# ARCHEOlogija 46

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#### STRAIPSNIAI

## EIGULIAI, ONE OF RIMUTĖ RIMANTIENĖ'S FIRST EXCAVATIONS – A REVISED INTERPRETATION

#### GABRIELĖ GUDAITIENĖ

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The Final Palaeolithic site at Eiguliai in Central Lithuania, was monitored by Konstantinas Jablonskis and his daughter, Rimutė Jablonskytė (Rimantienė), when she was already in her teens. By the late 1940s, the site had been partly destroyed, but not before yielding many surface finds. She, therefore, decided to obtain as much archaeological data as possible. Rimantiene's excavations at the Eiguliai 1 site became one of the very first investigations of her career. The collected lithic assemblage suddenly became a reference in researching Swiderian culture sites. The Eiguliai site was well known to scientists from the Eastern Baltic countries as well as to colleagues in Western Europe. As time passed and new excavation methods appeared, the site, which had been recorded only by several pictures and trench plans and where most of the material had been collected from the sandy surface, came to be regarded as not informative enough and ceded its importance to other newly discovered Swiderian sites. However, during the past five years, with the help of consultations with Rimantiene, the archaeological data from Eiguliai was reviewed and the discussion resumed. The aim of this publication is to present the entire lithic collection of morphological tools ascribed to the earliest stage of the site's occupation, along with some new insights into the archaeological data from *Eiguliai. The site is considered to have been a place that was visited multiple times for hunting purposes.* While the Swiderian culture assemblage predominates, the possibility of discussing an even earlier visit pre-dating the Swiderian culture is considered. Various remains of archaeological features once recorded at the site are reviewed and their interpretation is clarified: there are probably only a few features that could be ascribed to the Stone Age, contrary to what had been previously proposed. An analysis of the lithic assemblage has shown that people had probably brought flint material to the site, but did not stay there for long, and made quick decisions when tools needed to be produced.

Keywords: Rimute Rimantiene, Final Palaeolithic, Swiderian, Brommean.

Vėlyvojo paleolito Eigulių senovės gyvenvietę Vidurio Lietuvoje aptiko ir žvalgė Konstantinas Jablonskis su savo dukra Rimute Jablonskyte (Rimantiene), kai ji dar buvo paauglė. Penkto dešimtmečio pabaigoje, kai šioje vietovėje prasidėjo tilto statybos darbai, jie jau buvo surinkę daug titnaginių dirbinių, ir tyrėja nusprendė atlikti šio objekto tyrimus, surinkti kuo daugiau archeologinės medžiagos. Šie kasinėjimai buvo kone pirmieji jos karjeroje, tačiau titnaginių radinių kolekcija netrukus tapo etalonine medžiaga Svidrų kultūros tyrimuose. Eigulių senovės gyvenvietė tapo žinoma tiek Rytų Baltijos regiono, tiek Vakarų Europos archeologams. Vėliau, atsiradus naujiems tyrimų metodams, šis objektas, iš kurio buvo žinoma daugiausia paviršiniai radiniai ir keletas nuotraukų, buvo pradėtas laikyti tik iš dalies informatyviu, tad užleido savo svarbą naujai tyrinėtoms Svidrų senovės gyvenvietėms. Vis dėlto pastaraisiais metais, konsultuojantis su pačia R. Rimantiene, Eigulių archeologinė medžiaga buvo peržiūrėta iš naujo siekiant tikslinti jau turimus duomenis.

Šiame straipsnyje pristatoma pilna titnaginių dirbinių, galimų priskirti ankstyviausiems vietovės apgyvendinimo etapams, kolekcija, pateikiama keletas naujų įžvalgų. Ši gyvenvietė interpretuojama kaip keliskart apgyvendinta, lankyta vieta. Nors Svidrinis inventorius dominuoja, svarstoma galimybė identifikuoti galbūt ir ankstyvesnio apgyvendinimo etapą. Įvairūs objektai, aptikti senovės gyvenvietės ribose, interpretuoti iš naujo, svarstomas jų archeologinis pobūdis. Ko gero, tik keletas iš anksčiau paleolito epochai priskirtų objektų iš tiesų būtų galimi traktuoti kaip tos epochos gyvenvietės palikimas. Titnaginio inventoriaus ir titnago skaldymo technologijų analizė rodo, kad titnago žaliava čia buvo atsinešama, čia apsilankę žmonės neužsibūdavo ilgai ir kartais darė skubotus sprendimus gamindamiesi įrankius.

Reikšminiai žodžiai: Rimutė Rimantienė, vėlyvasis paleolitas, Svidrų kultūra, Bromės kultūra.

#### **INTRODUCTION**

A person, who has personally met five generations of Stone Age researchers and has outlived three different theoretical schools of archaeology science, is certainly a rarity. Today, over a cup of coffee, Rimantienė has become the most interesting companion one can imagine: so many topics can be covered: the history of archaeology, literature, languages, academic life, international communication issues.... She still has opinions about recently published books and papers; she is still concerned about the questions she raised in her own written works decades before. Several years ago, Eiguliai, a Final Palaeolithic site on the lower reaches of the Neris, became one of the most discussed topics in the hours-long meetings with Rimantienė. Following a re-evaluation of the artefact collection, which provoked detailed discussions, this article presents some of the latest insights on this prehistoric site. The investigations at Eiguliai can be seen as some of the very first steps in the long and fruitful career of Rimantiene in Stone Age archaeology. They symbolize her contribution to Final Palaeolithic and Mesolithic archaeology in Lithuania: the book *The Palaeolithic and Mesolithic* in Lithuania (Палеолит и мезолит Литвы) (1971), which published archaeological data from this site, is, according to Rimantiene herself, her 'donation to the Lithuanian Palaeolithic and Mesolithic'. Even though cited many times (Taute 1968; Šatavičius 1997; 2001; 2005a; Ostrauskas 1998; 1999; 2002a; Girininkas 2009; etc.), her thoughts on this data are still relevant.

#### A HISTORY OF RESEARCH

Rimantiene's archaeological work started when she was a teenager. Throughout 1930s and 1940s, along with her father, Jablonskis, she has collected artefacts from the riverbanks Lithuania's two biggest rivers, the Nemunas and the Neris. At home, she helped him to sort the finds into small cigar boxes and bags. Thanks to their work, some of the very first 'Mesolithic Swiderian' sites were included in Lithuanian archaeology and many drawings of the lithics were published (Puzinas 1938a).

The Eiguliai 1 site was one of the first sites discovered in the lower reaches of the Neris (Покровский 1899; Tarasenka 1928; Puzinas 1937). Back in the late 1930s, this area was assigned to the Mesolithic Swiderian-Tardenoisian culture. For the first time, scientists from other countries learned about the prehistoric sites situated on the banks of the Neris (Puzinas 1938a; 1938b). Simultaneously, the concept of a pre-Neolithic date for the appearance of the first inhabitants in Lithuanian territory was introduced. The Radikiai site, 5 km from Eiguliai, was represented as one of the most important Swiderian sites in Lithuania (Puzinas 1940). On the basis of the archaeological data and the comparative material from other countries, it was assumed that the first people had reached Lithuanian territory from the southwest, but did not go further than the northern part of the Neris basin area. The Eiguliai site was situated on this presumed 'border'.

