

INTERNATIONAL UNION OF SPELEOLOGY  
UNION INTERNATIONALE DE SPÉLÉOLOGIE

**Commission on Volcanic  
Caves**

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Newsletter N° 24      November 1999

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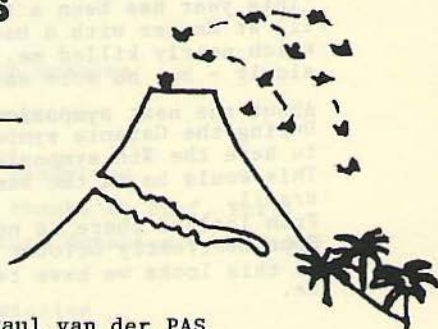
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Editorial

First our best wishes to:

**Takanori Ogawa.** Thanks for a generous gift to maintain the newsletter, but: he writes 'now I am in hospital for operation on retina.

**Yurii Slesin.** He writes: 'I was hoping to get to Catania also, but instead of that I spent all summer in the hospital in St.Petersburg. Now all is going well, but time is over'.

**Gordon Davies** (CEGEA & participant of the Kenya Symposium) writes: 'This year has been a tough one for me as I was taken critically ill at Easter with a bacterial infection (not Ebola from Kitum Cave!) which nearly killed me. After 3½ months in hospital I am recovering slowly - but no more safaris for a while'.

About the next symposium on vulcanospeleology.

During the Catania symposium there came a proposal from the Azores to have the Xth symposium on the Azores (Portugal) in September 2001. This would be in the same year as the International UIS-congress in Brazil.

From Iceland there is now a proposal for the Xth symposium in September/early October 2002.

So this looks we have two symposia coming - whatever the year might be.

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J.P. van der Pas

About the IX<sup>th</sup> International Symposium on Vulcanospeleology

As to be expected this was a success. Held from 11-19 September (1999), it saw some 50 participants from some 12 countries. Location very close to Etna made it even more exciting.

Of the many events at least two facts should be mentioned: a quiet Giuseppe Licitra who had apparently everything under a very good control, and the fantastic simultaneous translations English-Italian and vice versa. This made discussions extremely easy, and lectures understandable.

Of course lectures about vulcanospeleology from all over the world (e.g. Mauritius, Iceland, Japan, Australia, Hawaii, Kenya) and much about the Etna itself.

Excursions varied from downtown Catania (actually - under Catania) to the famous Etna itself.

Probably my most interesting excursion was to the caves near Catania at San Gregorio. Arriving on a spot too dirty to change clothes... but some nice caves. One even with many bats. Later we were told the area is going to be protected and 'cleaned'. We were supposed to meet some officials during this trip - and have some wine with them. The officials were in a hurry - so the drinking & eating (BBQ) started a kind of early - but in the end lasted long enough.

Congratulations to Giuseppe and his crew (there were many!). This was actually the third symposium on lavacaves in Catania - I hope one day there will be a fourth.

More on the symposium on other pages of this newsletter.

## AGENDA

### U.I.S. Commission on Volcanic Caves - Catania, Sept. 1999

1. Opening - announcements
  2. Members - policy
    - full and 'none' commission members
    - 'reporting' members
    - not heard from
  3. Status of proceedings Kenya 1998 - ready now
    - thanks to Prof. Forti
  4. Newsletter - costs (no problem, future donation by U.I.S.)
    - non E-mail yet.....
    - powerful tool for commission
    - commission library
  5. Structure of commission - more (other) staff
    - mission statement
  6. U.I.S. - status
    - liaison with other U.I.S. commissions  
(good contact & exchange newsletters with pseudo-  
karst & glacier-cave commissions)
    - liaison with non-U.I.S. groups
    - nomenclature, lexicon(s)
  7. Next symposium?
  8. Any other business?
- 
- sub 1. - regrets for non-attending by Jim Simons, Istvan Eszterhas, Conny Spelbrink.
  - sub 2. - some full members hardly report, some 'non'-members supply interesting material & news.
  - sub 4. - the costs of the printed form of the newsletter are very modest and no problem. U.I.S. is working on a plan for a donation of US\$ 100 for the commissions. The editor hopes to buy next year (early 2000) a PC, so E-mail will than be possible.
  - sub 6. - during a long talk with the secretary-general of the U.I.S. it was clear U.I.S. is not functioning optimal. Some staff do hardly their job, and many events are not reported.

Report about the Commission Meeting during IX<sup>th</sup> Symposium (16-09-99)

See agenda on previous page.

Members of the commission from USA, Tasmania, Germany, Italy, Japan and Iceland attending.

Re point 4 - commission library and documentation.

