

# ZO ČSS 1-11 Barrandien

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## Application for permission

For speleological exploration at the Alsó-Hégy plateau

To whom it may concern.  
Prague 3<sup>rd</sup> of March 2023

Dear Sirs,

We would like to apply for a permission to run speleological exploration works at the Alsó-Hégy plateau. Our speleological group works in this area more than 20 years and reported all the works every year to relevant authorities. We would like to continue in our works. The main focus should be on the central and eastern part of the karstic area with exploration in below mentioned caves and survey of potential new speleological objects.

As every stay, we guarantee to leave the place of the base camp clean without any garbage. All the waste will be taken back from the plateau and disposed in appropriate containers.

### 1. Car entry

We apply for the entrance of the 4x4 cars to be able to transport all necessary material, water and food to the base camp using the forest roads. The number of the cars will be max. up to 3. We will use the cars with below mentioned registration labels:

- 4AM7383 (Mr. Ctirad Piskač)
- 1SI 3789 (Mr. Pavel Kutílek)
- 8A4 35 61 (Mr. Mojmír Záviška)
- 1UJ 0441 (Mr. Martin Mandel)

### 2. Exploration Group Leaders

Each stay will have maximum 25 attendees and one of the following group leaders with 20+ years of speleological and climbing experiences:

Mr. Luděk Vlk  
Mr. Ctirad Piskač  
Mr. Mojmír Záviška  
Mr. Martin Mandel

### 3. Summary of the caves

We would like to make further exploration in following abysses:

5452-24	Nászút-barlang
5452-86	Nászút-melletti-barlang
5452-87	Gyors-zsomboly
5452-95	Dongó-zsomboly
5452-98	Reménytéljes-zsomboly
5452-59	Éves zsomboly
n/a	Sintér barlang (GPS: 48.5694108N, 20.7191058E)

### 4. Address of applicant

Luděk Vlk  
Czech Speleological Society, speleological club ZO1-11 Barrandien  
Babice 53  
251 67 Pyšely  
The Czech Republic

