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NEW UPPER PALAEOLITHIC SITE AT MEGYASZÓ-SZELESTETŐ

History of research

The name of Megyaszó was introduced into the archaeological technical literature by Ferenc Tompa when he unearthed the rich Middle Bronze Age cemetery (Füzesabony culture) by the village of Megyaszó in the 1930's.

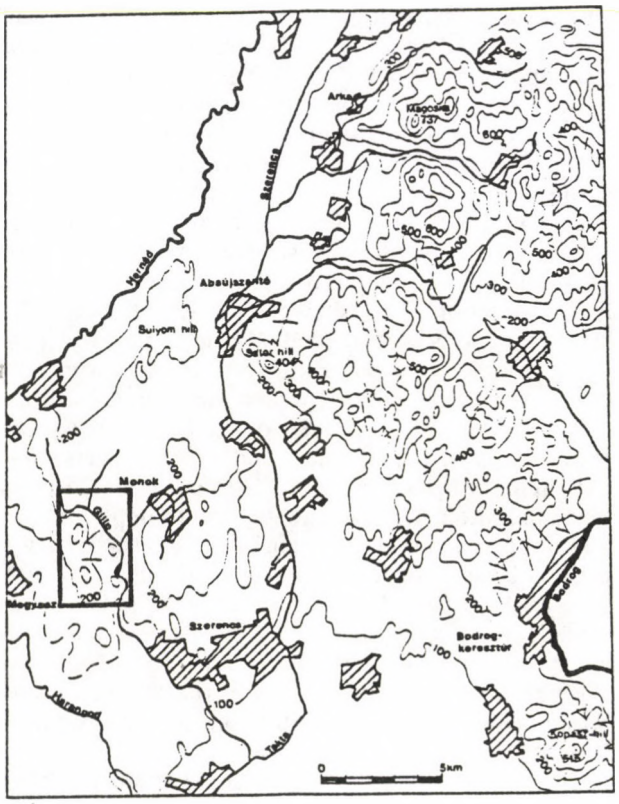
Prior to the discovery of the site on Szelestető, several field walks attested to the dense population of the area in prehistoric and historical times. From the Palaeolithic period, two objects in the collection of the Hungarian National Museum refer to Megyaszó.

Pb 55/25: Stray find collected by J. Horváth. A flat hydroquartzite flake. L. Vértes knew nothing about where it had come from.

Pb 57/52: D. Jánossy presented a treated hydroquartzite flake from Megyaszó-Répásárok in 1956 to the museum.

These flakes are not sufficient to state anything more than the mere fact of local hydroquartzite treatment (DOBOSI 1975, 72).

L. Vértes, in his handbook on the Hungarian Palaeolithic mentioned two other finds which are not to be found in the collection of the Hungarian National



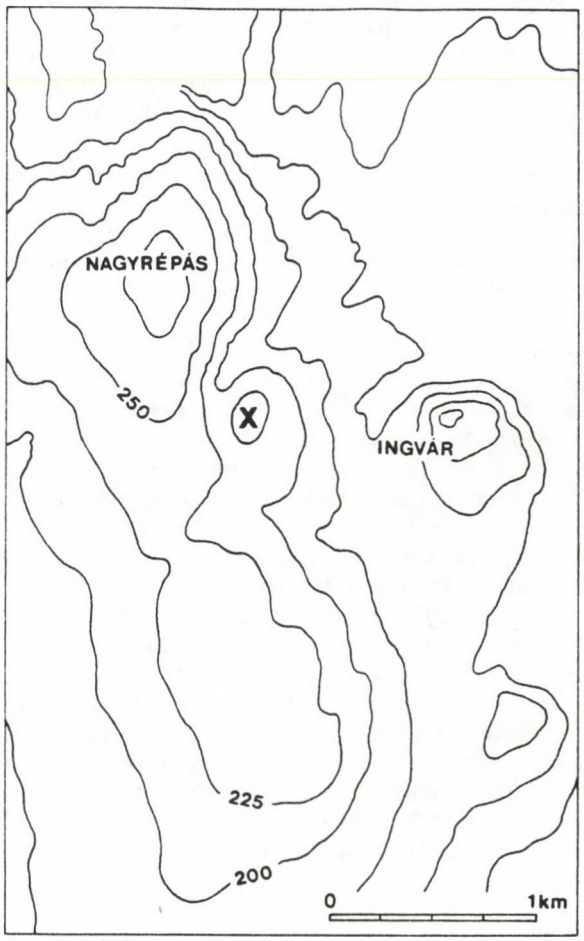


Fig. 1.1: General map of the Southwestern part of the Zemplén Mountains;
2: Contour map of the area around the Szelestető

Museum. "J. Mihalik picked an obsidian blade from loess in Hernádkércs (incorrectly Megyaszó in the literature) in 1921" (VÉRTES 1965, 197). It must be noted that Hernádkércs and Megyaszó are not neighbouring villages. Two pages later he writes: "Geologists collected an atypical silex blade also from loess at the village [Megyaszó] in recent years. The remains of mammoth and other Pleistocene mammals were found in the pits of the brick works. More careful investigations will certainly reveal Gravettian finds, perhaps similar to the ones from Arka" (VÉRTES 1965, 199). This site has not yet been located and verified.

In 1982 and 1983, several field walks scanned the area east of Megyaszó. Beside finds from the Neolithic, the Bronze Age and the Early Middle Ages, a single end-scraper on a retouched blade was recovered from the Gilip stream at the juncture of the valley of the stream and the Teklinka ravine. It seemed to have been washed out of the loessy western bank of the stream. The find is kept in the Herman Ottó Museum in Miskolc.

The history of the Szelestető site began in the middle of the 1980's. In *1984*, István Kókai, who had already reported on and identified several prehistoric sites for the Herman Ottó Museum, crossed the hills from the Nagyrépás hill toward the country road from Megyaszó to Szerencs. On his way, he noted treated fragments and artifacts on a hill next to the Nagyrépás (Fig. 1.2). Next year, in *1985*, after he had passed the finds to Katalin Simán, a series of field walks were undertaken to verify the site.[1] The first impressions were recorded in the form of a short report: "The greatest density of finds could be observed on the top and the southern slope of the hill. The finds are mostly composed of cores (precores and cores) and flakes from the hydroquartzite of the Zemplén mountains. Typical implements comprise ... endscrapers, burins, retouched blades. Their raw material is varied: local hydroquartzite, Slovakian radiolarite, obsidian, chert, silex. The finds from a surface of cca 30 by 15 m suggests that an Upper Palaeolithic Late Aurignacian or Early Gravettian site occupied the top of the hill" (HELLEBRANDT–LOVÁSZ 1986–87, 277). Repeated field walks and collecting tours *between 1986 and 1993* corroborated these statements. With the growing number of finds, the unexpected high ratio of obsidian became more and more striking. Since opal, jasper and hydroquartzite sources had already been discovered in the area, their domination was taken for granted. In subsequent years, contrary to general experiences, the quantity of the surface finds did not undergo a reduction. The concentration, however, grew dispersed due to active tillage on the land. At the end of the six-year-period, finds could be collected from all over the hill. It was also noted that a few prehistoric sherds were scattered on the southern slope together with a few implements that do not belong typologically to the Palaeolithic. From the unexpected richness of the surface finds we deduced that the site must have severely been disturbed but hoped that still intact areas could be unearthed either north of the dirt road leading from Megyaszó to Monok or in the narrow strip with trees and bushes between the dirt road and the field.

Verifying excavations got underway in 1993 with the financial support of the Hungarian National Museum (Budapest) and the Herman Ottó Museum (Miskolc). In this season, seven research trenches were opened between September 6. and September 16. over a surface of 75 m^2 (Fig. 2). The border between the two neighbouring villages, Megyaszó and Monok runs across the hill in a north-south direction, so that some of the sections were opened within the borders of Megyaszó, others (the majority) on the field belonging to Monok (local topgraphic number: 095). The name Megyaszó was retained, however, since geomorphologically the hill belongs to the Megyaszó area. Although the hill is a distinct topographical unit, it had neither a topographical or a folk etymological name. The name Szelestető ("Wuthering heights") was given to it from the constant, often strong wind the hill is exposed to. The first three sections were opened on the northern slope, in the area of Megyaszó. They were each 10 m long in a N-S direction and 1 m wide. The trenches were placed 5 metres from each other. There were a few finds in the humus, the deeper layers, however, proved empty. The base rock, the pinkish-grey, coarse-grained rhyolite tuff appeared at a depth of 60 to 70 cm. Two more sections were opened close to the bushy strip at the northern edge of the field. They measured 10 m by 1 m and 15 m by 1 m, the first was oriented in a N-S and the second in a NE-SW direction. These two sections also proved to be empty. In section 5., the base rock lay about half a metre deeper than on the western slope. Twenty-five metres farther to the east, the rock surface appeared at even a greater depth. At a depth of 110 cm, the dry loess with lime concretions was followed by a typical loess. The last two sections were opened on a small plateau on the highest point of the hill. Both sections, 8 m from each other, measured 10 m by 1 m and ran in an E-W direction. On the last but one day of the excavations, fragments of a jaw, animal bones, and a few artefacts came to light in the loess of *section 7.* The finds were scattered along the whole length of the section at a depth of 70 to 100 cm in and partly on the surface of a buried developed soil layer. Right under this layer, the decaying tuffy base rock appeared. The culture-bearing layer was marked by scattered, smeared charcoal traces, a few yellow ochre grains and faint ashy patches.

In *section 6.* scattered stone artifacts were found between 80 and 90 cm. The tuff appeared at a depth of 100 cm.

