

JĀNIS CEPĪTIS, LILIJA JAKUBENOKA, JURIS URTĀNS
(Latvia)

THE HISTORY OF RESEARCH ON LATVIAN
CUP-MARKED STONES

Stones with small hollows or pits, known as ‘cup-marked stones’, stand out among stones with marks of ancient artificial treatment in north-eastern Europe as well as in the rest of the world. Many different views have been expressed with regard to the significance, time of use, and ethnic or cultural attribution of these stones, but a consolidated view on these matters has not yet emerged. It is possible that there is temporal and geographical variation in the significance and role of cup-marked stones.

The first discovery of a cup-marked stone in the territory of Latvia was made in 1925 (Štāls, 1926). This was a stone near the homestead of Daviņi in Bērzaine Parish, north-west of the town of Valmiera in the northern part of Latvia close to the border with Estonia. At the time, 17 cup marks were observed on the stone. The stone (Fig. 1) is currently situated near a small watercourse formerly called the Viteke. It must be mentioned that this was a time of intensive discovery of cup-marked stones in Estonia. It is mentioned in an overview article (Tvauri, 1997) that in the year 1921 only 20 cup-marked stones were known in Estonia, whereas 95 such certain stones were known already by 1925. This was a favourable time for the development of the system of protection of cultural monuments, including archaeological monuments, in Latvia as well as in Estonia. At that time, as before, the main interests of Baltic German archaeologists related to burials, hill-forts and stone castles, while the Latvian investigators began to turn their attention to objects connected with worship and ancient traditions. So, in this context the cup-marked stone near the homestead of Daviņi, called *Lielais akmens* (‘Big Stone’), generated interest as an ancient cult object. For this reason it was placed under state protection and was later often mentioned in various publications. Because of insufficient familiarity with studies on cup-marked stones in the neighbouring areas, it

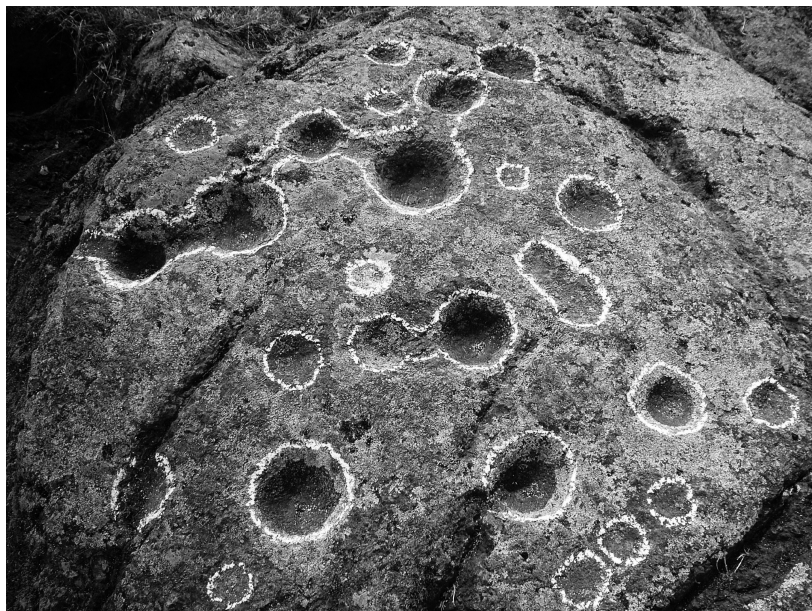


Fig. 1. Cup-marked stone near the homestead Daviņi (photo: A. Grīnbergs).

was not appreciated that this stone is not an isolated, peculiar find, but instead belongs to a class of stones represented in a large territory.

For a long time the cup-marked stone near the homestead of Daviņi remained as a unique stone of its kind in Latvia. In 1963 archaeologist Ē. Muguŗeviĉs carried out an archaeological excavation at a Couronian cemetery of the 12th–14th century near the homestead of Zviedri ('Swedes') in Pūre Parish, south-east of the town of Talsi in the western part of Latvia. During this excavation a stone with 11 cup marks was discovered at a distance of 200–300 m from this cemetery, on the left-bank slope of the River Abava Lowland. This find was recorded along with other results of the excavation; unfortunately, once again the place of this cup-marked stone within the system of ancient cult monuments was not defined. Without any verification, it was pointed out that such stones relate to the Fenno-Ugrian territories (Muguŗeviĉs, 1987, 63). Sadly, this stone was destroyed during land reclamation work.

In 1972 Estonian archaeologist V. Lõugas published a general article on the Estonian cup-marked stones (Lõugas, 1972). The two Latvian cup-marked stones known in the literature were mentioned as well, thus including them in the wider area of distribution of such stones in north-eastern Europe. This made it possible to eliminate the idea of cup-marked stones as a separate group of stones with hollows in Latvia (Caune, 1974, 92). A. Caune called them 'stones with conical or triangular prismatic hollows'. He initially emphasized the idea that these stones relate to folklore material, where the hollows are explained as impressions of the feet of the Devil or other mythological beings.

At the end of the 1970s some new, previously unknown cup-marked stones were found in Latvia. Thus, in 1977 a stone with five cup marks on the top was found at the village of Ruskulji near Lake Ciritis in Aglona Parish (Уртанс, 1978). This stone had been mentioned in the literature and archive material earlier as well, but without information about the cup marks. Moreover, this stone, like the stone near the homestead of Daviņi, had the name *Lielais akmens* ('Big Stone'). This stone is located in the south-eastern part of Latvia. It was assumed to be located at the far eastern fringe of the area of distribution of cup-marked stones, because at that time Latvian investigators knew nothing about the cup-marked stones in Belarus. During fieldwork by the district museum in the 1978 a cup-marked stone with approximately 30 cup marks was found near the homestead of Kalnalammikas in Lode Parish very near the Estonian borderline, north of the town of Rūjiena. This cup-marked stone, too, is situated near a river lowland, that of the River Rūja. This stone has the name *Upurakmens* ('Offering Stone'). A year later archaeologist I. Cimermane found the cultural layer of a settlement with wheel-made pottery near this stone. Also in 1978 during land reclamation works in the lowland of the River Ālande, east of the town of Grobiņa, a stone seemingly having some artificial lines was noticed. This stone was carefully investigated by the local historian J. Sudmalis as well as the amateur archaeoastronomer V. Grāvītis. The latter highlighted the hypothesis that in the remote past the lines on the stone may have been used for astronomical observations of the Moon (Grāvītis, 1978). At the same time, the cup marks on this stone are mentioned only in passing.

