



COMMISSION FOR PSEUDOKARST

at the International Union of Speleology

NACHRICHTENBRIEF

Newsletter

Nr: 20.

March, 2010

Redakteur / Editor: **Jan Urban**

Mitarbeiter / Associate: **Hartmut Simmert**

Postadresse /Mail-address: Institute of Nature Conservation PAS,
Al. A. Mickiewicza 33, 31-120 Kraków, Poland

Heimblattadresse / Homepage address: <http://www.pseudokarst.de.vu/>

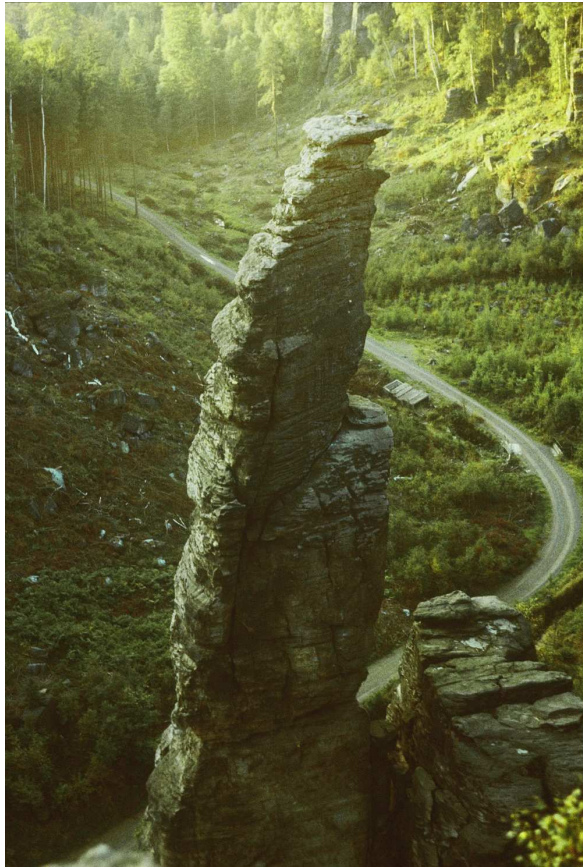


FROM KÖNIGSTEIN 1988 TO SAUPSDORF 2010 SEVERAL PERSONAL THOUGHTS AND PICTURES

Jan Urban

Commission on Pseudokarst UIS

In 1988 I was a geologist employed in Polish Geological Institute. My hobby was sailing and I visited caves as a tourist only occasionally. But I have just completed project on valorisation and legal protection of geosites in the Świętokrzyskie (Holy Cross) Mountains, central Poland. And for this reason, my friend, Andrzej Mochoń asked me, if I had seen caves in sandstones during my field works, because he had got a message that somewhere near Dresden, in Saxony Switzerland the conference on such unusual forms would be hold. I look at my field notices and photos and found some dark stains on the walls of sandstone crags – probably hollows. Consequently, we visited some sites and described these strange forms, I had never discerned before, so as to have a presentation during this conference. And, overcoming many obstacles obviously connected with “overseas” travels in communistic system we, finally, got Königstein at night, where we were warmly welcomed (with bear) by German hosts and Jiří Kopecký. Next day the 3rd Pseudokarst Symposium was opened.



Saxony Switzerland during the field sessions of 3rd Pseudokarst Symposium – view like from a parachute!

And the next several days were ones of the most significant and consequential in my life! In sunny weather of early autumn I devoured a fascinating picture, I had never imagined before! Landscape of large sandstone towers, rock castles and cities looked like petrified giants or sculptures carved by giants coming from other worlds! I was shocked by variety of macro- and microforms. Also the caves were quite different than I had visited before! Guided by very nice and professional hosts, I took a lot of pictures, which still seem to me to be unique, even the photography technique developed thousand times since that time. Look at some of them, do they show “normal” landscape?



Spectacular forms of Pfaffenstein could have delighted quite a number of naturalists.

As a geologist, I wondered how these landforms had come to exist. And I have been still wondering how such extraordinary forms: crags, caves, tafone, etc. developed. This inquiry and this first, non-scientific fascination have forced me to see more, to visit new sites, to explore new caves, to attend every next pseudokarst symposia so as to wonder again and again.

And thinking about the next Pseudokarst Symposium in Saupsdorf, again in Saxony Switzer-



„My” grup during the field session of the 3rd Pseudo-karst Symposium. Who can recognise these guys?

land, I am sure to “recharge” my inquiry and fascination. And I suppose that I will be not only one. I wish all participants of this meeting to feel similar surprise and admiration, even if they have already visited many picturesque regions with scenic landscapes. I am sure that the organisational talent and hospitality of our hosts from the speleoclub Hoehlen-und Karstforschung Dresden e.V. will facilitate these kind of feeling.

See you soon in Saupsdorf!