By the end of the first season we could establish that the culture-bearing layer was an approximately 30 cm thick buried soil. Archaeological features are scattered all over the surfaces and were settled directly over the base rock. Some finds were recovered from the loose deposit filling depressions and holes in

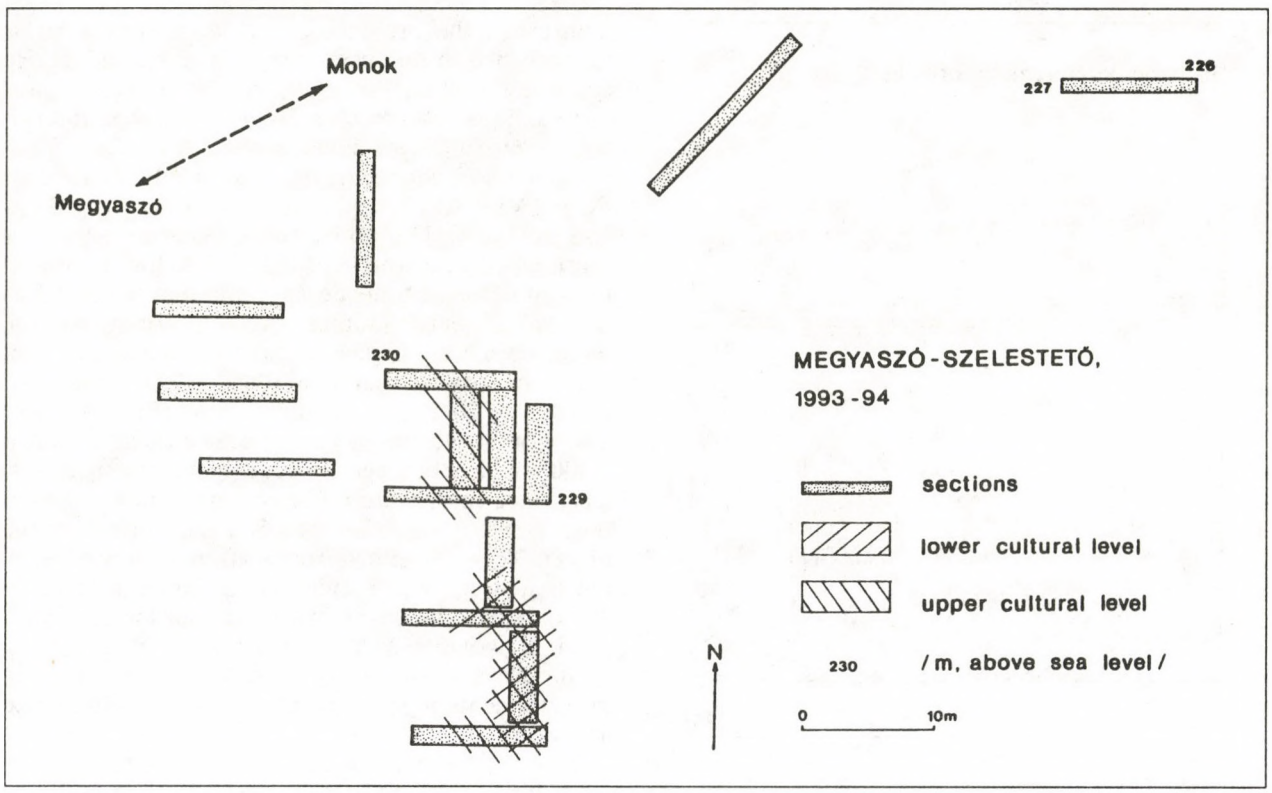


Fig. 2. Sections of the excavations in 1993 and 1994

the rock. The distribution and scarcity of the finds seem to mirror situation at the periphery of a settlement.

In *1994*, the excavations lasted three weeks from August 22 to September 9. This year, 104 m^2 was unearthed (altogether 180 m^2 were cleared in the two seasons) in the region where the culture-bearing layer had been found. The first two sections, accordingly connected the last two from the previous year.

Section I. was N-S oriented and 7 m by 2 m in extent. The first finds came to light at a depth of 90 cm, mostly in the southern end of the section. The culture-bearing layer was in the same buried soil as in the neighbouring sections, with humus-containing crotovinas and scattered charcoal grains. The finds were dispersed to a depth of 110 cm where the base rock appeared. The bones and the artifacts were covered with thick limey crust.

In *section II.* (the same size and orientation as for section I.) the fragment of a long bone and close to it an ochre-grain were found in original position in the loess at a depth of 80 cm. A flake was found lying at a depth between 95 and 100 cm. All the finds were found in an area of 1 m^2. In the western part of the section, humic patches could be discerned with poorly preserved charcoal grains. This time, a few centimetres of loess could be observed between the culture-bearing layer and the surface of the base rock.

Section III. was opened somewhat to the east of the previous sections. It measured 7 m by 2 m and was oriented in a N-S direction. There were relatively many finds in the humus also including a Neolithic sherd. No definite culture-bearing layer or settlement surface could be observed in the section, only a few bone fragments and a silex flake indicated the contemporary surface at the bottom of the loessy deposit.

Section IV. was set 18 m south of the former sections. It was 10 m x 1 m in extent and oriented in an E-W direction. Scattered bone and stone finds were uncovered at a depth of 90 to 100 cm in a loess with a more homogeneous structure and fewer lime concretions. In some spots, poorly preserved charcoal grains were detected, which, however, do not seem to be connected with the archaeological finds. The base rock appeared at a depth of 110–120 cm.

Section V. was opened about 48 m to ENE on the steeper slope (Fig. 3). It measured 10 m x 1 m. There was a single flake found in the upper part of the loess right under the humus and another artefact in the loess at a depth of 110 cm. A buried soil with charcoal grains was uncovered at a depth of 145–150 cm, under the typical loess. A few charcoal grains could be collected but they were not sufficient in quantity and quality for C-14 analysis. This layer was followed by a sandy deposit at a depth of 150–160 cm. We gave up the deepening of the section at 180 cm below the surface without having found the base rock.

Section VI. connected section 7. and section IV. It measured 10 m x 1 m and was E-W oriented. The rich-

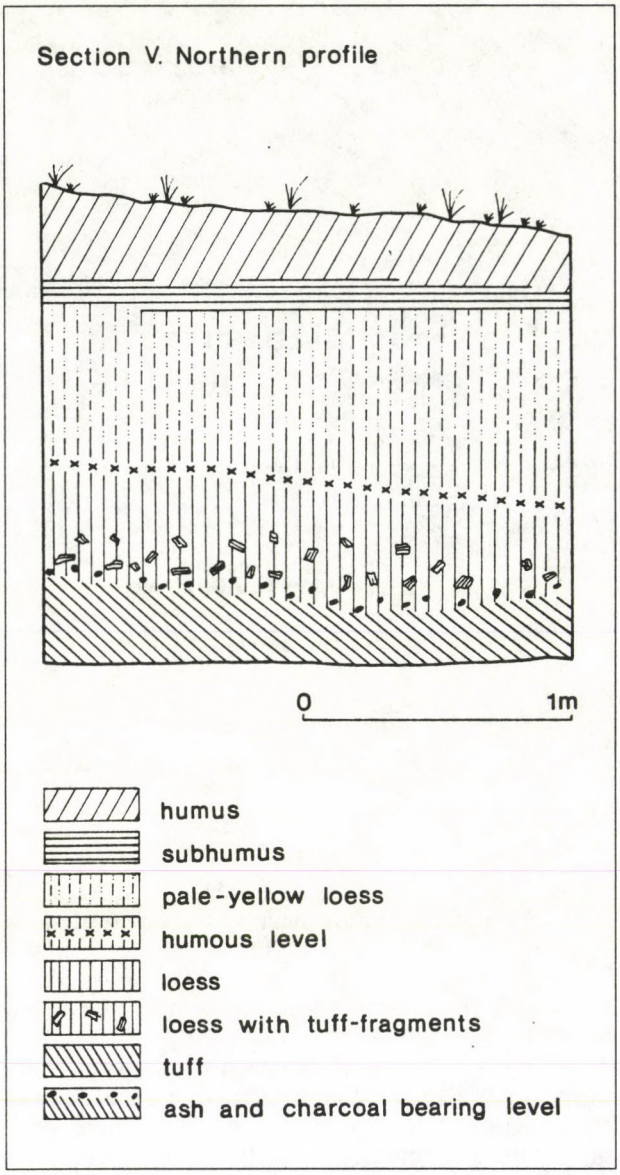


Fig. 3. Wall of section V.

ness of the finds was already surprising in the humus, and under it, they formed part of a settlement surface on the top of the loess. The humus was 20–25 cm thick. The finds from this layer appeared another 20–25 cm deeper, that is to a depth of 40–45 cm in typical loess. A big bone and a few artifacts were unearthed in a depth of 100 cm. This was the first time that the upper culture-bearing layer could be observed as a settlement surface (between 40–55 cm) in a superposition to the lower culture-bearing layer (100–110 cm) separated by archaeologically sterile loess.

During the excavations in 1993, soil samples were collected from the archaeologically empty section 7. P. Csorba analysed the samples (Appendix I.) and demonstrated the presence of two depositional levels that are rich in humus and organic constituents. He could not explain this phenomenon by pedological factors. These two levels are congruous with the two culture-bearing layers identified in 1994.

Section VII. connected the eastern sides of sections IV. and VI. It was 7 m x 2 m in extent and oriented in a N-S direction. The upper culture-bearing layer was represented by a couple of flakes. The lower cultural level, at the same time, became apparent at a depth of 110–115 cm. In the southern two-thirds of the section, teeth, worn bone fragments, artifacts and an approximately cylindrical, plano-parallel, 25–27 cm thick tuff block rose 20 cm above the surface (Fig. 5). After having removed the block, it became obvious that it could not have belonged to the original base rock surface, since there were a few centimetres of loess deposit between the base rock and the bottom of the object. There were artefacts scattered all around it, but none were found underneath. Therefore, it must certainly have belonged among the settlement features. It did not display any sign of treatment or wear on its surface (e.g. as a mill or a mortar). Its position and measurements suggested that it must have functioned as a stool.

Section VIII. was 7 m long in S-W direction and 2 m wide. It was situated between sections VI. and 7. The upper culture-bearing level came to light at a depth of 55–60 cm in the loess. In addition to the artifacts, there were also fragments of long bones. The highest positioned find of the lower culture-bearing layer lay at a depth of about 80 cm. The 20 cm deposit between the two did not contain archaeological finds. The lower layer was characterized by scattered but distinct burnt patches with small, poorly preserved charcoal grains. The finds in the upper layer included a big scapula and many small bone fragments with a thick limey incrustation on them. There were also a few scattered artefacts. The base rock appeared at a depth of 95–100 cm.

