

ARCHAEOLOGICAL SURVEY AT URBÁRSKE SEDLISKÁ, STUPAVA, SLOVAKIA: PRELIMINARY REPORT

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Introduction

In late July of 2002, an archaeological project was undertaken to study ancient German habitation near the Roman-style building of Stupava, in southwest Slovakia². The project was titled the Urbárske/Mást Archaeological Project, and was sponsored by the Slovak National Museum-Archaeology Museum (AM-SNM) in Bratislava, Slovakia, and the Department of Archaeology at Boston University, with funding from the Humanities Foundation at Boston University and private donations. The survey and excavation were conducted from July into mid-October and artifact conservation and study have continued to the present. The survey portion of the project lasted through the month of August and is the focus of this paper.

The Stupava site, named after a neighboring modern town, has produced evidence to show that it may have had actual Roman inhabitants and even soldiers. The site is located between the Morava River and the western foothills of the Little Carpathian Mountains,

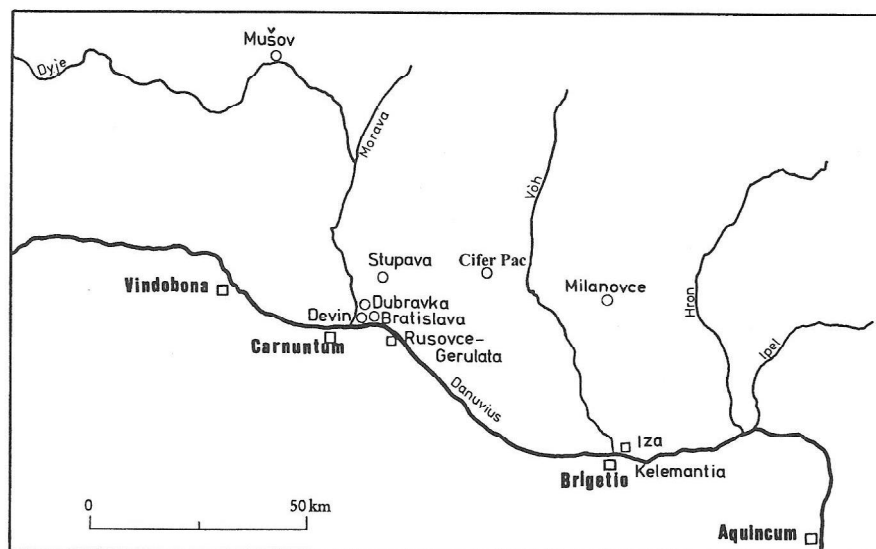


Figure 1 Map of the Roman Frontier along the Middle Danube (Genser 1990, 50)

16 km north of the Danube River, which was the Roman Frontier (Fig. 1). Archaeological work along the Morava Valley has identified German sites (burials and dwellings) around Stupava as well as further to the north and south (Elschek 1995, 39 and 42; Droberjar 1997, 11; Kolník 1998, 144). The Roman-style building at Stupava, located within close proximity to other purely German sites, provides an opportunity to study German and Roman interaction from the 1st to 3rd centuries A.D., the lifetime of the Roman-style building. The evidence at the site includes iron shoe-nails characteristic of Roman legionary footwear mixed with other Roman material such as pottery and stamped roof tiles all of which indicates a Roman presence at certain levels of the site, (Staník – Turčan 2000, 23). Stupava not only provides an opportunity to examine Roman activity beyond the frontier, but also to study the cultural influence that Romans and Germans had on each other. Surveys in and around Stupava have located more German sites (Turčan 1985, 93). Recent excavations have also located German structures just outside the boundary walls of the Roman-style building.³



Figure 2 Location of Urbárske sedliská and the survey area

The site chosen for the project resides in an area called Urbárske sedliská, which is approximately 800 m distant from the hilltop where the Roman-style building sits (Fig. 2). Archaeological material was first discovered at Urbárske sedliská in 1982, when farmers were putting in drainage pipes in an attempt to dry out the land for farming (Turčan 1985, 94). Dr. Vladimír Turčan and Dr. Zdeněk Farkaš of the Slovak Archaeological Museum were the official observers of the digging and noted if pottery or other ancient material was exposed (Turčan 1985, 94; Farkaš 1984, 2). In one area, work was stopped to allow the excavation of a German grubenhaus, while in another area, a Bronze Age urn-burial was excavated. The area containing the BA urn was a low hill with gentle slopes leading to a manmade drainage ditch. It was noted by Z. Farkaš that along the slopes and at the western edge of the hilltop, to the south of the BA burial, there were various types of pottery sherds, including German and Roman pieces (Farkaš 1984, 4). He postulated that if a site did exist, it would be on top of the low hill (Farkaš 1984, 3 and 4).

The 2002 project was organized to explore further the area that had been identified by Z. Farkaš in the belief that the German pottery may be indicative of some type of structure or at least cultural feature. Since the site was identified only through surface finds and brief excavations, it was not clear where it was best to place units; what is more, twenty years had passed, so the precise area was in question as well. A new surface survey, therefore, was designed for the approximate area identified as the site and for which we had obtained a permit. Artifact density, as determined by survey, would be the principal criterion for determining the most promising places for excavation of German cultural features.

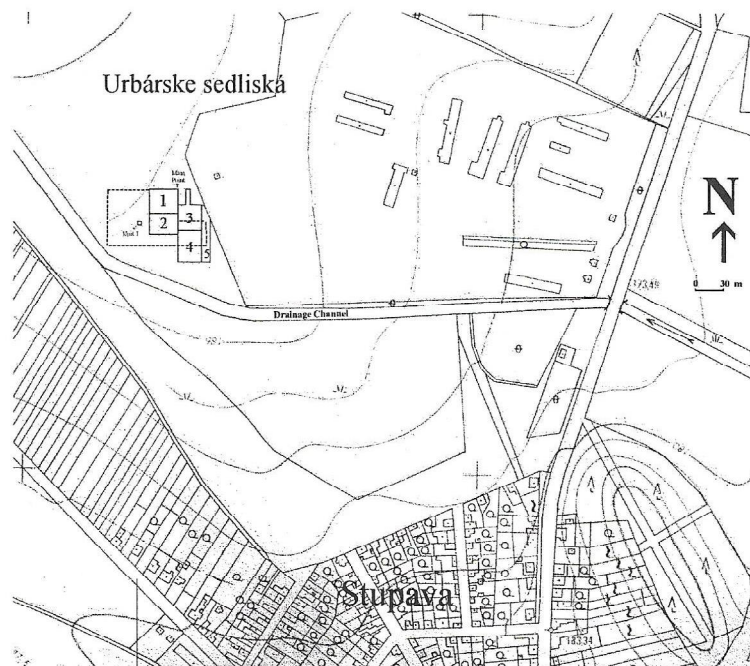


Figure 3 Subdivision of the survey into areas 1–5. The dotted line represents the area surveyed by the magnetometer

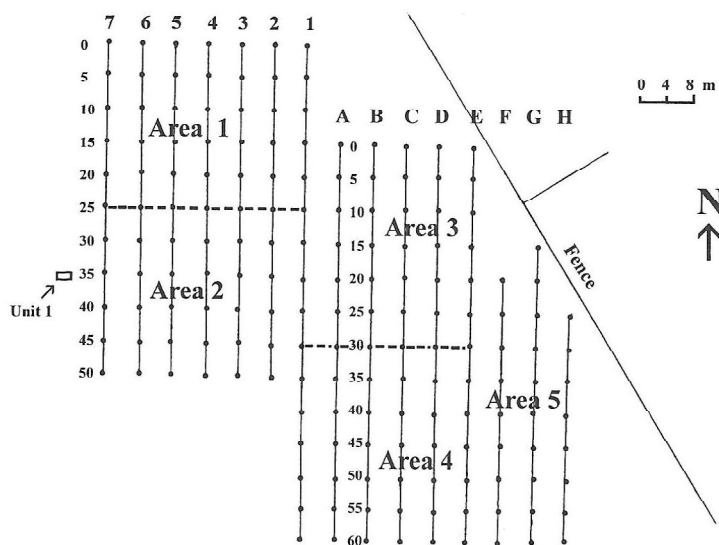


Figure 4 Transects and Shovel Test Pits. The lines are the transects while the shovel test pits are represented by dots along the transects

The Survey Method

In designing the method of survey, time and crew size limited the area that could be covered. Only three weeks could be given over to the survey, leaving roughly seven weeks for excavation, and money constraints kept the crew at four, not including the primary investigator. The survey area was laid out over an area approximately 70 × 80 m, divided into transects spaced at five-meter intervals, running north-south (Figs. 3 and 4). The transects were lined north-south so that they would be aligned with the magnetometer survey transects, which will be discussed in more detail below. Five areas were demarcated and labeled 1 – 5 (the fifth area was added toward the end of the project to identify an area that had circular patterns of grass growth, possibly marking cultural features). Area 1 was 25 × 30 m and area 2 was 25 × 25 m, areas 3 and 4 were each 25 × 30 m, while area 5 was a narrow strip, measuring 10 × 90 m, with its north end at an angle because of a fence. The transects in areas 1 and 2 were labeled 1 through 7 from east to west, while in areas 3 and 4, the transects were labeled A through E from west to east, with area 5 having transects F through H. The oddity of this procedure was because areas 1 and 2 were laid first and labeled, and then later 3 – 5 were added. The labeling was chosen to minimize confusion when taking notes and bagging material. Along each transect, yellow flagging tape was placed every five meters.