Bill Halliday sends all his information to R. Greeley of the Arizona State University. Is in favour of sending/donating to the NSS (USA) due to their yearly huge compilation of articles. Hawaii is suggested as collecting point for lavacave publications. Bill Halliday claims there are some problems and unsure future. Giuseppe Licitra is founding an International Center at Catania (Italy). But this is just a start.

Stephan Kempe thinks Arizona State University is questionable due to lack of funding.

J.P. van der Pas (supported by P. Forti, H. Trimmel and G. Middleton) is in favor of the U.I.S. library in Switzerland. Their listings are extensive (our newsletter is in their publications), and last 5-year inventory is on internet.

Re point 7 - the next symposium?

Bill Halliday just distributes a leaflet from 'Os Montanheiros' Speleologic Exploration Society of Azores with the proposal of the X International Symposium on Vulcanospeleology to be held in Sept. 2001 on the Azores (Portugal).

Nice as it is - it interferes with U.I.S. rules (we are an UIS-commission.....). In 2001 Brazil will have the International Congress, and all working groups and commissions are asked not to organize any event during that year. 'Os Montanheiros' will be asked to reconsider this year 2001.

There were also plans for a combined (glacier-caves and lava-caves) symposium on Iceland.

The president of the Icelandic Speleologic Society, Siggí Jónsson, is present and explains. Costs might be very high. A proposal for an excursion by A. Eraso looks nice, but might be terrible expensive. Siggidur Jonsson promises to look into this and report soon.

His proposal arrived in the mean time - just look on the first page.

In between - during this meeting an E-mail arrives: it is from our Kamchatka (Russia) member Yurii Slesin! He had hoped to be present but due to a long illness situation changed.

A loose remark by Bill Halliday: our commission is the cutting edge in speleology..... Thank you Bill!

Re point 8 - any other business? Well, plenty - now it really starts.

Bill Halliday proposes three motions - all unanimously accepted. See them on other pages in this newsletter.

A motion by Greg Middleton is also unanimously accepted - see also in this newsletter.

Sigurður Jónsson wants a legislation about speleoethems.

Now conservation is mentioned - and clearly the commission needs a **conservation officer!** Greg Middleton talks about an UICN-publication. New help (or at least information....) comes from a very welcome attendant of this symposium - Chris Wood (UK).

In the mean time 'some' action took place. As chairman of this commission I realized there is a UIS department on protection - so why not ask them also for advice? However, at this moment no answer has been received yet.

Important: Paolo Forti suggests 'a standard volume on vulcanospeleology'. There is a nice publication on karst, A. Eraso from the glacier-cave commission published a book about glacier-caves, but how about lava-caves? Paolo Forti really wants to contribute

to such a publication. He looks expectantly to Stephan Kempe.... However: Bill Halliday is working already on a 'pseudo-karst' lavacave book. Chris Wood also offers help for such a publication. So: who starts? Bill Halliday proposes three motions. All unanimously accepted. See them on the next pages of this newsletter. Greg Middleton also has a motion. Also accepted. See one of the next pages.

## MISSION STATEMENT

### of the UIS Commission on Volcanic Caves

The Commission on Volcanic Caves is an integral unit of the International Union of Speleology and upholds the high standards of its parent organization. It meets during international congresses of speleology, during international and regional symposia and all appropriate occasions. It solicits and approves sites for such symposia, held to date in the USA (2x), USA-Hawaii, Italy (3x), Japan, Spain (Canary Islands) and Kenya.

The basic mission of the Commission is to advance the scientific exploration, study, and preservation of lava tube caves and related features in volcanic rock, throughout the world. It seeks to bring together all persons, organizations, and agencies with legitimate concerns with volcanic caves, their features, and their environments. Its members are leading vulcanospeleologists from each country or area with especially important lava tube caves or related features. Members are expected to keep the Commission informed about progress and problems in vulcanospeleology and to disseminate vulcanospeleological information to other speleologists in their country or study area.

The Commission collects and disseminates information through its Newsletter, through sponsorship of internal symposia and conferences and through exchange visits, through meetings of its Chairman/President with individual Commission members and cooperators, and through data compilation in a world data base on lava tube caves at Arizona State University (USA). Currently this world data base contains information on more than 2000 lava tube caves in 40 countries. Further, the Commission provides reports and recommendations to national and regional organizations as the American Geological Institute. Its Newsletter is published at least two or three times each year. In addition to current information it contains reports and abstracts. It is archived at two U.S. Geological Survey libraries, in the UIS library (Switzerland) and is abstracted in Volcano Quarterly.