In the meantime, Jablonskytė (Rimantienė) and her father continued their investigation, visiting many places in an area of around 4000 km<sup>2</sup> and adding thousands of artefacts to their private collection. At that time, a flint assemblage was interpreted on the basis of typology, patina colour, the regularity of the shape, and the knapping technology. The artefacts from the Neris valley were ascribed to either the Mesolithic or the Neolithic.

In the mid 20<sup>th</sup> century, Jablonskis' private collection was carefully sorted by Rimantienė and later became the property of the National Museum of Lithuania. However, one important source of information, Jablonskis' 1937–1939 diary, was lost during the Second World War when a Russian soldier jumped into their house through a window and stole it. Nevertheless, it is possible to trace an accurate history of their surveys as the find labels include the exact dates of their expeditions. Many of the sites were visited multiple times.

In the 1940–50s, several sites in the Neris basin were investigated archaeologically. In 1948, Jablonskytė has decided to excavate at the Eiguliai site. From the large collection of surface finds she knew it to be a promising prehistoric object. Its lithic assemblage was nearly the largest of all the sites in this area. The discovered data was published and the most representative artefacts put on museum display to represent the Mesolithic period (Jablonskytė-Rimantienė 1956; Яблонските-Римантене 1959).

When a comprehensive study of Lithuanian archaeology was prepared in 1961, Rimantiene's insights on the Eiguliai finds were taken as the basis for depicting the Stone Age (Kulikauskas *et al.* 1961). Despite being a fundamental work for many decades, an advanced concept of the first settlement of the Neris basin had to be prepared. Rimantiene associated some sites from that area to the Late Palaeolithic, and so, a concept for the pre-Mesolithic dating of the first settlement of this area was delineated. It was defined by several distinguishing archaeological groups/cultures (Римантене 1962):

- The Late Palaeolithic Peribaltic Magdalenian group (related to the Ahrensburg, Bromme and Lyngby cultures);
- 2. The Late Palaeolithic Swiderian group (related to the Solutrean tradition and Masovian cycle), an example of which was Eiguliai 1 site. Rimantiene associated it with the Early Swiderian stage: points with a not tightened tang were regarded as predating those with a tightened tang.
- 3. The Early Mesolithic Epi-Palaeolithic culture, a continuation of the Late Palaeolithic cultures in a complex form, with all the elements interchanged.

Soon after, thanks to Rimantiene's correspondence with archaeologists from other countries and publications written in foreign languages, the Eiguliai site became well known internationally (Яблонските-Римантене 1966; Taute 1968) and was associated with the Final Palaeolithic Swiderian culture. It has to be mentioned that in the 1970s, only 29% of the Eiguliai lithic assemblage of morphological tools had been published and only 17 redrawn implements were presented in the literature intended for Western European readers.

Unfortunately, the Eiguliai 1 site was destroyed during the construction of a highway bridge five years after the archaeological data had been published (Яблонските-Римантене 1959). Nevertheless, it was included in the Atlas of Lithuanian SSR Archaeology (Rimantienė 1974), became one of the main collections representing Swiderian culture, and was analyzed in archaeological works in the Baltic region (Rimantienė 1984; Šatavičius 2001; Кольцов, Жилин 2008; Girininkas 2009).

At the start of the new century, a new generation of archaeologists started investigating a range of newly discovered and rediscovered sites. Several studies on Late Palaeolithic and Mesolithic archaeology were published (Šatavičius 1997; 2001; 2005a; 2005b; Ostrauskas 1998; 1999; 2002a; 2002b). The basic periodisation and cultural classification was revised and clarified: the remains of at least three archaeological cultures, the Swiderian, Ahrensburg, and Bromme, were confirmed to have existed in the Neris basin. Following research conducted in Poland (Schild 1975), a major change was proposed: to consider the Swiderian points with a tightened tang to be earlier than those with a not tightened tang (Šatavičius 2001). The inventory from Eiguliai was reconsidered, but was not the subject of a more extensive investigation. At times, it has even been regarded as having no value for scientific research since the biggest part of the collection consisted of surface finds. In recent years, the artefacts from Eiguliai were re-evaluated in the context of other Final Palaeolithic sites in the Neris valley (Gudaitienė 2018) and the following analysis was prepared.



Fig. 1. The Eiguliai 1 site on the left bank of the Neris (LiDAR base). Drawing by G. Gudaitienė.

#### A SITE WITH FOUR FINDSPOTS

The site was situated 5 km from the confluence of two major rivers, the Nemunas and the Neris (Fig. 1). Four sandy places, Eiguliai 1A, 1B, 1C and 1D, all separated by a few hundred metres, yielded flint artefacts. It was an area around 300 m from the river's waters, on the second terrace and the edge of the third, where river valley narrows. The closest tributary stream is about 0.5 km away.

#### ANALYSIS METHODS

The artefacts from the Eiguliai 1 site are kept in two places: the National Museum of Lithuania and the Vytautas the Great War Museum. It was, therefore, impossible to refit the flint finds.

A use-wear analysis of the flint artefacts was also regarded as an only partly reliable method because the lithics (and sometimes also pottery) were kept altogether in boxes for 70 years and were undoubtedly affected by friction due to the boxes being moved and the work of the archaeologists studying the collection. Thus, the following steps were undertaken: the collection was visually evaluated and sorted, the morphological tools were drawn while recording the secondary work on the blanks, all of the lithic debitage was visually analyzed, and the various indicators (striking directions, bulb and lip dimensions, morphology of lithics, their patina colour, retouching, the number of decortication flakes and blades, the number of crested blades with and without secondary working, etc.) were evaluated to identify the knapping techniques used at each individual findspot. Some interpretations of morphological tool functions were suggested. Also, since no use-wear analysis was made, some comparisons with artefacts, which had already been thus investigated, were considered (Osipowicz 2010; 2014; Osipowicz et al. 2018).

It has to be admitted that neither the usewear analysis, nor the logical or comparative interpretations could be accepted as fully reliable. However, a refitting analysis should be conducted at the earliest opportunity to conjoin the two parts of the assemblage and to be able to make some clarifications of the knapping techniques that were used.

**Most of the Eiguliai 1A** findspot was destroyed before any investigation was initiated. Several thousand artefacts were first collected and then a small-scale excavation was undertaken by Rimantienė in 1948. The few prehistoric features unearthed were then ascribed to the Stone Age.

The two lithic collections, which were kept separately in two museums, differed: the surface finds were much more intensively patinated than the lithics recorded during the excavations. Thus, no interpretation made on the basis of patina colour was considered reliable.

The flint material used at the site was of a very good quality and the number of lithics indicates that there was no shortage. Presumably, the material was easily brought to the site, which is only tens of kilometres from flint sources in South Lithuania. The cores and their fragments indicate that flint knapping occurred here on many occasions and could have been done by different people. The knapping activity zones were not situated close to a hearth since lithics that had been affected by fire were not numerous. According to Rimantiene's notes<sup>1</sup>, two knapping zones were unearthed.

The flint cores varied in size and form; unipolar as well as double-platform and amorphous cores were used to produce blades and flakes. They were not completely exhausted and so there was perhaps no need to conserve the flint material. A semi-soft flint knapping technique was probably

<sup>&</sup>lt;sup>1</sup> Rimantienė, Rimutė, (no date), Eiguliai, manuscript in the National Museum of Lithuania, Vilnius.