In an effort to learn as much as possible about the site and help in determining where to place the later excavation units, a magnetometer crew was brought in from the Archaeological Institute of Nitra. A larger area was laid out for them to survey, since they could cover more ground in a shorter time. The magnetometer survey covered two adjoining areas, the first was 80 × 60 m and the second 30 × 30 m, with the eastern half covering the area marked for surface survey with the four-man crew (Fig. 5). The Nitra

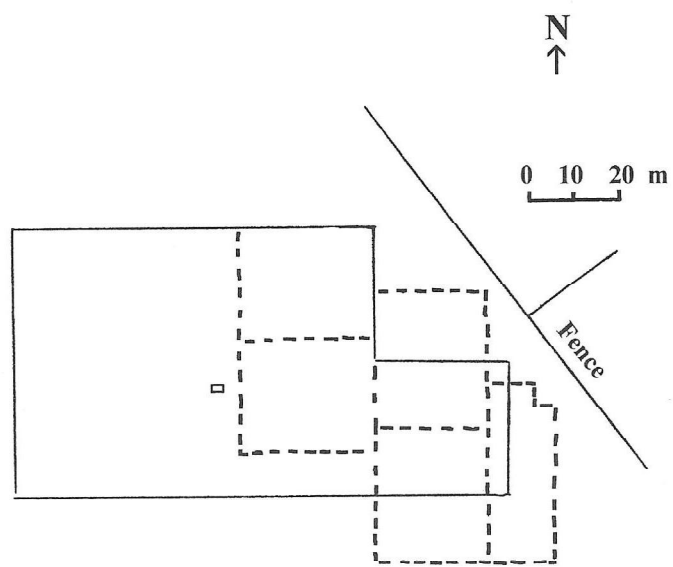


Figure 5 The solid line represents the area surveyed by the magnetometer



Figure 6 Crew working along the transects. The two on the left are working along Transect 1 and the two on the right are working along Transect 2

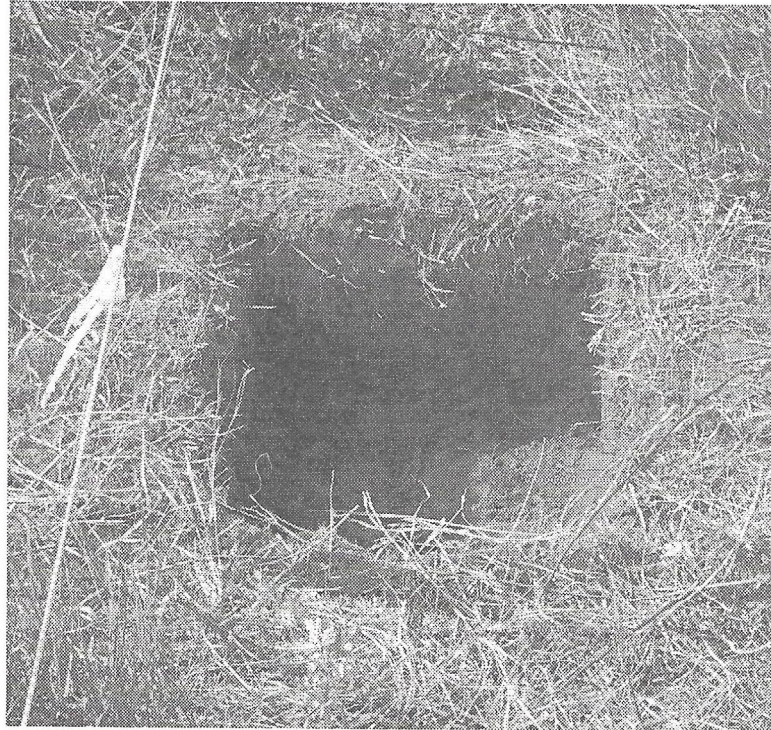


Figure 7 Shovel Test Pit along Transect 1 at Meter Mark 5

crew surveyed the field with transects spaced every one meter, running north-south. The magnetometer survey was carried out on July 25th, but the results were not provided until late September, too late to help in identifying where to place the excavation units, which had to be done by late August. The surface survey phase of the project started in full on July 29th, although some preliminary work was done on the 22nd.

When first planned, the survey was to be a surface collection effort, with each crewman walking along the transects picking up material and marking amounts found in relation to where they were along the transects (Fig. 6). The first day showed that this method would not be feasible. The area was a field that had been allowed to remain fallow for at least the previous two years; as a result, it was covered by tall grasses and very young saplings along with other types of brush. The vegetation cut visibility down to zero: seeing pottery on the surface was impossible. Since it was not possible to bring in a large tractor to mow the field that day, I decided that along each five-meter mark, we would clear a one-meter-square area of brush to see if anything was visible. The task of clearing just one square meter was time consuming, and when finally accomplished, revealed nothing. The root mat of the shrubs and grasses totally obscured any material on the surface.

Even if a tractor had been brought in to mow the vegetation, the root mat was thick enough still to obscure everything. The idea of making a simple surface collection, therefore, was abandoned in favor of shovel test pits, hereafter designated STP(s). The

transects were already laid out and flagged at five-meter intervals, so it was decided to dig STPs in this arrangement.

By following the transects and digging STPs every five meters, we conducted a systematic field survey, ensuring even coverage. Each STP was to be 50 cm square, excavated to a depth of 50 cm, following natural stratigraphy (Fig 7). Forms were made for the crew to fill out as they worked in teams of two (Fig. 26). The STPs were labeled in the field notes by what transect and at what five-meter point it was located on the transects: for example the first STP on transect one was labeled 0 and the second was 5, the third 10 and so forth. Each crew used shovels and sorted the dirt using trowels, while material was bagged and labeled, with quantities being placed on the forms. Sifters were tried but because of the clayey nature of the soil, they quickly clogged and slowed the teams to such a degree that they had to abandoned in favor of sorting the dirt by trowel. The use of sifters is standard when the STPs are 30 – 50 cm square and highly recommended, since they catch small artifacts and also overcome the problem of visibility when artifacts are covered in dirt (McManamon 2000, 608; Collins and Molyneaux 2003, 63–64). When STPs are small (often called shovel probes), with only two to three shovels full of dirt, then sorting by trowel is the usual course of action (Collins and Molyneaux 2003, 64). The choice of not using sifters for the STPs at this project was a hard one and chosen because of extenuating circumstances.

There are various ways of laying out STPs, such as simple random, whereby you randomly place STPs in the survey area; another method is stratified random, in which the site is divided into regions and STPs are placed randomly in the regions but in proportional amounts to the size of the regions; or the more complex stratified unaligned systematic, which is a combination of the various shovel test pit techniques (Fig. 8) (Renfrew and Bahn 2000, 77). Because of its simplicity, the systematic method was chosen, which a crew of four can do quickly (Renfrew and Bahn 2000, 77). The systematic method involved laying out STPs along transects that are spaced on average 10 m apart, with the shovel test intervals at 15 – 30 m, creating a grid. The shovel test intervals can be placed closer for

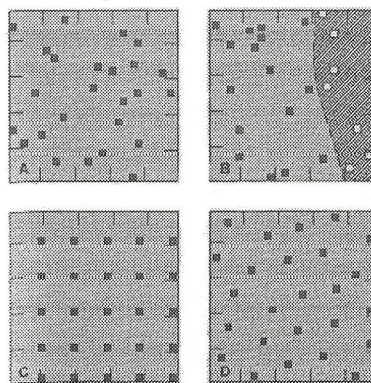


Figure 8 Types of sampling using shovel test pits. (A) Simple Random; (B) Stratified Random; (C) Systematic; (D) Stratified Unaligned Systematic (Renfrew and Bahn 2000, 77)

a more fine-grained view of artifact distribution. The systematic method has been criticized in the past for built in bias (Nance and Ball 1986, 458; Shennan 1997, 380; Renfrew and Bahn 2000, 77; Collins and Molyneaux 2003, 63). There is a risk that you may hit every single example, or miss them, if features within the ancient culture were spaced at certain intervals (Renfrew and Bahn 2000, 77). Other criticisms of using STPs deal with the depth that sites are buried and artifact density. STPs are useful for the discovery of sites that are near the surface and so sites buried deeper may go undiscovered. In regards to artifact density, if the STPs are spaced too far apart, they may miss features, creating a map of the area having no cultural material, or smaller than the reality. This bias however is in reference to using STPs in field survey over unknown territory, where it has been shown that test pit sampling are biased against the discovery of small, low density sites (Nance and Ball 1986, 479; Collins and Molyneaux 2003, 63). The use of STPs as a sampling technique has greater success than when STPs are used as a discovery technique (Shott 1989, 396). The project here had a specific area where artifacts had already been found, so STPs here were being used as a sampling technique to find areas of higher artifact density.