DIE GRÖSSTEN SUFFOSIONSHÖHLEN (RÖHRENHÖHLEN) IN SANDSTEINEN NORDWEST-RUSSLANDS. NUTZUNG VON HÖHLEN IN DER MENSCHLICHEN KULTUR

Agapov Iliay.A.

St. Petersburg, Russische Geographische Gesellschaft (RGO)

Die betrachteten Höhlen befinden sich im Nordwesten von Russland. Sie wurden von der Gruppe der RGO-Mitglieder, namentlich Agapov IA, Lyakhnitsky Yu.S., Kaminskii SV, Khlebalin I. Yu., Pinchuk SV, und Yushko A. A., untersucht.

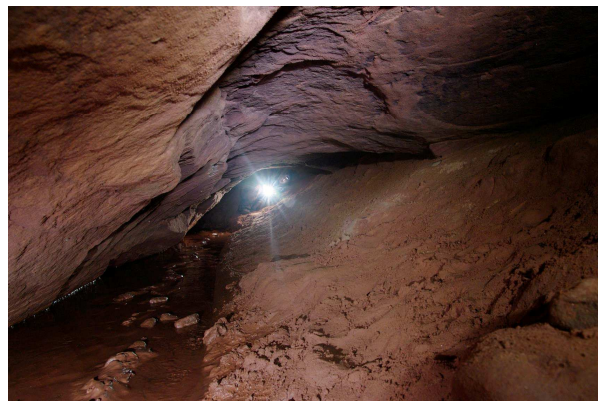
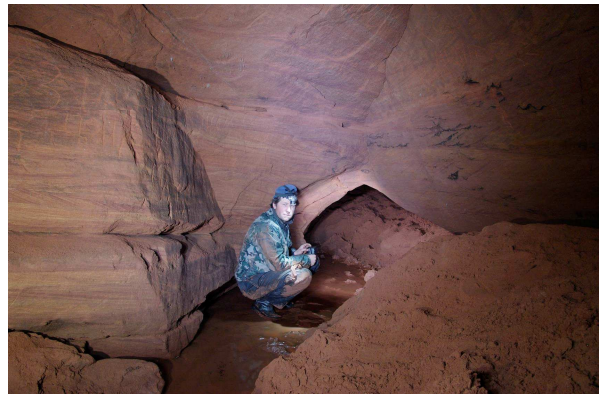


Suffosionshöhlen sind beschränkt auf die Anhöhen der devonischen Sandsteine in Flusstälern so tief wie 30 m. Ihre Entstehung begann etwa vor 10.000 Jahren an tektonischen Brüchen. Hohlräume, die als Folge der unter der Witterung und mechanischen Erosion (die so genannte "sufosion" oder, in der modernen Literatur geomorphologischen, "Rohrleitungen" oder "Tunneling") sowie die Senkung der Schwerkraft Rock Blöcke. Einen Hohlraum bildet in Sickern Ort. Deepwards, Höhlen schmale Ritzen zu unpassierbar, aber innerhalb des Massivs, Kammern bis zu 5-10 m lange, in der Regel nicht zugänglich für Menschen, die Form.

Svyataya-Höhle, Eingangsraum.

Svyataya cave. Entrance. Photo Yu. S. Lyakhnitsky

Svyataya Höhle. Es befindet sich in der Nähe von Rozhdestvenno Dorf im Bezirk Gatschina in Aufschlüssen des red devonischen Sandsteine auf dem linken Ufer des Flusses Gryazna, die in die Oredezh Fluss. In der Nähe der Höhle, seit 1499, es war ein Friedhof von Weliki Nowgorod mit Nikolskaja Kirche. Der Frühling fließt aus der Höhle verehrt wurde seit dem XV Jahrhundert. Die Höhle wurde seit den 1980er Jahren. In den letzten 20 Jahren, durch die Erforschung und das Clearing von unpassierbar Risse (Kanäle), die Länge wurde von 70 auf 130 m. Im Jahr 2006 war es die Überprüfung durch die Russische Geographische Gesellschaft (RGO)-Gruppe unter der Leitung von Yu.S. Lyakhnitsky. Eingang in die Höhle ist eine große gewölbte Grotte ca. 6 m hoch und 5 m breit. Die Höhle ist ein System aus drei Kammern zusammen mit engen Passagen. Zwei Sinkholes über die Kammern zusammengebrochen sind, werden an der Oberfläche.