During the course of the excavations soil samples were collected for pedological analysis (Appendix I.), samples from the raw material of the artefacts for petrographic analysis (Appendix II.) and the site was placed within the topographic map of the region.[2]

Parallel to the excavations, field walks were organized in the vicinity of the archaeological site (Fig. 1.1).

On the *Szelestető*, further finds could be collected in great numbers from all over the surface of the hill. South and east of the excavation, a few Prehistoric and Medieval sherds were collected and a great quantity of rock debris and blocks were noted. At the southeastern foot of the hill there was a single arrowhead lying on the field. It can be attributed to the Period of the Hungarian Conquest.

Megyaszó-Csákó On the northern slope of the Nagyrépás hill there was a large Neolithic settlement

with decorated and plain sherds, daub and chipped artifacts from the Bükk culture.

Megyaszó-Teklinka rift Erosion exposed wooden opalite accumulations in the rift running from the Nagyrépás hill to the valley of the Gilip stream. Samples of the opalite were collected for the Lithotheka.

Megyaszó-Répás rift Samples were collected from the hydroquartzite outcrops on the right bank of the Gilip stream, at the eastern feet of the Nagyrépás hill. At the same place, primary sources of iron ore and silicified slate were observed. There were traces of workshop activity, although they could not be dated.

Megyaszó-Hosszúhegy The long hill runs between the Szelestető and the country road from Megyaszó to Szerencs. There were only a few scattered, uncharacteristic sherds on the surface.

Megyaszó-Ingvár A volcanic peak with jasper outcrops at its feet. Samples were collected for the Lithotheka.

Abaújszántó It could be observed from the site that a very particular geomorphological formation dominates the area. The steep sides of the Sátor-hill and Sulyom-hill enclose, like a gate, the valley running southwards along the western edge of the Zemplén mountains. Through this gate, a natural road opens between the north- and southwestern peripheries of the mountaains, both areas inhabited during the Upper Palaaeolithic. It also could have been a route for animal migration. On the lower terrace of the Sulyom-hill, just above the valley, only a few, probably early Medieval, sherds indicated traces of human occupation.

Geomorphology, topography

Topographically, the site is not directly connected to either the valley of the Hernád, or the Tisza, or even the Gilip stream and valleys of their affluents. Szelestető is a member of the Szerencs hill microregion (Marosi–Somogyi 1990). It is a foot-hill formation on the southwestern side of the Zemplén mountains with a terrace height between 110 and 336 m. From the Zemplén mountains, it is separated by a structural fault along the valley of the Szerencs stream. From the west and the south it is bordered by the Harangod microregion (Marosi–Somogyi 1990, 901). To the south, it is separated from the lowlands of the Taktaköz by a hill range, which is proportioned by southward running ravines, and which is lower even than the Szelestető.

Szelestető is approximately 6 km from the Hernád as the crow flies. The river, its dead chanels and waterlogged alluvium are bordered by the steep walls of a terrace that rises gradually to the werstern side of Megyaszó village where it reaches the height of 240–260 m.

The village of Megyaszó was established in the valley of an active stream and on its first terrace. The land surface rises gently from the village towards Hosszúhegy and Szelestető and the Nagyrépás, the highest hill in the microregion.

Szelestető is a prominent strategic point (Fig. 1). In clear weather, the peak of the Kopasz hill at Tokaj can be seen to the Sotheast, the Gergelyhegy and the Magoska to the North-Northeast and the gallery forests along the Tisza river to the South.

The valley of the Gilip stream occupies a much more significant fault line than the capacity of the present waterflow would justify (together with the pond created from the dammed up water of the stream). The steeply rising, distinct volcanic block of the Ingvár separates the valley from the site.

The highest point of the Szelestető (the centre of the excavations as well) is 230 m above Baltic sea level. It is sharply detached from the Hosszúhegy in the South, while to the North, the steep hillside forms the Southern wall of a deep ravine that leads to the valley of the Gilip stream.

The base rock of the region is Sarmatian rhyolite tuff covered with a clayey-loessy deposit. The uppermost soil cover is brown chernozem (Marosi–Somogyi 1990, 902), which is heavily eroded in some places. The loessy deposit over the tuff is characterized as an old loess, which seems not to be true in the case of Szelestető. The lower culture-bearing layer rests almost directly on the tuff, with only a few centimetres in between. This level can be dated to the Upper Würmian, while the loess that lies over it must have deposited in the Pleniglacial B period.

Settlement features

Settlement features were observed in nine adjacent sections. They can be divided into two groups: the upper and the lower settlement level.

Upper settlement level

It was observed in the Eastern part of the unearthed area on a surface of about 20 m^2. It was marked by a few artifacts and bone fragments with traces of smeared charcoal pieces. These, however, did not form a coherent settlement or living area. The finds are too scarce even to define the character of the settlement

Lower cultural level (Fig. 4–5)

It occupied a surface of not more than 80 m^2. It was marked by whole and fragmentary bones, jaw fragments, artifacts, flakes, implements, ochre and charcoal grains and scattered ashy patches. They were sparsely distributed over the surface. There was just one area where a definite settlement feature could be noted. Here the artefacts and bones lay relatively densely around a rhyolite tuff stool. This overall distribution, the intensity of the settlement features lags far behind the general picture presented by other Hungarian sites. It also seems to contradict the great number and high quality of finds collected on the surface. The controversy may be elucidated by supposing that the settlement(s) must have been much greater in the two

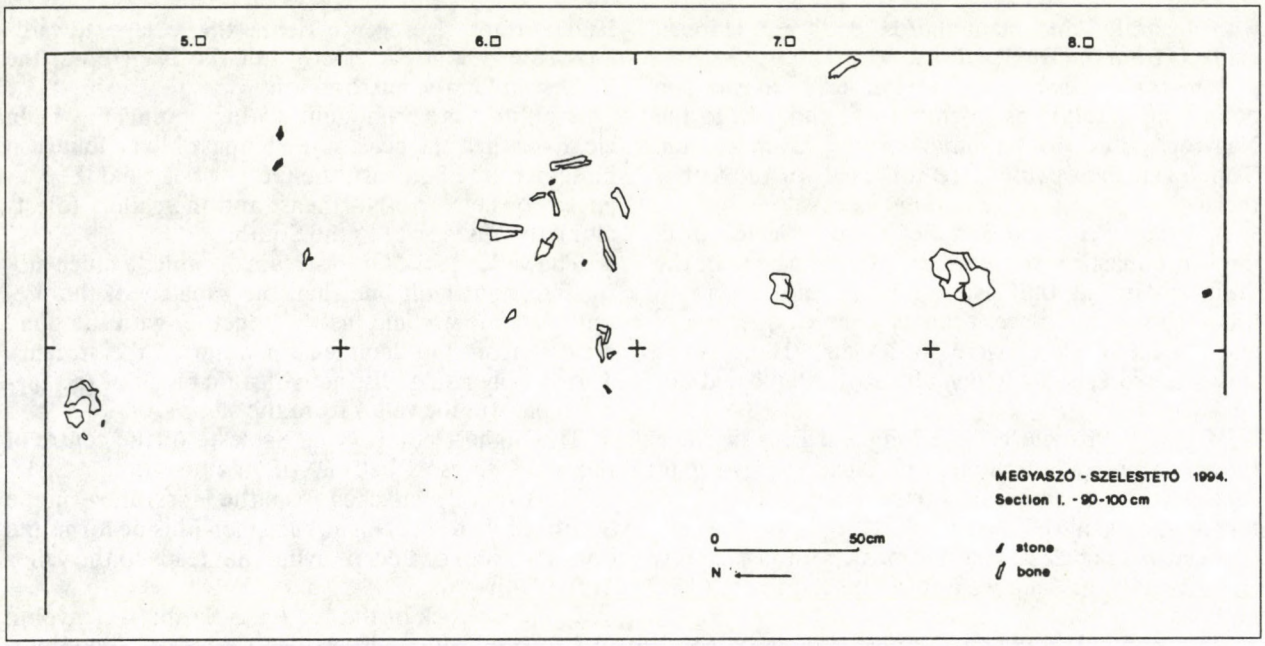


Fig. 4. Surface of section I., lower culture level

periods than suggested by the unearthed vestiges. However, the chemical constitution of the soil did not favour the fossilization of the bones on the one hand, and the erosion and intensive tillage removed the majority of the finds from their original position and scattered them on the surface, on the other.

The faunal remains are very fragmentary and too few to be analysed in greater depth. Three species could be identified[3]: Coelodonta antiquitatis, Equus sp., Bison priscus. All three species lived in open regions.

Description of the finds

Altogether, 8263 artifacts have been recovered. Approximately 94% of the finds were collected from the surface and the humus. One percent came from