Three other factors also played a role in the original decision to use STPs. A magnetometer survey was planned to provide more information to help counter any potential bias. The image created by the magnetometer was to have been compared to the artifact distribution seen in the STPs and the actual placement of excavation units would be decided based on that information. As noted above, this did not happen, the magnetometer report arrived too late for that purpose and it was discovered that the STPs with the highest artifact density were, in fact, outside the area surveyed by the magnetometer. The second factor was the expectation of what the STPs would provide. The survey was done to only acquire information on artifact density, with the hope that this would lead to the discovery of features or houses. This method is used in the United States by cultural resource companies conducting salvage archaeology with time constraints, and from personal experience I was aware that it was a successful approach. Finally, the number

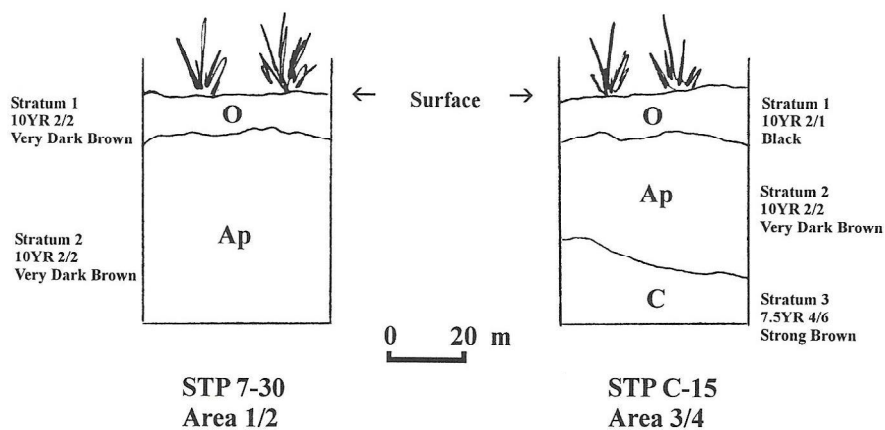


Figure 9 Profiles from two stps that represent the stratigraphy of the two areas: A1/2 and A3/4

of STPs dug would counter the bias, by ensuring as much coverage as possible. By digging a STP every five meters, instead of digging every 10 – 15 m, there was a greater probability of discovering cultural features. The probability was further increased by having the transects only five meters apart.⁴ Planning STPs every four meters or less could have increased still more the probability of success, but considering the small crew at hand, would have been inefficient and time consuming.

Survey Results in Regards to Soil, Stratigraphy and Overall Artifact Distribution

During the survey phase 147 STPs were dug in Areas 1 – 4, with another 27 in Area 5. A total area of approximately 3650 m² was covered during the survey. Upon analysis of the data a clear division occurred between areas. Areas 1 and 2 were different from Areas 3 and 4 in stratigraphy, soil composition, and artifact content, even though located next to each other. Areas 1 and 2 (hereafter A1/2) were on the gentle slope going toward the drainage canal 100 m away to the west of the site (Fig. 3). Areas 3 and 4 (hereafter A3/4) were at the top of the low hill, which was relatively flat. Transect 1 lay along the transition between the hill top and start of the slope, and acted as a dividing line between the two.

The soil composition and stratification were the first clues that there was a difference. All the STPs were dug to an arbitrary depth of 50 cm, with a few random STPs being dug deeper, up to 90 cm. In A1/2, all the STPs had a uniform soil composition from top to bottom, except along Transect 1, which as said, was the transition line, sharing characteristics of both areas. In A3/4, the STPs had a more complex stratigraphy, with varied soil composition.

The stratigraphy in A1/2 had only two identifiable layers, which were the root mat (O horizon) and the plough zone (Ap horizon) (Fig. 9). The O horizon was almost completely made up of roots, with some soil, trapped decaying organic material, and archaeological material. The A horizon was made up of thick, humus rich soil, with a strong clay component. In texture the soil is a sandy clay loam, with a fine granular structure. The color did not vary much being usually Munsell 7.5YR 3/2 Dark Brown just below the root mat and a 7.5YR 4/4 Brown at the bottom of the STPs.

The stratigraphy in A3/4 was more complex because of the addition of a sand layer below the plough zone, which appeared to be thinner in this area. STPs in A3/4 revealed a root mat (O horizon) along with the Ap horizon. The main difference was that under the Ap horizon was what can be called a C horizon made up of pure sand (Fig. 9). This identification was what the STPs revealed, however, but later expanded excavations revealed a more involved stratigraphy. The plough zone had in fact cut into and obliterated the original B horizon that lay immediately above the sand layer. Depressions into the sand were filled with the soil that had made up the B horizon, thereby helping to show that it had existed at one time.

An immediate problem arose in trying to explain why there was sand in one spot and not in another. It was very interesting that the hilltop had in fact sand roughly 50 cm under the surface while only a few meters west, on the slope, there was no sand. In an effort to find out more about the stratigraphy of the area, a unit (designated Unit 1) was opened further to the west down the slope to try to find where the sand began in that place (Fig. 3). The unit was a 1 × 2 m pit and was taken down to a depth of 166 cm. Instead of

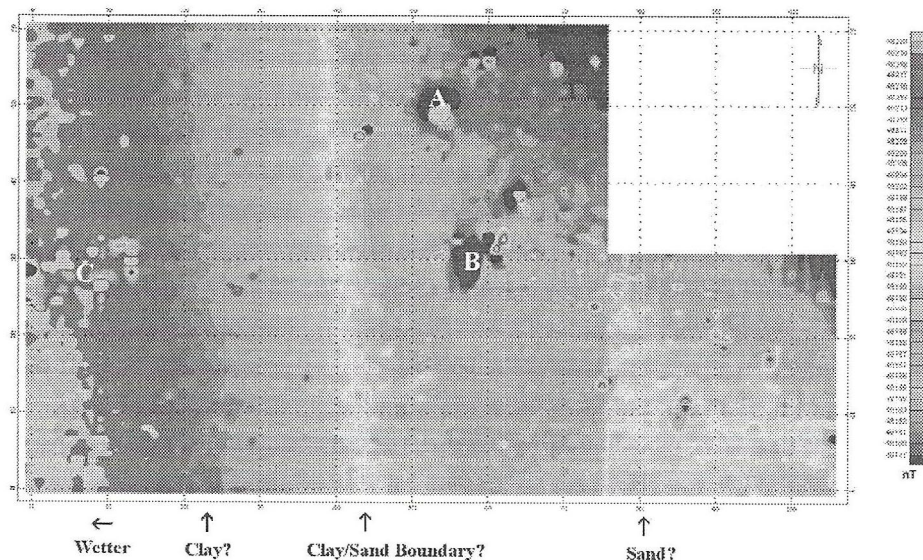


Figure 10 Magnetometer Map of the magnetic readings of the soil. The areas marked with letters A, B and C are errors in reading due to the presence of metal objects at the surface

reaching the missing sand layer, we uncovered a pure clay layer at around 140 cm. The soil here was also much wetter, because the drainage channel and wetter area were only 40 m from the test pit. It appeared then that the sand disappeared further up the slope at a sharper angle than what one sees today on the surface.

Z. Farkaš, in the field report for his work in the same area, identified the hill as a sand dune (Farkaš 1984), now buried by alluvial fill and soil formation, further modified by intensive agricultural activity.⁵ Our fieldwork confirmed this identification. A3/4 is the top of the sand dune, while A1/2 is the side of the dune, where sand gives way to alluvial fill sitting on top of a clay stratum. The alluvial fill is not surprising since the Morava River is only five kilometers to the west. The site of Urbárske sedliská is actually along the eastern boundary of the floodplain for the river. One must also keep in mind that intense agricultural activity has taken place in the region. Today the area is used to grow wheat, corn, sunflowers, and various vegetables. Along with the alluvial fill, there may have been infilling of the area with soil brought in by farmers to help create a more fertile field.

The magnetometer survey also supports the idea of a buried sand dune with a stronger clay subsurface component to the west. Along with the survey report for anomalies that might be anthropogenic, a report was also given on the soil make-up of the area. On the magnetometer map (Fig. 10) one may see a clear transition that corresponds to where the sand is and where the soil and clay begin. The fact that most cultural finds would be on top of a hill is understandable given that most people would want to live at the top, where it is level, not on a slope.