*Höhle in der Nähe des Dorfes Uzhovo
Cave near the Uzhovo village.*

Höhle in der Nähe des Dorfes Uzhovo. Es befindet sich 2,5 km im Südosten von Uzhovo Dorf in Gdov District of Pskov Region in einer schwer zugänglichen Stelle. Im September 2008 und Mai 2009, die Gruppe der RGO-Mitglieder, die ihre Untersuchung, topographische Erhebung, fotografiert, und der Behinderung

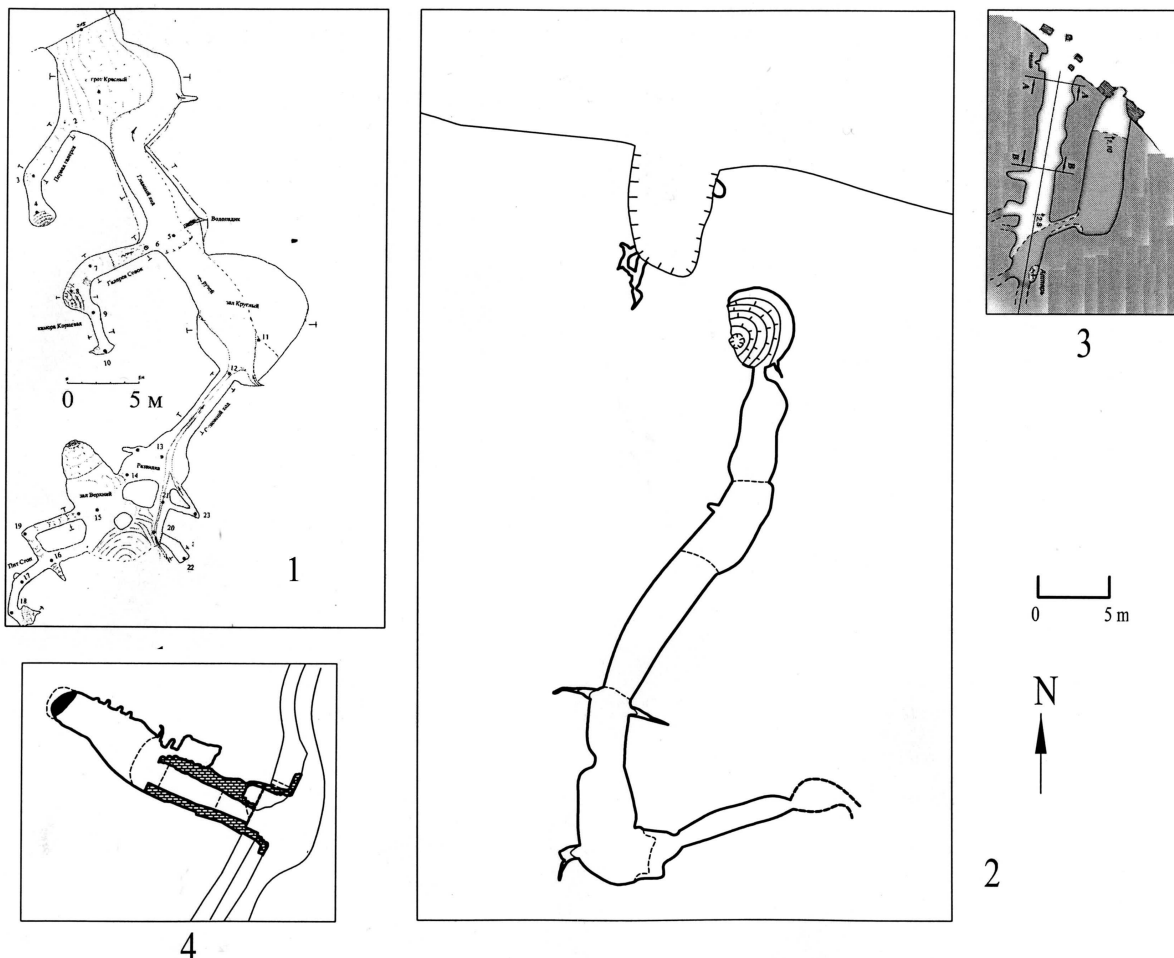
Entfernung. Die Höhle ist in der linken Flanke der Schlucht ein kleiner Bach fließt in einem größeren, der Plussa River Nebenfluss. Der Eingang befindet sich in einer Doline ca. 4 m Durchmesser. Die Höhle ist eine Höhle, die von einem unterirdischen Bach in den roten Sandstein Devon. Es bildete entlang einer tektonischen Bruch. Insgesamt Passage Länge ca. 62 m. Vault Höhe von 0,4 bis 3,8 m, Breite, 0,8 bis 4,5 m. Cavity ist gerade, die sich von Norden nach Süden. Diese Galerie ist in vier widening, kleine Hallen. Im hinteren Teil, der Galerie und verengt sich nach Osten zu einem Spalt unpassierbar. Ein Strom ca. 1 m breite Ströme in die Höhle. Der ursprüngliche Höhleneingang ist nicht haltbar. In der zweiten Hälfte des 20. Jahrhunderts, ein Erdbeben stattgefunden, und eine Sinkhole ca. 5 m Länge gebildet. Ein Strom aus den Sinkhole Hang in der Schlucht sickern durch den Erdbeben Stelle. Eine kleine Höhle mit Gesamtlänge von über 4 m und Gewölbe Höhe von ca. 0,5 m wurde in den südlichen Teil der Doline. Das zweite Loch, durch welches man sich in eine teilweise erhaltene Halle etwa 4,5 m im Durchmesser, ist im Osten. Der Eingang befindet sich am Rand des Kraters, in der Kammer Gewölbe. Es ist eine Passage aus der Kammer zu den wichtigsten Teil der Höhle. Früher wurde die Höhle verehrt, und die Quelle wurde als heilig. Symbole und andere Kultgegenstände wurden über den Frühling und in der Grotte.