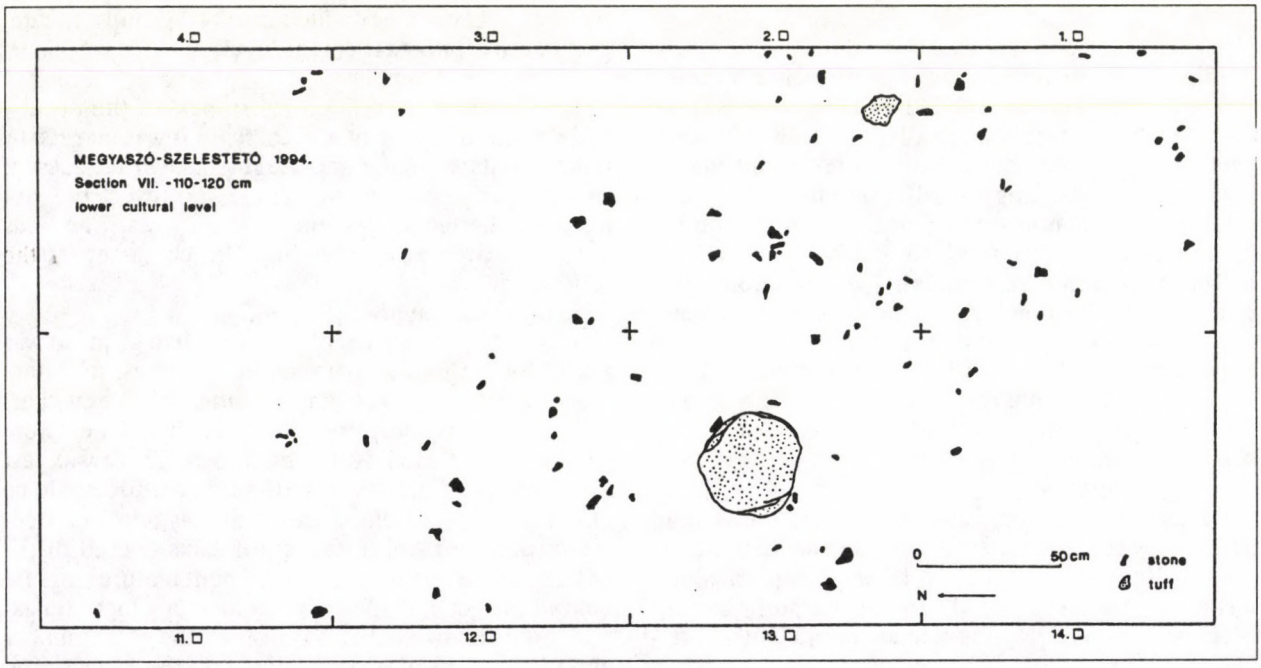


Fig. 5. Surface of section VII., lower culture level

the upper level and 5% from the lower cultural level. The technical distribution of the finds was as follows:

cores	4.2%
blades and blade fragments	5.0%
flakes and waste	83.8%
tools	6.8%
	99.8%

The remaining 0.2% consists of hammer stones, choppers, retoucheurs and ochre.

The high quantity of the flakes and waste does not imply a workshop but is the result of the poor quality and abundance of the local hydrothermal raw material. In as much as half of this category had no direct relevance to the character of the settlement (inclusions, naturally broken fragments, unused blocks etc.), the ratio of the tools is higher either than expected from surface collections or as compared to other Hungarian sites.

Cores

As a result of the heterogeneity of the raw material,

– some cores remained in the precore stage or the block broke in an early stage of preparation,

– many pieces took an approximately geometrical shape warranted by the tabular structure of the rock,

– the frequency of rejuvenating flakes confirm that successful cores were used to the utmost.

Among the typical cores, the blade cores dominate. Many of these cores are small, especially the ones made on obsidian. Beside the blade cores, some Levallois discoid cores add colour to the picture.

Blades

There are very few complete classical blades. It may be due to the poor quality of the raw material just as well as to the natural fragmentation which took place on the surface. It should also be taken into consideration that many blades were turned into retouched implements. The average length of complete blades is 36 mm.

Flakes and waste

As already mentioned earlier, many pieces contain intrusions and other defects. A great number preserved the outer cortex of the lump or pebble in the case of the radiolarite, the silex, the flint and the obsidian. Concerning the hydrothermal raw material, the original block surfaces, crevice intrusions, thick patination with weathered surfaces contain the same information. The relatively high frequency of chips, at the same time, attests to local tool production and rejuvenation of damaged or worn tools.

Tools

Three implement types dominate the industry in approximately the same ratio, the endscrapers, the burins and the retouched blades.

Endscrapers (24% – Figs. 6–8)

Two main types can be differentiated within the group, the classical ones on blades and the end-scrapers on flakes. Besides, there are a few double, carenoid and museau end-scrapers. These latter underline the archaic Aurignacoid character of the industry. A single round end-scraper on a flake was found on the surface, it might belong among the scattered Prehistoric finds.

Rabot (2.5%)

This group is composed of cores or core-base fragments with burin edges. They do not correspond to the classical representatives of the type.

Combined implements (1% – Fig. 8)

Two combinations are present: end-scraper + burin and end-scraper + borer.

Borers (0.5% – Fig. 8)

In Megyaszó, similarly to all other Hungarian Upper Palaeolithic sites, the representatives of this group display some casualty in shape and execution. All the pieces were collected from the surface so that they are all badly worn.

Burins (21% – Figs. 9–12)

The majority are simple ones made with one or more blows. About one quarter were prepared on truncated blades. Further varieties are those with double or multiple burin edges, or the ones made on retouched blades. It is interesting to note that obsidian and hydroquartzite are represented in the same ratio within this group.

Points (5.2% – Fig. 12)

Twenty-one pieces are pointed blades. There are only six Gravette points. One piece is very specific (Fig. 15). One end of the flake was retouched as an end-scraper, while the other end is pointed. Partial surface retouching was applied to remove the outer cortex of the obsidian lump. In result, it resembles a Mousterian point.

Tanged or shouldered fragments (1.5% – Fig. 12)

All these pieces are fragments from one of the types but they are not large or characteristic enough to be grouped anywhere.

Backed blades and bladelets (9% – Fig. 13)

Many are fragmentary. The majority are simple backed blades. Only a few of the blades are retouched down the other side.

Truncated blades (4.5% – Fig. 13)

The truncated edges display the common conformation of straight, oblique and convex edges.

Retouched blades and flakes (22% – Fig. 14)

Beside the classical retouched Gravettian blades, some heavy blades carry the characteristic scalenoid Aurignacian retouch. This group harmonizes with the above-mentioned, also Aurignacoid end-scraper varieties.

Side-scrapers (8% – Fig. 15)

In addition to a few real side-scrapers, the majority of the tools in this group are composed of blades and flakes with scraper edges along one side.