Identification of previously unknown cup-marked stones continued in subsequent years (Sēlpils Ezernieki (Urtāns, 1984), Bēzaines Daviņi II). The most striking find was the discovery of about 200 cup marks on a boulder at the homestead of Elekši, west of the town of Priekule, situated in the south-

western part of Latvia (*Urtāns*, 1991). It became evident that cup-marked stones are not particularly exceptional in Latvia.

For the first time in Latvia, an archaeological excavation was conducted at a cup-marked stone in 1978 (*Urtāns*, 1980, 104). In the course of the excavation, covering an area of 14.5 square metres next to the cup-marked stone *Lielaismens* near the village of Ruskūji, mentioned above, it was revealed that the foot of the boulder had been greatly disturbed by recent digging. However, at a depth of 0.47 m a hearth with a diameter of 0.22 m and a thickness of 0.03 m was found. The fire had been built on a small flat boulder (0.18 m × 0.16 m), but no archaeological objects were found there.

Extensive collection of folk-tales began in Latvia in the second half of the 19th century and actively continued in the first half of the 20th century. The assembled and published folklore material often refers to the acts of the Devil as well as other mythological characters. Folklore material was also collected about stones that were later established as having cup marks. As a rule, these stones were large and, of course, could attract the attention of ancient people, regardless of whether they had cup marks. In particular, the stones at Aglonas Ruskūji and Sēlpils Ezernieki are connected with the acts of the Devil. The stone Daviņu *Lielaismens* is connected with the acts of old maids, but it is only with respect to this stone that the folk-tales refer to the cup marks. For example, each hole corresponds to a different deity (*Urtāns*, 1990, 48–49, 87–88). In general, it must be admitted that the folklore does not indicate any special significance or originality of cup-marked stones in Latvia.

In the late 1980s, developing the above-mentioned idea of A. Caune, an attempt was made to identify in written folk-tales a relationship between boulders with imprints of the Devil's feet and cup-marked stones (*Urtāns*, 1989). These boulders have generally not been preserved up to the present day, or else clear pits have not been identified on them. Summarizing the evidence on cup-marked stones in Latvia, an article (*Уртанс*, 1987) was published with data on the four cup-marked stones known at that time, and also presenting data on five other boulders with hypothetical pits resembling cup marks. Thus, the Latvian cup-marked stones were included within the area of distribution of such objects in Finland, Russia, Estonia and Lithuania. Referring to the results of a study of Estonian cup-marked stones, the Latvian examples were dated to the middle of the 1st millennium BC. However, ideas about the significance of these stones were expressed very cautiously. This article is often

cited by researchers in neighbouring countries, so that cup-marked stones of Latvia have been included in the broader geographical distribution of these objects. At the same time, so far in the literature of neighbouring countries the view has dominated that the number of cup-marked stones in Latvia is small in comparison with adjacent territories. V. Grāvītis's attempts to connect stones that may have had a significance in ancient rituals with research on archaeoastronomy attracted the interest of astronomer and surveyor J. Klētnieks. He informed a group of enthusiasts of local history studies, led by G. Eņiņš, about these ideas. This group began to pay attention to cup-marked stones in Latvia from the early 1990s. First, following up a story once heard about a certain stone called *Mēness akmens* ('Moon Stone') in Vidriži Parish, north-west of the town of Sigulda, the members of this group found 72 cup marks on a boulder near the homestead of Kaķi. There was also apparently a line specially marked on this cup-marked stone (Cepītis, 1993). This boulder had already been included in the list of protected monuments of local significance as a possible cult site by the local historian A. Andruss, but the presence of cup marks had not been recorded. It remains an open question whether this stone is indeed *Mēness akmens*. G. Eņiņš's group of local historians subsequently checked all the previously known cup-marked stones in Latvia. Among Latvian cup-marked stones, the most cup marks were counted on the above-mentioned stone east of the town of Grobiņa – about 270 cup marks. Re-establishing the old place-name, this stone is now called Padambji Stone. G. Eņiņš published his observations in a popular article (Eņiņš, 1994), suggesting that these stones be called *bedrīšakmeņi* in Latvian, a term subsequently adopted by Latvian researchers. In his turn, J. Cepītis published an article (Cepītis, 2003) discussing the interpretation of the archaeoastronomical significance of cup-marked stones. However, in the light of subsequent discoveries, he has acknowledged that this interpretation now seems rather premature.

Since that time, the members of the local history group headed by G. Eņiņš – A. Grinbergs, A. Opmanis and J. Cepītis – have found a number of previously unknown cup-marked stones. Let us examine the more impressive examples. In the south-western part of Latvia they include two boulders near the homestead of Mūrnieki in Cīrava Parish, boulders on the former estate of Lukne in Dunika Parish, a boulder near the homestead of Pērkoni in Rucava Parish and a boulder near the hill *Spicāis kalns* ('Peaked Hill') in Medze Parish. In the north-western part of Latvia there are: a boulder at Dižstende in Lībagi Parish,

boulders at the homesteads of Jāņandreji and Ventkalni (Laidze Parish), and boulders at the hill-forts of Buse (Matkule Parish) and Mēžīte (Lauciene Parish). There is also a stone on the bank of the River Salaca in the town Mazsalaca in the northern part of Latvia, and a boulder on the shore of Lake Puškrievi in the village Puskundži in Ilzeskalns Parish in the eastern part of Latvia. On some of the previously known cup-marked stones additional cup marks were found. They occur, for example, on the side, the vertical edges (Ruskuļi *Lielais akmens*) and even on the lower face, as revealed in a hole left by treasure hunters (Daviņi *Lielais akmens*). An interesting fact is the discovery of cup marks on the upper, flat face of a vertically positioned boulder often visited by tourists near the homestead Āži in Dundaga Parish. It must be mentioned that this stone has been regarded as a boundary stone between the territories of the Couronians and Livs in the north-western part of Latvia. Previously unnoticed cup marks have also been found on a boulder popular with tourists: *Rudais akmens* ('Red Stone') in Medze Parish.