Cult sufosion Höhle in der Nähe von Kleskushi Dorf in Luga District of Leningrad Region sieht ähnlich. Wasser von seiner Quelle ist nach wie vor als Heilung.

Dolozhskaya Kulthöhle. Es ist in 1 km SW von Luzhki Dorf Slantsy Kreis in einem Sandstein-Felsen am linken Ufer des Flusses Dolgaya. Die Höhle ist bekannt aus dem 18. Jahrhundert. Ein Eremit aus dem Kloster von der Republik Nowgorod lebte in ihm. Unten am Fluss, gegenüber der Höhle gibt es eine "sledovik" Stein mit Our Lady's Maul "Drucken". Der Stein und die Höhle sind sehr verehrt. Laut einer Legende, die Besichtigung von Notre-Dame kam in der Nähe der Höhle. Eine religiöse Prozession mit lokal Himmelfahrt Symbol verehrt wurde. Es ist eine Überzeugung, dass der Stein heilt Krankheiten, wenn ein krankes ist die gegen den Druck. Wasser aus der Höhle ist als Heilung; Anwohner regelmäßig nutzen. Ein integriertes Studium des Denkmals wurde im Sommer 2005. Gesamtlänge der Höhle beträgt etwa 21 m. Es verfügt über zwei Eingänge in den Tal-Piste gebaut von Sandsteinen. Einer der Eingänge ist durch einen Erdrutsch. Die Höhle stellt zwei horizontale Galerien durch einen schmalen Durchgang. Länge der größere ist ca. 11 m, Höhe 1.20-2.8 m, Breite - 1.80-2.60 m. Am Ende der Galerie, gibt es einen kleinen unterirdischen See, Wasser, aus denen die als Heilung. Ein extemporierte Altar ist in der Nähe gebaut werden. Wasser fließt aus dem See in der benachbarten Galerie, und dann sickert in Sand. Es gibt kleine Blinde Niederlassungen sich in unpassierbar Ritzen in der Wand und in der Galerie butt-Ende. Die Höhle ist im Devon (D2) zementiert schlecht, schlecht ferruginized, leicht rötlich-grau, Cross-Bett-Sandstein mit einer Beimischung von Licht Glimmer. Sie sind leicht verwitterten, zahlreiche Nischen Rohrleitungen, Kanäle entwickelt.

In der ersten Hälfte des 20. Jahrhunderts, ein Tempel aus Stein, die nicht haltbar ist, wurde am Höhleneingang. Es war ein Glockenturm über einem Eingang der Höhle. Der Tempel war ein skete der nächsten Kloster. Die Höhle wurde zum Teil von Menschen erweitert. Mehrere kleine Höhlen sufosion wurden gezeigt, nicht weit von der Dolozhskaya Höhle. Eine ähnliche Anlage mit Höhle "sledovik Stein" gibt es auch in der Nähe, in der Nähe von Trutnevo Dorf im Bezirk Gdov Pskov Region.

Die Höhle im Dorf Posolotino befindet sich in Plyussa District of Pskov Region auf dem rechten Ufer des Flusses Chernaya in die Plyussa Fluss. Die Höhle wird in Licht Sandsteine mit sufosion (Rohrleitungen?) Und Erosion Kavernen. Es ist bekannt, wurde aus dem 16. Jahrhundert, als Mönche aus Pskov-Pechory Kloster organisiert Posolotin - "Neue Pechory" Kloster. Eine Kirche sei "in den Bergen". Laut einer Legende, die Besichtigung der Ikone der Gottesmutter Hodegetria von Tichvin hier aufgetreten. Die Frühjahr-lakelet in der Höhle ist bis heute verehrt, die im Namen der Jungfrau Maria. Das Kloster wurde im 18. Jahrhundert, aber die Höhle Ehrfurcht ist erhalten geblieben bis zum heutigen Tag. Die Höhle ist eine einzige rechteckige Galerie, die von Osten nach Westen und Erweiterung in der Mitte. Gesamtlänge der Höhle ist etwa 21 m. Die Höhe des gewölbten Dach reicht 1-3 m, während die Breite der Galerie ist 1-3.5 m. Die ersten zehn Meter der Höhle sind durch Mauerwerk, erste (im Raum) Backstein, Bruchstein und dann weiter durch die Granitfelsen. Hinter der nördlichen Wand befindet sich eine Kammer, ca. 3 m lang, für die Bestattung, mit Knochen der Verstorbenen. Solche Bestattungen in künstlichen Höhlen der Pskov-Pechory Kloster. Dies ist ein Festhalten an der Tradition der mittelalterlichen Klöster Höhle von Russland. Verstärkung der Höhle Dach ist auch für traditionelle Höhle Klöster. Eine kleine Höhle Tempel gab es in dieser Höhle in der historischen Zeit. Höhlen und das Gebiet um sie herum einen sakralen Bedeutung für die lokale heidnischen Bevölkerung. Mit dem Aufkommen des Christentums, heidnische Traditionen wurden nicht abgeschafft, sie weiter zu existieren. Reverence von Höhlen weiter bis in die Gegenwart, sie habe nicht zu Ende, auch in der sowjetischen Zeit, obwohl das Tabu.