Table 1
Number of Artifacts by Type in Area 1/2

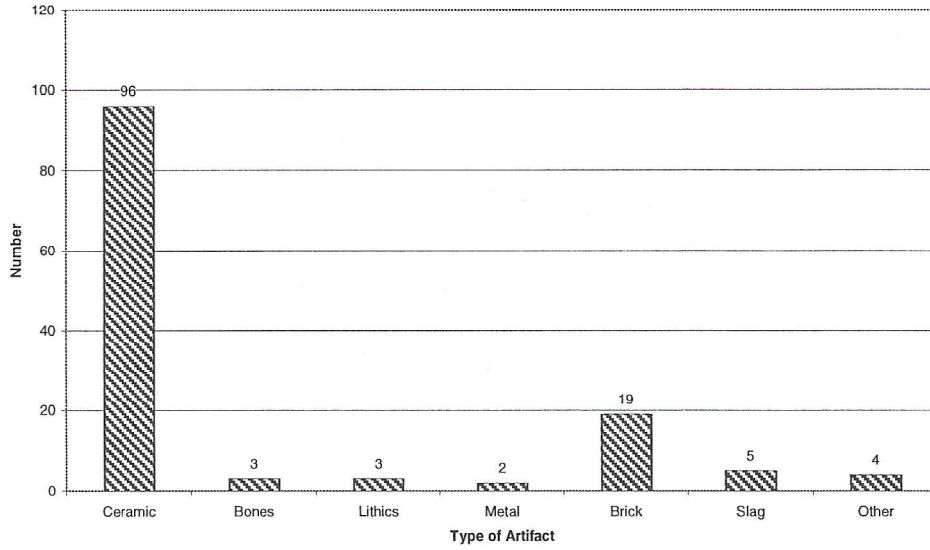


Table 2
Number of Artifacts by Type in Area 3/4

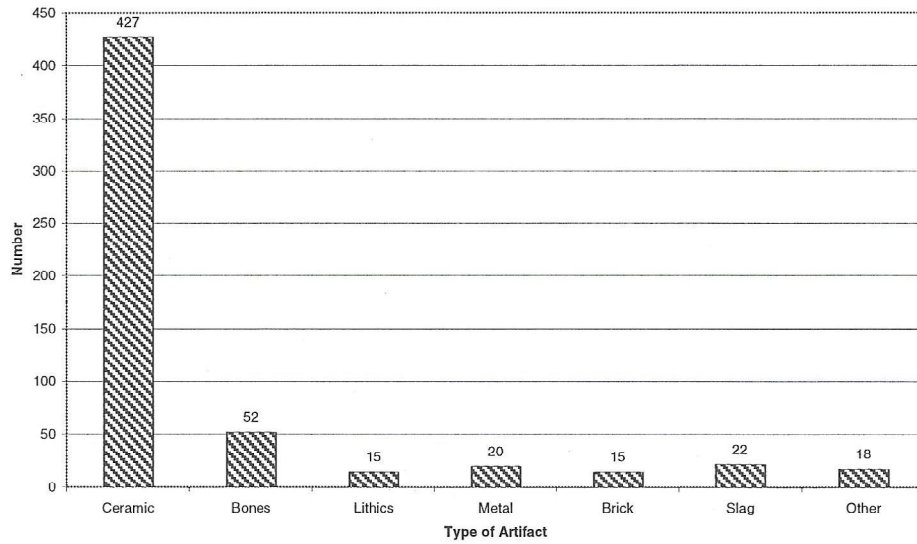


Table 3
Percentage of Artifacts by Type in the Survey Area

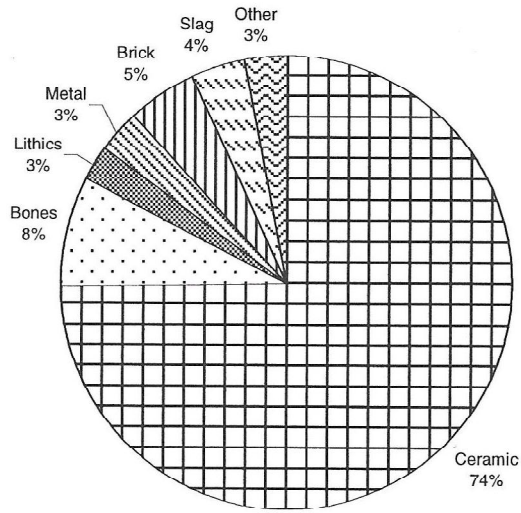
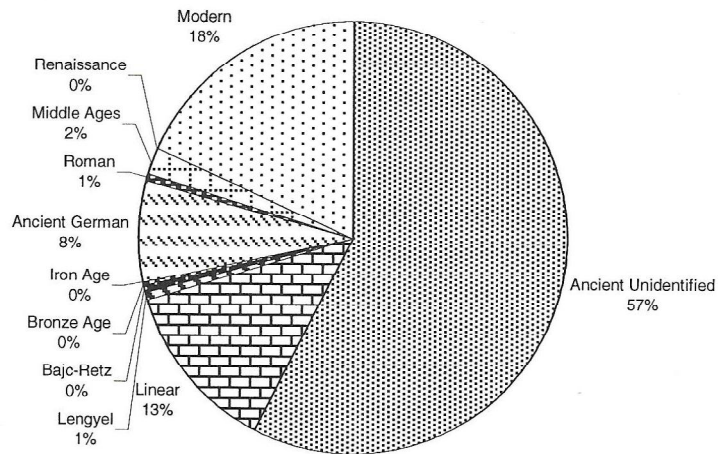


Table 4
Percentage of Pottery Sherds by Type (Period/Culture) in the Survey Area



Another difference determined by the survey were that STPs from area A1/2 yielded only 135 artifacts compared to the 582 found in Area 3/4 (Table 1 and 2). Area 3/4 had 81% of all the artifacts and 82% of all the ceramics. The breakdown by percentage of different artifacts was similar in both areas, where ceramics made up around 74% of all artifacts found, with the other types being under 10% each (except modern brick fragments in A1/2), as can be seen in Tables 1 and 2. The artifact amounts fit well with our identification of A3/4 as being the top of a hill upon which cultural activity took place, while artifacts found in A1/2 reached there as a result of slope wash or plowing. When looking at the fields in the area, they are orientated so that the plow travels along the east/west axis. In later excavations we actually found old plough furrows running east/west. The ploughs would have either begun or ended on top of the hill, so artifacts would slowly be smeared down slope toward the western end of the field, near the drainage channel (Fig. 3). The plow would have actually turned and started its plowing in A3/4. The plow would only just start to dig into the soil in A3/4, and really start turning the soil in A1/2, thereby lessening the damage done to artifact concentrations in A3/4.

Discussion of Artifacts

In the following section, the artifacts will be discussed by group, with the pottery being subdivided by period and/or culture. There are seven artifact categories, and the pottery has twelve subgroups (Tables 3 and 4). This format is being followed to provide an overview of what was found.

1. Metal

Twenty-two metal items were found, in varied states of preservation. Identification was done with the help of V. Turčan and the museum's curator of metal artifacts, Mr. Slovak. Preliminary identification took place in the field and then further examination was done after the metals were cleaned at the museum.

Since Urbárske sedliská was a field in active use, modern items included pieces of farm machinery (chain-belt, bolts, and nuts⁶) and farming tools (such as the blade from a hoe and a shovel). The number of metal pieces from other periods in recent history was also quite high. The Russian army during WWII had marched through this area and had actually engaged German troops stationed in Stupava (on top of the Roman-style building). Some pieces might date to this period, but none of the items could be identified with that amount of precision. Other pieces were so corroded, it was impossible to determine their original function.

2. Brick, Slag and Bones

These four categories have been combined because of the limited information that can be given for them at this stage of the analysis. A total of 34 modern brick fragments were found during the survey. Until recently a brick house had stood near the field, but was torn down during the early 1990s. The remains of the house are still present and the brick fragments in the field most likely came from there.