The Commission intends to continue and expand all current projects. Especially it intends to expand its cooperation (as requested by the UIS Committee during the XII-th Int. Congress of Speleology in Switzerland - 1997) with other Commissions and Working Groups of the International Union of Speleology and with national and regional speleological organizations working in the field of vulcanospeleology.

Subject: Report on the 9th International Symposium on  
Vulcanospeleology

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The 9th International Symposium on Vulcanospeleology convened as scheduled in Catania (Sicily) on September 13, 1999 under the sponsorship of the Centro Speleologico Etneo. About 45 registered and attended.

by: William R. Halliday National Speleological Society Representative
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On the previous evening, a formal reception honored publication of "Dentro il Vulcano: le Grotte dell'Etna". This book was prepared by CSE and the Parco dell'Etna. It is to be used as a reference tool by members of CSE and park staff and a few others, and is not available to the public. The book is beautifully done and lavishly illustrated. I received an authors' copy and will try to obtain copies for the NSS library and that of the Hawaiian Volcano Observatory.

On September 13, 14 and 16 were 9 sessions and one "roundtable". On September 15 was a field excursion to the actively-erupting summit area of Mt. Etna. Sessions were chaired by Hubert Trimmel (past president of IUS), Harry Pinkerton (British volcanologist active in Etnean lava tube caves), Renato Cristofolini, Jan Paul van der Pas (president, IUS Commission on Volcanic Caves) and myself. Paolo Forti (immediate past president of the IUS) chaired the round table; it included Francesco Vinci (Director of the Parco dell'Etna, Nicola Barone (President of CSE), Dr. Alfonso Piciocchi (president of the leading speleological group of Naples and a director of Vesuvius National Park, Chris Wood (British professor of environmental studies and a former Hawaiian caver) and myself. Simultaneous translation was excellent (Italian to English and vice versa).

Several official pre-and post-symposium excursions visited major caves and other geological features on and around Mt. Etna and nearby volcanic islands. For these, a 46-page guidebook was available in English and Italian versions. Independent excursions also were

easy, to Siracusa for the Ear of Dionysus and to Vesuvius (I made both of these, as well as a side trip to Santa Maria di Leuca where there are karstic caves at sea level with very complex speleogenetic histories).

Participants were well supplied with an abundance of good maps and professional and touristic literature. One especially important reprint (though slightly outside the mainstream of vulcanospeleology) was: Calvari, C. and H. Pinkerton. 1999. Lava tube morphology on Etna and evidence for lava flow emplacement mechanisms. *Jour. Volcanol. & Geothermal Research*, 90:263-280. No publication date was announced for the Symposium proceedings.

By request, I spoke on Volcanic Show Caves of the World, identifying more than 100. Most are in national forests and national parks of the western USA and are minimally developed. I also spoke on flood pulses and steady state conduit flow of water in lava tube caves and its public health implications. My assigned topic in the round table discussion was Speleology in Volcanic Parks.

For this I drew heavily on American national parks and monuments plus my 1980 proposal for an international peace park in The Karst. I suggested that the administrative plan of Parco dell'Etna could be a model for such a park.

In addition to the round table, approximately 40 papers were presented. For those wishing detailed information on some or all, I have notes on most plus some questions and answers. Some highlights:

Many major caves of Mt. Etna are within (or at least beneath) aa flows rather than pahoehoe flows; most Etnean eruptions begin with aa flows and switch to pahoehoe.

CSE is monitoring human impact on the ice in Grotta de Gelo, high on Mt. Etna, and other impacts in other caves.

On Mt. Etna, sophisticated studies of current eruptions seem to be more directly related to lava tubes than in Hawaii, or else are described much more fully. Those of fresh lava include remote intra-tubal flow studies. Studies of still-fuming lava tube caves were impressive.

Some small lava tube caves have been found in Pliocene flows in Sardinia, and some small syngenetic volcanic caves in the West Carpathian Mountains of central Europe. On Iceland's Mt. Hekla, a lava tube cave 200-300 m long was formed in andesite, but it has been destroyed in later eruptions.

According to Paolo Forti, mineralogy of volcanic caves is more varied and more important than that of karstic caves. In Kenya in 1998 he found 17 mineral species, 3 of them new to caves. Volborthite (copper vanadate) has been found in an Icelandic cave; mirabilite crusts are common there.

On Grand Comoro Island, Greg Middleton has found more than 4 km of lava tube caves to date, in a total of 30 caves. Tree cast caves are increasingly studied in Japan, with speleogenetic details now emerging. One now is a show cave.

Jon Stephenson has altered some earlier views and now views the Undara caves/wall complex as basically an inflation feature involving preferred subcrustal pathways.