Höhlenpläne:

Cave maps:

1. Svyataya cave (L=120 m). Topographic survey, 2006. Yu. S. Lyakhnitsky, I. Yu. Khlebalin, A.A. Yushko;

2. Cave near Uzhovo village (L=62 m). Topographic survey, 2009. I.A. Agapov, S.V. Kaminskii. Computer processing: I.A. Agapov

3. Dolozhskaya cave (L=21 m). Topographic survey, 2006. I.A. Agapov, I. Yu. Khlebalin. Computer processing: A.N. Zelenin

4. Cave in Posolotino village (L=21 m). Topographic survey, 2006. I.A. Agapov, I. S.V. Kaminskii. Computer processing: I.A. Agapov

Referenzen:

Agapov I.A. 2008. Respektvoll Höhlen in Sankt Petersburg Diözese. Sankt Petersburg Eparchial Bulletin, St. Petersburg,. 35-36: 123-136.

THE LARGEST SUFOSION (PIPING) CAVES IN SANDSTONES OF NORTHWEST RUSSIA.

UTILIZATION OF CAVES IN HUMAN CULTURE

Iliay A. Agapov

St. Petersburg, Russian Geographic Society (RGO)

Caves under consideration are situated in the northwest of Russia. They have been investigated by the group of RGO members, namely Agapov I.A., Lyakhnitsky Yu.S., Kaminskii S.V., Khlebalin I. Yu., Pinchuk S.V., and Yushko A.A.

Sufosion (piping) caves are confined to the outcrops of the Devonian sandstones in river valleys as deep as 30 m. Their formation started approximately 10,000 years ago along tectonic fractures. Cavities formed as a result of subsurface weathering and mechanical erosion (called “sufosion” or, in modern geomorphological literature, “piping” or “tunneling”) as well as gravitational subsidence of rock blocks. A cavity forms in seepage place. Deepwards, caves narrow to impassable chinks; however, inside the massif, chambers up to 5-10 m long, usually inaccessible for people are formed.

Svyataya cave. It is situated near Rozhdestvenno village in Gatchina District in outcrops of the red Devonian sandstones on the left bank of the Gryazna River, which flows into the Oredezh River. Near the cave, since 1499, there was a graveyard of Veliky Novgorod with Nikolskaya Church. The spring flowing out the cave has been revered since 15. century. The cave has been studied since the 1980’s. During the last 20 years, due to the explorations and clearing of impassable fissures (channels), its length was extended from 70 to 130 m. In 2006, it was inspected by the Russian Geographical Society (RGO) group under the leadership of Yu.S. Lyakhnitsky. Entrance to the cave represents a large vaulted grotto approximately 6 m high and 5 m wide. The cave represents a system of three small chambers joined by narrow passages. Two sinkholes over the collapsed chambers are revealed at the surface.

Cave near Uzhovo village. It is situated 2.5 km to the southeast from Uzhovo village in Gdov District of Pskov Region in a hard-to-reach place. In September 2008 and May 2009, the group of the RGO members carried out its investigation, topographic survey, photographing, and obstruction removal. The cave is in the left ravine slope of a small brook flowing into a larger one, the Plussa River tributary. The entrance is in a sinkhole approximately 4 m in diameter. The cave represents a cavity formed by an underground stream in the red Devonian sandstones. It formed along a tectonic fracture. Total passage length is about 62 m. Vault height is from 0.4 to 3.8 m; width, from 0.8 to 4.5 m. Cavity is straight, stretching from north to south. This gallery has four widenings, small halls. In rear part, the gallery turns eastward and narrows to an impassable chink. A stream about 1 m wide flows in the cave. The original cave entrance is not preserved. In the second half of the 20th century, a landslide occurred, and a sinkhole about 5 m long formed. A stream flows from the sinkhole slope into the ravine seeping through the landslide body. A small cave with total length of about 4 m and vault height of about 0.5 m was cleared in the southern part of the sinkhole. The second hole, through which one can get into a partially preserved hall approximately 4.5 m in diameter, is in the east. The entrance is at the crater bottom, in the chamber vault. There is a passage from the chamber to the main part of the cave. Formerly, the cave was revered, and its spring was considered to be sacred. Icons and different cult objects were placed above the spring and in the grotto.

