

METAL DETECTING SURVEYS IN THE AQUINCUM MUSEUM

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Molehill-like mounds, pits of the size of a bomb crater, trenches of unknown origin... Although the heavily built-up and intensively used area of the Hungarian capital is far from favorable in terms of metal detecting surveys, from the 2000s onwards archaeologists of the Budapest History Museum have often chanced on traces of illegal metal detecting and the robbing of archaeological sites. The straw to break the camel's back came in summer 2005 when metal detecting antiquaries were caught red-handed on the west side of Aquincum's Roman Civil Town. This experience led scholars to the conclusion that the problem must be tackled in the capital city, and then came the idea to involve amateurs and enthusiastic laymen with a strong interest in local history so that they can contribute to real archaeological research as volunteers.



1. The baseball field and the Roman Civil Town of Aquincum from a bird's eye view

TREASURE HUNTERS, LAY SCHOLARS, ARCHAEOLOGISTS...

Metal detecting has been used by the military, especially by bomb-disposal experts, as well as by archaeologists at excavations for a long time, but for the latter it remained an occasional asset until the 1980s. Since then, it has become fashionable for laypeople to make their own D.I.Y. metal detectors and go treasure hunting in the hope of financial gains or simply for fun. Reports on the robbing of archaeological sites appeared in the newspapers already in the 1970s,¹ and yet the dramatic spread of metal detectors in the 1990s found the heritage protection institutions of post-1989 Hungary completely unprepared. In this period treasure hunting first targeted the Roman sites of Transdanubia but later no renowned site remained undisturbed. Bronze and Iron Age hill forts, churches in the Great Hungarian Plain, Roman forts and villas, often located in national parks, were all affected and sometimes even seriously damaged. Estimations are that ca 2,500-3,000 metal detecting hobbyists were active in the country in 2005. While many of them specialized in WWII relics, others were after archaeological finds, and a small group specifically looked for artifacts to put on the illegal market.



2. Metal detecting on the baseball field

¹ Károly Kiss, "Magyarországra is áttért az orvásítás és a műkincsrablás", *Amerikai Magyar Népszava* 1976 február 13, 14; János Mekis, "Magánásatások, a régészet pártfogói, kincskeresők és bűnözők", *Új Magyarország* 1978/16, 26.

3. *Fibulae (brooches) from the Roman Civil Town*4. *Buried Roman iron tools unearthed from the baseball field*

Professionals have called for a tougher legislation long since, but preventive measures were rarely considered, for example Gábor V. Szabó surveyed Bronze Age hoards in order to collect and document metal finds that were still in their original archaeological contexts.² By the mid-2000s Hungarian researchers realized that metal detecting is an indispensable tool for large-scale excavations: at digs where tons of soil are removed and large surfaces explored within a very limited time frame, small metal artifacts can only be recovered with this method.³

At first, metal detecting was utilized only sporadically at large-scale rescue excavations preceding highway constructions, but from 2007 onwards it became a regular practice to involve professionals and technicians who used to do illegal treasure hunting but now worked for the Cultural Heritage Protection Service.⁴ At the same time, interested laypeople, willing and eager to cooperate, contacted museums all over the country and looked for ways to contribute to real research.

In the years to come, informal meetings and roundtable discussions were organized frequently with the participation of hobbyists and archaeologists proper, in order to create a common platform of collaboration for people who came from different backgrounds but were all dedicated to cultural heritage protection. Proposals to refine existing regulations were tabled—these were also published on-line in 2008, titled *The Guidelines for Ethical Metal Detecting*.⁵

As a result of this new form of cooperation, a number of small finds and assemblages that had been discovered earlier by hobbyists were now donated to museums,⁶ and several authenticating excavations were conducted. Local cooperation projects were imitated, such as the Danube Limes Project,⁷ surveys in Baranya County,⁸ and a community archaeology project organized by the Directorate of Museums in Pest County; the latter gave especially spectacular results.⁹ Some of the volunteers even received public recognition; on the initiative of the Hungarian Association of Archaeologists, István Greman received the István Schönvisner Medal in 2013, and the same decoration was given to József Meleg in 2014. In 2018 Lajos Sándor received Henszlmann Imre award in 2018.