Fig. 2. Points and scrapers from the Eiguliai 1A findspot. Drawing by G. Gudaitienė.



Fig. 3. Scrapers from the Eiguliai 1A findspot. Drawing by G. Gudaitienė.

used for semi-regular blade production. Numerous decortication flakes show that the material was brought to the site as nodules and the cores were produced in situ.

The flint implements were typologically ascribed to the Final Palaeolithic. The tanged points were mostly long and narrow, and had been made from blades (Fig. 2:1–4, 2:7–9). Flat ventral retouching was used to thin the proximal end of the blank and to form a not-tightened tang. Some marginal dorsal retouching was employed on the sides of some points. These finds have been ascribed to the Swiderian culture. One blade with both ventral and dorsal retouching at the proximal end (Fig. 2:7) could have been a blank used for point production. Its tip was broken and the implement seemed to have been left unfinished.

Several points stood out from the Swiderian assemblage. One had a proximal end only partly flattened by retouching (Fig. 2:1), while the other has a rhombus/leaf shape with a tang retouched on both sides (Fig. 2:9).

The morphological scrapers were mostly made of irregular or semi-regular blades and flakes, the working edge having been formed on the distal end of the blank (Fig. 2:5–6, 2:11–19, 3). Only a few tools had a wide scraping edge. Some large flakes discovered at the site displayed utilisation traces similar to marks



Fig. 4. Burins and other implements from the Eiguliai 1A findspot. Drawing by G. Gudaitienė.

left by scraping and had a curved profile convenient for scraping; they could, therefore, be interpreted as morphological scrapers. They show that some quick decisions were made while the work was in progress. A visit to the site might have been short-term or little effort was put into tool production in general. Some of the scrapers might have been hafted as they bear utilization marks or retouching on their proximal part. Some of them have a very similar width and could have been interchangeable parts of the same tool or the result of the standardization of the blade production technique.

One scraper made from an irregular blade bears marks of later retouching and use (Fig. 2:14). It could have been produced in the Final Palaeolithic and then found and utilized again in the Late Mesolithic or Neolithic.

The morphological burins were mostly dihedral with the working edge sharpened several times (Fig. 4). They were produced from semi-regular blades and flakes. On the basis of a micro-wear analysis made on some analogous specimens, it is possible that some of the blanks with retouched and utilized margins from Eiguliai could have been used as hide or bone/antler scrapers (Osipowicz 2014). However, the function of many items was undetermined (Fig. 4). One flake with edges that had been intensively utilized by hitting a hard material had previously been interpreted by Jablonskis as a strike-a-light. But, since the ferruginous rocks used for striking with a piece of flint are not common in Lithuania, it might date to the Iron Age or later, even though there are examples of the use of flint strikea-lights in Swiderian communities in Poland, where ferruginous rocks are also absent (Osipowicz *et al.* 2018). Some other similar finds were also discovered at this site and so it is not an exclusive artefact; its function should be determined after a use-wear analysis.

An artefact which undoubtedly stood out in terms of all of Lithuanian Final Palaeolithic archaeology was an engraved slate pebble discovered in knapping zone 2 at the Eiguliai 1A site. Rimantienė interpreted it as an art object engraved with a flint burin and related to a ritual or magic. In recent decades this artefact has been studied several times and a microscopic analysis has finally revealed that it was probably a piece of slate used to rasp the edge of a flint core before striking it (Rimkutė 2012; Gudaitienė 2018).

The Eiguliai 1 site was also known as yielding some of the earliest campsite features ever discovered in Lithuania, hearths in particular. After a small-scale excavation undertaken by Rimantiene,

several stains of dark grey sand mixed with ashes and charcoal were interpreted as prehistoric hearths and were thought to date to the Final Palaeolithic. The interpretation was soon published and became a well known archaeological discovery. Two features were unearthed at the Eiguliai 1A findspot (Fig. 5–7). They were a very dark brown and sharply contrasted with the surrounding small grained, yellow sand. This kind of preservation indicated that they probably date to later than the Final Palaeolithic. Stratigraphically, they were at the same level as the archaeological horizon with burnt flint flakes and charcoal



Fig. 5. An archaeological feature at the Eiguliai 1A findspot, which has been interpreted as a Final Palaeolithic hearth. *Photo by R. Rimantienė* (colorized at www.colorize-it.com by G. Gudaitienė).

fragments. Rimantiene noted that the charcoal could have come from *Pinus sylvestris* wood. However, the pieces were scattered and were not particularly concentrated around the so-called 'hearths'. As the archaeologist herself noticed, a natural forest fire had been recorded in the area and so the burnt artefacts could have been a result of this accident and later bioturbation. In the 1980–90s, decades after this archaeological data was published, some charcoal samples from the Eiguliai 1 site were investigated using <sup>14</sup>C dating. The results were not published but they did reveal that the 'hearths' dated to the Early



Fig. 6. An archaeological feature at the Eiguliai 1A findspot, which has been interpreted as a Final Palaeolithic hearth. *Photo by R. Rimantienė* (colorized at www.colorize-it.com by G. Gudaitienė).



Fig. 7. A stratigraphic profile at the Eiguliai 1A findspot. *Drawing by R. Rimantienė.* 

Iron Age<sup>2</sup>. On the basis of the recorded data (no artefacts in the fill; a diameter of only 30 cm, etc.), it was difficult to interpret their function. Thus, they were regarded in general as bioturbations and irrelevant for the reconstruction of the first settlement at the Eiguliai site.

Another important discovery at the site was a stain, which was interpreted as a prehistoric building floor and was unearthed at the same level as one of the so called 'hearths' (Fig. 7). Even though it was partly destroyed, some characteristics could be identified (Римантене 1971; Rimantienė 1984): it was over 3 m wide and semi-circular. The 'hearths' were interpreted as having been outside the building. Girininkas suggested an opposite interpretation, that they were inside, and therefore, prehistoric people had probably stayed in the building during a cold season (Girininkas 2009). Stratigraphically, however, this feature was in the same level as the 'hearths' and so might have also been created in the Iron Age.

According to Rimantienė, 5000 m<sup>2</sup> at Eiguliai might have been occupied many times in the Final Palaeolithic. The flint material could have been obtained from the sources situated somewhere nearby and the people did not save it (Римантене 1971; Rimantienė 1984). Her interpretation is convincing, but only cautious assumptions can be made about the duration of the site's settlement due to the loss of the bulk of the archaeological data and the disputable value of the features, which were

<sup>&</sup>lt;sup>2</sup> Personal consultation with dr. Rimutė Rimantienė, 17 January 2014.

erroneously associated with the Final Palaeolithic. However, two flint knapping zones and tens of implements show that it was occupied during at least two moments in the Final Palaeolithic when tools were produced, which cannot necessarily be associated with only one person, only one group of people, or even only one time period. Some people might had visited the site and produced flint implements in the Swiderian manner out of material they brought with them. The implements were used for hunting, processing carcasses, and other activities. The abundant untouched flint debitage might indicate that the people abandoned the site quite soon (perhaps after the hunt was over). Some archaeological features of the earliest settlement stage might have existed in the area destroyed before the site's discovery.

**The Eiguliai 1B** findspot yielded a large collection of surface finds, which were supplemented by archaeological data obtained from Rimantiene's 1952–1953 excavation of 111 m<sup>2</sup>.