A small stone with two pits on opposite faces was found on the shore of Lake Sasmaka near the town of Valdemārpils by local historian Ē. Prokopovičs. This stone remained the only known portable stone in Latvia until 2007, when A. Grīnbergs accidentally found some stones of this type in the apple garden near the estate of Stukmaņi in Klintaine Parish (*Grīnbergs, 2007*). Altogether, six cup-marked stones were found here, and were transported to the Museum of History and Art at the town of Aizkraukle, the centre of the district. Some of these stones had two cup marks on opposite faces; others had only one cup mark. After this publication, new information was received from Bebrene Parish. Local historian Ā. Grūberte had in her private collection of antiquities what seemed to be a small cup-marked stone found in the lowland of the River Dviete, at a place called *Putnusalā* ('Bird Island'), a widely known ancient settlement site near the River Daugava. In the autumn of 2007 we visited the site together with A. Grīnbergs to check this information and were surprised to find that one more definite cup-marked stone had been found nearby during the potato harvest.

There was an idea that these cup-marked stones belong to an entirely different class of historic stones, perhaps even having a technical significance. But after a while J. Zira, the owner of the land where the above-mentioned cup-marked stone on the shore of the Lake Puškrievi is located, showed two small cup-marked stones that had turned up near this stationary cup-marked



Fig. 2. Small cup-marked stones found at Puskundži
(photo: L. Jakubenoka).

stone (Fig. 2). Among the recently found small cup-marked stones the most peculiar example was found near the homestead of Ezerliči in Tilža Parish (in the north-eastern part of Latvia). This stone had the shape of a regular tetrahedron, with one cup mark on each of its four sides.

Recently a review of Latvian cup-marked stones has been published (*Cepītis, Jakubenoka, 2009*). Latvian cup-marked stones have occasionally also been included in general works by scholars from neighbouring countries, where there has also been a rapid increase in the number of known cup-marked stones (see, e.g.: *Biezais, 1985, 6, 29*). It has become clear and generally accepted that there are a lot of cup-marked stones in Latvia. The number could be considerably less than in Estonia, but no smaller than in Lithuania. Moreover, there is an accelerating trend of increase in the number of known cup-marked stones in Latvia. In addition to finds of cup-marked stones with many

cup marks, stones with one possible artificially formed cup mark have been found. It has to be said that without intensive scrutiny because of the cup-marked stones already detected, such stones could remain unnoticed. It is likely that in the future stones with hardly noticeable pits will be found, which can be determined as cup marks only by knowledgeable researchers. Indeed, since cup-marked stones are usually not associated with folk traditions, the possibility of discovering them is purely random, requiring sophisticated skill and relevant experience. Frequently, when checking incoming messages about stones alleged to have cup marks, the reliability of the received information should be assessed, even when it comes from experienced professionals and local historians. On the other hand, people with a heightened sense of perception of non-traditional situations in nature often help to find cup-marked stones. For example, information about a stone near the homestead of Elekši was given by a young man who had been grazing cattle near the stone for a long time. It is worth mentioning that this boulder has become an example of how closely the condition of cup-marked stones must be monitored. Despite the fact that this stone has been listed as a state-protected monument, on one occasion, just by chance, two of the authors of this article managed to save this stone from destruction (*Jakubenoka, 2004*).

Cup-marked stones have now been found throughout Latvia and the opinion once expressed that Latvia constitutes a peripheral territory with respect to the distribution of cup-marked stones can now be regarded only as a fact of historiography. In the light of the latest discoveries it is possible to identify areas in Latvia where cup-marked stones are present: the territory of the former Liepāja District; the area in the vicinity of the town of Talsi; northern Latvia (Vidzeme); eastern Latvia (mainly the Latgale Uplands), and one problematic area – the lowland along the lower reaches of the River Daugava. These areas of Latvian cup-marked stones differ in principle with respect to the characteristic properties of the objects found there. The lowland along the lower reaches of the River Daugava is a problematic area due to the fact that only one large cup-marked stone is known there, and the available information about small cup-marked stones does not permit identification of the characteristics of cup-marked stones of this area. Let us briefly examine the cup-marked stones currently known in Latvia, listed in the following tables. The tables include only those cup-marked stones of the appropriate areas that have been surveyed by at least by two authors of this article.

The cup-marked stones of Liepāja District (Table 1), taken to include only those stones that definitely belong to this class of stones, represent the largest number. This area is adjacent to the areas of Lithuania where cup-marked stones occur. Some Lithuanian researchers (*Vaitkevičius*, 2003, 98) date these Lithuanian cup-marked stones to a later period than the Estonian cup-marked stones. In comparison with other cup-marked stones in Latvia, cup-marked stones in this area have large numbers of cup marks, as many as a hundred. At the same time, many stones with a small number of cup marks have been found in this area. Some of the stones of this area lie on the slopes of small river valleys: the stone at Lukne – the Lukne stream, Pērkoni – the River Sventāja, Padambji – the River Ālande, Elekši and Joguļi – the Virga stream. At the same time, the cup-marked stones from the homestead of Mūrnieki are not associated with any watercourse or water-body. Moreover, these stones are situated close to an artificially shaped rectangle of stones, which was found by local historians and has been investigated by amateurs in archaeoastronomy (*Klētnieks*, 1989). The discovery of cup-marked stones near the homesteads of Mūrnieki, Luknes and Joguļi suggests that cup-marked stones can form systems, and need not always be regarded as individual objects. Unfortunately, after the accidental discovery of three cup-marked stones near the homestead of Luknes, the next investigators to visit the site could not find the third, relatively small cup-marked stone (0.5 m × 0.4 m × 0.3 m) with one cup mark. It may be noted that the cup marks on the Padambji stone have been rather fancifully interpreted as ancient writing (*Paiders*, 2003, 27). The cup-marked stones Padambji and Mūrnieki I are nowadays used in neo-pagan rituals. A. Opmanis recently found a cup-marked stone at the foot of the ancient shore of the Baltic Sea, near the hill *Spicais kalns* ('Peaked Hill') in Medze Parish north of the town of Grobiņa (Fig. 3). This stone has about 100 cup marks, one of which stands out by its size. In principle, the presence of one particularly large cup mark is a characteristic property of Latvian cup-marked stones, but in this case the largest cup mark is particularly extensive. As regards the cup-marked stones near the homestead of Joguļi, it must be said that one of these stones is very impressive, but the second can be recognized as cup-marked only by analogy, taking into consideration the presence of a pit resembling an enlarged cup mark. The cultural monuments inspector for Liepāja district, I. Vize, has provided information about a cup-marked stone near the Gauri burial site in Rucava Parish. This stone has been shattered, and currently