An interesting aspect of the survey was the discovery of slag. Two types are present, those from metal production and those from either glass production or from glass melted by high heat. The slag most likely did not come from the house that was torn down since



Flake
 Cat. # 1220
 STP 1-25

Perforator?
 Cat. # 1222
 STP B-45

Core
 Cat. # 1221
 STP 1-40

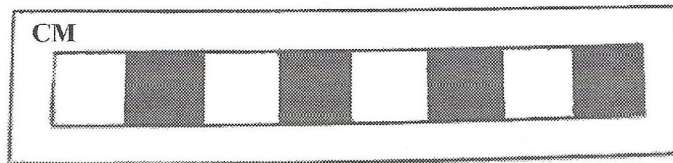
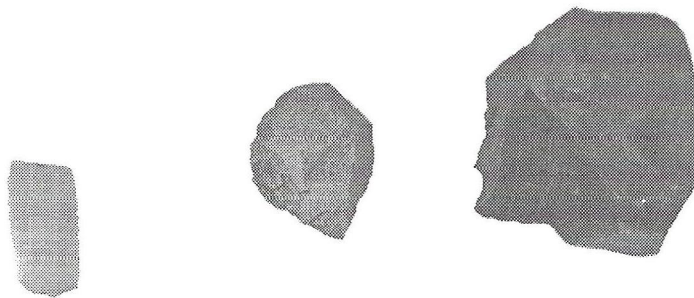


Figure 11 Lithics from various STPs



Blade
 Cat. #1223
 STP D-10

Core
 Cat. # 1224
 STP D-20

Core
 Cat. # 1225
 STP D-35

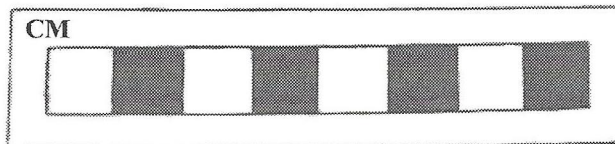


Figure 12 Lithics from various STPs along transect D

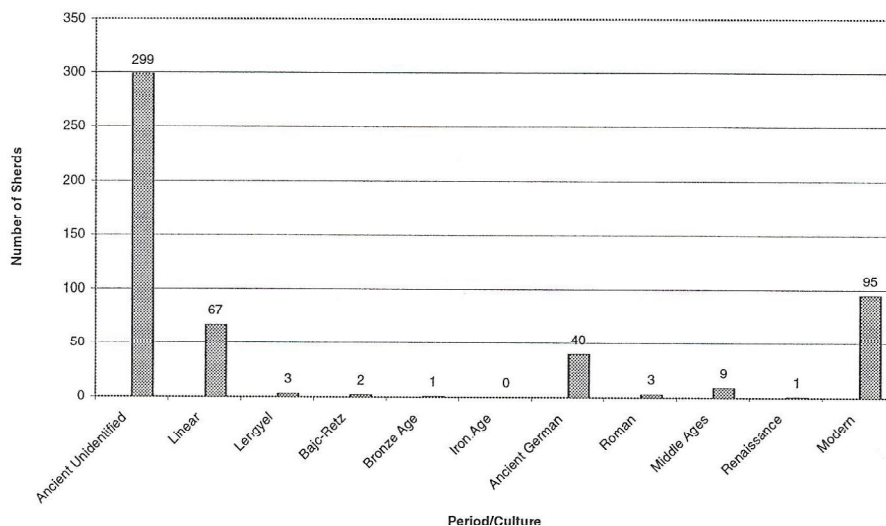
there is no evidence of any burning that could have created slag. Another possible source are the nearby private garden plots, which locals fertilize in various ways, including the use of compost heaps, possibly containing all types of trash. Ancient metallurgical activity or glass working cannot be ruled out, however, because the nearby grubenhau excavated by V. Turčan in 1982 had evidence for jewelry making, including crucibles and slag (Turčan 1985, 114). Analysis of the slag by a specialist still needs to be done to further clarify their origin and composition.

There was a total of 55 pieces of bone found. Many pieces came from the surface or plough zone, but two STPs (C15 and E15) in area A3/4 had bone mixed with pottery in a dark soil right above the sand layer. The bones on inspection in the field seemed to be bovine, while the pottery was primarily of ancient German manufacture. These two STPs will be discussed in more detail below in the pottery section as well as in the conclusion. Since most of the bones are from the plough zone it is hard to say to what period the bones may belong. Analysis is still being done on all the bones found at the site, and hopefully more can be said about them in the future. A potential source for some of the bones found in the plough zone could be the slaughterhouse located approximately 100 m from the survey area.

3. Lithics

Eighteen lithics were found during the survey. Preliminary identification has subdivided the group into ten flakes, three cores, two blades, one possible tip of a blade, one possible perforator, and one notched flake (a sample provided in Figs. 11 and 12). Their appearance fits into the microlith industry of the Neolithic Period. During this period in Southwest Slovakia the Linear Ceramic culture flourished, then followed by the Lengyel in the late Neolithic into the Eneolithic. The lithics found in the STPs were almost always

Table 5
Number of Pottery Sherds by Type (Period/Culture) for Total Area Surveyed



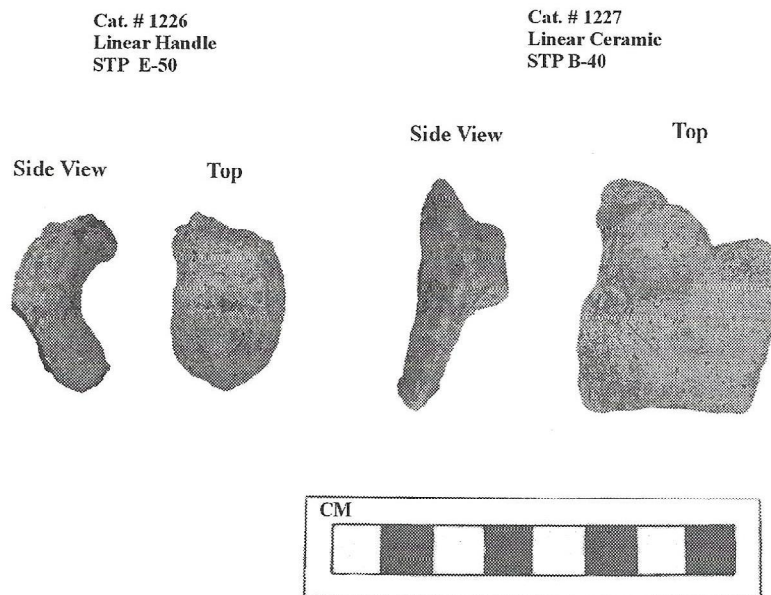


Figure 13 Linear Ceramics

mixed with ancient pottery, some of which could be identified as part of the Linear Ceramic culture. The source for the stone used is not known at the moment, but from the study of other sites dating to the Neolithic in the Bratislava region to the south, source material came from local places: such as the mountains nearby or the ancient river terraces of the Danube or Morava river, but some material was imported from as far away as Poland (Farkaš 1990, 119; Farkaš and Novotný 1993, 46). A more detailed report of the lithics will be given once their analysis is completed.

4. Ceramics⁷

One surprise of many at Urbárske sedliská was the variety of periods represented by the ceramics. The focus of the project was to locate and excavate German cultural features, but the survey showed us that the site has a much richer history and a longer period of occupation. Since most of the ceramics came from the plough zone, however, the pottery was very fragmented, thereby making identification difficult. In the end, 57% of the pottery was identified only as being ancient and could not be assigned to a specific period or culture (Tables 4 and 5).

The earliest pottery came from the Neolithic Period, belonging to the Linear Ceramic culture (5300 – 3800 BC) (Farkaš 1990, 74 and 136). The pieces found during the survey are very fragmentary. A total of 67 pieces were recovered, of which there were 62 body sherds, three rims, one handle, one piece with a nodule, and one of the body-sherds had a decoration of an incised line. The fabric and color varied, ranging from grayish brown (Munsell color 10YR 5/2) to a reddish yellow (7.5YR 7/6) to a light yellowish brown

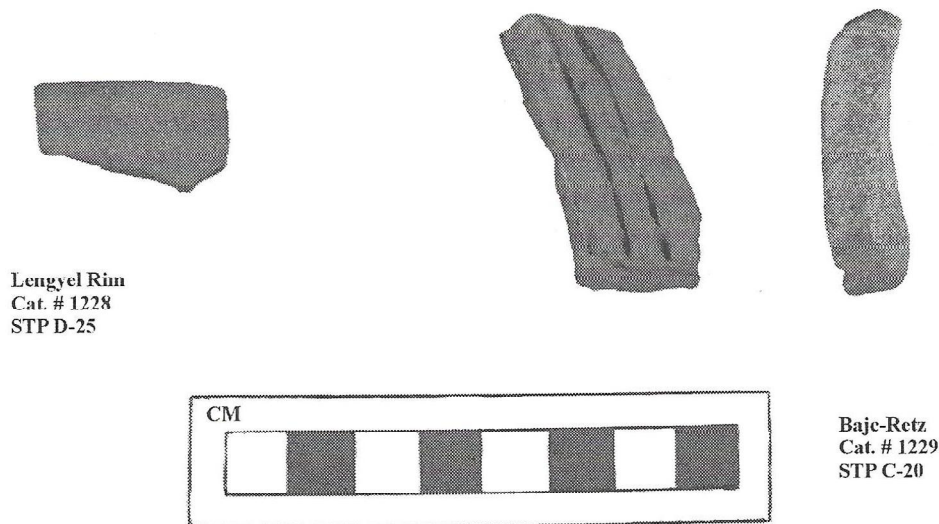


Figure 14 Representative pieces of the Lengyel and Bajč-Retz ceramics

(10YR 6/4). The rim pieces were too small to reconstruct body shapes, and the handle fragment could not be further identified (Fig. 13). The piece with the nodule is a body fragment and most likely came from a closed vessel (jug or amphora), but the exact form is unknown. The clay used for the ceramics was poorly refined, still having sand and small rocks. The potters added grass, straw, and/or chaff to help strengthen the pots. These inclusions were quite large and left hollows and pitting all over the pots after firing. The fabric also bears witness to varied firing temperatures, with many sherds having a striation in the fabric indicative of having been first baked in a reducing, then an oxidizing atmosphere.