² V. Szabó 2017: 107–134; V. Szabó 2013: 793–815; V. Szabó 2012.

³ Such nonsystematic research was conducted e.g. before the construction of the M7 highway in 2002–2003, at the site Balatonlelle-Kenderföld. Marton – Serlegi 2004: 15–18.

⁴ Ilon 2017: 185–206.

⁵ The proposal was written by hobbyist József Meleg, legal expert Norbert Puskás, and archaeologist Gábor Lassányi. https://regisegbuvar.blog.hu/2009/01/02/a_felelossegteljes_femkeresozes_etikai_kodexe

⁶ Just to name a few: József Meleg donated a Roman period bronze statue of a satyr, found at Biatorbágy (Bartus 2010: 15–25); Gergely Radovics turned in a late medieval hoard from Kesztlöc (Tarbay 2014: 179–297); Csongor Bárczánfalvi gave the museum a fragment of a Roman military diploma from Sándorfalva (Lassányi 2012: 199–204); while László Bernhardt, Norbert Cséri, and János Forgács handed over a strap crossing plate decorated with Avar period ornaments, found in Mány (Fancsalszky 2013: 163–180).

⁷ Visy et al. 2011.

⁸ Most recently: Szabó – Szajcsán 2017: 154–157; Szabó – Bertók – Gáti – Szajcsán 2016.

⁹ Rác 2017.

TWO EXEMPLARY PROJECTS IN OLD BUDA

The Budapest History Museum and the Aquincum Museum adopted metal detecting tools relatively late; the first equipment was bought in 2006, and volunteers gradually joined the museums' team in field surveys. The first large-scale project that involved volunteers was a field walk in the west part of the Roman Civil Town, before the construction of a baseball field in 2012.¹⁰ Archaeological layers were scarcely affected by this construction because the area was leveled by filling rather than by removing soil, and so almost 12,000 m² of this area could be surveyed in the past few years in several stages. Luckily, a 2011 geophysical survey by Stefan Groh and Helga Sedlmayer, done within the framework of a joint project of the Archaeological Institute of Austria and the Aquincum Museum, had already examined the area; therefore, the position of the remaining stone structures was known. Metal detecting brought to light more than 400 artifacts, mostly dated to the Roman period. The artifacts' location was documented using total stations. Find concentration and surface phenomena suggested that Roman buildings stood on the two sides of the east-west oriented main road. The floor must have slanted towards the south, and the number of finds here was much smaller.

Until 2017, altogether ca 70 Roman coins, a large number of clothing accessories, keys, and chest mounts were brought to light from this playing field. The discovered metal artifacts as well as our present knowledge on settlement history suggest that the area was intensively used between the 1st and the early 3rd



5. Half of a Roman bronze lamp, bronze half lamp decorated with a theater mask



6. Roman period bronze vessel decorated with floral ornaments, brought to light from the baseball field

century, and the buildings were destroyed in the 3rd century, perhaps in a Barbarian attack. Another assemblage, recovered with the help of metal detecting, confirms this latter hypothesis on a violent intrusion: four iron tools used in agricultural production, two hoes, one axe, and one spade, were buried in the backroom of a house, probably as a hasty means to hide them;¹¹ the clay that covered them was later burnt. Immediately next to this hoard a storage vessel was buried that yielded one half of a special bronze lamp, bronze half lamp with theatrical mask decorated with a theater mask. Only half a dozen such objects are known from the area of the Roman Empire.¹² Another find of special interest from here is a well-preserved, oval shaped bronze vessel embellished with incised floral ornaments, brought to light in 2017.

The other exemplary large-scale project that involved metal detecting was done in the west side of the Civil Town that is still not built up. Treasure hunting activities had been frequent here since the 1990s. A complex site reconstruction coordinated by Paula Zsidi and financed by the National Cultural Fund (NKA) in 2013-2014 involved metal detecting volunteers.¹³ Only those parts of the area without garbage deposition and considerable vegetation could be surveyed; several hundreds of artifacts were unearthed. Most

¹⁰ Lassányi 2013: 19–31; Lassányi – Rupnik 2013: 101–105.