Sincerely  
Luděk Vlk

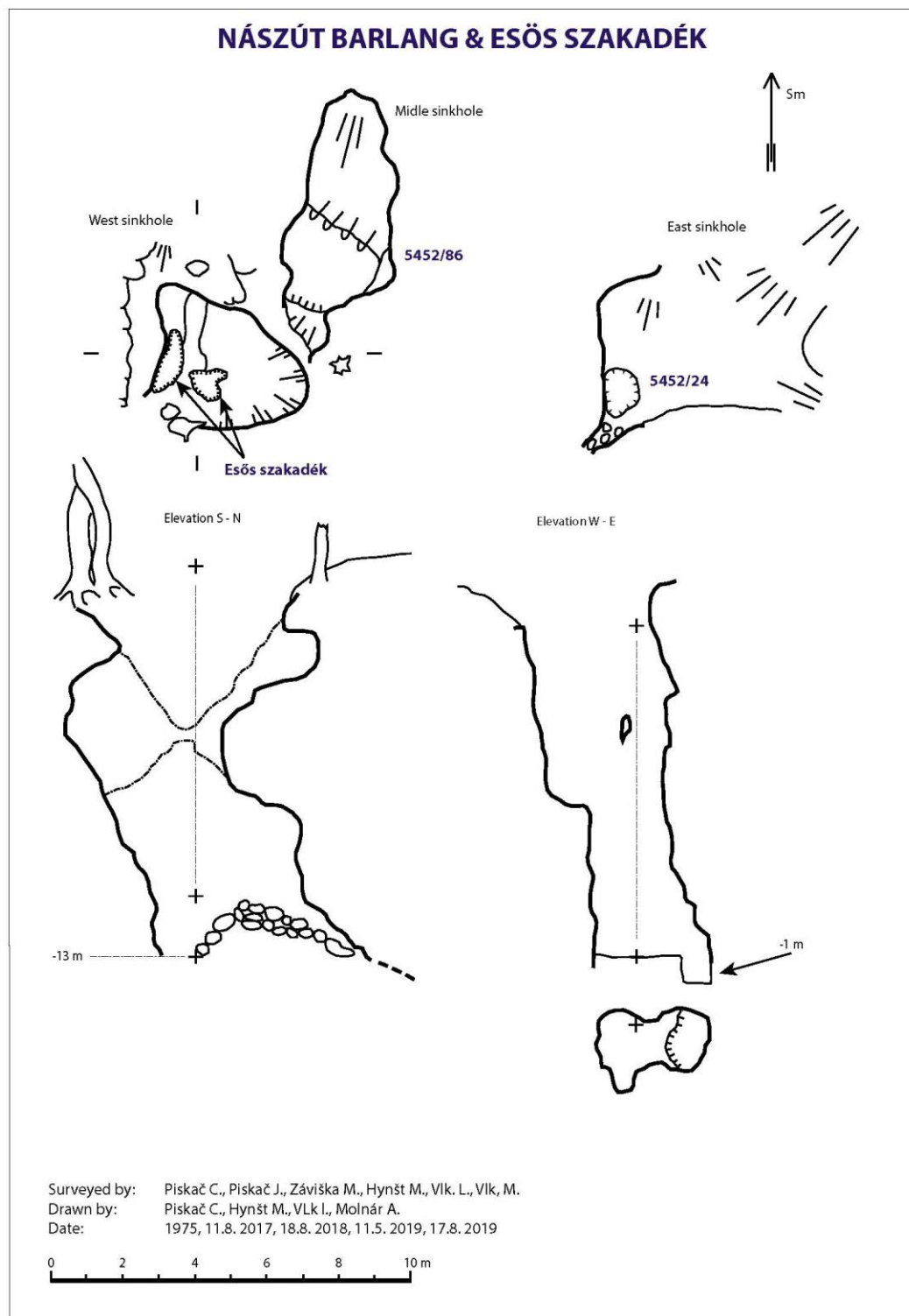
## 5. Detailed report

### 6. Nászút-barlang (5452-24)

Description of the final works:

Exploration works were focused to remove mud and stones from East-West sink-hole lying nearby Nászút-melletti barlang (5452//86). After initials works, it was obvious that this sinkhole is a vertical cave, which is connected to both other caves (Nászút and Nászút-melletti). This abyss was named Esős.

We extracted 401 construction carts, which represents approx. 36 to 40 tons of sediments and stones in the spring 2019, during the summer stay (2019) we removed 830 construction carts, which 73 to 94 tons.



## 7. Nászút-melletti-barlang (5452-86)

See the Nászút-barlang (5452-24). Additional information:

Esős szakadék description (5452/not assigned)

Rocky edges of the cave surround the entry at west, north and south side. There is a rock bridge in the depth of 5 m, which splits the shaft in two parts. Below the bridge, the shafts lead to final depth of 13 meters. In the east side of the bottom, there is choked slope coming from Nászút barlang. There is a falling slope leading to the north to unknown spaces. The bottom is stable, but all the time, there are spaces between stones and it leads down for sure.

We drew map with the final situation of all three caves. The Nászút is very dangerous to pass through, because the way leads between choked stones.