The cultural period immediately after Linear Ceramic is Lengyel (3800 – 2800 BC), which straddles the Late Neolithic and Early Eneolithic (Farkaš 1990, 110). We did identify three pieces from that period; two body sherds and a rim (Fig. 14). The fabric of this pottery is different from the Linear Ceramic in not having grass, straw and large rocks. The firing was also done at a higher temperature and in better kilns (Farkaš 1990, 118).

Wedged between Lengyel and the later Baden culture is a brief cultural period known as Bajč-Retz (2900 – 2700 BC), at the break between the Early and Middle Eneolithic. Their main forms of decoration are punctured furrows in geometric patterns, sometimes filled in with white incrustation (Farkaš 1990, 123). Two body sherds turned up in the survey, which had the traditional form of decoration (Fig. 14). The ceramic fabric is cleaner, using finer inclusions, while firing is uniform with no striation of colors.

After Bajč-Retz, there does not seem to be much activity on the site until the Roman Period. Both the Bronze Age cultures and Iron Age ones do not seem to be present, except for one Bronze Age body sherd. This conclusion may be incorrect, since there is a large group of sherds that are ancient but could not be properly identified because of their

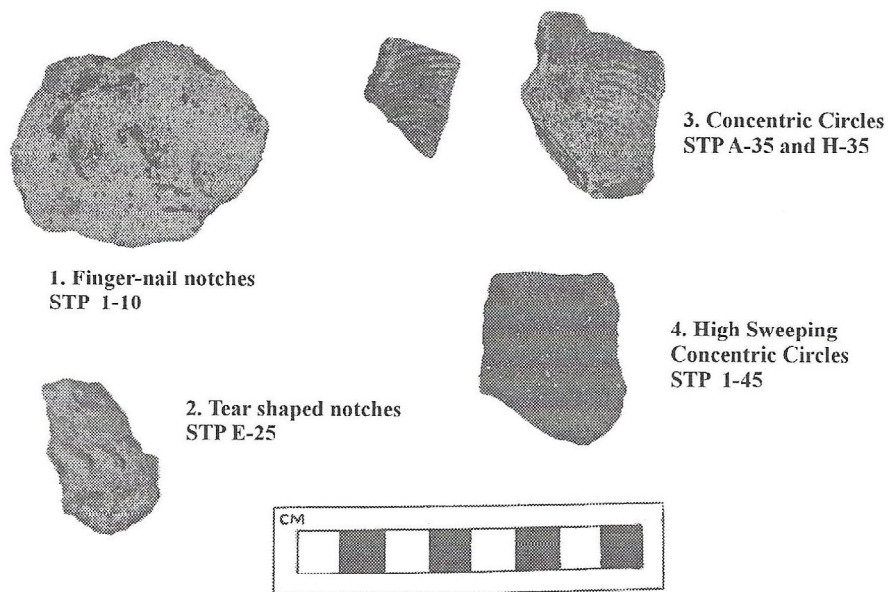


Figure 15 Decoration types found on German pottery during survey

fragmentary condition. It is reasonable to suspect that there is a possibility of Bronze Age pieces being among them.

The main focus of the survey had been to find any evidence of the Roman Period and the Ancient German culture in the region. The survey did not disappoint us. Forty German sherds were found along with four Roman. These make up only 9% of the total amount of pottery found, but some are of sufficient quality for identification purposes. Another important aspect is the concentration of artifacts. Two STPs had high concentrations of German material: STP C15 had 12 pieces and STP E15 had 6. Other STPs, if they had ancient German sherds, had usually one to three pieces. STPs C15 and E15 also had the sherds mixed with bones in a very dark soil, which was on top of the underlying sand in area A3/4. The concentration and amounts focused our attention on the area immediately

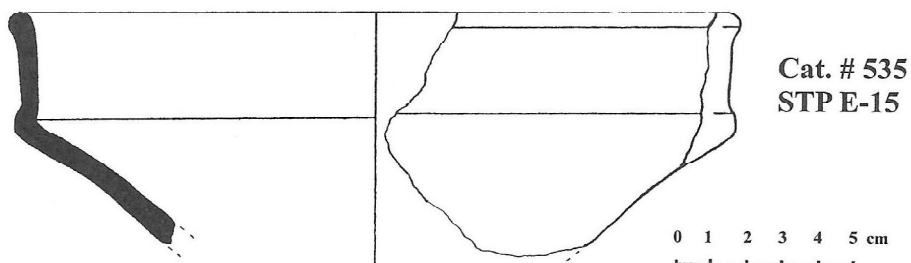


Figure 16 Diagnostic rim from STP E-15

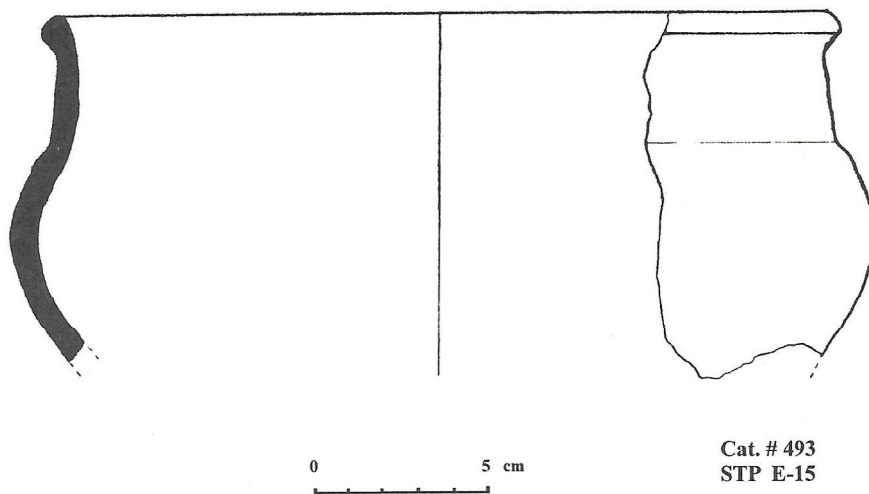


Figure 17 Diagnostic rim from E-15



Figure 18 Diagnostic rim from STP 1-50

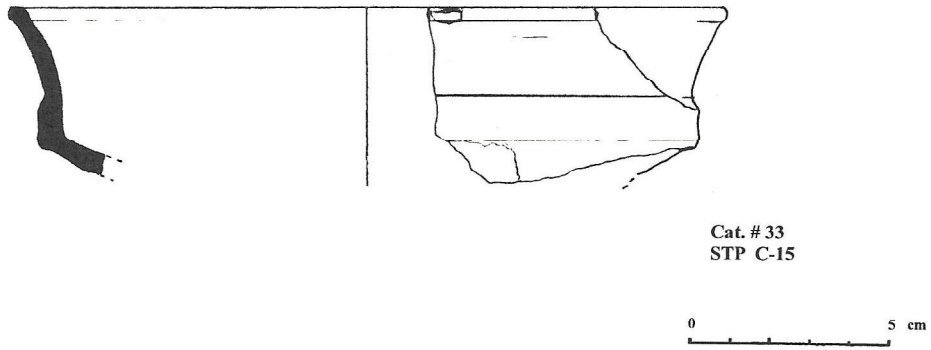


Figure 19 Diagnostic rim from STP C-15

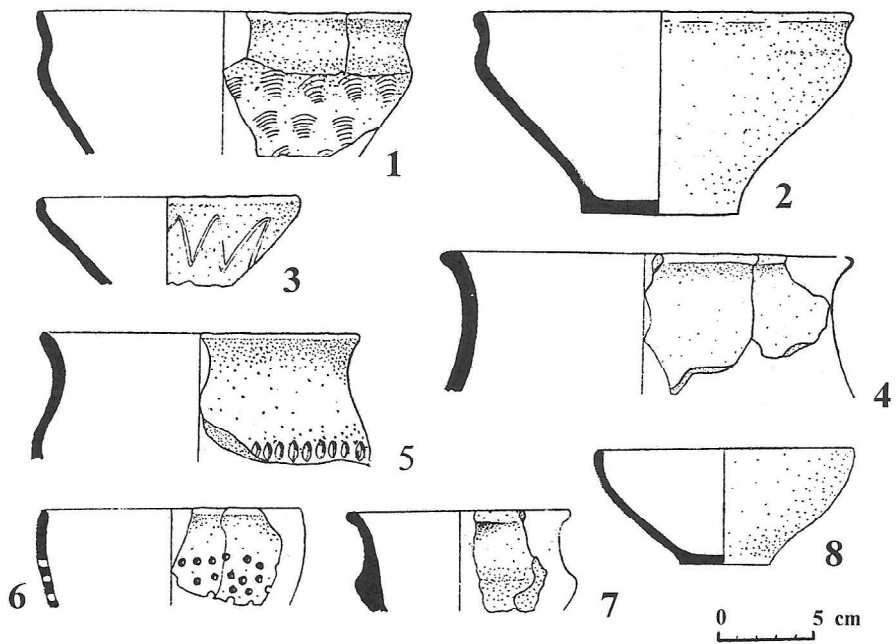


Figure 20 Pottery found in the *grubenhaus* excavated in 1982 (Turčan 1985, 97)