Some fracture caves on Mt. Etna are more complex than those previously reported in Japan, with brittle multiple linings and benches. Characteristically they are 2 m wide and 100 m deep.

Tenerife's Cueva del Viento now is 19 km long, with nearby C. de Filipe Reventon at 2 km. 40 troglobites have been identified here to date. It has a 3-dimensional network, and a vertical extent of 500 m. A natural reserve has been proposed for this cave and probably will be enacted this year. However 2 km had to be written off because of damage by urbanization.

Italian cave diggers are active in modern lava flows. In one such project they dug down to a historic church and found much of it still open in the form of "an artificial cave".

Some of the secondary minerals in new Mt. Etna caves clearly were deposited from aerosols.

The round table presentations demonstrated a clear trend toward cooperation between caver organizations and land administrators. Forti and Wood urged administrators to go farther and coerce cavers to assume responsibility for protection of caves. Some saw lava tube caves as more fragile than karstic caves.

In Iceland, a new national park at Snaeffelsjokul is expected to include several caves. The Icelandic Speleological Society is negotiating to be manager of one of them and has gated others.

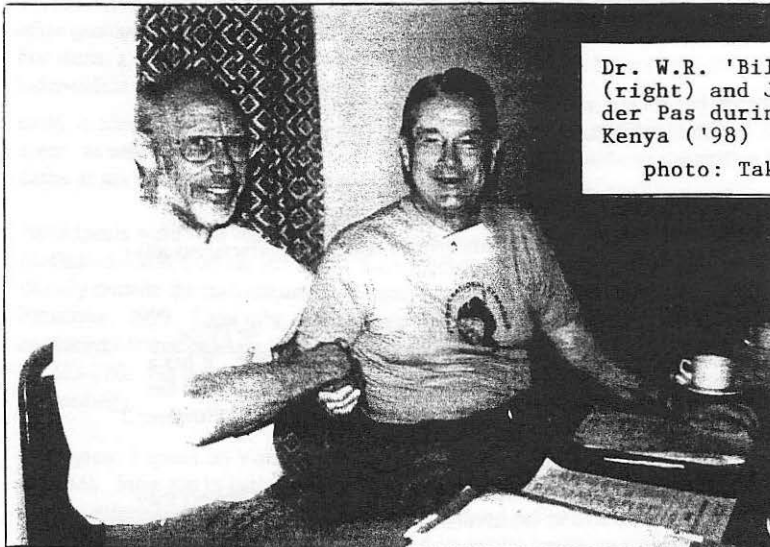
Chris Wood stressed the importance of environmental impact studies and the concept of carrying capacity (but did not mention the associated concept of maximum acceptable change). Many speakers stressed the need to protect cave resources and values.

Housing is being eliminated on at least the middle slopes of Vesuvius, now that there is a national park there. Caves of that volcano were described as being small and insignificant, but in a gallery exhibit, a 1917 publication included the map of a sizeable one.

All in all, an excellent meeting. Publication of the Proceedings will be awaited eagerly.

From: [bnawrh@webtv.net](mailto:bnawrh@webtv.net) (William Halliday)

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Dr. W.R. 'Bill' Halliday (right) and Jan Paul van der Pas during meeting in Kenya ('98)

photo: Takanori Ogawa



# UIS Code of Ethics for Cave Exploration and Science in Foreign Countries

..... and some remarks by the "Commission on Volcanic Caves". Basically there is nothing wrong with this Code. However, reading it the word 'karst' is very often used, nearly as if no other than karst-caves exist. Recently I was involved in translating this text and it is clear the word 'karst' could be omitted a few times. Going to e.g. Iceland or Hawaii it certainly would be appreciated if the environment of the caves would be respected - even if this is no karst.

J.P. van der Pas, Chairman of the Commission on Volcanic Caves

UIS supports the international activities of speleological societies, caving groups and karst scientists because they are important for; discovering new caves and extending old caves; investigating their contents, for example, minerals, biota and archaeological and anthropological remains; distributing knowledge of karst and caves throughout the world; enabling the exchange of safe caving practices and assisting in the protection and preservation of caves and karst.

To avoid misunderstanding by indigenous and local people, government and local and national caving organisations in the country in which the proposed cave exploration or scientific investigation is to take place. The UIS Bureau has prepared the following recommendations.

## 1. Before leaving your country

In many cases it will be necessary to obtain official permission from the authorities in the country being visited. In addition, inform the national speleological organisation of the country to be visited, if there is no national organisation contact the UIS national delegate.

If possible organise joint expeditions with cavers from the country to be visited. The national speleological organisations will be familiar with the official requirements for visiting expeditions. They will be well-versed with the requirements for the lodging of expedition reports and other published material and the regulations pertaining to the removal of materials by the expedition from the caves and to other countries for scientific studies.