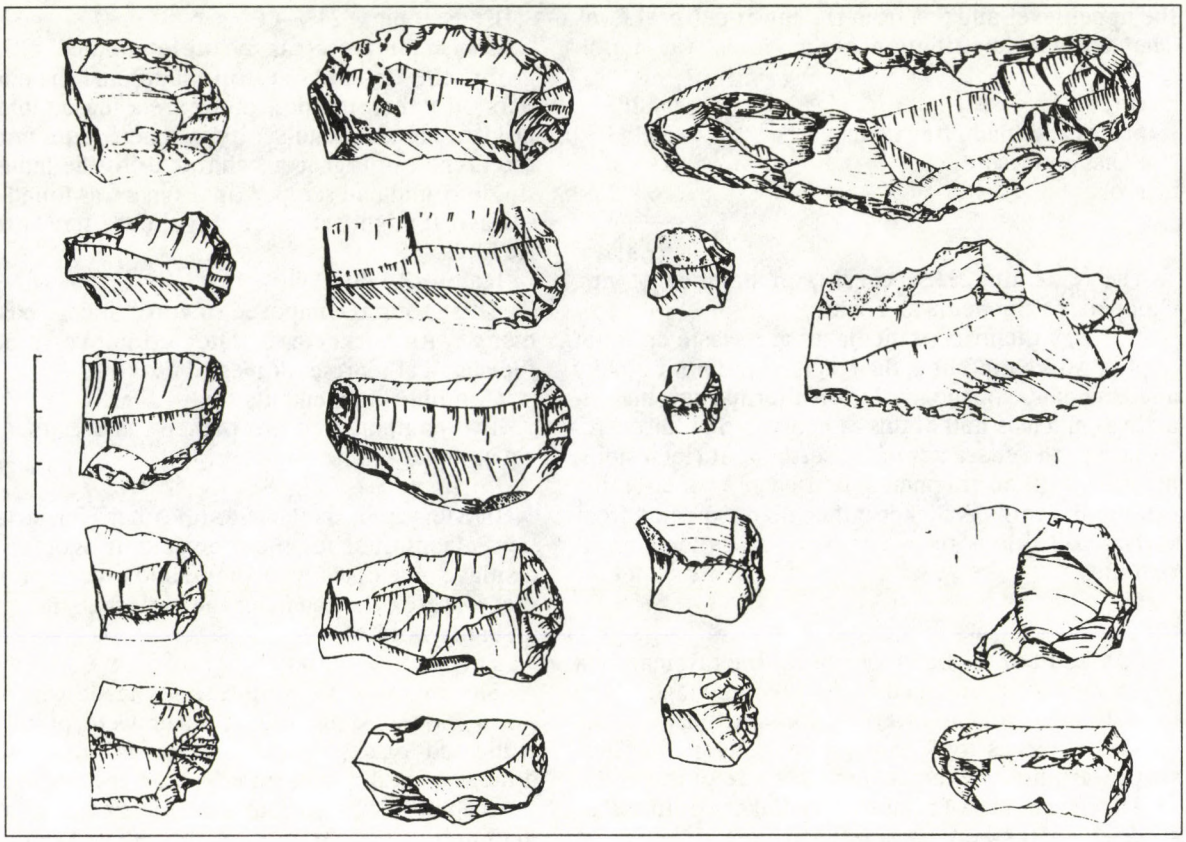


Fig. 6. End-scrapers on blade

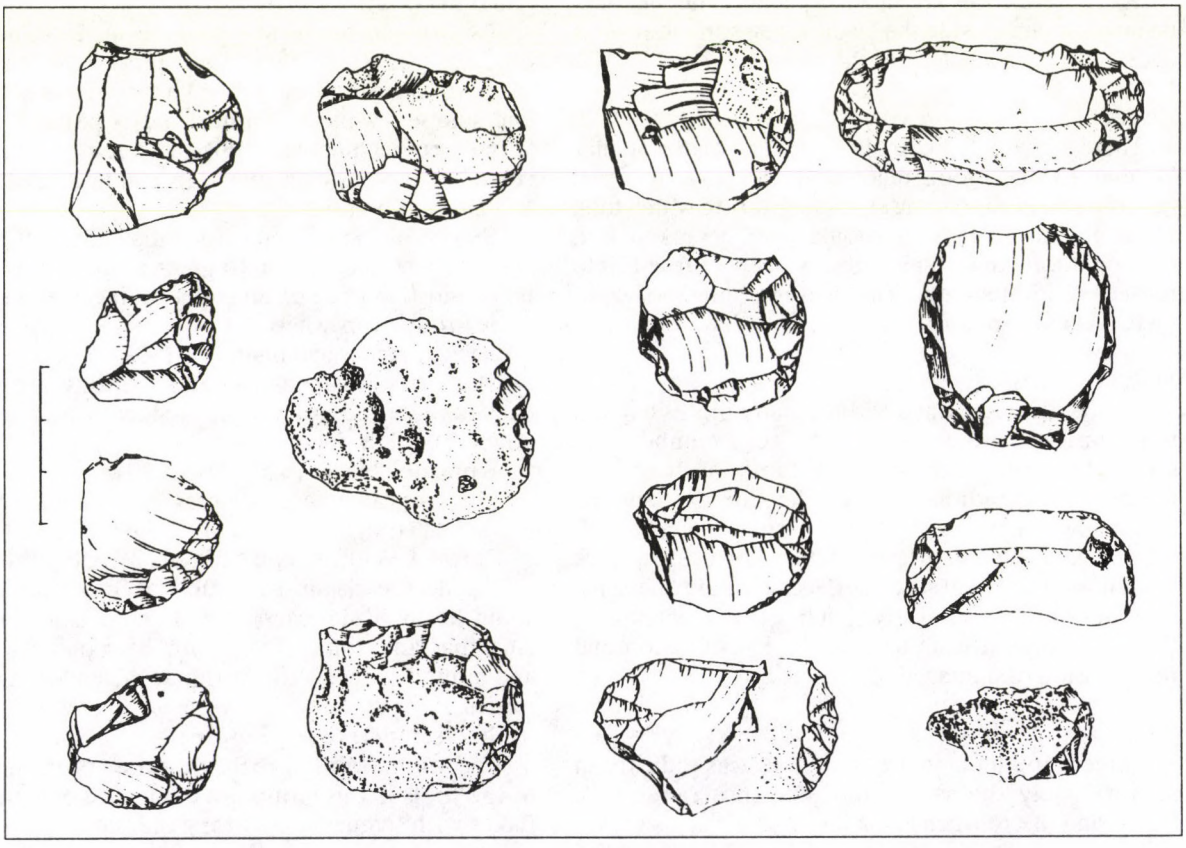


Fig. 7. Double end-scrapers and end-scrapers on flakes

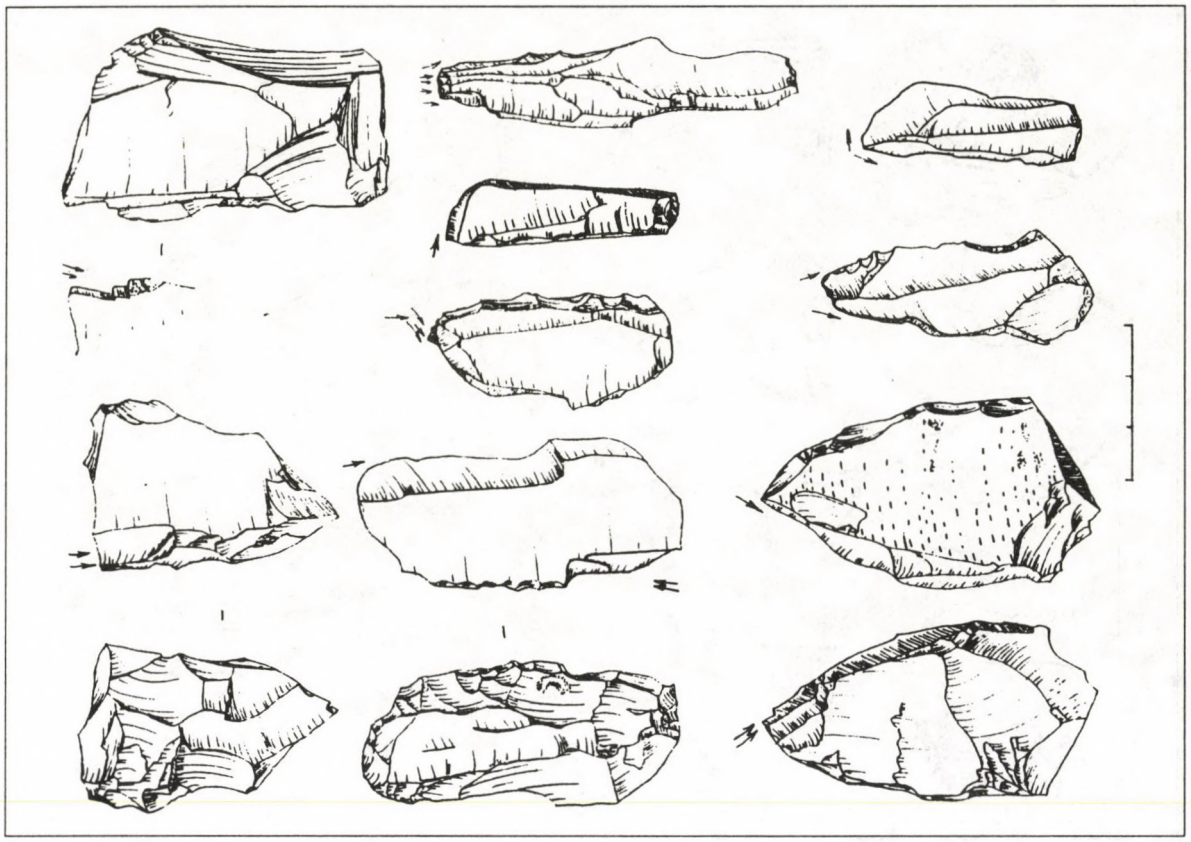


Fig. 9. Burins

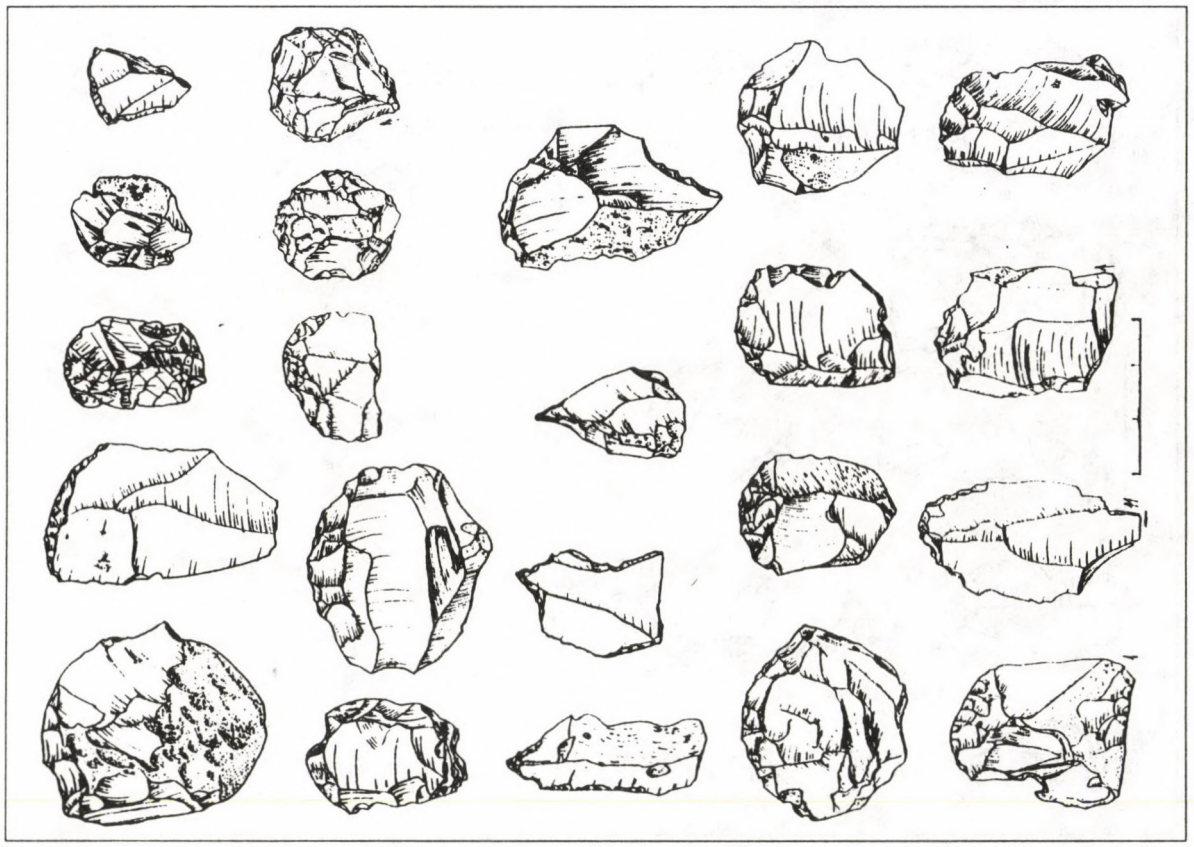


Fig. 8. End-scrapers on flakes, end-scraper + burin combination, borers

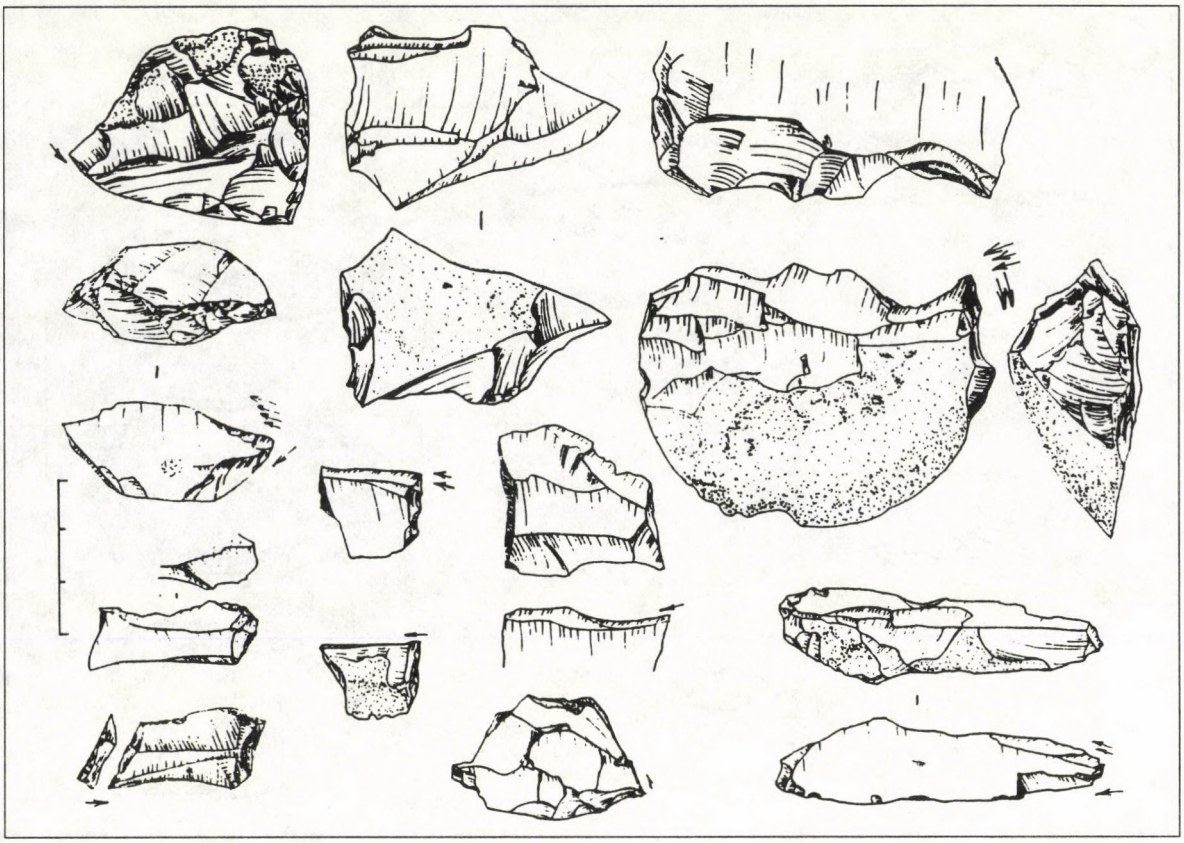


Fig. 10. Burins

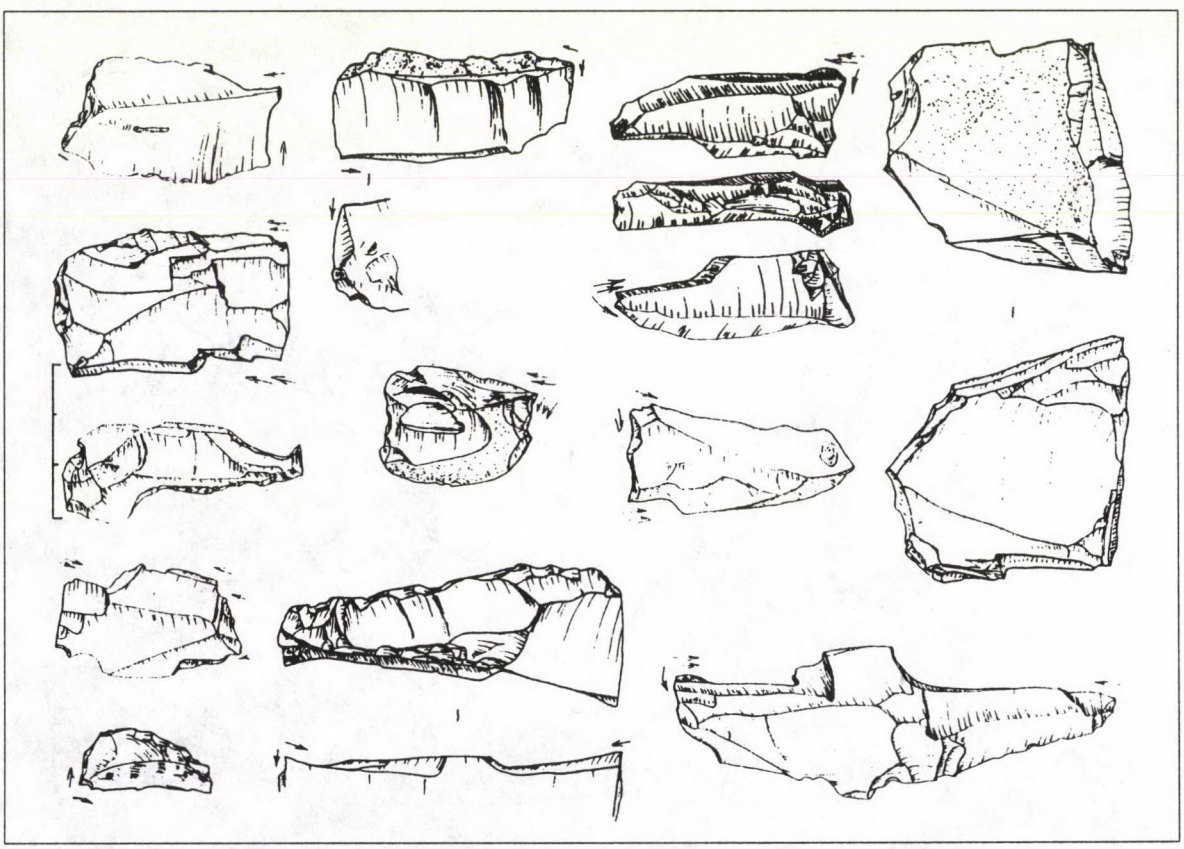


Fig. 11. Simple, double and multiple burins

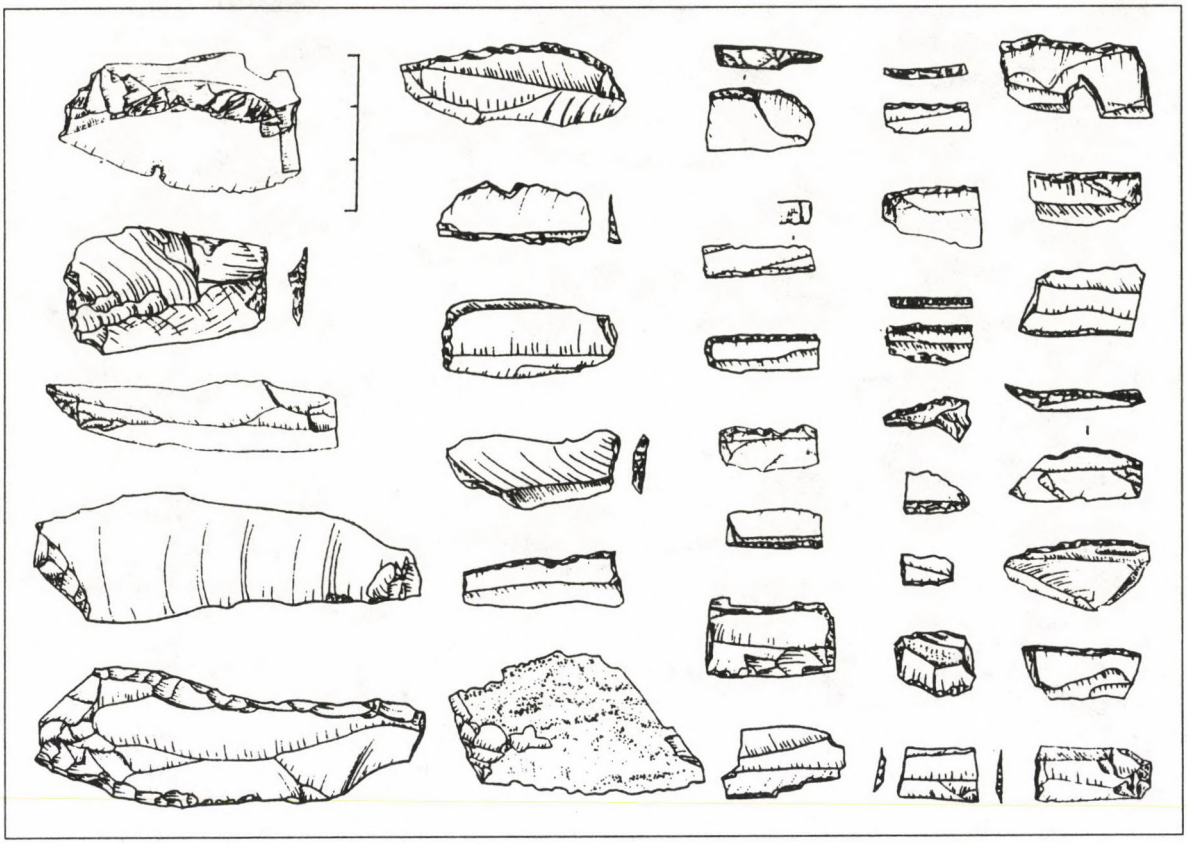


Fig. 13. Truncated and backed blades

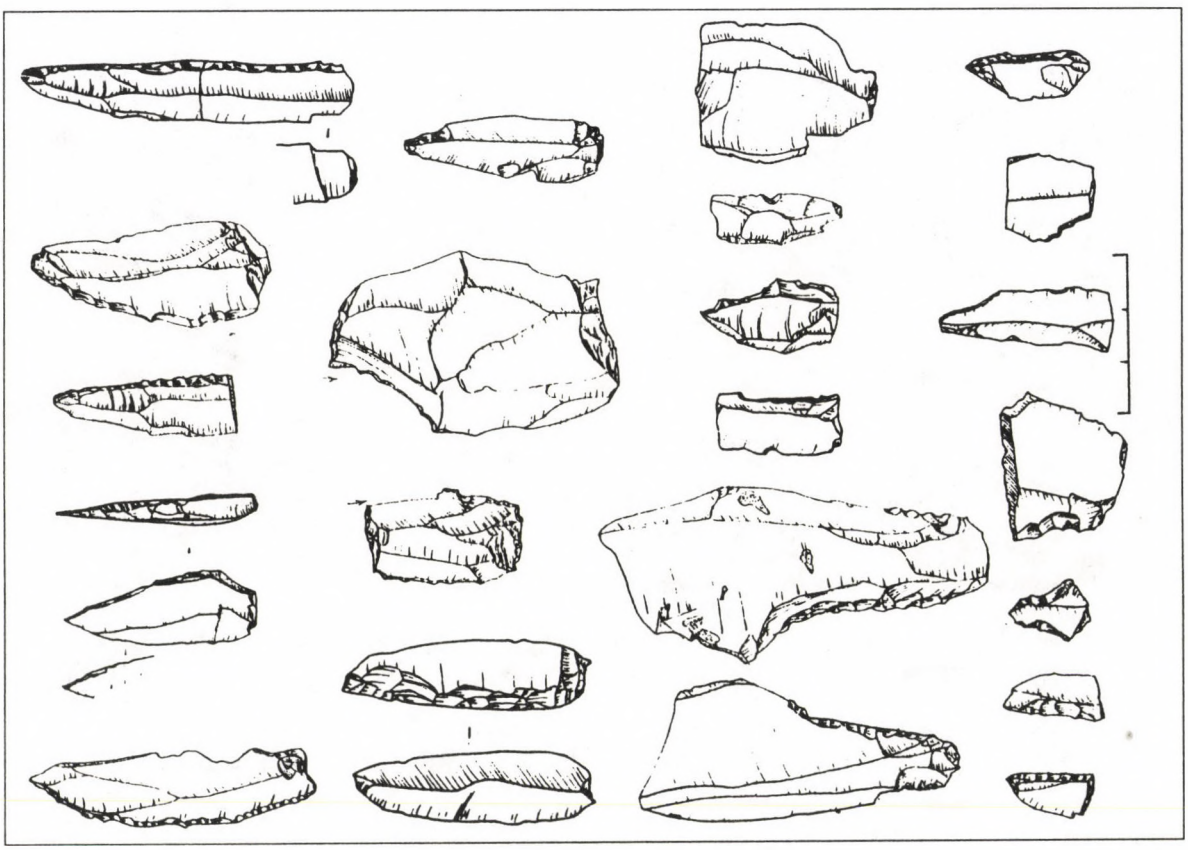


Fig. 12. Burins on truncated blades, pointed blades, tanged and shouldered fragments

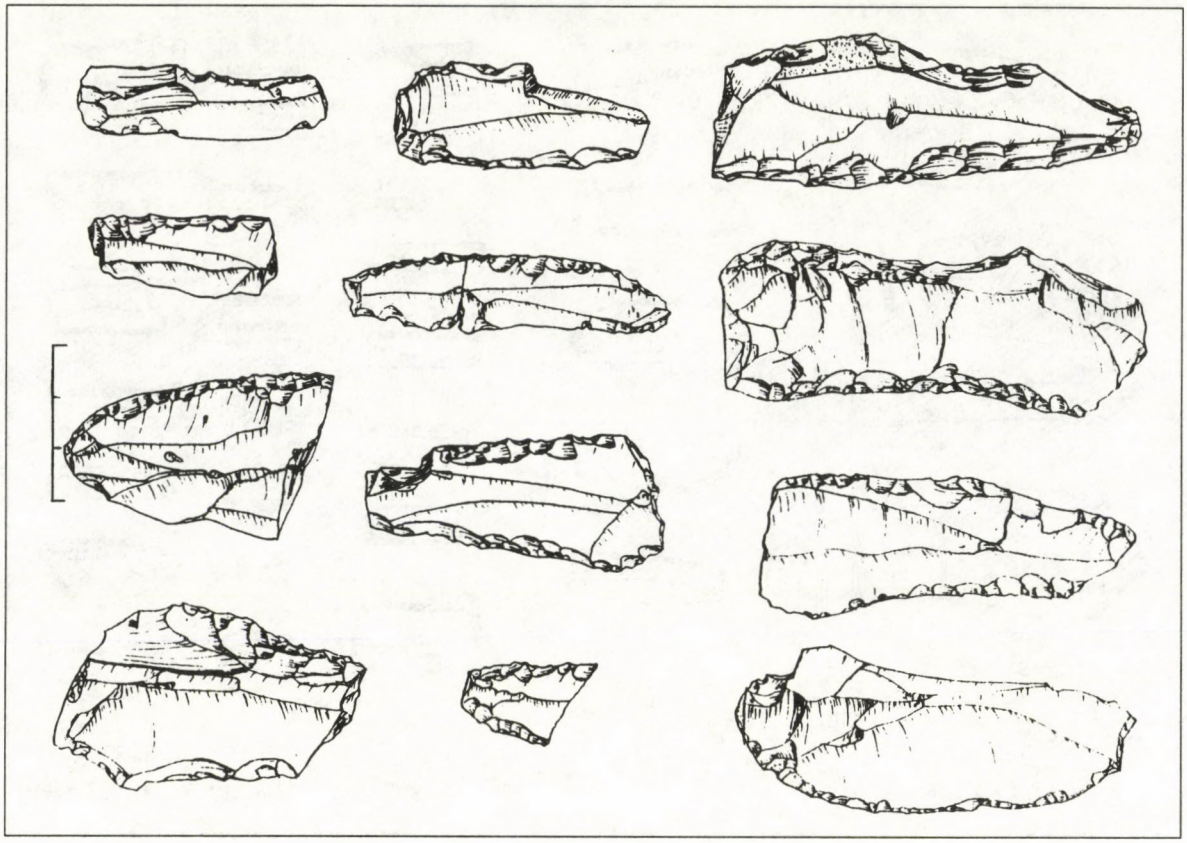


Fig. 14. Retouched blades

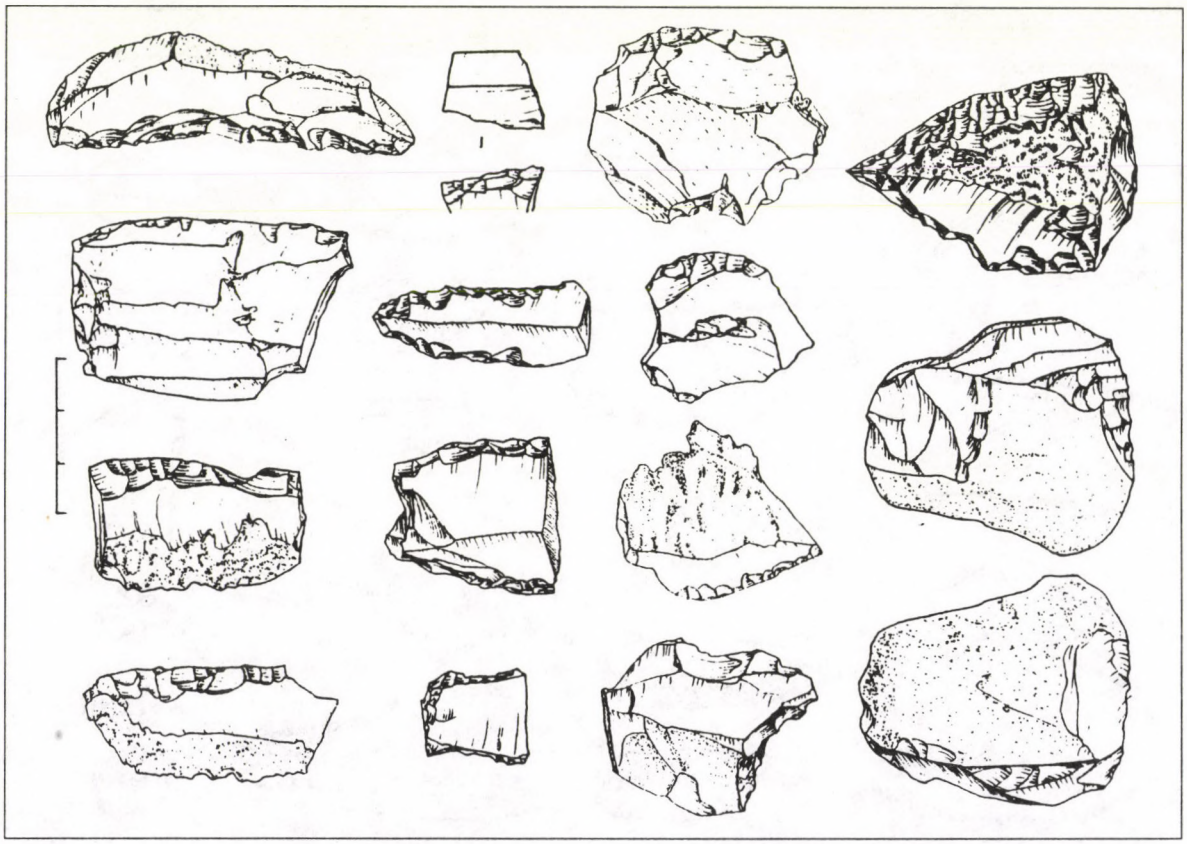


Fig. 15. Piece esquillée, side-scrapers, 'Mousterian point', retouched blades