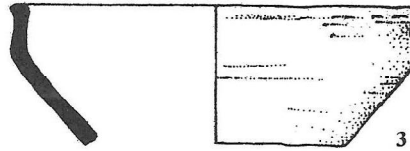


Figure 21 Vessel 3 found in *grubenhaus* 3 at Bratislava-Trnávka (Varsik 2002, 144)

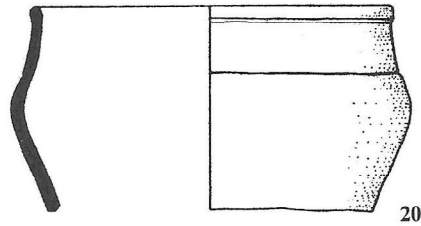


Figure 22 Vessel 20 from *grubenhaus* 20 at Bratislava-Trnávka (Varsik 2002, 147)

around these two STPs for the second phase of the project, when units were excavated for the goal of finding German cultural features.

The German pottery found during the survey was a mixture of body sherds along with some diagnostic rims. Among the body-sherds, four types of decorations were found (Fig. 15). (1) This type uses finger-nail notches (impressions) either in rows or random placement on the pots. (2) The second uses tear-shaped notches shaped by a tool in rows. (3) Here we see concentric circles created with a brush or comb. (4) The fourth is related to the third type of decoration but the curved lines are high and sweeping with a prominent arch in their pattern. These decorations are found in some form or another on German pots throughout the Roman Period and cannot provide a precise date for the surveyed area.

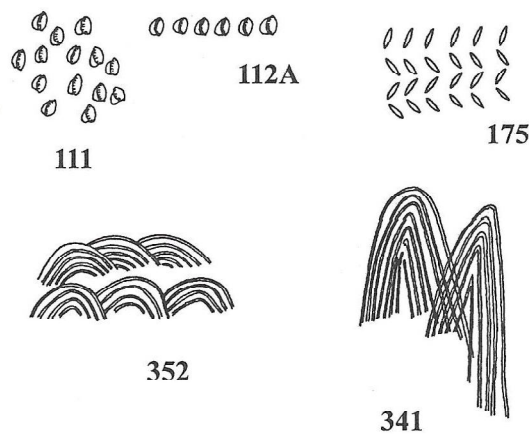


Figure 23 Decorative elements with typology numbers by (Droberjar 1997, 31, 32 and 36)

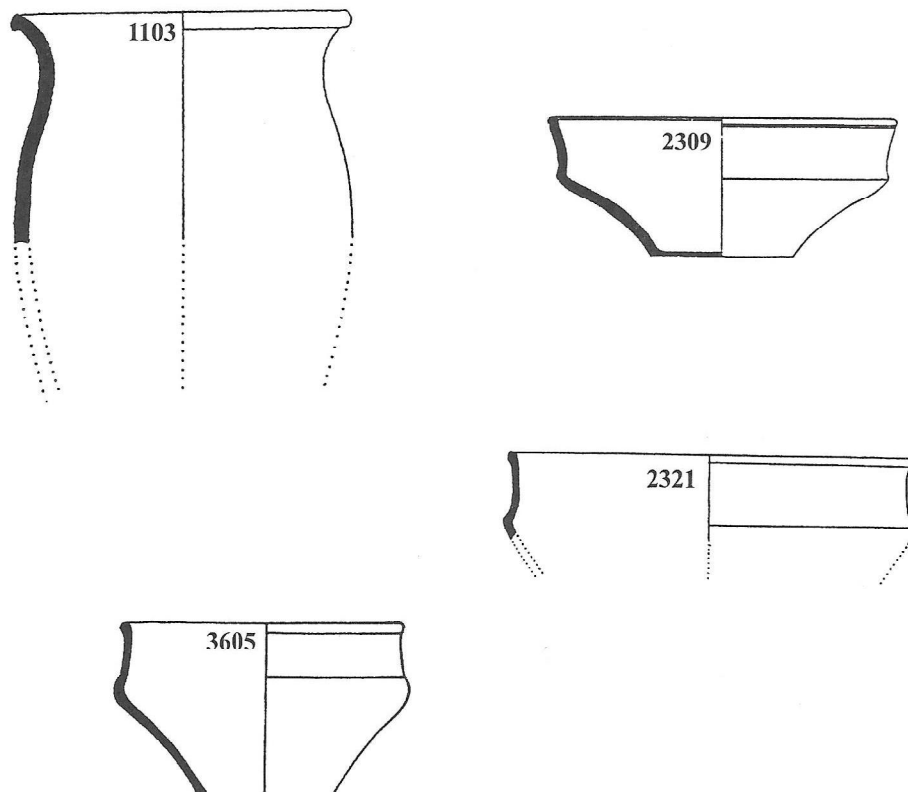


Figure 24 Vessel forms from Droberjar's typology (Droberjar 1997, 44, 51, 52 and 59)

Four diagnostic rims were found that could be dated with some precision. All of the vessels were hand made. (1) The first rim (Cat. No. 535, Fig. 16) is from an open form of two pieces. The upper piece was the rim and bent outward; the lower piece having walls bent inward at an angle instead of a curve. There is a lip or ridge at the join of the upper and lower portions of the pot. The edges are sharp, showing a higher quality of workmanship. The fabric is brown (7.5YR 5/2) and the surface was rubbed with graphite and polished, although much of this has been worn away. (2) The second rim (Cat. No. 493, Fig. 17) is an open form having a lip bent outward joined to a straight neck. There is a bulge at the shoulder of the pot after which it would appear the body of the pot curves gently inward. The fabric is coarse with many inclusions and the surface shows burning or discoloration from being close to high heat. The clay is mottled with light to strong brown colors (7.5YR 6/4 and 4/6). (3) The third rim (Cat. No. 1230, Fig. 18) is from a less open form, having a pronounced lip bent outwards sitting on a small neck. The shoulder is shallow and the body is indeterminate since there is nothing left. On the shoulder is a decoration of finger-notches in a row. The fabric is coarse with many inclusions and is a very dark gray (10YR 3/1) in color, while the surface is rough with no treatment. (4) The



Roman sherd
Cat. #1231
STP D-20

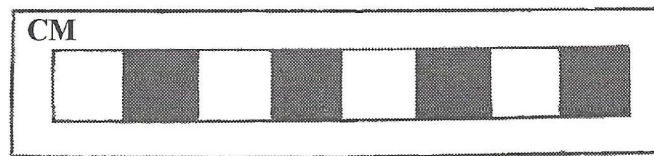


Figure 25 Roman sherd with provincial decoration

final rim (Cat. No. 33, Fig. 19) is from a small open-form vessel with sharper edges than in the other vessels discussed so far. The surface appears to have been polished or buffed and the fabric is very fine with small inclusions. The fabric is a uniform very dark gray (10YR 3/1) to black in appearance.

The grubenhaus excavated by V. Turčan in 1982 at Urbárske sedliská yielded similar ceramic decoration and forms, dating the site to the middle of the second century AD. (Turčan 1985, 114). The first rim (no. 535) is similar to Turčan's vessel 2 (Fig. 20) in his excavation report, while the third rim is similar in form and decoration to vessel 5 (Fig. 20) (Turčan 1985, 97).

When we look at the recent excavations at Bratislava-Trnávka by Dr. V. Varsik, we see similar vessel forms again. The first rim (no. 535) from our survey area is similar in form to vessel 3 from Grubenhaus 3 (Fig. 21) (Varsik 2002, 144). The second rim (no. 493) is similar in form to vessel 20 from Grubenhaus 30 (Fig. 22) (Varsik 2002, 147). Again we see the same repertoire of decorative elements used on the vessels. The sites at Bratislava-Trnávka have been dated to the late 1st century into the early 2nd century (Varsik 2002, 139).

For further comparison, if we look at published German pottery from Moravia we see similar forms again, dating to the second century AD. Using Droberjar's typology put forth in *Studien Zu Den Germanischen Siedlungen* (1997), the decorative elements found during the survey fit into the types 111, 112a, 175 and 340 (Fig. 23) (Droberjar 1997, 31, 32 and 36). Among the vessel form typology, our first rim (no. 535) fits into form 3605; while the second rim (no. 493) fits in with form 2309; the third rim (no. 1230) fits in with form 1103; and the final rim (no. 33) fits in with form 2321 (Fig. 24) (Droberjar 1997, 44, 51, 52 and 59). These forms were found in Morava at Blučina and Komořany, which date to AD 160–200 (Droberjar 1997, 232, 245, 248 and 259).