## 2. During expedition

The expedition members should respect the laws of the country and local traditions and understand that some caves may be sacred sites and be of religion and/or cultural significance: exploration and research studies in these caves may be restricted.

The expedition members should not damage either the karst or its caves. They should where possible educate and advise local communities in the protection and preservation of their karst and caves.

## 3. After the expedition

Samples from the caves and karst collected by the expedition should only be taken out the cave and country if the correct export procedures are followed and their export is permitted.

Copies of all printed material produced by the expedition, together with the location and maps of the caves should be sent to the participating caving clubs and the national speleological organisation and/or the UIS national delegate. Assistance received from the organisations within the country visited should be acknowledged in all the expedition publications.

El sistema de cuevas volcanicas de Padierna, situado en el Predio Los Encinos, al sur de la Ciudad de Mexico (al lado de TV Azteca) corre peligro de ser destruido. Este sistema de cuevas con mas de 4 km de tuneles incluye la Cueva de Huesitos, que con 1.79 km es la mas larga del Distrito Federal. El predio Los Encinos, propiedad privada, depende como "area verde" de la Secretaria de Desarrollo Urbano y Vivienda SEDUVI), y es la unica zona que queda sin urbanizar del famoso Pedregal del volcan Xitle. A pesar de que se han hecho estudios por parte del Consejo de Recursos Naturales del DF (CORENA) que muestran la importancia ecologica de la zona (que incluye varias especies endemicas y/o en peligro de extincion, tanto vegetales como animales), la SEDUVI dictamino que el grupo FRISA de construccion puede urbanizar el terreno. Esto no solo destruira la unica zona aun preservada del Pedregal, sino tambien a las cuevas de Pedro el Negro (1.13 km de largo), Cocodrilo (725 m de largo), Margarito (642 m de largo) y Huesitos (con 1.79 km de largo la caverna mas extensa del Distrito Federal). Las estructura primarias en el interior de estos tubos son de gran interes geologico.

Para tratar de salvar este sitio y lograr que sea declarado "area protegida", por favor escribir a Alejandro Encinas Rodriguez, Secretario de Medio Ambiente del Distrito Federal, a la siguiente direccion de correo electronico:  
[aencinas@df.gob.mx](mailto:aencinas@df.gob.mx)

Es importante salvar estas cavidades. Por favor escriban.  
RAMON ESPINASA, [ramone@tonatiuh.igeofcu.unam.mx](mailto:ramone@tonatiuh.igeofcu.unam.mx)

Message: Destruction of the Sistema Padierna caves.

The Padierna lava tube system, located at the Predio Los Encinos, south of Mexico City is in danger of being destroyed. This cave system with more than 4 km of tunnels includes Cueva de Huesitos, which at 1.79 km is the longest cave known in Distrito Federal. The Los Encinos lot is a private property, but as a "green area" it is managed by Secretaria de Desarrollo Urbano y Vivienda (SEDUVI). It is the only stretch of the Xitle lava field, the famous Pedregal, that has not yet been destroyed by urbanization. Although studies made by Consejo de Recursos Naturales del DF (CORENA) show the ecological importance of the area, including the presence of several endemic and/or endangered species of plants and animals) SEDUVI has given permission to a Grupo Frisa to begin construction of a housing project in the area. This will not only destroy the only preserved area of Pedregal's ecosystem, but also the caves of Pedro el Negro (1.13 km long), Cocodrilo (725 m long), Margarito (642 m long) and Huesitos (with 1.79 km of passage the longest cave in Distrito Federal). The primary volcanic structures inside this tubes are of geological interest. In order to preserve this area and its caves, situated inside Mexico City, a "protected area" status should be given to it. Please write Alejandro Encinas Rodriguez, Secretario de Medio Ambiente del Distrito Federal, to the following e-mail address, supporting the change in status and the creation of a park in the Predio Los Encinos:  
[aencinas@df.gob.mx](mailto:aencinas@df.gob.mx)

It is important to save this caves. Please write.  
RAMON ESPINASA, [ramone@tonatiuh.igeofcu.unam.mx](mailto:ramone@tonatiuh.igeofcu.unam.mx)

This list came from 'Cavers Digest' via Bill Halliday. He corrected already the wrongly spelled 'Monte' for Kenya entries. This is 'Mount'.

From: Chris Lloyd <cjlloyd@vianet.com.mx>  
 To: "Jim Olsen" <cavers@ditell.com>  
 Subject: RE: lava tube lengths  
 Date: Sun, 4 Apr 1999 18:28:35 -0500

I finally got Ramaon Espinasa to give me his list of lava tubes that he has prepared for his masters thesis (is thesis is on a system of tubes just south of Mexico City). It is up to date as far as he knows up to April 1998. If anyone has any more recent info or know of caves that have been omitted, please let me know and I can update Ramon.