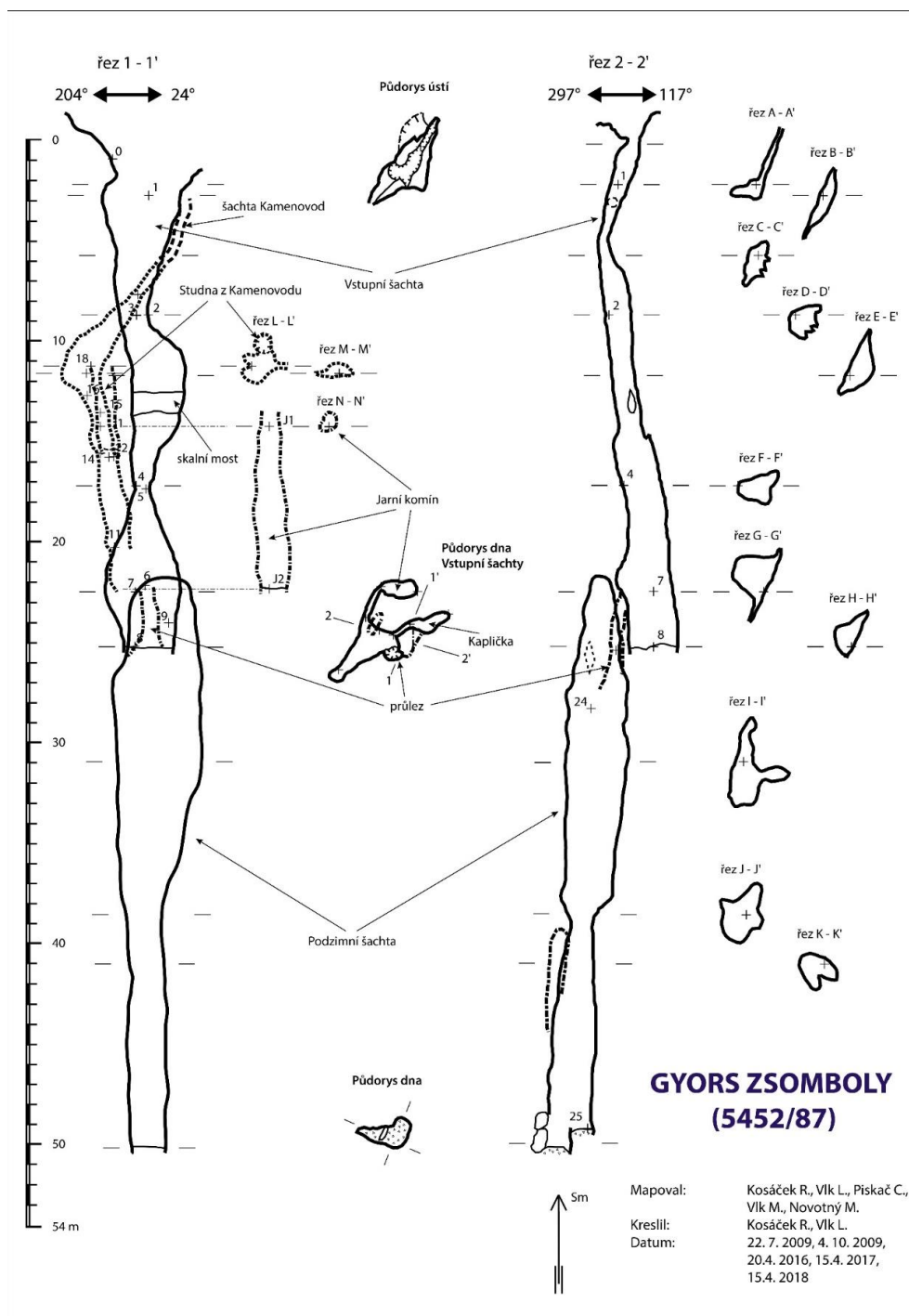


The bridge

## 8. Gyors-zsomboly (5452-87)

The exploration works were focused on finding new spaces in the Entry shaft, in Kamenovod (Stonepipe), and in Jarní komín (Spring chimney). We discovered there a new well - Studna z Kamenovodu (Pitch from Stonepipe). The bottom of the Entry shaft was deepened by 2 meters, however without new findings.

We have to carry out the new survey work, because the former “expedition type” map was made without the fixed points. It was found to be insufficient with respect to the still growing knowledge of the abyss together with its relatively complicated spatial character. Thus, there were surveyed all the chimneys and other known parts of the abyss. The following picture shows positions of the shafts parallel to the Entry shaft.



#### **9. Dongó-zsomboly (5452-95)**

During the years 2018 and 2022 we only focused on the abyss check and photo-documentation.

#### **10. Reményteljes-zsomboly (5452-98)**

During the years 2018 and 2022 we only focused on the abyss check and photo-documentation.

Prague 3<sup>rd</sup> of March 2023

Luděk Vlk  
Chairman of the speleological club



## **Dolný vrch – Alsó-hegy 4.8.–14.8.2022**

EXPLORATION REPORT  
Ctirad Piskač  
(Translated by Luděk Vlk)





**Our Speleological club organised the stay at the Alsó-hegy from 4<sup>th</sup> to 14<sup>th</sup> of August 2022. The list of participants was as follows:**

Martin Mandel, Míla Mandelová, Mojmír Záviška, Vlasta Vytiska, Jiří Ik Novotný, Ctirad Piskač, Robert Kosáček, Miloš Gumák Novotný, Jiřina Novotná, Ondra and Pavel Kutílek, Tomáš Mandel, Petr Šmerák, Pavel Kubálek.