The three Roman pieces found were poorly preserved body fragments. Two were

Figure 26 Form used for the survey.

Surface Survey Form

Site: _____ Date: _____

Recorder: _____

Transect Number: _____ Direction: _____

Meter Point: _____

Number of Artifacts: _____ Number of Sherds: _____

Transect Number: _____ Direction: _____

Meter Point: _____

Number of Artifacts: _____ Number of Sherds: _____

Transect Number: _____ Direction: _____

Meter Point: _____

Number of Artifacts: _____ Number of Sherds: _____

Transect Number: _____ Direction: _____

Meter Point: _____

Number of Artifacts: _____ Number of Sherds: _____

Transect Number: _____ Direction: _____

Meter Point: _____

Number of Artifacts: _____ Number of Sherds: _____

undecorated, but one (Cat. No. 1231) had a common provincial decoration of notches placed in rows (Fig. 25). Since they were body fragments they could not be dated. They are provincial in origin, coming most likely from a frontier source, such as Carnuntum or Gerulata in Pannonia.

Based on the few diagnostic pieces found during the survey and compared to other excavations in the region, the ancient German component of Urbárske sedliská dates to some time during the first half of the second century AD.

After the Roman Period, there is a fall-off in ceramics until the modern period. Only ten pieces could be identified as belonging to the Medieval and Renaissance Periods, while 95 sherds could be identified as being modern. Among the pieces from the Middle Ages is a rim and a body sherd dating to the 13th century. There is great variety in pottery types from the modern period, ranging from poor-quality ceramics to glazed pieces to porcelain.

Conclusions

Urbárske sedliská is a much more complicated sight than first envisioned. The field survey did provide enough evidence of ancient German habitation for the second phase of the project to be successful in locating cultural features. With the presence of pottery from so many periods, however, it becomes clear that further exploration of the area and adjoining fields needs to be done to better understand the total history of the site.

Shovel test pits are a relatively inexpensive and technically simple method for surveys intended to assess artifact density on a known site. A small crew can cover a large area and through artifact density can better choose where to open larger units that will have a greater chance of exposing features. Shovel test pits can also provide a basic overview of a site, providing evidence for the different cultural horizons present and even date ranges for the different periods. Shovel test pits, however, are a destructive technique just like full-scale excavations. Careful records need to be kept for the STPs, especially if some STPs are later found to have penetrated cultural features. The artifacts found in these STPs would have to be placed back into the context of the cultural features.

The weakness of STPs for discovering unknown sites has been mentioned above, especially in reference to small sites both in size and artifact density. Shovel test pits are also limited to the detection of near surface sites. Despite these limitations and because no better alternatives have been developed, STPs are still widely used (Collins and Molyneaux 2003, 63). When surveys are planned, with STPs as part of the project, other methods of subsurface detection are recommended to be done in conjunction. If possible, non-destructive techniques, such as magnetometer, resistivity, or conductivity surveys would provide added information that may aid in the discovery of new sites, while overcoming some of the shortcomings of STPs.

In regards to Urbárske sedliská, the survey has shown that the site was occupied from the Neolithic to the present. When looking at pottery percentages, the greatest amounts that could be identified came from the Neolithic/Eneolithic, Roman Period, and modern times. The pottery densities during these periods indicate a greater human presence. Even though the focus was ancient German, the number of Linear Ceramics found at the site also requires further study and it is possible that structures from that period may exist at Urbárske sedliská. Of the total number of ceramics found during the survey, ancient German sherds make up only 8% while Linear makes up 13% (Table 4).

Two STPS, C-15 and E-15, had a high density of German pottery, including diagnostic pieces. These pieces were dated to the first half of the second century AD, thereby providing a rough idea for the period of occupation. The presence of animal bones and a very dark organic rich soil was also an important indicator that these two STPs were important. The fill of a grubenhaus is usually a very dark soil made up of cultural material and organic material, such as animal remains, wood and charcoal. As mentioned before, when units were opened at the two STPs, two German grubenhäuser were discovered. Future publications will provide a detailed analysis of these two huts, which fall outside the scope of this paper.

Endnotes

- ¹ Department of Archaeology, Boston University, 675 Commonwealth Avenue, Boston, MA 02215, USA.
- ² I would like to thank the staff of the SNM-Archaeological Museum in Bratislava, especially Dr. Vladimír Turčan and Dr. Štefan Holčík, for providing me the opportunity to undertake this project as well as for all the support they gave me during my stay in Slovakia. A special thank you is also given to my field assistants: P. Nagy, D. Nagyová, V. Zervan, M. Fratrič, and A. Mongiello, whose hard work allowed this project to be successful. I would also like to thank Dr. James Wiseman for reading an early draft of this paper, providing helpful corrections and suggestions. Any remaining errors are entirely my responsibility.
- ³ Personal communication with Dr. Turčan.
- ⁴ It is without question that the success of the survey increases proportionality to the amount of STPs dug. Nance and Ball provide a detailed analysis of using test pits in survey, looking at their reliability and how best to do test-pit sampling (Nance – Ball 1986). Density of artifact concentration plays a large role in the success of test-pit sampling (Nance – Ball 1986, 471–472). In this regard, I note that Urbárske sedliská has a high artifact density.
- ⁵ In a conversation with Dr. Farkaš about the sand dune, it was postulated that the dune's formation would have happened during the Pleistocene.
- ⁶ My field assistants told me that the Soviet-Union-era combines were famous for breaking down quickly and also for losing parts as they worked across the fields. The combines were copies of American models.
- ⁷ Pottery was identified with the help of Dr. Vladimír Turčan (Roman and Late Antiquity), Dr. Zdeněk Farkaš (Mesolithic and Neolithic), Dr. Juraj Bartík (Bronze Age), and Magister Igor Bazovský (Roman) who are all part of the SNM-Archaeological Museum. I am grateful to them for their help, although any errors remain my responsibility.

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PREDBEŽNÁ SPRÁVA O ARCHEOLOGICKOM VÝSKUME V STUPAVE, V POLOHE URBÁRSKE SEDLISKÁ

ERIC VRBA

V júli 2002 sa uskutočnil archeologický projekt s cieľom preskúmať germánske osídlenie v blízkosti rímskej stanice v Stupave na juhozápadnom Slovensku (obr. 1). Miesto výskumu sa nachádza v polohe Urbárske sedliská, ktorá leží 800 m severozápadne od lokality Stupava (obr. 2). Prvý archeologický výskum sa v týchto miestach uskutočnil už v roku 1982, kedy bol odkrytý zahĺbený dom a hrob z doby bronzovej. Terénne práce v roku 2002 boli zamerané na ďalšie preskúmanie tohto areálu s cieľom lokalizovať germánske osídlenie. Keďže lokalita už 20 rokov nebola archeologicky skúmaná, bolo potrebné zvoliť najvhodnejšie miesta pre získavanie archeologického materiálu. Preto boli v rámci terénneho prieskumu vyhlíbené pokusné sondy 50 × 50 × 50 cm každých 5 m pozdĺž línií zvaných transekty, vzdialených od seba taktiež 5 m (obr. 3 a 4). Materiál z týchto jám bol následne vyhodnotený (obr. 7).

Na základe analýzy koncentrácie nálezov a ich kultúrnej príslušnosti bolo možné stanoviť pravdepodobné miesta výskytu archeologických objektov, predovšetkým germánskych obydlí. Kvôli verifikácii takto získaných podkladov bol vykonaný aj magnetometrický prieskum. Celkovo bolo vyhlíbených 147 pokusných sond na ploche približne 3 650 m², z ktorých sa podarilo získať 717 predmetov, z toho 74 % tvorí keramika, ktorá pochádza predovšetkým z troch období. Neolit/eneolit je zastúpený kultúrou s lineárnou keramikou, z doby rímskej sú prítomné hlavne fragmenty germánskych nádob a tretiu skupinu tvorí novoveká keramika (obr. 13, 16–19).

V keramickom súbore sa vyskytli štyri okrajové črepy germánskeho pôvodu datované do prvej polovice 2. storočia. Na iných fragmentoch sa objavovali bežné germánske výzdobné prvky ako nechtové záseky alebo koncentrické krúžky (obr. 5). Najprínosnejšie boli dve pokusné sondy (C-15 a E-15), v ktorých sa nachádzala vysoká koncentrácia germánskej keramiky premiešanej so zvieracími kosťami, v pôde bohatej na organické zvyšky. Tieto dve plochy sa stali východiskom pre druhú fázu projektu, kedy boli vyhlbené väčšie výskumné sondy.

Výsledkom takto vedeného archeologického výskumu bolo odkrytie dvoch germánskych chát, ktoré budú publikované.