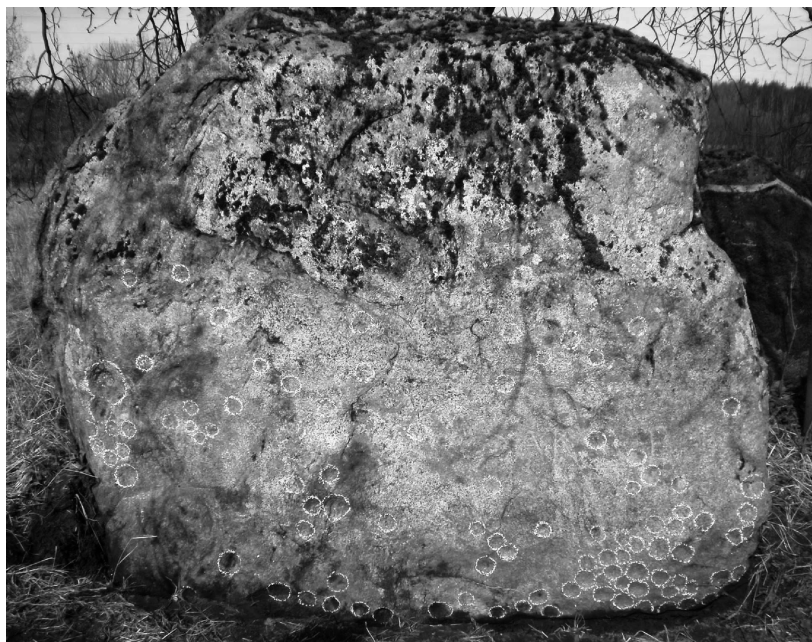


Fig. 3. Cup-marked stone near *Spicāis kalns* (photo: L. Jakubenoka).

it is possible to see only one fragment, although it is not impossible that other pieces of this stone will be found. Although I. Vize describes such fragments, we have not found them. The founder of Liepāja museum J. Sudmalis indicated a stone with a diameter of 1 m and 12 cup marks at the hill-fort of Diždāme in Gramzda Parish, but nowadays it has not been possible to find it. The view has been expressed that there are some cup marks on the surface of Klaustiņi Boulder (Rucava Parish), which is protected as an archaeological monument, but this is not readily apparent. Finally, we may note that a stone exhibited at Apriķi School Museum in Laža Parish, west of the town of Aizpute, can most probably be considered a small cup-marked stone.

Table 1. Stones with cup marks in Liepāja District.

| No | Place and decade of discovery | Size of stone (m) | Number of cup marks | Size of cup marks (cm) | Remarks |
|----|---|-------------------|---------------------|-----------------------------|---|
| 1 | Padambji, Grobiņa Parish 1970s | 2.9 × 2.1 × 1.6 | About 270 | Diameter 4–6, depth 0.5–2.5 | Stone has been moved |
| 2 | Elekši, Priekule Parish 1980s | 2.4 × 1.8 × 0.9 | About 215 | Diameter 4–6, depth 0.5–2.0 | Under state protection |
| 3 | Mūrnieki I, Cīrava Parish 1990s | 2.0 × 1.5 × 0.8 | About 110 | Diameter 4–6, depth 0.5–1.0 | |
| 4 | Mūrnieki II, Cīrava Parish 2000s | 1.7 × 1.2 × 0.7 | 4 | Diameter 4–6, depth 0.5–1.5 | |
| 5 | Luknes I, Dunika Parish 2000s | 4.4 × 2.9 × 0.9 | 10 | Diameter 4–6, depth 0.5–2.0 | |
| 6 | Luknes II, Dunika Parish 2000s | 2.1 × 1.1 × 0.7 | 7 | Diameter 4–6, depth 0.5–1.0 | |
| 7 | <i>Spicāis kalns</i> , Medze Parish 2000s | 2.5 × 1.8 × 0,6 | About 100 | Diameter 4–5, depth 0.5–1.0 | Stone has been moved; partially excavated by researchers; one of the cup marks has a diameter 10 cm, depth 3 cm |
| 8 | Kapsēde, Medze Parish 2000s | 3.9 × 2.8 × 2.0 | 5–10 | Diameter 4–5, depth 0.5–1.0 | Name: <i>Rudais akmens</i> |
| 9 | Odzīņas, Medze Parish 2000s | 3.4 × 2.3 × 1.6 | 6–9 | Diameter 5, depth 1.0 | |

| | | | | | |
|----|--|----------------------|----|--------------------------------|--|
| 10 | Joguļi I, Priekule Parish 2000s | 2.0 × 1.1 × 0.5 | 7 | Diameter 4–6, depth 0.5–2.0 | |
| 11 | Joguļi II, Priekule Parish 2000s | 1.6 × 1.0 × 0.4 | 6 | Diameter 4–6, depth 0.5–2.0 | |
| 12 | Pērkonī, Rucava Parish 2000s | 2.1 × 1.9 × 0.8 | 10 | Diameter 4–6, depth 0.5–2.0 | |
| 13 | Gauri, Rucava Parish 2000s | Fragment of stone | 5 | Diameter 5 depth 1.0–2.0 | |