Similarly to the Eiguliai 1A findspot, mainly good, high quality flint was discovered. Poor quality flint flakes with chalky inclusions were also present and probably indicate the use of some local raw material. The lithics were covered by a patina of varied intensity due to the effect of post-depositional chemical and physical processes. Some of the finds were a bit reddish. Part of the assemblage, including some of the cores, had been affected by high temperatures and so, presumably, some flint knapping took place at a hearth.

The flint debitage contained different-sized flakes, but, significantly, some of them were much larger than the average size of the blanks recorded at the Neris basin sites (Gudaitienė 2018). Therefore, the nodules used for the cores must have been quite large and heavy. They had to have been transported or brought to the site. Unipolar (conical as well as handle-core), double-platform, and amorphous cores were used for blade production. They were usually not completely exhausted, but some of them displayed significant indications of mistakes made during the knapping process, which in most cases became a reason to discard the core as unusable. In general, the flint was used wisely, producing some good quality blanks, but was not conserved.

Traces of the hard-hammer percussion used for the primary removal of the nodule's surface were apparent on the proximal parts of some flakes. Whereas semi-soft and soft percussion was used for blade production. Some very small regular blades were present, however, almost no tools made from these kinds of blanks were discovered. Regular tiny blades are usually related to Late Mesolithic flint working technology. The lithic assemblage was very similar to the finds at the Eiguliai 1A findspot. However, the larger variety of implement types indicates that the place could have also been inhabited in the Late Mesolithic and Neolithic.

The point assemblage was small, but they were all ascribed to the Swiderian culture. One had been made from an irregular blade (Fig. 8:2) and had a tightened tang formed by flat ventral and marginal dorsal retouching. Three points were a type similar to the ones found at the Eiguliai 1A findspot (Fig. 8:3-5). They had previously been interpreted on the basis of the intensity of their patina and ascribed to the group of 'finds with a thin bluish-whitish patina' (Šatavičius 2001). However, in 2016, all three had a very different colour, but had comparatively more important features in common: knapping technique and size/ proportions. The tip of one had been corrected by several strikes. This technique has not been recorded at other Swiderian sites along the Neris, but was common at South Lithuania sites (Римантене 1971, p. 29, Fig. 18:6-7, 37:7, 65:3, 75:2; Juodagalvis 2001, p. 186-187, Fig. 2.36:21, 2.37:7).

Although the implements described above should be typologically dated to the Final Palaeolithic, they may not have been the earliest finds at the Eiguliai 1 site. Another point made from a decortication flake



Fig. 8. Points and other implements from the Eiguliai 1B findspot. Drawing by G. Gudaitienė.



Fig. 9. Scrapers from the Eiguliai 1B findspot. Drawing by G. Gudaitienė.

and possessing a wide tang formed by marginal dorsal retouching stood out from the assemblage (Fig. 8:1). This technology is closer to the Brommean than the Swiderian: a flake was used as a blank, its bulb was not detached or flattened, and the tool was of rather rough proportions. This implement might indicate a visit by a different group of people, who could typologically pre-date the Swiderian settlement stage. Thus, two separate settlement moments may be considered in the Final Palaeolithic.

Some other artefacts similar to points were also present. They were made from blades produced from unipolar cores, but the technique was unidentifiable. A few of them could have been tools ascribed to the Mesolithic or Neolithic (Fig. 8:6–7), while one item can be interpreted as a borer (Fig. 8:8).

The morphological scrapers were mostly made from semi-regular blades produced from unipolar as well as double-platform cores (Fig. 9). The majority of these tools were medium width (1.6–1.7 cm). There were no exceptionally large scrapers. The working edge was formed on either the distal or proximal part of the blank, sometimes both. In some cases, the sides of scrapers had been retouched or had utilization marks and so might have been used with a handle. All of the implements were formed by simply using the most suitable blank. One item stood out because of its form: it was made from a large irregular blade and



Fig. 10. Burins from the Eiguliai 1B findspot. Drawing by G. Gudaitienė.

had a rather long curved edge retouched on the dorsal side (Fig. 8:15). Another morphological scraper had non-patinated retouch negatives at the edges on both sides; therefore it could have been reused at a later date (Fig. 9:4). This tool could have been chosen among the lithics laying in the sand not only as a useful blank, but also as a tool for a particular function. Thus, a piece of Final Palaeolithic waste might have been seen as a still usable implement by later visitors, which might hint at a different level of flint accessibility in the area in different periods. Significantly, reuse phenomena have also been detected at other sites along the Neris (Gudaitienė 2018). However, this item's use and reuse should be investigated through a use-wear analysis before a comparison of its primary and later function can be made.

Morphological burins, i.e. simple burins on a truncation and dihedral burins with one- or

two-directional angles, were common (Fig. 10). Some were retouched on the sides. This might have been convenient for applying pressure with a finger without getting cutting. This detail could indicate that prehistoric people did not mind a tool's aesthetic form, and secondary working was employed only when it was a question of the basic requirements. In addition, it seems that burins were used for a short time, as their cutting edges had not been resharpened very many times. Thus, decisions on tool making might have been made quickly, within the confines of one job. However, as the latest traceology results have proven, the interpretation of these tools can be quite different from what the use-wear marks indicate: many cases have been recorded where the burin spall appear to have not been used; instead, the implement's sides were the actual working edges, which were used for scraping and other activities, the



Quantity of flint finds

Fig. 11. The flint find distribution in the Final Palaeolithic horizon at the Eiguliai 1B findspot. Drawing by R. Rimantienė.

'burin angle' having been created to form a better butt for the tool (Osipowicz 2014). Thus, without a use-wear analysis, it is difficult to determine whether the morphological burins found at Eiguliai were actually used as burins. Sometimes an end-scraper had a burin spall facet on the opposite end (Fig. 10:2, 10:6). They might also be examples of facilitating the insertion of a scraper into a handle through the removal of several spalls.

Some items, especially those that are not morphological tools, are difficult to date and might be ascribed to a period after the Final Palaeolithic. The pottery finds also indicate a later settlement stage.

As was mentioned before, the Eiguliai 1 site yielded some features associated with the Stone Age horizon. One 52 cm wide, 42 cm deep stain called 'hearth 11' was unearthed in the relatively deepest layer containing lithics at the 1B findspot (Fig. 11–12). According to Rimantiene, the feature's fill was harder than the surrounding sand and contained considerable soot and badly preserved pieces of charcoal. The sediment had presumably been affected by either a very hot fire and/or by fire over a long period. A scraper, a small core, and a blade were discovered in its vicinity<sup>3</sup>. Thus, it might be interpreted as a hearth. However, its dating was based on stratigraphy and, like the results of the



Fig. 12. The stratigraphic profile of a feature at the Eiguliai 1B findspot. The feature has been interpreted as a Final Palaeolithic hearth. *Drawing by R. Rimantienė.* 

dating of the charcoal from the Eiguliai 1 site, the <sup>14</sup>C dating was not published. In 2014, it became unclear whether only the features found at the 1A findspot, or also other features at the site dated to the Early Iron Age. But, according to Rimantiene, 'there were no Stone Age hearths at the Eiguliai site<sup>4</sup>.

In the find distribution plan (Fig. 11), at least one concentration of lithics was recorded 9 m from the presumed hearth. However, the majority of the artefacts were collected from the surface. Postdepositional processes had also contributed to their scattering. Thus, the original distribution of the finds must have been quite different.