Cult sufosion cave near Kleskushi village in Luga District of Leningrad Region looks similarly. Water from its spring is still considered to be healing.

Dolozhskaya cult cave. It is in 1 km to the SW from Luzhki village of Slantsy District in a sandstone outcrop on the left bank of the Dolgayaya River. The cave has been known from the 18th century. A hermit from a monastery of the Republic of Novgorod lived in it. On the river bottom, opposite the cave, there is a “sledovik” stone with Our Lady’s foot print. The stone and the cave are highly revered. According to a legend, the Visitation of Our Lady occurred near the cave. A religious procession with locally revered Assumption icon was established. There is a belief that the stone cures diseases if a sick place is put against the print. Water from the cave is considered to be healing; local residents regularly use it. An integrated study of the monument was carried out in the summer 2005. Total length of the cave is about 21 m. It has two entrances in the river valley slope built up by sandstones. One of the entrances is closed by a landslide. The cave represents two horizontal galleries joined

by a narrow pass. Length of the larger one is approximately 11 m, height is 1.20-2.8 m, width – 1.80-2.60 m. In the end of the gallery, there is a small underground lake, water from which is considered to be healing. An extemporaneous altar is constructed near to it. Water flows from the lake into the adjacent gallery, and then seeps into sand. There are small blind branches turning into impassable chinks in the wall and in the gallery butt-end. The cave is developed in the Devonian (D2) poorly cemented, poorly ferruginized, light gray-reddish, cross-bedded sandstones with an admixture of light mica. They are easily weathered; numerous piping niches, channels are developed.

In the first part of the 20th century, a stone temple, which is not preserved, was built at the cave entrance. There was a bell tower above one of the cave entrances. The temple was a skete of the nearest monastery. The cave was partially widened by people. Several small sufosion caves were revealed close to the Dolozhskaya Cave. A similar cave complex with “sledovik stone” also exists nearby, near Trutnevo village in Gdov District, Pskov Region.



*Masonry in the cave, situated in the Posolotino village
Mauerwerk in der Höhle, im Dorf Posolotino gelegen*



*Walls and coves of the cave in the Posolotino village,
fixed by the granite masonry
Wände und Buchten der Höhle im Dorf Posolotino,
gesichert durch das Granit-Mauerwerk*

Cave in Posolotino village is situated in Plyussa District of Pskov Region on the right bank of the Chernaya River falling into the Plyussa River. The cave is developed in light sandstones with sufosion (piping?) and erosion caverns. It has been known from the 16th century, when monks from Pskov-Pechory Monastery organized Posolotin – “New Pechory” Monastery. A church was “in the mountain”. According to a legend, the Visitation of wonderworking icon of Our Lady took place here. The spring-lakelet inside the cave is up to now revered in the name of Our Lady. The monastery was abolished in the 18th century; however, the cave reverence has been preserved to the present day. The cave represents a single rectangular gallery stretching from east to west and widened in the middle. Total length of this cave is about 21 m. The height of vaulted roof ranges 1-3 m, while the width of the gallery is 1–3.5 m. The first ten meters of the cave are reinforced by masonry, first (in space) brick, then quarrystone and further by granite boulders. Behind the northern wall, there is a chamber approximately 3 m long, for

Monastery. This is an adherence to the traditions of medieval cave monasteries of Russia. Reinforcement of cave roof is also traditional for cave monasteries. A small cave temple existed in this cave in the historical time. Caves and the territory around them acquired a sacral meaning for local pagan population. With the advent of Christianity, pagan traditions were not abolished, they continued to exist. Reverence of caves continues to the present day, it did not end even in the Soviet time despite the taboo.

Reference:

Agapov I.A. 2008. Revered caves in Saint Petersburg Eparchy. Saint Petersburg Eparchial Bulletin, St. Petersburg, 35-36: 123-136.

TWO AMERICAN STATE PARKS NAMED FOR PSEUDOKARSTIC CAVES

William R. Halliday

Honorary President of the Commission on Volcanic Caves UIS

Convened in west-central Texas (in the college town of Kerrville) in July 2009, the 15th International Congress of Speleology was notable for an official full-day excursion to the granite monolith of Enchanted Rock and its extensive crevice cave. En route for many attendees were state parks in



Sign of the Devil's Den Trail



Sign of the Robbers Cave State Park

Arkansas and in Oklahoma in which the titular features are caves. Yet these parks are rarely visited by American speleologists because these are crevice caves in sandstone, not dissolutional caves in carbonates or evaporates. Throughout the world, such names attest to the persistence of traditionally dire medieval concepts of caves in general. In the USA, most of them are small pseudokarstic features (the extensive, well-studied karstic