The cup-marked stones in the vicinity of the town of Talsi (Table 2) are more homogeneous in comparison with those of Liepāja District. There are original discoveries of relatively small cup-marked stones at hill-forts (Buse, Mežīte) and at the place of worship Ilbatu *Zelta kalns* ('Golden Mountain'). There is a hypothesis that two cup-marked stones at the foot of Buse Hill-Fort once constituted a single stone, although doubts have also been expressed on this matter. The process of discovery of these two stones was rather curious (*Jakubenoka, 2007*). We received a message that during a field school for geology students from the University of Latvia near the River Imula they had found a stone resembling a cup-marked stone. When the stone referred to by the geologists was checked, it was concluded that in this case it was only an unusual natural form. But that same day genuine cup-marked stones were found at the foot of the hill-fort. A. Opmanis has provided information about a cup-marked stone (1.9 m × 1.0 m × 0.7 m) with one cup mark on the opposite side of the hill-fort, but the authors of this article have never been able to find it. A cup-marked stone located on the slope of Ilbatu *Zelta kalns* drew the attention of local historian of Talsi District L. Landmane. This cup-marked stone, in the park of Dižstende Manor, was located close to a frequently-used path which leads from the administrative building of Stende Plant Breeding Station to the bus stop, but was first noticed by J. Cepītis (*Kalmanis, 2004, 10*). It should also be noted that the cup-marked stone at the homestead of Jāņandreijs is the second of the known Latvian cup-marked stones after Daviņu *Lielais akmens*



Fig. 4. Cup-marked stone near the homestead Ventkalni (photo: L. Jakubenoka).

which has grooves connecting the cup marks. A few months after receiving the report of this cup-marked stone, another cup-marked stone was discovered on the land of the neighbouring homestead of Ventkalni (Fig. 4). The distinction of these two separate areas of cup-marked stones in the west of Latvia is also justified by the fact that no discoveries of cup-marked stones have been made in the lowland of the River Venta, which separates the two areas. The cup-marked stones in the vicinity of the town of Talsi are less closely connected with the river valleys. The stones at Buse Hill-Fort seem to be essentially connected with the hill-fort, not with the River Imula that flows close by. At the same time, it should be noted that the small cup-marked stone from Valdemārpils was found on the shore of Lake Sasmaka. Also relating to this area of distribution of cup-marked stones is the above mentioned stone, now destroyed, near the homestead of Zviedri in Pūre Parish.

Table 2. Stones with cup marks in the vicinity of town of Talsi.

| No | Place and decade of discovery | Size of stone (m) | Number of cup marks | Size of cup marks (cm) | Remarks |
|----|---|-------------------|---------------------|--------------------------------|---------------------------------|
| 1 | Buse I, Matkule Parish 1990 | 1.2 × 1.1 × 0.5 | 18 | Diameter 4–6, depth 0.5–2.0 | Stone has been moved |
| 2 | Buse II, Matkule Parish 1990 | 1.3 × 0.8 × 0.3 | 1 | Diameter 6 depth 2.0 | Stone has been moved |
| 3 | Āži, Dundaga Parish 2000 | 1.6 × 1.6 × 0.9 | 6 | Diameter 4–6, depth 0.5–1.0 | |
| 4 | Jāņandrei, Laidze Parish 2000 | 1.0 × 1.0 × 0.2 | 36 | Diameter 4–6, depth 0.5–1.0 | Used as the threshold of a barn |
| 5 | Ventkalni, Laidze Parish 2000 | 3.4 × 2.2 × 1.5 | 16 | Diameter 4–6, depth 0.5–1.0 | |
| 6 | Mežītes, Lauciena Parish 2000 | 1,0 × 0.8 × 0.3 | 12 | Diameter 4–6, depth 0.5–1.0 | |
| 7 | Dižstende, Lībagi Parish 2000 | 1.7 × 1.3 × 0,6 | 32 | Diameter 4–6, depth 0.5–2.0 | Stone has been moved |
| 8 | Ilbati, Strazde Parish 2000 | 1.0 × 0.9 × 0.3 | 8 | Diameter 4–5, depth 1.0–1.5 | |
| 9 | Valdemārpils, Dzirnavu iela 11 2000 | 0.3 × 0.3 × 0.2 | 2 | Diameter 5, depth 2.5 | Small cup-marked stone |

Some of the cup-marked stones, namely those in the vicinity of the towns of Mazsalaca and Rūjiena, in the north of Latvia (Vidzeme) (Table 3) are adjacent to an area of cup-marked stones in the south of Estonia. There is Daviņu *Lielais akmens*, whose significance is highlighted by the impressive cup marks on it. In the frame of the Latvian-Estonian project "Unknown cultural heritage values in common natural and cultural space" (2009–2011) two definite cup-marked stones were found near Lake Sārums (Limbaži Parish) and near a well-known boulder called *Velnakmens* ('Devil's Stone') at Jaunutēni in the River Salaca (Skaņkalne Parish). It is debatable whether one can include in this area a cup-marked stone near the homestead of Kaķi, which has a large number cup marks and apparently also an artificially formed line. A major discussion arose regarding the inclusion in the class of cup-marked stones of a stone found near the homestead of Pankas in Kocēni Parish near the town of Valmiera. This stone is now exhibited in a nature park created by geologist D. Ozols at the homestead of Jēči in Naukšēni Parish. Most researchers consider the notches on this stone as naturally formed. Nowadays nobody has been able to find the cup-marked stone Daviņi II, which was apparently discovered in the 1980s. Most likely, this stone is in a heap of boulders formed during land reclamation work, which does not exclude the possibility that the original assessment of this stone was incorrect. The last case concerns a report of a stone near the homestead of Rudiņi in the rural area of the town of Mazsalaca. There is only one known small cup-marked stone in this area, found by L. Gercāne at the homestead of Līvi in Kocēni Parish. This stone has two cup marks symmetrically arranged on opposite sides, and seems artificially worked as a whole. Finally, perhaps within this area of cup mark stones there is a distinct class of worship stones, represented by stones with a relatively large artificially shaped hollow. Such stones have been found near the homesteads of Purteteri in Vaive Parish and Kalna Cikuži in the countryside east of the town of Ape. These stones have been compared in a separate article (*Jakubenoka*, 2005) and most likely relate to a later period. When a report about a stone with one artificial hollow located near a lime tree used as an offering site near the homestead of Virsaīši in Beļava Parish was followed up, it was recognized to be erroneous – the cavity in the boulder was natural.