<sup>&</sup>lt;sup>3</sup>Rimantienė, Rimutė, (no date), Eiguliai, manuscript in the National Museum of Lithuania, Vilnius.

<sup>&</sup>lt;sup>4</sup> Personal consultation with dr. Rimutė Rimantienė, 17 January 2014

The 1B findspot could have been visited several times in the Final Palaeolithic and the very first settlers might have been a group of people (or a person) who could have known a tool production technology similar to the Brommean, or it might have been brought to the site by Swiderian people from elsewhere. It may be seen as an 'import' since it is difficult to ascribe more tools to this assemblage without a refitting analysis. It could have been the only find representing this stage of the occupation, but its relationship with the Eiguliai 1D findspot is also considerable.

Later, the area was again visited by groups of Swiderian people, perhaps more than once. The remains of a feature previously regarded as a hearth should be interpreted with reservations. The quantity and quality of the flint debitage left at the site and the manner of tool production show that the visits were short-term, but multiple. Raw material was brought to the site and worked in situ, but not completely exhausted or conserved.

The Eiguliai 1C findspot was situated on the edge of the third terrace of the Neris and is at a much higher elevation than the rest of the findspots. It was never excavated, artefacts having only been collected from the surface.

Poor quality raw material was mostly used there. Only a few blanks indicate that there were several cores of a better-quality flint worked in the area. The lithics had a patina due to exposure to the sun and wind. Some of the artefacts, including one core used for blade production, had been affected by high temperatures. This could have been the result of a forest fire in the last millennium or because they fell into a prehistoric hearth.

Almost no flint cores were discovered and so the knapping technology was reconstructed from the visual study of the blanks. Most likely, unipolar and amorphous cores were used and the soft or semisoft knapping technique was employed to produce blades and flakes. The lithic collection contained fragments of several tools, presumably points, made from semiregular blades (Fig. 13:10–11, 13:13). One of them (Fig. 13:11) had a tang flattened by ventral retouching. Another artefact, a knife or point fragment, was atypical because, presumably, its tip was at the blank's proximal end (Fig. 13:10). Another fragmentary retouched blade was tentatively interpreted as the tip of a point (Fig. 13:13).

Several finds were preliminarily associated with the earliest settlement stage on the basis of their morphology and production technology: a scraper made from a large flake (Fig. 13:9), a burin with a bit resharpened multiple times (Fig. 13:2), and some retouched and utilized blades of undetermined morphology. One find was interpreted as an axe fragment. Irregular chipping from rough use could indicate contact with a hard material (Fig. 13:4). Burin spalls were later removed on the side opposite the working edge; thus, it could have been repurposed into a burin-like tool or it could have been set into a handle in this way.

This location could have been a small, short-term campsite with a hearth, where some flint working and other activities occurred in connection with the Swiderian culture. Several tools were repurposed and resharpened many times and so, presumably, these prehistoric people did not bother to produce new tools on new blanks. The work had to be done quickly or, due to their general character, they put little effort into tool production.

The Eiguliai 1D findspot was rather close to the 1B findspot. It was partly destroyed due to sand mining activities. Rimantiene's excavations in the area ( $60 \text{ m}^2$ ) yielded a large lithic assemblage.

Good quality raw material was used at the 1D findspot. The artefacts had a patina of varying intensity and some had been affected by fire. The flint had presumably been brought to the site as nodules and then worked in situ, as a large



Fig. 13. Various artefacts from the Eiguliai 1C findspot. Drawing by G. Gudaitienė.

number of big flakes and decortication flakes was present.

This findspot yielded many cores, mostly with a double-platform, and some multidirectional amorphous, as well as some knapped flint pebbles, which had been used for flake production. Semi-soft and soft knapping techniques had probably been used to produce the blades.

The assemblage contained various implements. Four leaf-shaped points made from semi-regular blades were ascribed to the Swiderian type (Fig. 14:2– 5). Two had dorsal retouching. One stood out: its whole perimeter had been retouched from the ventral side and the bulb had been flattened (Fig. 14:6). According to Rimantienė, it was a retouched burin with a tang, but its form was rather reminiscent of a point (Римантене 1971). In addition, three different fragments of retouched blades, presumably points, were, with reservations, related to the Swiderian tool kit (Fig. 14:7–9).

There were numerous morphological scrapers and burins. The scrapers varied considerably, but most had been created from blades and had only one scraping edge (Fig. 15–16). One had an unusual two-directional distal scraping edge (Fig. 16:3), use-wear marks on both edges, and a burin-like bit. Some scrapers had been retouched or been used on their sides. They had, most likely, been inserted into handles. The width of the scraping edge varied from 1 to 6 cm. Some scrapers also had bits that might have been used



Fig. 14. Points and similar finds from the Eiguliai 1D findspot. Drawing by G. Gudaitienė.

for cutting (Fig. 15:8, 15:15, 15:21, 16:3). The largest tools were produced from flakes, only several from decortication flakes. This characteristic shows that the site's visitors had more flint material than the people at some other sites along the Neris, where scrapers were produced from decortication flakes much more frequently. The majority of the scrapers discovered at this location should probably be associated with the Final Palaeolithic occupation stage.

The morphological burin toolkit was relatively the largest, seeing as it contained over 30 items made from various blanks (Fig. 17–18). This might show that cutting/dividing activities were very important, not only because of the number of tools, but also because of their multiple resharpenings and intensive use. However, as has been mentioned, on the basis of comparisons with some artefacts that have burin facets and were analyzed in Poland, some of them could have also been used for other activities like whittling, grooving, etc. (Osipowicz 2014). Most of the burins were dihedral. Over all, the tool assemblage from the Eiguliai 1D findspot indicates that considerable work had been done at the site. This was presumably the result of a successful hunt. The worked material might have been quite hard, as many of the tools were found broken, probably due to the great pressure placed on them. Some of the burins had retouched edges to use as convenient fingerholds without the risk of getting cut.

The morphology of many of the implements was not determined (Fig. 19–20). The presence of retouched blades and flakes, knives, an axe, and some drilling tools indicated that various activities took place at the site during its habitation in the Final Palaeolithic. The visit was probably not too short: from the time when tools were produced before the hunt until the processing of all of the carcasses was finished. More than one group of hunters might have visited the site.

The majority of assemblage has been ascribed to a group(s) of Late Swiderian visitors, but some



Fig. 15. Scrapers from the Eiguliai 1D findspot. Drawing by G. Gudaitienė.



Fig. 16. Scrapers from the Eiguliai 1D findspot. Drawing by G. Gudaitienė.

implements could be ascribed to some other toolkit, perhaps one connected with the Brommean-like culture identified at the Eiguliai 1B findspot.