¹¹ Rupnik 2013: 32–42.

¹² Lassányi 2013: 25–27.

¹³ Lassányi – Zsidi 2017: 273–287; Lassányi – Zsidi 2014: 127–128; Lassányi – Zsidi 2015: 32–50.



7. Lead artifacts decorated with mythological figures, found on the baseball field



8. Roman period iron curb-bit from the Civil Town

of these originated from the Roman Period, and there were a few finds from the Migration Period and the early modern era as well. Geophysical data was available from the Archaeological Institute of Austria here as well and so it was possible to establish connections between demolished buildings of the settlement and archaeological artifacts. The metal detecting and the small test pits yielded altogether 74 Roman coins, most of them dated to the 2nd-3rd century. Clothing accessories, including 38 brooches, were also brought to light; most of these are knee fibulae, but a few single and double knot fibulae, and several ornamented plate brooches were also found, some of which were decorated with swastika, openwork pelta motif, or geometric designs. Belt and strap mounts were discovered in large numbers, many of them had enamel or openwork decoration.

Household items were represented by furniture decorations, cylindrical bronze handles, furniture mounts, bronze chest mounts, and chest handles. A huge amount of lead melt and several lead objects were discovered, as well as votive items. A fragment of a so-called military diploma counts as an outstanding find; it was issued during the joint rule of Marcus Aurelius and Lucius Verus, between autumn AD 163 and summer AD 165, or late AD 166.¹⁴

In summer 2015 another sealed deposit came to light during an authenticating excavation. It consisted of metal objects, mainly chest and furniture mounts, and included an iron sword locket and a curb-bit used to break horses.¹⁵ These objects were probably collected and buried in a shallow pit in the AD 3rd century with the intention to recycle them later.¹⁶

Most of the metal finds originate from the flourishing 2nd-3rd-century Civil Town. Earlier finds, especially coins, are small in number, probably because layers associated with this earlier period may be in several meters' depth as it was seen at previous excavations. Artifacts and coins from the 4th century, postdating the flourishing of the town, are scarcely present in the material examined so far, which confirms the hypothesis that the town's life ceased after the first decades of the 4th century.

THE 'BUDAPEST HISTORY MUSEUM MODEL'

During the work described above, metal detecting volunteers proved indispensable. Gradually, requests have been made to involve in excavations and other systematic field surveys those metal detecting professionals who own high quality equipment and have considerable experience in fieldwork. One reason behind this request is the tight deadlines and schedules of rescue excavations: research has to be conducted on workdays and in office hours, which makes it difficult to cooperate with volunteers. Budapest History Museum uses a combined model; the museum bought several pieces of metal detecting equipment to be used by archaeologists and technicians during soil removal and screening. Volunteers join the team for field

¹⁴ Lassányi 2015: 73–77.

¹⁵ For an analogy see Curle 1911: plate LXXI, fig. 3.

¹⁶ Lassányi – Zsidi 2017: 285, plate 16.

surveys and for small-scale tasks with loose deadlines; they are recruited from among people who have already been tested during cooperations with museums or cultural heritage protection teams. The circle of such people is growing. Lajos Sándor (Sandax Ltd) has productively contributed to salvage excavations since 2014; several closed assemblages were discovered with his help, and hundreds of well-documented archaeological metal artifacts came into the museum's possession through him.

Although this model works well, it leaves limited room for 'community archaeology.' Due to heavy in-building, the capital, and historical town centers in general, are different from other sites in terms of metal detecting projects and volunteer engagement. On the long run, the possibilities of involving more volunteers in heritage protection have to be addressed and explored.¹⁷

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¹⁷ The Budapest History Museum has received significant help from the following metal detecting specialists: István Andrusch, Sándor Gudmon, Lajos Lovász, Ottó Machalitzky, József Meleg, Miklós Molnár, Tibor Nagy, Gergely Radovics, János Róza, Lajos Sándor, and Zoltán Vinis.

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