Table 3. Stones with cup marks in the north of Latvia (Vidzeme).

| No | Place and decade of discovery | Size of stone (m) | Number of cup marks | Size of cup marks (cm) | Remarks |
|----|-----------------------------------|------------------------|---------------------|---|--|
| 1 | Daviņi I, Bērzaine Parish 1920 | 4.0 × 2.8 × 1.7 | 19 | Diameter 3–14, depth 1.0–7.0 | <i>Liēlais akmens</i> , under state protection |
| 2 | Kalnalammkas, Lode Parish 1970 | 5.4 × 2.8 × 1.0 | C. 30 | Diameter 4–6, depth 2.0–3.0 | <i>Upurakmens</i> , under state protection |
| 3 | Kaķi, Vidriži Parish 1990 | 3.3 × 3.0 × 1.2 | C. 70 | Diameter 4–6, depth 0.5–2.5 | Under protection by the municipality |
| 4 | Mazsalaca I, Mazsalaca town 1990 | 1.5 × 1.0 × 0.3 | 12 | Diameter 4–5, depth 0.5–1.0 | |
| 5 | Mazsalaca II, Mazsalaca town 1990 | 1.3 × 1.1 × 0.3 | 10 | Diameter 4–5, depth 0.5–1.0 | |
| 6 | Rīga, Codes iela 45a, 1990 | 3,1 × 1,9 × 1.3 | C. 15 | Diameter 4–6, depth 0.5–1.5 | In the possession of sculptor O. Feldbergs. Probable original location (according to the sculptor): Blome Parish |
| 7 | Līvi, Kocēni Parish 2000 | Small cup-marked stone | 2 | | In the possession of L. Gercāne, resident of the homestead Līvi |
| 8 | Jaunutēni, Skaņķalne Parish 2010 | 2.4 × 1.2 | 2 | The biggest is 10 cm in diameter, 5.5 cm deep | Near the well-known boulder of Jaunutēni in the River Salaca |
| 9 | Unkšas, Limbaži Parish 2010 | 1.9 × 1.8 × 0.9 | C. 7 | Diameter 4–6, depth 0.5–1.5 | Near Lake Sārums |

Despite the small number of cup-marked stones so far discovered in eastern Latvia (Table 4), this territory represents a significant area of distribution of cup-marked stones in Latvia. All of the known stationary cup-marked stones are similar in size, and in the size and number of holes, and two of them are located on the shores of lakes. It seems that the possibility of finding previously unknown cup-marked stones is very high. In recent years some small cup-marked stones have also been found. Among these are the two stones mentioned above in the village of Puskundži, and a peculiar stone found at the homestead Ezerliči. According to a publication (*Вінакурау, Дуччы, Зайкоўскі, Карабану, 2003*), all 33 identified cup-marked stones in Belarus are located in the north-western part of the country. It is possible that this area is related to the area of distribution of cup-marked stones in Belarus, in spite of the fact that in Belarus no small cup-marked stones have so far been found.

Table 4. Stones with cup marks in the eastern Latvia.

| No | Place and decade of discovery | Size of stone (m) | Number of cup marks | Size of cup marks (cm) | Remarks |
|-----|-----------------------------------|-------------------------|---------------------|-----------------------------|---|
| 1 | Ruskuļi, Aglona Parish 1970 | 3.8 × 2.2 × 2.1 | 7 | Diameter 4–6, depth 0.5–1.5 | <i>Lielais akmens</i> , under state protection |
| 2 | Puskundži, Ilzeskalns Parish 1990 | 3.3 × 2.9 × 1.9 | 6 | Diameter 4–6, depth 0.5–1.5 | |
| 3–4 | Puskundži, Ilzeskalns Parish 2000 | Small cup-marked stones | 1–2 | | In the possession of J. Zira, owner of the homestead of Aizezere |
| 5 | Mazie Žurili Nirza Parish 2000 | 2.6 × 2.0 × 1.4 | 4 | Diameter 4–6, depth 0.5–1.0 | |
| 6 | Ezerliči, Tilža Parish 2000 | Small cup-marked stone | 4 | | In the private collection of Ē. Kašs on the homestead of Ezerliči |

Among the cup-marked stones in the lowland of the lower course of the River Daugava (Table 5) Ezernieku *Velna akmens* ('Devil's Stone'), stands out in particular. This cup-marked stone, which lies in wet bushland, is the only one in Latvia related to the tradition of footprint stones. According to the recorded folk-tales, other, deeper recesses on the stone were formed by the Devil, who climbed, sat and slept on this stone. These take the form of a rounded rectangular recess with a diameter of 0.35×0.40 m and a depth up to 8 cm, along with two hard-to-see, small, but artificially formed recesses. It should be noted that astronomic significance has also been attached to a line visible on this stone (Grāvītis, 1995). Significantly, Sēlpils Parish is very rich in preserved cult stones. A survey of these sites, including Ezernieku *Velna akmens*, is described in a separate article (Cepītis, 1997). Stones found at Skrīveri and during the excavation of the settlement of Laukskola near Salaspils have not been re-examined so far and there is no clear conviction that they are actually cup-marked stones. There is a peculiar stone from the homestead Radzes in Koknese Parish, in which 14 holes can clearly be seen. Nevertheless, most researchers doubt whether this stone can be included in the class of cup-marked stones. The reason for this is the fact that these holes do not have smooth bases. However, the presence on this stone of one larger hole and the fact that, before the stone was used as a boundary-mark, it lay in the valley of the River Daugava, can be regarded as serious counter-arguments. Unfortunately, during a recent visit to the homestead Radzes it was found that this stone had already been taken away somewhere, so it has become impossible to establish the truth. Writer A. Goba (Goba, 1995, 222), discussing cup-marked stones, mentions that even in the relatively recent past in the environs of the town Lubāna, on the bank of the Aiviekste, a tributary of the River Daugava, the birth of a child was marked by making a pit in some stone. Indisputable evidence of such tradition has still not been found. Moreover, in the vicinity of the town of Lubāna no cup-marked stones have been found, not even examples with roughly formed holes. It must be noted that this area experienced extensive land reclamation work in the second half of the 20th century. On the other hand, since it is relatively easy to make a roughly formed pit in a stone, the idea is entirely plausible, and perhaps the stone near the homestead Radzes confirms it. There are finds in this area of other possible cup-marked stones that are still being evaluated. For example, there are two such stones near the hill-fort of Avotiņkalns in Klintaine Parish. Concluding the review of cup-marked stones in the