Some prehistoric features were unearthed in the same archaeological horizon as the lithics. According to Rimantienė, three hearths and several concentrations of flint finds were discovered. She made small depictions, excavation plans, and drawings<sup>5</sup> (Fig. 21–24). Unfortunately, the features were not photographed. Hearth 1, which was 60 cm wide and 25 cm deep, was recorded in the deepest layer yielding flint artefacts. Some burnt wood fragments and lithics with an intense patina were found in its fill. Another feature recorded in the same level consisted of a 75 cm wide, 35 cm deep stain with a different coloured sediment fill containing soot and charcoal fragments. This could have been a burnt wooden structure or the result of bioturbation. The sediments from the two features in the Eiguliai 1D findspot had no characteristics common to prehistoric hearths (hardness, specific colour, etc.). This is a main difference between the features unearthed in the Eiguliai 1B and 1D findspots. And, like elsewhere at the Eiguliai 1 site, their chronology is questionable because of the missing <sup>14</sup>C dating data. The third feature interpreted as a hearth was a stain,

<sup>&</sup>lt;sup>5</sup>Rimantienė, Rimutė, (no date), Eiguliai, manuscript in the National Museum of Lithuania, Vilnius.



Fig. 17. Burins from the Eiguliai 1D findspot. Drawing by G. Gudaitienė.



Fig. 18. Burins from the Eiguliai 1D findspot. Drawing by G. Gudaitienė.

only 25 cm in diameter, which was found in a higher stratigraphic layer. Therefore, after the revision of the data, it was interpreted as an object of undetermined function, probably bioturbation, that could date to a later period than the Final Palaeolithic.

A 40 cm wide concentration of lithics, including some that were burnt, was found roughly 1.5 m from hearth 1<sup>6</sup>. Another concentration was recorded 5 m away. Both concentrations yielded flint cores and retouched blanks. One contained around 10% retouched finds, the other up to 40%. A knapping zone usually extends beyond a 40 cm area. Thus, the flint debitage might have been shovelled, and then scattered a bit due to post-depositional processes. The shovelling might indicate an intention to settle there for a longer period.

<sup>&</sup>lt;sup>6</sup>Rimantienė, Rimutė, (no date), Eiguliai, manuscript in the National Museum of Lithuania, Vilnius.



Fig. 19. Various artefacts from the Eiguliai 1D findspot. Drawing by G. Gudaitienė.



Fig. 20. Various artefacts from the Eiguliai 1D findspot. Drawing by G. Gudaitienė.



Fig. 21. The profile of the trench at the Eiguliai 1D findspot. *Photo by R. Rimantienė* (Colorized in www.colorize-it.com by G. Gudaitienė).

After every find collected in every stratigraphic layer was taken into account, the lithic distribution exhibits two large concentrations and a few smaller ones (Fig. 23). Without the exact recording data, there is no possibility of analysing the knapping techniques used in each concentration and so it is difficult to determine whether they all could come from the same moment in time.

The variety of the flint tool types and the Swiderian knapping method used to produce them indicate at least one Final Palaeolithic stage in the site's settlement. Presumably, a group of hunters stayed there for a longer period until a large quantity of prey had been processed. The different types of points indicate that the site could have been visited more than once by several different groups of people. A question arises as to whether the Swiderians should be regarded as the site's very first visitors: the relationship between the assemblages

Fig. 22. A stratigraphic profile at the Eiguliai 1D findspot. Drawing by R. Rimantienė.





Fig. 23. The find distribution at the Eiguliai 1D findspot. *Drawing by R. Rimantienė.* 



Fig. 24. Stratigraphic profiles with features, which have been interpreted as Final Palaeolithic hearths at the Eiguliai 1D findspot. *Drawing by R. Rimantienė*.

collected at the Eiguliai 1B and 1D findspots should be taken in consideration, especially when analyzing the presumed Brommean-like toolkit.

The flint working occurred in several zones and so a number of different people could have produced the implements. Some work could have taken place close to a hearth, if one is considered to have existed at the site during the period in question. Other archaeological data, which was not analyzed in this study: potsherds and some flint artefacts typical of the Neolithic or Bronze Age, prove that the site was repeatedly settled thousands of years later when the remains of the first campsites had been covered by a layer of Aeolian sand. Finds from both archaeological horizons had intermixed through time and so part of the assemblage ascribed to the Final Palaeolithic settlement could also be associated with later settlers.

#### **OVERVIEW**

In conclusion, the Eiguliai 1 site was extensive, covering an area of over 50 000 m<sup>2</sup> that was occupied many times in the Final Palaeolithic. The very first visitors may have known a tool production technology similar to that of the Brommeans and, on the basis of the latest Lithuanian Final Palaeolithic chronology (Šatavičius 2005b; Šatavičius 2016), could have camped at Eiguliai in the first half of the Younger Dryas. The predominant assemblage belongs to people related to the Swiderian culture who appeared at the site a bit later. Hunting activity, preparation for it, and some carcass processing work might have been the main reasons for their stay at the site. One hunt had presumably been on a larger scale, which caused a

group of people to camp for a longer time at the 1D findspot. Unfortunately, no prehistoric features other than artefacts can be clearly associated with these prehistoric campsites, with the cautious exception of a presumed hearth discovered at the 1B findspot.

The site could have been visited several times by the same group of Swiderian people, as well as become a place where a few related hunter groups gathered. The visitors knew of a high-quality flint source(s) relatively close to the site and brought many nodules for tool production with them. However, the considerable amount of flint debitage left behind has shown that the Final Palaeolithic inhabitants did not consider the area a place to stay for long. They also apparently did not consider it worthwhile to conserve the flint as they probably knew they would soon be heading south where flint is easily found.

#### DISCUSSION

After many decades, the collection of artefacts from the Eiguliai 1 site is still relevant and important in Lithuanian and Northern European Final Palaeolithic archaeology and remains one of the largest assemblages associated with the Swiderian culture. During those years, some of the interpretations have been revised. On the one hand, the dating of the Mesolithic site was changed to the Final Palaeolithic, with contamination by some later inventory. On the other hand, nearly all of the objects that had been published and became well-known as features of the Final Palaeolithic settlement: the presumed stains of hearths and a hut, were explained as non-archaeological or dating to some later period. The old perspective on the typical Early and Late Swiderian point types was later reversed and affected the interpretation of the Eiguliai 1 site collection as well: the assemblage of points with a tightened tang is now seen as pre-dating the one that contains points with non-tightened tangs (Šatavičius 2001). However, both concepts should be proven or refuted only after a refitting analysis has been conducted. A considerable discussion still needs to be held of the chronology and the concept of the two types coexisting at one site and belonging to the same group of people.

The interpretations once made on the basis of lithic artefact colour appeared to lack any value

after comparing the two collections, which are kept in two museums since all of the finds had been affected by different natural and preservation environments. But after reviewing all of the artefacts, some previously published insights were also clarified. The microscopic analysis of the incisions on the slate pebble that had once been ascribed to some sort of art or magical activity has shown that it should be interpreted as a flint core rasping tool. Thus, the Eiguliai 1 site, once regarded as an archaeological object providing evidence of Final Palaeolithic art and rituals in Lithuania, has to now yield this position to other new discoveries (Rimkus *et al.* 2020).

A flint point from the Eiguliai 1B site evoked a question of the existence of some non-Swiderian culture remnants in the collection. On the basis of its form, proportions, and production technique, it was preliminarily ascribed to some other culture. The only clear message this artefact brings is that it was probably not made by Swiderians. However, it would be very difficult to determine if the owner of this point belonged to the Bromme culture since it is apparently not a typical Brommean point: usually this culture's points are known to have been formed on wide blades, decortication flakes being rarely used for point production. It is an exception and its resemblance to Brommean tools, from a technological point of view, is relatively greater than to the Swiderian points.