Visit at the plateau: rangers Muki and Ádam  
Remote support: Mišo Varhola



The main focus of the stay was supervision of locations explored in the past years. We were aware of carbon dioxide presence and that was why the explorations were undertaken with the highest safety. We used personal CO2 gas detectors and also all participants participated in the insurance for speleological expeditions.

## Activities

On Thursday, 4<sup>th</sup> of August 2022 evening all participants met in the Szalamandra camp in Szögliget. We met Mišo Varhola with his spouse. We stayed overnight, and in the morning, we left to the “Csehek camp” base closed to Komjáti Jég cave. During the way, we had to cut fallen trees and remove the wood from the road. This was the only way how to reach our base camp. First, we built tents and basic equipment and then we started with exploration of the nearest objects. – Kómjati Jég and Éves zs. We continued in the exploration in next days.

We focused on the bottom of Éves zs. and its slope to stabilize it. After the slope stabilisation, we surveyed the abyss to complete the map.

There was localised a new founding in the same doline, where Gyors zs. is located. This discovery consisted of a group of small rocks forming potential cave entrance. Lately we named it Gyors alatt. We did exploration to the depth of -2 m, where the sediments were very firm. We realized that there is no sense to continue in the exploration and we made drawings of it. Most probably it is a fragment of former abyss.

During the stay we checked also selected locations and measured CO2 levels within them (Komjáti, Dongó, Gyors, Natržená, Vagon, Kostnice).

We found a lot of big bags with torn moss from the forest. We have also seen moss pickers here and there. We reported the situation to the ranges of the National Park immediately. We have been told not to undertake anything against the pickers. It is very likely that the moss picking is very well organised vandalism. They sell it as a goods - decorations in the cemetery. The bags disappeared during the night.

We made a video-documentation and tried to survey caves using a lidar. We used the lidar to survey Éves. zs. Later, we found out that data processing is time consuming and very expensive because of the need of high-priced software.



The stay was ended on 14<sup>th</sup> of August. We cleaned the place of the base camp and brought it back to former status.

## Results and attachments

### 5452/59 ÉVES – zsomboly

**Location:** N 48.56711°, E 20.73997°

**Description:** In this, well recognised cave, (see publications *Piskač: Alsó-hégy 2014* and *Vlk L.a kol. Atlas krasových jevů Dolného Vrchu*, there was recognised a bottom drop of the main shaft and decorated chamber in the depth of 11 metres. After securing the bottom, our team finished the survey of the abyss.

**Activities:** We found bottom a drop during the locality check. The decorated chamber dropped together with the bottom. This chamber is decorated with sinter dikes and snail shells. The bottom surface was based from silt. There was a risk that the found bonds will fall down and break. The former bond placement has been lost by the bottom movement. That is why we carefully moved these fragments to the safer place at the bottom, under the supervision of a professional anthropologist, Mr. Pavel Kubálek.

The deepest place at the bottom is loose and covered by debris. In the cross-section of the sediments, the slopes of the layers are clearly seen.