List of World's Longest lava Tubes (in meters)

1	Kazumura Cave	Puna District, Hawaii, U.S.A.	61,420
2	Cueva del Viento	Tenerife, Islas Canarias, España	17,032
3	Leviathan	Colinas Chyulu, Kenya	12,500
4	Bilemot Gul	Isla Cheju, Korea	11,749
5	Huehue Cave	North Kona District, Hawaii, U.S.A.	10,280
6	Manjang Gul	Isla Cheju, Korea	8,928
7	Keala Cave	Puna District, Hawaii, U.S.A.	8,600
8 & 9	Pahoia Caves	Puna District, Hawaii, U.S.A.	16 km aprox
10	Cueva de Don Justo	Hierro, Islas Canarias, España	6,315
11	Ferrocarril-Mina Inferior	Volcán Suchiooc, México	6,197
12	Cueva de los Verdes	Lanzarote, Islas Canarias, España	6,100
13	Gruta das Torres	Pico, Azores, Portugal	5,439
14	Iglesia-Mina Superior	Volcán Suchiooc, México	5,145
15	Susan Gul	Isla Cheju, Korea	4,675
16	Ubuwomo bwa Musanze	Rwanda	4,560
17	Surtshellir-Stepanshellir	Islandia	4,300
18	John Martin Cave	Puna District, Hawaii, U.S.A.	4,158
19	Deadhorse Cave	Skamania County, Washinton, U.S.A.	4,100
20	Ape Cave	Skamania County, Washinton, U.S.A.	3,904
21	Duck Creek Lava Tube	Kane County, Utah, U.S.A.	3,695
22	14-18 Series	Mount Suswa Kenya	3.5 km aprox
23	Sochon Gul	Isla Cheju, Korea	3,074
24	Cueva del Cascajo Santa Cruz, Islas Galápagos, Ecuador		3,010
25	Rainbow's End Cave, Mount Silali, Kenya		3 km aprox
26	Pango ya Moshi	Colinas Chyulu, Kenya	3 km aprox

Note: a couple of these include segments separated by collapses, and thus may not meet some peoples criteria of what is a single cave.

List of Long Lava Tubes in Mexico (length in Meters, followed by depth)

1	Ferrocarril-Mina Inferior	Volcán Suchiooc	5,623	72
2	Iglesia-Mina Superior	Volcán Suchiooc	5,145	54
3	Cueva del Diablo	Volcán Suchiooc	2,020	70
4	Cañada de los Pastores	Rayón, San Luis Potosí	1,882	43
5	Cueva de Huesitos	Volcán Xitle	1,792	18
6	Cueva del Arbol	Volcán Suchiooc	1,480	118
7	Chimalcatepec	Volcán Suchiooc	1,388	201
8	Cueva de Marcelo	Volcán Suchiooc	1,268	62
9	Pedro el Negro	Volcán Xitle	1,132	35
10	Cueva del Aire	Volcán Yololica	1,083	87
11	Los Cuicillos	Rayón, San Luis Potosí	976	14
12	Sierra Partida	Ocampo, Tamaulipas	850	65
13	Cueva del Salvial	Rayón, San Luis Potosí	796	14
14	Cueva del Cocodrilo	Volcán Xitle	725	21
15	Cueva del Volcancillo	Toxtlacoaya, Veracruz	685	139

List of World Lava Tubes by Depth (Meters)

1	Kazumura Cave	Puna District, Hawaii, U.S.A.	1,102
2	Cueva del Viento	Tenerife, Islas Canarias, España	518
3	Leviathan	Colinas Chyulu, Kenya	480
4	Cueva de los Verdes	Lanzarote, Islas Canarias, España	230
5	Ape Cave	Skamania County, Washinton, U.S.A.	213
6	Ubuvomo bwa Musanze	Rwanda	210
7	Chimalacatepec	Volcán Suchiooc, México	201
8	Namganduk Gul	Isla Cheju, Korea	181
9	Keala Cave	Puna District, Hawaii, U.S.A.	180
10	Cueva de Don Justo	Hierro, Islas Canarias, España	143
11	Cueva del Volcancillo	Toxtlacoaya, Veracruz, México	139
12	Cueva del Arbol	Volcán Suchiooc, México	118
13	Cueva de la Tubería	Volcán Suchiooc, México	116

Chris Lloyd, in Guadalajara

Several motions were proposed during the  
UIS Commission Meeting at Catania.  
Just to have an idea about the contents  
here the three proposed by Bill Halliday  
(Dr. W.R. Halliday MD) are shown here.