At first, the Eiguliai 1 site was depicted as a place occupied several times for a rather long period. The latest revision of the archaeological data has revealed that the site was probably occupied for more than a few times, but the visits might have been rather short. However, by saying 'a long stay' and 'a short visit', archaeologists sometimes have in mind the same period of time, e.g. a few weeks. Thus, in general the depiction of the occupation of the Eiguliai 1 site did not change, and its main character was and still is accepted, i.e. the site represents the remains of multiple visits by different groups of people. In conclusion, the review of the Eiguliai 1 site's archaeological data resulted in some clarifications that are useful for further research. It brings this collection back into the scientific discussion. But many unanswered questions still remain and in the long-term, one of the best methods for obtaining answers would be the refitting of the lithic assemblage, which has not been possible thus far, and a usewear analysis of the implements, the reliability of which should be regarded as disputable because of the natural and post-depositional friction effect on the artefacts, which have been kept in boxes for 70 years.

#### REFERENCES

Girininkas, A., 2009. *Akmens amžius* (=*Lietuvos archeologija*, I). Vilnius: Versus Aureus.

Gudaitienė, G., 2018. *The first inhabitants in the western part of the Neris river basin in Lithuania* (Doctoral dissertation). Vilnius University.

Jablonskytė-Rimantienė, R., sud., 1956. *Pirminės kultūros skyriaus ekspozicijos vadovas*. Kauno valstybinis M.K. Čiurlionio vardo dailės muziejus.

Juodagalvis, V., 2001. Glūko 10-oji akmens amžiaus gyvenvietė. In: Baltrūnas, V., red. Akmens amžius Pietų Lietuvoje (geologijos, paleogeografijos ir archeologijos duomenimis). Vilnius: Geologijos institutas, Vilniaus universitetas, Lietuvos istorijos institutas, 182–187.

Kulikauskas, P., Kulikauskienė, R., Tautavičius, A., 1961. *Lietuvos archeologijos bruožai*. Vilnius: Valstybinė politinės ir mokslinės literatūros leidykla.

Osipowicz, G., 2010. Narzędzia krzemienne w epoce kamienia na ziemi chełmińskiej. Studium traseologiczne. Toruń: Wydawnictwo naukowe Universitetu Mikołaja Kopernika.

Osipowicz, G., 2014. Semi-product, Waste, Tool... Are We Sure? Functional Aspect of Stone Age Morphological Flint Tools. In: Marreiros, J., Bicho, N., Gibaja Bao, J., eds. *International Conference*  on Use-Wear Analysis Use-Wear 2012. Cambridge Scholars Publishing, 398–430.

Osipowicz, G., Sobkowiak-Tabaka, I., Bosiak, M., 2018. The oldest strike-a-lights in Poland. The preliminary results of microwear and chemical analysis. In: Valde-Nowak, P., Sobczyk, K., Nowak, M., Źrałka, J., eds. *Multas per gentes et multa per saecula*. Kraków: Alter Radosław Palonka, 219–228.

Ostrauskas, T., 1998. *Lietuvos mezolito gyvenviečių periodizacija* (daktaro disertacija). Vilniaus universitetas.

Ostrauskas, T., 1999. Vėlyvasis paleolitas ir mezolitas Pietų Lietuvoje. *Lietuvos archeologija*, 16, 7–11.

Ostrauskas, T., 2002a. Kundos kultūros tyrinėjimų problematika. *Lietuvos archeologija*, 23, 93–106.

Ostrauskas, T., 2002b. Apie vėlyvojo paleolito periodizaciją Lietuvoje. E. Šatavičiaus koncepcijos kritika. *Lietuvos archeologija*, 23, 239–246.

Puzinas, J., 1937. *Eigulių II km. kapinyno tyrinėjimų ataskaita, 1935, 1937 m.* Copy of the report No. 424 kept in the Kaunas State Museum, Archive of the Institute of Lithuanian History, file No. 1131.

Puzinas, J., 1938a. Naujausių proistorinių tyrinėjimų duomenys (1918–1938 metų Lietuvos proistorinių tyrinėjimų apžvalga). Kaunas: Varpo sp.

Puzinas, J., 1938b. Stand der archäologischen Forschungen in Litauen. *Pirmā Baltijas vēsturnieku konference Rīgā*, VIII, 16–20.

Puzinas, J., 1940. Lietuvos proistorės bruožai. In: Ruzgys, V., red. *Naujoji mokykla. Kraštotyra. III.* Kaunas: Sakalas, 97–139.

Rimantienė, R., 1974. Akmens amžiaus paminklai. In: Rimantienė, R., sud. *Lietuvos TSR archeologijos atlasas. Akmens ir žalvario amžiaus paminklai, I.* Vilnius: LTSR Mokslų akademijos istorijos institutas.

Rimantienė, R., 1984. *Akmens amžius Lietuvoje*. Vilnius: Mokslas.

Rimkus, T., Butrimas, A., Iršėnas, M., Meadows, J., 2020. The decorated spindle-shaped bone dagger from Šarnelė: The earliest example of hunter-gatherer mobile art in Lithuania. *Archaeologia Baltica*, 26, 50–62.

Rimkutė, G., 2012. Netitnaginių uolienų apdirbimo technologijos ir dirbinių gamyba finaliniame paleolite-mezolite Lietuvoje. *Archaeologia Lituana*, 13, 29–65.

Schild, R., 1975. Późny paleolit. In: Chmielewski, W., Hensel, W., eds. *Prahistoria ziem polskich. I: Paleolit i mezolit*. Wrocław: Ossolineum, 159–338.

Šatavičius, E., 1997. Vėlyvoji Svidrų kultūra. *Kultūros paminklai*, 4, 3–15.

Šatavičius, E., 2001. Vėlyvojo paleolito kultūros ir jų likimas ankstyvajame mezolite (daktaro disertacija). Vilniaus Universitetas.

Šatavičius, E., 2005a. Svidrų kultūra Lietuvoje. *Lietuvos archeologija*, 29, 133–170.

Šatavičius, E., 2005b. Lietuvos vėlyvojo paleolito kultūrų periodizacija. *Lietuvos archeologija*, 6, 49–82.

Šatavičius, E., 2016. The first Palaeolithic inhabitants and the Mesolithic in Lithuanian territory. In: Zabiela, G., Baubonis, Z., Marcinkevičiūtė, E., eds. *A hundred Years of Archaeological Discoveries in Lithuania*. Vilnius: Society of the Lithuanian archaeology, 8–39.

Tarasenka, P. 1928. *Lietuvos archeologijos medžiaga*. Kaunas: Švietimo Ministerijos Knygų Leidimo Komisijos leidinys.

Taute, W., 1968. Die Stielspitzen-Gruppen in nördlichen Mitteleuropa: ein Beitrag zur Kenntnis der *späten Altsteinzeit (=Fundamenta, Reihe A, 5)*. Köln: Böhlau.

Кольцов, Л. В., Жилин, М. Г., 2008. Финальный палеолит лесной зоны Европы (культурное своеобразие и адаптация). Москва: Институт археологии РАН.

Покровский Ф. В., 1899. *Археологическая* карта Ковенской губернии. Вильна: Типография А.Г. Сыркина.

Римантене, Р. К., 1971. *Палеолит и мезолит Литвы*. Вильнюс: Минтис.