Some other implements, which are represented by a few, statistically non-evaluatable items, complete the type list. Notched and esquillée type implements and a few tools with dorsal retouching can be counted among them (Fig. 15).

Raw materials (see also Appendix II)

The better part of the artifacts (63%) were made on the varieties of the local hydrothermal raw material (limnic quartzite, jasper, silicified and opalized wood as well as other silicified depository rocks). The geological occurrence of all these varieties can be found within a circle of about 3–5 km.

Obsidian (27,5%) has two basic varieties in the region (BÍRÓ et al. 1986). The Carpathian I. variety is characteristic of the northern part of the hill, while the Carpathian II. occurs in the more southern regions. In the central area, a special, to date very rare variety is known. It is either black with rusty brown stripes or sometimes totally rust or mahogany coloured. In the Hungarian Upper Palaeolithic, the Carpathian I. variety was generally preferred. The other two varieties are much less significant. It is, however, the first occasion that it is represented in such a high ratio as the second most important raw material. (Similar phenomena seem to be more common in Southeast Slovakia near the geological source of the Carpathian I. obsidian.)

Radiolarite (4%) can be found in practically all the North-East Hungarian Upper Palaeolithic sites. The geological source of this material is by the upper reach of the Hernád river. The pieces in Megyaszó preserved the pebble shapes and often the pebble cortex. They were probably collected from the basin of the Hernád.

Flint (3%) is the only definite long-distance raw material. It is also a problematic type unless the outer cortex is present, since the pieces are usually thickly patinated and are very difficult to distinguish from high quality hydroquartzite with similarly white patina. It is impossible to tell in what shape or size they arrived here and from where. Certainly, they belong to the group of northern flints, which came from beyond the Carpathians.