In front of the Éves zs. entrance

# 5452/59 ÉVES - zsomboly

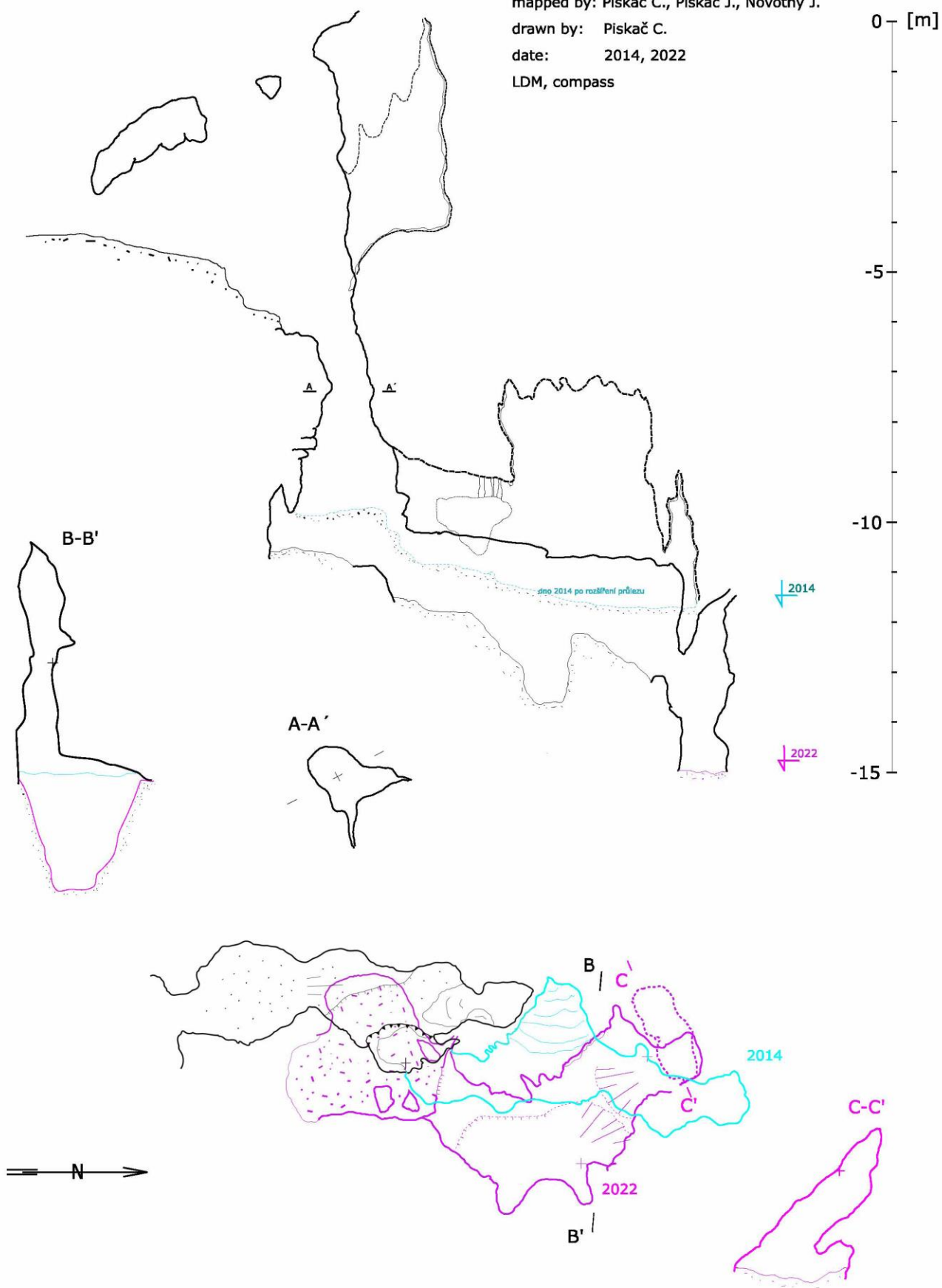
loc: N 48.56711°, E 20.73997°

mapped by: Piskač C., Piskač J., Novotný J.

drawn by: Piskač C.

date: 2014, 2022

LDM, compass



Backward view from the bottom into the entrance shaft (with ladder) in the depth -11m:





Entrance, Bottom with snail shells, Sinter layer from free block in dropped bottom:





## **294 GYORS ALATT**

CZ No: 294  
CZ synonym: Pod Rychlou, colloquially „Pomalá“  
HU name: Gyors alatt

**Location:** N 48.5667036, E 20.7401819

This depression is located approx. 47 m southeast from Éves zs. in direction 140° and 264° from Gyors zs. It lies in the same doline, in its lower third.

### **Description:**

The fragment of an abyss has a mouth based from scraps with vertical walls. It has a triangle shape with dimensions 3 × 1 m. The maximal depth is -3.2 m. The bottom is covered with red-coloured sediments.





