched microblades it should be classified as an Aurignacian facies yet unknown in Hungary. Its chronological classification is currently not possible based only on typological features.

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