Silex (2%) is represented by medium sized and small pebbles, which must have been picked up from deposits of the Hernád river.

The "Szeleta" raw material (felsitic/glassy quartz-porphyry) (0.5%) is a macroscopically characteristic rock type. The only known, so far authentic source is the in eastern part of the Bükk. In respect to Megyaszó, it is a typical 'medium-distance' raw material.

Other raw materials did not play a significant role in the composition of the industry. One, the rock crystal, deserves special attention due to its rarity. Although rock crystal can be found in the western side of the mountain, it, however, is full of microfissures. The few clear and structurally homogeneous pieces found in Megyaszó must have been imported from a greater distance (North-Transylvania or the Alps?). From Hungary this raw material is known from authentic excavations from one site: Pilismarót-Pálrét (DOBOSI 1991).

The other rock and mineral types (sandstone, rhyolite, ochre) served other purposes than raw materials for the chipped stone industry.

Technology

Two basic, raw material dependant technological processes can be differentiated. One is associated with the poor quality local hydrothermal materials, which could be accessed (extracted or collected) in large blocks, the other is characteristic of pebbles or smaller lumps. In the first case, even low productivity resulted in a great amount of waste material due to the abundance of raw material within easy reach, its inhomogenous structure and poor quality. In the other case, the relatively smaller size of the pebbles and lumps, their less frequent occurrence and finer structure allowed a more thrifty treatment. The ergonometric coefficient was much higher in this latter case. Cores, core fragments and exhausted cores were often turned into tools. It is especially true for the obsidian where rough retouching along the striking platform of the cores resulted in chopper-shaped implements with zigzag-shaped edges.

The striking platforms are mostly smooth, clactonoid on the flakes. On blades some are clactonoid, broad and smooth, sometimes preserving the pebble cortex. The bulb of percussion is large. On the majority, the striking platform is pointed, the bulb of percussion is small. In a few cases the core preparation can be observed and a small bulb of percussion. In the process of raw material treatment both the hard and the soft hammer technique were applied independent of the quality of the material.

Vertical distribution of the finds

Six percent of the whole find material, 500 items, were unearthed in the two settlement levels. Although there were some sherds and artefacts that can be attributed to a later phase of Prehistory, the overwhelming majority of the surface finds present a coherent picture, which is compatible with that from the two settlement levels. Nevertheless, it should be noted that the finds from the two levels are not really sufficient either quantitatively or qualitatively (no more than 39 implements) for detailed or comparative analysis.

The find material collected from the surface and the humus was evenly distributed over the upper third of the hill. The lower settlement level never came close to the surface or at least we could not observe it during the two excavational seasons, so it seems likely that the surface material originally belonged to the upper settlement level. In both levels, the finds were covered with a thick lime crust. The same was already missing from the surface finds. The thickness of this

crust on the artifacts and bones in the upper level supposes an originally thicker loess cover.

The bones are poorly or medium well preserved, similarly to those from Bodrogkeresztúr (VÉRTES 1966) but better than at Arka (VÉRTES 1964/65) and Hidasnémeti (SIMÁN 1989).

The few authentic data seem to support the idea that the two settlement levels can be attributed to the same archaeological culture.

Animal bones and settlement features could be observed in the lower settlement level, although they do not directly reflect the size of the population, the duration or the function of the settlement. The quantity, distribution and quality of the finds scattered on the surface suggest that people settled twice on the hill for relatively longer periods. Its seems to be true even if we allow that the surface distribution is far from the original and that the upper level yielded no valuable settlement features.

Summary

Occasional stray finds (Pleistocene mammal bones, artifacts) have been reported from Megyaszó for decades. The site Szelestető was found in the mid-eighties and the following field walks resulted in the discovery of hundreds of artifacts, including typical tools.

Systematic verifying excavations were conducted in 1993 and 1994 on a surface of 180 m^2. Traces of settlements were found in two levels on the highest part of the hill. The two levels were separated by a 60 cm thick loess. The finds, fragmentary animal bones, flakes, waste and a few implements, were rather loosely scattered in both levels. Settlement feature could be observed only in the lower level: a stone stool. The settlement levels were marked with sporadic charcoal grains, ashy patches, ochre traces and, as attested to by the pedological analysis, organic material accumulations.

The scanty settlement features (no hearths, no postholes etc.) suggest that the central parts of the settlements were outside the excavated area and only the fringes of them were unearthed.

Given the richness of the surface finds, the advantageous circumstances would also make it likely that this was a more permanent settlement. The hill is well separated from its surroundings and, at the same time, it is protected from the vicissitudes of the weather being encircled by higher hills. The raw material sources are within easy reach. The hydrothermal varieties crop out on the sides of the neighbouring hills, the silex is a constituent of the deposits of the Hernád river, and the obsidian and the 'Szeleta' raw material can be collected from a distance of one day's walk. The area of the hill is at the meeting point of various ecological niches: midmountains to the East and Northeast, the plains to the South and the valley of the Hernád river to the West. The region has always abounded in running waters. Even today, it seems to be a paradise for animal life.

The archaeological material, the raw material varieties, the bones of large mammals suggest that the population of the site was aware of these advantages and profited from them.

The few alien raw material point to closer contact with the populations of contemporary sites. In the region of the Tokaj-Eperjes mountains, two archaeological sites may be considered: Bodrogkeresztúr-Henye hill (VÉRTES 1966) and perhaps Tibava (BÁNESZ 1960).

Regrettably, the function of the settlements cannot be defined. It certainly was not a simple hunters' camp because there are too few projectile points. The technical composition of the artifacts exclude the possibility that it might have been a workshop site. There are too few bones and too many artifacts to mark the settlement as a butchering site. The observed features are not enough to satisfy the criteria for a permanent settlement even if the surface finds, the preparation and setting up of the stool would support this solution.

The find material, as a whole, reflects a stable, unified picture in technical and typological respects just as well as in horizontal or vertical distribution. The typical Gravettian types and the presence of Aurignacoid implements affirm that the industry can be attributed to an older phase of the Gravettian culture. Its closest analogues can be found in the material of the Bodrogkeresztúr-Henye hill site.

Table I. *Raw material distribution*

Raw material	surface	humus	upper level	lower level	All pp	%
hydro-quartzite	4196	624	58	330	5208	63
obsidian	1960	215	16	75	2266	27,4
radiolarite	283	30	1	7	321	3,9
flint	217	18	1	3	239	2,9
silex	172	8		2	182	2,2
"Szeleta"	24	7		1	32	0,4
others	13			2	15	0,002
Altogether	6865 83,1%	902 10,9%	76 0,9%	420 5,1%	8263	

Table II. *Type-list of Megyaszó*

Type after Bordes		surface	humus	upper levels	lower levels	together pp	%
1–2	end-scraper on blade	55	7		2		
3	double end-scraper	4	1				
8	end-scraper on flake	51	4		2		
9	circular end-scraper	1					
11–12	carenoid end-scraper	6			1		
13–14	museau end-scraper		1	1			
	end-scrapers					136	24,3
16	rabot	6	5		3	14	2,5
17	end-scraper+burin	3	1				
21	end-scraper+borer	2					
	combined end-scrapers					6	1,0
23	borer	3				3	0,5
24	bec	1				1	0,2
27–30	simple burin	60	14	4	7		
34–37	burin on ret.blade	16	1				
41	multiple burin	14		1	1		
	burins					119	21,07
45	knife/atypical	1				1	0,2
46–47	pointed blade, point	21	1		1	23	4,1
48–49	Gravette point	4				4	0,7
56–57	tanged, shouldered	7	1			8	1,4
58–59	backed blade	38	10		3	51	9,1
60–63	truncated blade	20	3		2	25	4,5
65–66	retouched blade, flake	106	10		6	122	21,8
67	Aurignacian blade	2				2	0,4
69	"Mousterian point"	1				1	0,2
76	piece esquillée	4					
77	side-scraper	30	4		3		
	double side-scraper				1		
	side+end-scraper	1			1		
	scrapers					44	7,8
TOOLS		458	63	6	33	560	6,78
Others	blade	328	58	10	19	415	5,02
	core, core fragment	303	36	1	12	352	4,26
	chopper				1	1	0,01
	flake, waste	5769	745	59	354	6927	83,83
	hammer-stone, grinding stone, retoucheur	3			1	4	0,04
Altogether		6865	902	76	420	8263	

Notes

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PEDOLOGICAL ANALYSIS OF SECTION 7. AT MEGYASZÓ-SZELESTETŐ ARCHAEOLOGICAL SITE (SEPT: 1993)

The archaeological excavation was conducted on the fringe of an intravalley ridge proportioned by erosional valleys with steep (16–18 degrees) sides, a geomorphologically characteristic formation of the Szerencs hill range. The plateau-like intervalley ridge slopes in gentle waves towards the South. Its highest point, which functions as a denudational source area toward the North, is separated from the excavations by a deeply retreated erosional side-valley. As the direct vicinity of the research trench was bound by this deeply cut side-valley and slopes facing the main valley, one of the aims of the pedological analysis was to determine to what extent the area was disturbed by natural surface replacement processes.

The grain size analysis of the samples that had been collected by 10 cms from –30 cm (the bottom of the ploughed soil) to a depth of 110 cm revealed that *no kind of surface deplacement process*, be it superposition, accumulation or erosion could be demonstrated. The grain size composition of the samples from under the ploughed soil is practically uniform from 40 to 110 cm. From a pedological respect, typical loess (0.002–0.005 mm) dominated with 32–35% in all the samples, even if the loam fraction also makes up about 30% (Table 1). The clay fraction and sands with larger grains than the loess are represented with 15–20%. Consequently, the physical composition of the samples does not reflect any kind of stratification. It should be mentioned that there are two levels, where the finest fraction (grain size under 0.001) is missing: between 50–60 cm and 90–100 cm.

The chemical analysis showed a greater variability (Table 2). Regarding the *humus content*, the growing ratio of organic materials in the level between 50–60 cm and at the bottom of the section is striking. The high humus content of the 50–60 cm deep level cannot be explained by a natural process, especially as compared to the absolutely 'normal' less than 1% in the under- and overlying levels. The depth of 60 cm might imply deep ploughing, which may turn organic mate-