The following motion - proposed by Dr. W.R. Halliday -was unanimously accepted by the  
General Meeting of the U.I.S. Commission on Volcanic Caves, held on 16 September 1999  
during the IXth International Symposium on Vulcano Speleology at Catania, Italy.

The I.U.S. Commission on Volcanic Caves commends the Hawaii Chapter of the National  
Speleological Society for its concern about sewage and toxic and hazardous wastes placed in  
Hawaii lava tube caves. The Commission urges all relevant agencies and organizations to  
cooperate fully in recognizing, evaluating and taking appropriate steps to terminate this  
alarming problem.

The following motion - proposed by Dr. W.R. Halliday -was unanimously accepted by the General Meeting of the U.I.S. Commission on Vulcanic Caves, held on 16 September 1999 during the IXth International Symposium on Vulcano Speleology at Catania, Italy.

The I.U.S. Commission is alarmed at the damage to the Padierna lava tube system and the lack of protection that it should rightly be afforded. The Commission request that the cave system urgently receive "protected area" status with creation of a park in the Predro los Encinos, as recommended by local speleologists.

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The following motion - proposed by Dr. W.R. Halliday -was unanimously accepted by the General Meeting of the U.I.S. Commission on Vulcanic Caves, held on 16 September 1999 during the IXth International Symposium on Vulcano Speleology at Catania, Italy.

The I.U.S. Commission on Volcanic Caves considers Mowich Cave, Oregon, USA, to be of exceptional significance because of its unparalleled geological setting: beneath tens of meters of subsequent lava flows.

The Commission deplores the lack of due process and lack of cooperative planning in excluding geoscientists and other concerned persons from this cave.

The Commission urges:

- 1) immediate reopening of this cave to geoscientists;
- 2) removal of the disinformation sign now present in the entrance;
- 3) emplacement of an interpretive sign with accurate information, and
- 4) cooperative planning to protect both geological and biological resources and values of this exceptional cave.

In the mean time Dr. W.R. Halliday took some action already:

Bat Conservation International tells me informally that they knew nothing of the use of their name on Mowich Cave, OR. They have looked into it and say it was the USA Forest Service and State of Oregon; further, that they see no need for a year-round closure of the cave - only during bat hibernation and nursery seasons. I have escalated the problem to the chief of the Forest Service and Chief of the US Fish and Wildlife Service.

Attending the VII<sup>th</sup> International Symposium for Pseudokarst  
Arad - Macea - Moneasa ROMANIA 6-10 October 1999

I represented our commission on this symposium. As you might remember UIS ordered the three 'non-limestone' to keep contact with each other.

Since I went by own car it was easy to pick up their president, Mr. István Eszterhás in Hungary. A short stay at his house was an experience (pleasant!). He is more or less the heart of this commission on pseudokarst, which only recently joined UIS.

Mr. Eszterhás produces e.g. a yearbook of their activities. Which commission has an issue like this? Each contains some 300 pages, to be added all the pictures, plans, maps and so on. However - only a few are produced, just for their own members.

But we move to the symposium.

Entering Romania is still an adventure. In '93 it took me 12 hours, but now we are through in just an hour. Apparently their customs are not aware tourist could be good paying people in their country, so you are treated as a piece of shit. Of course they have to go to the toilet themselves (or drink coffee) and just close the border.

The symposium was organized by Prof. Tulucan. He is the secretary of this commission - young, dynamic and full of energy. If they had only a few more of this kind of persons Romania would be a roaring country (in positive sense).

The Symposium is held in several premises all over Arad. Due to a host of reasons not too many people participate - but enough to make it a success, and the smaller group is much easier to transport to all the locations and places to visit.

Participants came from Poland, Austria, Hungary, Netherlands and of course Romania. Despite the fact their president does not speak English the whole symposium was done in English - but of course many other languages were used.

I will skip the feeding and drinking. It was good, it was plenty. Lectures were diverse. Jan Urban from Poland is more or less making a complete inventory of all 'pseudo karst' in his country. His conclusion: there is no area which speleological should be overlooked.

Eszterhás talks about ice-in-caves. His theory is that lava keeps the cold longer. Kind of discussable.

Margielewski talks about some 500 registered talus-caves. Many 15m. high (Poland).

Interesting is an Austrian lecture (Mais/Pavuzza) about cave-size-prediction by temperature-comparison with other known caves nearby. Of course Prof. Tulucan gives a comprehensive overview of pseudo-karst of his country.

Than several field-trips, some of cultural importance.