Римантене, Р., 1962. Периодизация и топография поселений каменного и бронзового веков в Литве (По данным поселений центральной Литвы). Автореферат диссертации на соискание ученой степени кандидата исторических наук, Вильнюс. Archive of the Lithuanian Institute of History, file No. 461087, 18 p.

Яблонските-Римантене, Р., 1959. Стоянки каменного века в Эйгуляй. In: Тараканова, С., А., Терентьева, Л., Н., ред. Вопросы этнической истории народов Прибалтики. Москва: Изд-во Акад. наук СССР, 11–31.

Яблонските-Римантене, Р., 1966. Периодизация мезолитических стоянок Литвы. In: Гурина, Н., Н., ред. У истоков древних культур (эпоха мезолита) (=Материалы и исследования по археологии СССР). Москва: Наука, 75–87.

#### EIGULIAI – VIENA PIRMŲJŲ RIMUTĖS RIMANTIENĖS KASINĖJIMŲ VIETŲ. NAUJA INTERPRETACIJA

#### Gabrielė Gudaitienė

#### Santrauka

Eiguliuose (dabar Kauno m.) Rimutė Rimantienė pirmą kartą apsilankė kartu su savo tėvu Konstantinu Jablonskiu, dar būdama paauglė. Ten aptikę akmens amžiaus radinių, jie ėmė vykdyti nuolatinį vietovės monitoringą, rinkti archeologinę medžiagą į tuo metu pradėtą kaupti didžiulės vertės K. Jablonskio radinių kolekciją. Po dešimties metų, tuo metu jau dirbdama M. K. Čiurlionio muziejuje, R. Rimantienė nusprendė imtis šios vietos kasinėjimų ir išsaugoti kuo daugiau archeologinės medžiagos. Aptikta medžiaga ir K. Jablonskio kolekcijos radiniai vėliau buvo publikuoti ir susilaukė kitų šalių tyrėjų dėmesio. Eigulių senovės gyvenvietė ilgam laikui tapo etaloniniu Svidrų kultūros objektu, iki kol nauji tyrimų metodai ir naujai, profesionaliai ištirtos Svidrų kultūros gyvenvietės netapo svaresnės duomenų tikslumo ir patikimumo prasme.

Pastaraisiais metais nuspręsta prie šios medžiagos grįžti, peržiūrėti ir iš naujo analizuoti visus titnaginius radinius. Su pačia R. Rimantiene diskutuoti įvairūs požiūriai į šią medžiagą, ir galiausiai parengta atnaujinta interpretacija, kurią lydi pilnas paleolito ir sunkiau nustatomo datavimo radinių katalogas. Pateikiamas Eigulių vietovės daugkartinio pirminio apgyvendinimo vaizdas, tipologinė-technologinė titnaginių radinių analizė, atskleidžianti įrankių gamybos ir panaudojimo ypatybių, taip pat atnaujinta informacija apie objektus, aptiktus kasinėjimų metu (židinius, pastato liekanas, titnago skaldymo vietas), keliamas jų interpretavimo klausimas. Patikslinti duomenys, tikimasi, bus sugrąžinti į archeologinę diskusiją, vėl taps aktualūs. Dėl specifinių radinių saugojimo aplinkybių – pusė kolekcijos yra Lietuvos nacionaliniame muziejuje, o kita dalis - Kauno Vytauto Didžiojo karo muziejuje - kol kas nebuvo įmanoma pritaikyti refitingo metodo, kuris, ateityje atsiradus galimybėms, bus labai perspektyvus, ir suteiks dar daugiau svarbių duomenų apie pirmuosius Eigulių, Kauno gyventojus. Mikroskopinė trasologinė titnaginių dirbinių analizė matoma kaip sunkiai galima, nes per daug dešimtmečių kartu tose pačiose talpose laikyti ir daug kartų kilnoti archeologiniai radiniai galimai patyrė stiprų post-depozicinį apsidėvėjimą.

#### ILIUSTRACIJŲ SĄRAŠAS

1 pav. Eigulių 1 senovės gyvenvietė kairiajame Neries upės krante (LiDAR pagrindas). *G. Gudaitienės brėž.* 

2 pav. Strėlių antgaliai ir gremžtukai iš Eigulių 1A radimvietės. *G. Gudaitienės pieš*.

3 pav. Gremžtukai iš Eigulių 1A radimvietės. *G. Gudaitienės pieš.* 

4 pav. Rėžtukai ir kiti dirbiniai iš Eigulių 1A radimvietės. *G. Gudaitienės pieš.* 

5 pav. Archeologinis objektas Eigulių 1A radimvietėje, interpretuotas kaip vėlyvojo paleolito židinys. R. Rimantienės nuotr. (spalvas atkūrė G. Gudaitienė www.colorize-it.com įrankiu).

6 pav. Archeologinis objektas Eigulių 1A radimvietėje, interpretuotas kaip vėlyvojo paleolito židinys. R. Rimantienės nuotr. (spalvas atkūrė G. Gudaitienė www.colorize-it.com įrankiu).

7 pav. Stratigrafinė sienelė Eigulių 1A radimvietėje. *R. Rimantienės pieš.* 

8 pav. Strėlių antgaliai ir kiti dirbiniai iš Eigulių 1B radimvietės. *G. Gudaitienės pieš*.

9 pav. Gremžtukai iš Eigulių 1B radimvietės. *G. Gudaitienės pieš.* 

10 pav. Rėžtukai iš Eigulių 1B radimvietės. G. Gudaitienės pieš.

11 pav. Titnaginių radinių išsidėstymas vėlyvojo paleolito horizonte Eigulių 1B radimvietėje. *R. Rimantienės pieš.* 

12 pav. Archeologinio objekto Eigulių 1B radimvietėje, interpretuoto kaip vėlyvojo paleolito židinio, stratigrafinis pjūvis. *R. Rimantienės pieš*.

13 pav. Įvairūs dirbiniai iš Eigulių 1C senovės radimvietės. *G. Gudaitienės pieš.* 

14 pav. Strėlių antgaliai ir panašūs dirbiniai iš Eigulių 1D radimvietės. *G. Gudaitienės pieš*.

15 pav. Gremžtukai iš Eigulių 1D radimvietės. *G. Gudaitienės pieš.* 

16 pav. Gremžtukai iš Eigulių 1D radimvietės. *G. Gudaitienės pieš.*  17 pav. Rėžtukai iš Eigulių 1D radimvietės. *G. Gu- daitienės pieš*.

18 pav. Rėžtukai iš Eigulių 1D radimvietės. *G. Gu- daitienės pieš*.

19 pav. Įvairūs dirbiniai iš Eigulių 1D radimvietės. *G. Gudaitienės pieš.* 

20 pav. Įvairūs dirbiniai iš Eigulių 1D radimvietės. *G. Gudaitienės pieš.* 

21 pav. Perkasos sienelė Eigulių 1D radimvietėje. R. Rimantienės nuotr. (spalvas atkūrė G. Gudaitienė www.colorize-it.com įrankiu). 22 pav. Stratigrafinė sienelė Eigulių 1D radimvietėje. *R. Rimantienės pieš*.

23 pav. Radinių išsidėstymas Eigulių 1D radimvietėje. *R. Rimantienės pieš*.

24 pav. Archeologinių objektų Eigulių 1D radimvietėje, interpretuotų kaip vėlyvojo paleolito židinių, stratigrafiniai pjūviai. *R. Rimantienės pieš*.

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