## 294 GYORS ALATT

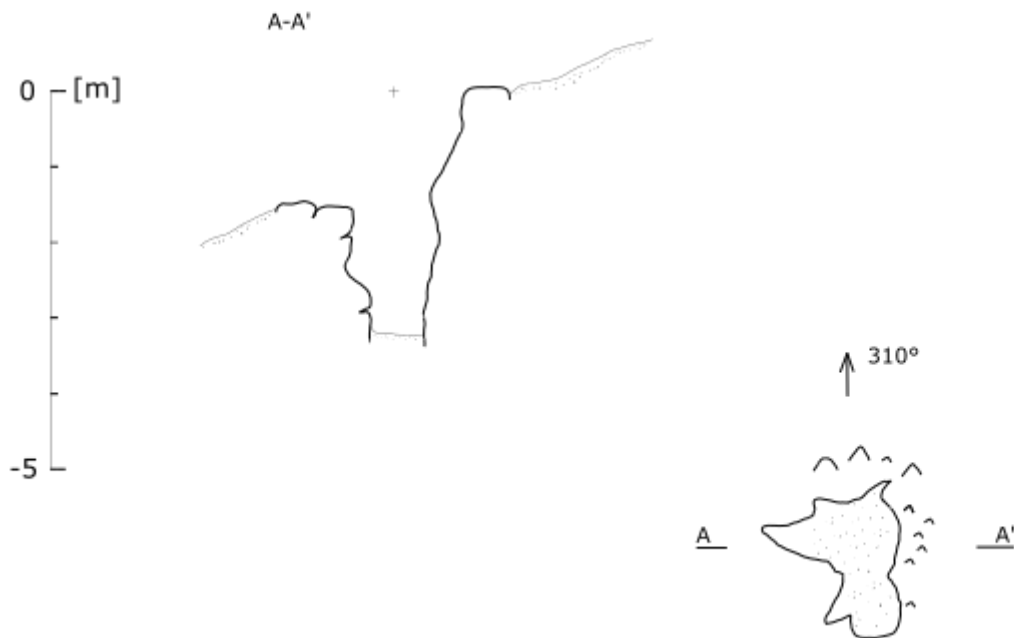
loc: N 48.5667036, E 20.7401819

mapped by: Piskač C.

drawn by: Piskač C.

date: 08/2022

LDM, compass



## Conclusion

The number of attendees and all the activities led to exceptional results in parallel with wear and tear and fatigue both physical and psychical. For all that the attendees were able to tune the activities and work in a great synergy. The working discipline was phenomenal. So, here is the right place to thank all of them!



Authors of the pictures: Pavel Kubálek, Jiří Novotný, Ctirad Piskač (Source Kelabuk Rajče; personal archive)

2/2023

Appendix

## **ZO ČSS 1-11 Barrandien**

# **Basic anthropological evaluation of human remains from the Éves abyss, expedition Alsó-hegy 2022**

Expert report  
Pavel Kubálek

Prague 2022



**Author:****Mgr. Pavel Kubálek**

Matúškova 786/10

149 00 Praha 4

Czech Republic

IČ: 700 77 304

Tel.: +420 775 622 374

e-mail: pavel.kubalek@seznam.cz

Mgr. Pavel Kubálek

**Ústav archeologické památkové péče stř. Čech Praha,p.o.***Central Bohemian Archaeological Heritage Institute*

Nad Olšinami 448/3

100 00 Praha 10

Czech Republic

IČ: 49276433

Mobil: +420 606 027 441

E-mail: [pavel.kubalek@uappsc.cz](mailto:pavel.kubalek@uappsc.cz)Web: <https://www.uappsc.cz/>**Site name:****Éves-zsomboly (Éves abyss), Alsó-hegy****The name of the event:****Expedition Alsó-hegy 2022****District:****Borsod-Abaúj-Zemplén, Aggteleki karszt, Hungary****Cadastral area:****Komjati, Hungary****Location:****GPS: 48.56712°N 20.73998°E****Organization:****ZO ČSS 1-11 Barrandien****Year of research:****2022****Preliminary dating:**

subrecent

**Head of expedition:****Mgr. Luděk Vlk****Depositing the report:****ZO ČSS 1-11 Barrandien and author archives****Depositing the findings:****in the abyss, at the site of the find****Date:**

Prague 9. 2. 2023

Mgr. Pavel Kubálek

anthropologist

# Content:

1.	MATERIAL .....	13
2.	METHODS .....	13
3.	DESCRIPTION OF FINDINGS.....	14
4.	REFERENCES .....	15

## *1. Material*

The material for the osteological analysis consists of human skeletal remains, which were found on August 2022 during a summer speleological expedition at Dolný vrch - Alsó-hegy (Aggteleki karszt) plateau during survey in the Éves abyss (Éves-szomboly). The abyss lies approximately 400 m east of the borderline XII / 46. Its mouth is located on the northern slope of the ditch, which is adjacent to the ditch of the Komjáti Jég-szomboly abyss from the northwest (Vlk - Mandel 2019).