One is very interesting for me - a ride around Arad. We see an old Vauban-built fortress, in a very complete form. Near to my house (Maastricht) we have only remains of such an identical construction. But the Arad one looks complete and perfect! Of course the secret-police has here their headquarters and nobody can go near.....

We, of course, go also in the field. A visit to the Hodobana Cave. Since the entrance is a 10 meter drop young cavers take care about getting us down safely. It is a kind of slippery on some places, and our leader crashes down in a meters deep abyss. As a good caver he survives and we study the cave. Interesting minerals protude from the wall (something for Paolo?).

We also visit an area with quarries and caves, and thermal activity. However, due to the miserable economic situation and mismanagement caves are closed, neglected or destroyed.

Due to the economical situation (not only Romania - but the whole area) it is very difficult for cavers from there to visit symposia or other events 'further away'.

The hospitability is fantastic. At the very end I was invited for a farewell-diner at the house of Prof. Tulucan. Entering his house he showed his garden. As with many speleologists who own a garden a metallic cave-ladder hung down from a tree. But it looked a kind of strange, misused, old? No, it had been hit by a flash of lightning - via tree, ladder, grass, house, fax, tv and so on it has done its work.

Of course there was a commission meeting. Most important: their current newsletter - in German - might be done in the future by their Austrian members (= the Austrian Institute for Natural History, Speleological Section) - probably in English - and maybe on the web. Their next symposium might also be in Austria.

For more info you can try:

tulucan @ hotmail.com  
 hoele @ nhm-wien.ac.at or:  
 speleo.austria @ netway.at

**Publication received:**

A pre-print of 'Volcanic Caves and related features in Western Victoria' by Ken Grimes (ken-grimes @ hl40.aone.net.au). Will be in the Proceedings of the 13th Australasian Conference on Cave and Karst Management - 1999 (?).

Some diagrams from K.G. Grimes (in press) "Volcanic Caves and Related Features in Western Victoria", in Henderson, K [ed] *Proceedings of the 13th Australasian Conference on Cave and Karst Management, 1999*. Australasian Cave and Karst Management Association, Melbourne. (in press).

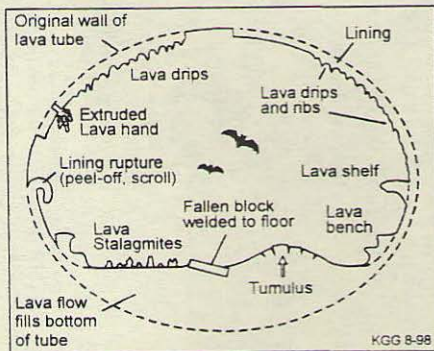


Figure 9: Features found in lava tubes.

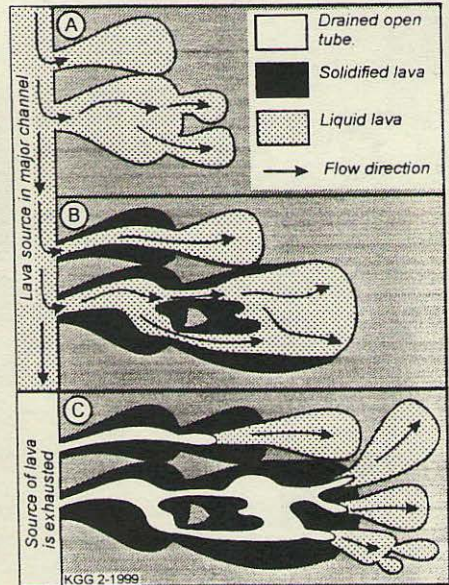


Figure 4: Stages in the formation of lava tubes by draining of lava lobes.

A: Thinly crusted lobes of lava expand by breakouts through ruptures and budding of further lobes.

B: Stagnant areas of the older lobes solidify, but hot flow from the source keeps the feeder conduits liquid.

C: When the source flow ceases some of the conduits may drain to form air-filled cavities.

# International Journal of Speleology

VOLUME 27 H (1/4), 1998  
Theme Issue with special Editor

Physical Speleology

## VULCANOSPELEOLOGY

Edited by  
Paolo Forti

Proceedings of  
8th International  
Symposium on Vulcanospeleology

February 7-8, 1998  
Nairobi, Kenya



Published quarterly by Società Speleologica Italiana

Printed with the financial support of: Ministero dei Beni Culturali e Ambientali  
Consiglio Nazionale delle Ricerche  
Museo di Speleologia "V. Rivera", L'Aquila

The Kenya Symposium Proceedings still available from the editorial address. Due to continuous problems with our national banks we prefer Df 50 in cash. Non-Dutch nationals can collect their copy free at the editorial address.

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