lowland of the lower course of the River Daugava, we should note two boulders already referred to by A. Caune in connection with his suggestion that stones about which there is folklore material indicating traces left by the Devil's feet could also belong to the class of cup-marked stones. Pastamuižas *Velna akmens* ('Devil's Stone') in Koknese Parish is nowadays a popular tourist spot, but no depressions have been observed on this stone (*Urtāns*, 2005). The other stone, on the bank of the River Arona near the homestead Trušļi in Mārciena Parish, nowadays cannot be located. The article mentions other stones in Latvia with similar folklore material (*Caune*, 1974). Most of these stones have not been preserved up to the present day, while those that can be investigated are typical footprint stones. At the same time, with rare exceptions, these stones are located in areas of distribution of cup-marked stones.

Table 5. Stones with cup marks in the lowland of the lower course of the River Daugava.

| No | Place and decade of discovery | Size of stone (m) | Number of cup marks | Size of cup marks (cm) | Remarks |
|-----|------------------------------------|-------------------------|---------------------|---------------------------|---|
| 1 | Ezernieki, Sēlpils Parish 1980 | 6.0 × 4.0 × 1.5 | 2 | Diameter 8, depth 2.0–4.0 | <i>Velna akmens</i> , under state protection |
| 2–7 | Stukmaņi, Klintaine Parish 2000 | Small cup-marked stones | 1–2 | | In the Museum of history and art in Aizkraukle |
| 8–9 | Putnusalā, Bebrene Parish 2000 | Small cup-marked stones | 1 | | In a private collection of Ā. Grūberte on the homestead Atāli, Bebrene Parish |

Cup-marked stones should nowadays be seen not only as objects of scientific study, but as a significant part of the cultural and historical landscape (*Jakubenoka*, 2006a). As such, they have not only scientific but also spiritual value (*Jakubenoka*, 2006b). The spiritual value of cup-marked stones remains, in contrast to their research value. In our opinion no less important is the protection and promotion of cup-marked stones, in order to ensure their preserva-

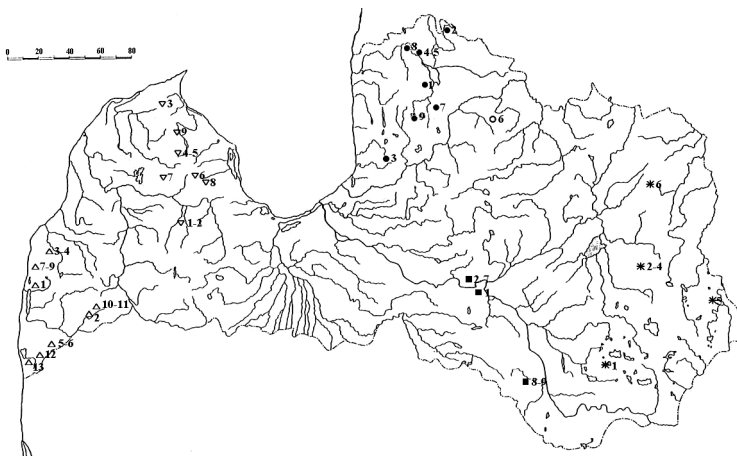


Fig. 5. Distribution of known cup-marked stones in Latvia: Δ – cup-marked stones in Liepāja District; ∇ – cup-marked stones in the vicinity of the town of Talsi; \bullet – cup-marked stones in the north of Latvia (Vidzeme); $*$ – cup-marked stones in eastern Latvia; \blacksquare – cup-marked stones in the lowland of the lower course of the River Daugava.

tion. Previously unknown cup-marked stones are currently being discovered frequently. Unfortunately, only some are under state or municipal protection.

Figure 5 shows the location of the cup-marked stones mentioned in Tables 1–5. The stone now in the possession of sculptor O. Feldbergs is shown at its possible previous location.

Summary

The stones known as cup-marked stones stand out among stones with marks of ancient artificial treatment in north-eastern Europe, as well as in the rest of the world. So far in the literature the view has predominated that the number of cup-marked stones in Latvia is small in comparison with neighbouring countries. The history of research on Latvian cup-marked stones is considered and it is shown that in Latvia there are a large number of cup-marked stones. In the light of the latest discoveries, four reliably identified areas of cup-marked stones are plotted in Latvia, eliminating one problematic area.