Devil's Icebox is a notable exception as is the largely subaqueous pseudokarstic Devil's Hole, Nevada). The two described in this report are Devils Den State Park, Arkansas and Robbers Cave State Park, Oklahoma. These are less than 150 km (100 miles) apart but differ markedly in geometry and features. Both contain notable resources and values, and are within very popular recreational areas. Information leaflets are distributed at both, but no technical information. Obscure notes about them may exist in the speleological literature, but

cannot be found by web search engines, and detailed geological reports on their environs are equally obscure. This is in striking contrast to Enchanted Rock Cave, extensively studied by Kastning (e.g., 2009) and others, whence a 9-page bibliography is in print. The specific information below was obtained during very short reconnaissances in July 2009. Both caves add a special cultural flavor and an uncommon form of popular recreation to the parks despite their total lack of historical documentation of robbers and of the Devil. Not even a hint of the fiery brimstone (sulfur) traditionally associated with the Devil is present, and Robbers Cave is shaped inconveniently for sheltering any self-respecting robber.



Devil's Den, entrance area



Devil's Icebox, detached segment of Devil's Den



Devil's Den, entrance

Devil's Den together with an adjoining Devil's Icebox (which is a detached open continuation of the main feature, notably unlike the karstic cavern bearing the same name in Missouri), Arkansas, is a simple crevice cave in shaly tilted thinbedded sandstone subparallel to the hillside at the bottom of a deep, wide gorge typical of

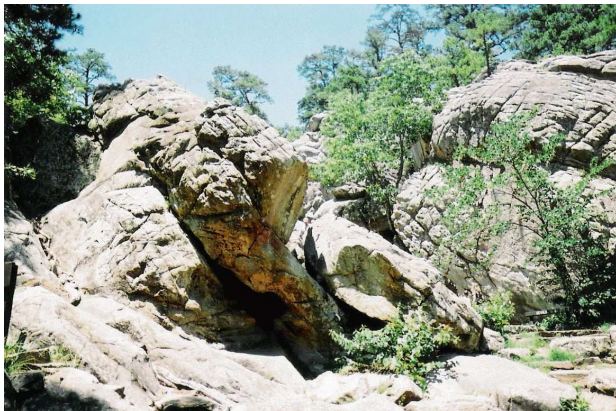
the sparsely populated south flank of the Ozark Dome. Its course largely consists of a narrow 150 meter (500 foot) linear squeezeway one to three meters in width and height with a single short crawlway. It is about 40 meters above Lee Creek, the local base level. Near its far (northeast) end is a breakdown area where a narrow fissure (now gated) extends to the surface. The cave is open to the public without supervision, and is advertised regionally as part of an enjoyable recreational complex. Despite heavy use by enthusiastic local “spelunkers”, bats and presumably smaller forms of cave life are present.



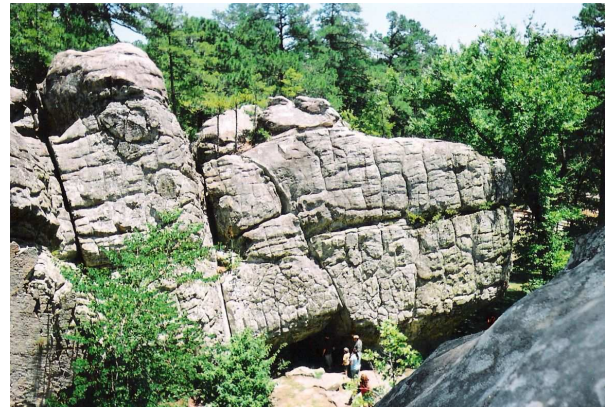
Robbers Cave



Robbers Cave

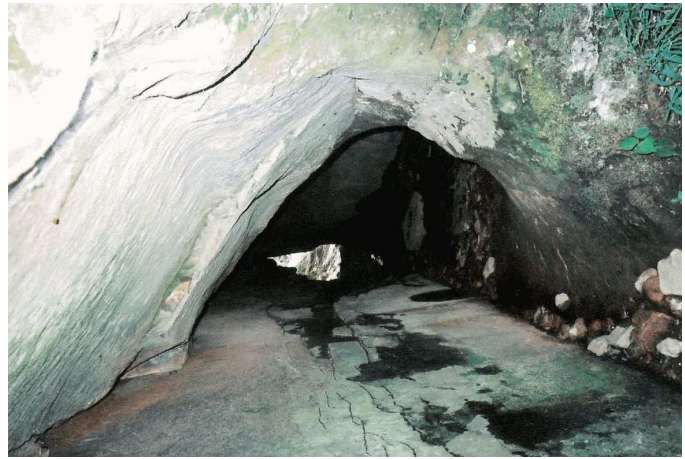


Robbers Cave, fractured sandstone and small at caves; Robbers Cave is at the top of photo behind trees