The Éves-szomboly survey was conducted by Éva Haász and Attila Kósa in 1967 (Stieber 2012a). The research continued and in 1978 Lukács described the findings of recent animal bones from the site (Stieber 2012b).

In a survey of the cave of members of ZO ČSS 1-11 Barrandien, in 2022, in addition to new animal bones, fragments of human bones were also found. Since no accompanying artifacts were captured during the retrieval of the remains, so, determination of the findings age is only roughly estimated according to the preserved bones for the modern period. The estimation is around a hundred years.

## *2. Methods*

The evaluation used internationally valid standard methodologies according to Knussmann (1988), "Recommendations for determining age and sex" (Ferembach et al. 1980) and according to Stloukal (1999). The age estimation was based on evaluation of changes in the facies auricularis of the hip bone (os coxae) (Lovejoy et al. 1985). The sex estimation was made according to the morphoscopic evaluation of the hip bone (os coxae) according to the Brůžek method (2002).

Internationally valid standard methodologies according to Dokládál (1999) were used in the processing of burnt human remains.

### 3. Description of findings

#### Context description

During the monitoring visit we found that there was a significant gravitational shift of the sediments. The strata was disturbed by small mammals (perhaps badgers or foxes??). The deposits were threatened. Only fragments of bones were recorded in situ, which, according to the state of preservation, are very probable of subrecent origin and clearly secondary deposition. Furthermore, only modern fragments of animal bones were found. Artifacts not found.

The bones found were in a fluffy soil layer, mostly dark brown in colour. Depending on the structure of the layer, it can be assumed that it was probably transported to the place by gravity or flushing in the last century and was mixed by small mammals, probably beasts (badgers, foxes?). The findings of excrement correspond to this. There was a laid reddish-brown soil with an admixture of stones beneath this layer.

After finding a fragment of the human bones, a control of the extracted sediments was introduced and the dump was checked. Several other bone fragments could be traced.

#### Description of human remains

Damaged bones and bone fragments have been preserved. Fragments of the ribs, a fragment of the cervical vertebra, a fragments of the thoracic vertebra, a fragment of the right scapula (acromion), a fragment of the humerus, a fragment of the left radius, fragments of the left and right ulna, right first metacarpal bone, a left and right third metacarpal bone, 2 phalanges, a fragments of the left and right hip bone (os coxae), a fragments of the left femur, a fragments of the left and right tibia, a fragments of the fibula, the left talus, the right calcaneus a left and and right first metatarsal bone have been preserved.

A fragment of the right hip bone and a fragment of the femur are burned. The burning of bone fragments is of the second degree (bone fragments are brown and black) according to Dokládál (1999).

Evaluation of the facies auricularis of the right hip bone (according to Lovejoy et al., 1985): 5th degree

Evaluation of the right hip bone according to Brůžek (2002):

<i>Facies praeauricularis</i>	<i>Incisura ischiadica major</i>	Arc compose
B-b-2	B-b-2	2

### Conclusions

An adult male from the *maturus* I age group (40 to 50 years).

According to the local inspection, it can be assumed that it is a multiple deposit of bones. The bones were moved to the hall in the cave as isolated from another place at least a few decades ago. In the recent past, the rubble cone with its findings has been repeatedly dug up by small mammals (badgers?) and disturbed by the activities of cavers.

Because some of the bone fragments are burned, it is likely that they were burned outside the cave and brought into the cave. The bones could originally have been stored in a cave in a horizontal entrance hall or thrown in a chimney (above the hall) or stored near it, from where they could be flushed into the cave. According to Dokládál, the burning temperature of the found bones can be estimated at about 400 °C.

After the consultation with the local responsible person, the findings were stored back in the cave.



## 4. References

- Brůžek, J. 2002: A Method for Visual Determination of Sex, Using the Human Hip Bone. *American Journal of Physical Anthropology* 117, s. 157 – 168.
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