Bibliography

- Biezais, 1985. Biezais H. *Die baltische Ikonographie*. Leiden, 1985.
- Caune, 1974. Caune A. Dobumakmeņi Latvijā. *Arheoloģija un etnogrāfija*. XI. Rīga: Zinātne, 1974. 89–98.
- Cepītis, 1993. Cepītis J. Bedrišu akmeņi Latvijā un to arheoastronomiskais skatījums. *Zvaigžņotā Debess*. 1993./94. gada ziema. Nr. 142. 47–50.
- Cepītis, 1997. Cepītis J. Senās Sēlpils kultūrvēsturiskie akmeņi. *Vides Vēstis*. 1997. Nr. 3. 22–23.
- Cepītis, 2003. Cepītis J. Recent findings of cup-marked stones in Latvia and considerations on their archaeoastronomical interpretation. *Science, Higher Education, Technologies, Medicine, Humanities in the Baltics. Past and Present. Abstracts of the 21st International Baltic Conference on the History of Science, Riga, October 13–15, 2003*. Rīga, 2003. 76.
- Cepītis, Jakubenoka, 2009. Cepītis J., Jakubenoka L. Kultūrvēsturisko dabas objektu apzināšanas, aizsardzības un popularizēšanas problēmas; bedrišakmeņu piemērs. *Cilvēks un Vide*, 8. Starptautiskās zinātniski metodiskās konferences “Cilvēks un vide” rakstu krājums. Sast. L. Karule. Liepāja: LiePA, 2009. 21–31.
- Eniņš, 1994. Eniņš G. Noslēpumaino bedrišu akmeņi. *Rīgas Balss*. 06.10.1994.
- Goba, 1995. Goba A. *Akmeņim dziļas saknes*. Rīga, 1995.
- Grāvītis, 1978. Grāvītis V. Laukakmens ar senām iecirstām zīmēm. *Dabas un vēstures kalendārs 1979. gadam*. Rīga: Zinātne, 1978. 123–126.
- Grāvītis, 1995. Grāvītis V. Sēlpils Velna akmens. *Novadu laika grāmata 1996. gadam*. [Rīga], 1995. 108.
- Grīnbergs, 2007. Grīnbergs A. Bedrišakmeņu atklājums Aizkraukles rajonā. *Vides Vēstis*. 2007. Nr. 7/8. 34–37.
- Jakubenoka, 2004. Jakubenoka L. Kultūrvēsturisko akmeņu vērojumi viena gada garumā. *Daba un vēsture 2005*. Zinātne, 2004. 165–171.
- Jakubenoka, 2005. Jakubenoka L. Koki un akmeņi – ar Velnu saistīti un nesaistīti. *Daba un vēsture 2006*. Zinātne, 2005. 127–134.
- Jakubenoka, 2006a. Jakubenoka L. Mitoloģiskie akmeņi un ar tiem saistītā vēstītāj-folklorā – ziņu sniedzēji par htoniskajām dievībām. *Letonica. Humanitāro zinātņu žurnāls. Literatūra folklorā māksla*. 2006. Nr. 14. 77–92.
- Jakubenoka, 2006b. Jakubenoka L. Mazās vērtības lauku kultūrvīdē – folkloras un arheoloģijas vienotājas. *Kultūras krustpunkti*. 3. Iaidiens. Rīga: Mantojums, 2006. 44–52.
- Jakubenoka, 2007. Jakubenoka L. Kuriozi un nejausības bedrišakmeņu meklējumos. *Daba un vēsture 2008*. Zinātne, 2007. 206–213.
- Kalmanis, 2004. Kalmanis Z. *Dzimtas nams*. Dižstende, 2004.
- Klētņieks, 1989. Klētņieks J. Akmeņu mīklas atminējumu meklējot. *Zvaigžņotā Debess*. 1989. gada pavasaris. Nr. 123. 23–26.
- Lōugas, 1972. Lōugas V. Vāikeste lohkodega kultusekivid. *Eesti Loodus*. 1972. 12.
- Mugurēvičs, 1987. Mugurēvičs Ē. Pūres Zviedru kapulauks. *Arheoloģija un etnogrāfija*. XV. Rīga: Zinātne, 1987. 56–67.
- Paiders, 2003. Paiders J. *Senlatviešu rakstības noslēpumi*. Zvaigzne, 2003.

Štāls, 1926. Štāls A. Senējā reliģiskā kulta pieminekļi. *Latvijas Saule*. 1926. 37/38. 401–402.

Tvauri, 1999. Tvauri A. Eesti lohukivid. *Arheoloogilisi uurimusi*. T.1. Tartu, 1997. 11–53.

Urtāns, 1980. Pētījumi Ciriša ezera Ūpursalā, pie Ruskulju akmens un Daugmales kapulaukā. *Zinātniskās atskaites sesijas materiāli par arheologu un etnogrāfu 1979. gada pētījumu rezultātiem*. Rīga: Zinātne, 1980. 103–105.

Urtāns, 1984. Urtāns J. Ezernieku Velnakmens. *Lauku Dzīve*. 1984, 11.

Urtāns, 1989. Urtāns J. Par Velna pirkstiem akmeņos. *Dabas un vēstures kalendārs 1990. gadam*. Rīga: Zinātne, 1989. 212–214.

Urtāns, 1990. Urtāns J. *Pēdakmeņi, robežakmeņi, muldakmeņi*. Rīga: Avots, 1990.

Urtāns, 1991. Urtāns J. Jauns atklājums – Elekšu dobumakmens. *Kursas Laiks*. 12.03.1991.

Urtāns, 2005. Urtāns J. Pastamuižas Velnakmens folklorā un datēšanas princips *postquam*. *Letonica. Humanitāro zinātņu žurnāls. Literatūra folklorā mākslā*. 2005. Nr. 13. 144–155.

Vaitkevičius, 2003. Vaitkevičius V. *Alkai. Baltu šventviečių studija*. Vilnius: Diemedis, 2003.

Вінакурау, Дучыц, Зайкоускі, Карабанау, 2003. Вінакурау В., Дучыц Л., Зайкоускі Э., Карабанау А. Культавыя валуны са штучнымі паглыбленнямі на Беларусі. *Гістарычна-археалагічны зборнік*. 2003. № 18. 231–251.

Уртанс, 1978. Уртанс Ю. Обследование памятников в Валкском и Прейльском районах. *Археологические открытия 1977 года*. Москва: Наука, 1978. 453.

Уртанс, 1987. Уртанс Ю. Культурные камни с углублениями в Латвии. *Краткие сообщения Института археологии*. № 190. Москва: Наука, 1987. 69–73.