Robbers Cave, looking down at small cave ground level

Robbers Cave is about 150 km south and slightly west of Devils Den. In striking contrast to Devils Den, it is in the northern suburbs of the town of Wilburton, Oklahoma and is just off Oklahoma State Route 2. Here it is near the top of a sandstone escarpment at the southern margin of the low Sans Bois Mountains which are not part of the Ozark Dome. This is south of all known continental glaciations, but heavy periglacial precipitation may have been a major factor in shaping its landforms. The part of the escarpment within the state park is open to the public without supervision. It demonstrates extensive features of mass wasting, which has formed large “islands” and “peninsulas” of sloping, strongly fractured sandstones containing numerous partings and overhangs. Some of the “islands” appear to have been undermined and rotated. Some steep faces show unusual shallow channel mazes reminiscent of patterns of hydrostatic dissolution and piping of confined spaces in carbonate rocks,



Robbers Cave, small cave at ground level nearby

Robbers Cave, sandstone patterns

quite unlike tafoni. At the base of one such cliff about 15 meters high, a Y-shaped tunnel-like cave about 1.5 meter high and two to three meters wide extends about 10 meters through the base of a sandstone peninsula, and numerous smaller examples may reach the dark zone. Robbers Cave itself is a box-like horizontal structure near the top of the escarpment with a roof which largely consists of a single subhorizontal sandstone slab nearly 10 meters wide and 15 meters long. It terminates at a major joint which permits entry of a little light. The cave tapers abruptly beyond this joint and portions of its rear are in essentially total darkness. In contrast to the subhorizontal ceiling, the floor is in the form of an asymmetrical V, with both sides formed by other single slabs, each about half the width of the ceiling slab. This permits young visitors to scramble throughout the cave. One floor slab extends several meters outside the drip line. Along the line where these slabs meet, ceiling height is about 5 meters. Immediately adjacent to the cave is another cavernous space, but in the limited time available I could not find a safe way to investigate it.

Reference

Kastning, Ernst H. 2009. Granitic Pseudokarst of Enchanted Rock, Llano Basin, Central Texas, a Guide to the Landforms and their Origin. 15th International Congress of Speleology, Kerrville, Texas. Wednesday Field Trip, 22 July 2009. Paper, 32 pp. + covers.

SECOND INTERNATIONAL CONFERENCE ON GRANITE CAVES IN SWEDEN 2011, JUNE 1-4 + 5-7

The Fennoscandian shield consists of crystalline rocks. Sweden is known for its granite caves, and there are thousands of them recorded (SSF). The various types of caves are described by Sjöberg (1994). In most cases, the caves seem to have a paleoseismic origin (Mörner, 2003).

Symposium venue and date

The Symposium will be held close to Nynäshamm located 50 km south of Stockholm. The program will include 2 days of paper presentations and discussions, and 2 days of field

excursions. We also plan a scenic boat trip in the archipelago. Final program and dates in the 2nd Circular.

Registration, contact and questions

We would appreciate an early pre-registration. A registration form is posited on www.speleo.se. Or use the e-mails of any one of us in the organization Committee. Do not hesitate to contact us for any question and information.

Organization committee

Nils-Axel Mörner – morner@pog.nu
Rabbe Sjöberg – rabbe.sjoberg@telia.com
Sven Gunvall – sven.gunvall@telia.com
Johannes Lundberg – johannes.lundberg@nrm.se
Ulla Petterson – ulla.petterson@mdh.se
Under the main patronage of:
Swedish Speleological Society (SSF)
SSF homepage – <http://www.speleo.se>

Economy (preliminary)

Symposium all-included – ca 300 Euro
Extra Excursion – ca 300 Euro

Schedule and deadlines

First Circular – March 2010
Registration – June 1, 2010
Second Circular – October 2010
Abstracts – February 28, 2011
Symposium date – June 2011

Arriving/departing

The Symposium site is reached:

- by ferry boat to Nynäshamn,
- by air to Stockholm (Arlanda), and then
- by train from Stockholm to Nynäshamn.

Those continuing on the Extra Excursion will be dropped at the airport or Stockholm train station. We assemble in the evening of May the 31st.

An Extra Postsymposium Excursion

We will arrange a special excursion after the main symposium to the famous Boda Cave and other sites in the surrounding of Hudigsvall in order to highlight the relation between cave formation and paleoseismic events. Start Nynäshamn and end in Stockholm. Duration 3-4 days (June 5-7). Further details will be given in the 2nd Circular.

General information

We will try to combine top-quality science with fun, culture and scenic impressions.

Please, feel very welcomed!

EDITORIAL NOTICE

This issue of the Newsletter of the Commission on Pseudokarst UIS is published in March 2010 and only partly in two languages (we are sorry for this break of tradition and the delay). The next issue, no 21, is planned to be published in autumn 2010 traditionally in two languages. Please, send the papers, notices and other information to publish till the end of August 2010.

Correspondence address: Jan Urban, Institute of Nature Conservation PAS, al. A. Mickiewicza 33, 31-120 Kraków, Poland,
e-mail: urban@iop.krakow.pl, phone: 0048 694670815.