



Hawaii '91

Canaries '94

Kenia '98

Catania '99

Iceland 2002

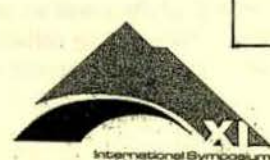
Azores 2004

Mexico 2006

Korea 2008

Australia 2010

???

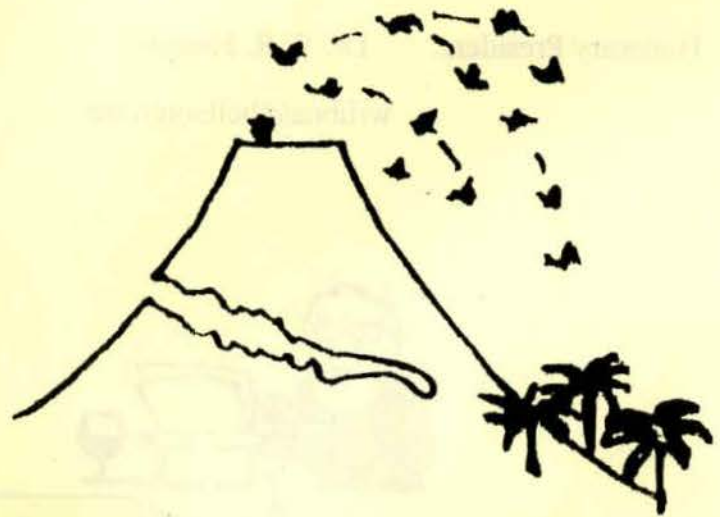


Catania 1983



International Union of Speleology  
Union Internationale de Spéléologie

*Commission on Volcanic Caves*



[www.vulcanospeleology.org](http://www.vulcanospeleology.org)  
symposium 'KOREA' Sept. 2008

51

*The Newsletter is send free to members  
of the Commission, and others who are  
interested in lava-tube caves.  
It is not possible to subscribe – but news  
and information is always appreciated ...!*

Honorary President: Dr. W.R. Halliday  
wrhbna@bellsouth.net



web master:  
John Pint  
ranchopint@yahoo.com

Chairman & editorial address: (a.i.)

J.P. van der PAS  
Vauwerhofweg 3  
6333 CB Schimmert  
Netherlands

jpgvanderpas@hetnet.nl

KOREA - JEJU - 2008

Yes, it is coming!

Initial data: August 31 (Sunday) 7.00PM Icebreaker  
Sept. 1 – 5 Conference (Monday – Friday)  
Sept. 6 - 7 U.I.S. Bureau meeting  
Sept. 6 – 10 Post-conference Fieldtrip

Information on the new web site:

WWW.VULCANOSPELEOLOGY.COM  
or: weeks@kangwon.ac.kr

The new web site is an initiative by John Pint !!  
(well known from [www.saudicaves.com](http://www.saudicaves.com))

Some brief information:

- title will be 13th Vulcanospeleology Symposium
- organized by Jeju Island Cave Research Institute, Cave Research Institute, Cave Research Institute of Korea, Korean Society of Cave Environments
- official language English
- tentative pre-registration fee US\$ 200 (on site US\$ 300)
- tentative lodging & food: US\$ 100/day

New or changed addresses:

Secretary General of U.I.S.

Fadi Nader      fadi.nader@gmail.com

Appt. # 11

7, Rue Estiennes d'Orves

92500 Rueil Malmaison

FRANCE

Jim Simons moved permanent to Sikitoi

e-mail is from a mobile phone, so do not send heavy attachments

sikitoi.francoise@gmail.com

the mailing address is now

Jim Simons

P.O. Box 218

90121 EMALI

KENYA

E-mail of Takayoshi Katsumata

t\_katsumata@ab.thn.ne.jp    for home

katsumata\_takayoshi@yahoo.co.jp    for mobile

Modification of address of Tsutomu Honda

hondat@jupiter.ocn.ne.jp

Vulcanospeleological Society of Japan

3-6-1, Otsuka, Bunkyo-ku

Tokyo

Japan

New editor for Newsletter Hawai'i Speleological Survey,  
took over from Hazel Medville:

Bob Richards      bob@cavegraphics.com

11600 Road 28.3

Dolores

81323 Colorado      U.S.A.

Notes &/or heard from

*John Pint finds the longest lava tube on the Arabian Peninsula..He visited the lava field Harrat Khaybar, in the hope to find a longer lava tube than the Al Fahda Cave in Jordan ....*

*With a team of three they find Umm Jirsat, some 100km's north of Medina. With 1400 meter this is the longest lava tube from Saudi Arabia. See www.saudicaves.com "Um Jirsan: secrets of the Wolves' Den.*



*Chris Wood has been extremely active. Twice on Iceland: north of Askja, and later to Surtsey. Also to Kenya for remapping caves and some work on Mt. Suswa.*

*Bill Halliday reports news from Alain Gerente and Philippe Audra.*

*- Caverne de Bernica (St. Paul, Reunion Island) is in a lava flow 30.000 to 200.000 years bp. It has an overburden of 80 – 160 meter. Its original conduit is rather intact; the floor is mostly covered with small breakdown blocks which average 20cm in width. The cave contains allophone stalagmites, the only example known in Reunion. Length of cave 369 meter.*

*Bill Halliday reports (via John Lane and Matt Covington) that John reported to have found some lava tubes on New Britain (PNG). More info has been asked.*

THE CAVES OF RWANDA /  
LES GROTTES DU RWANDA

*Berliner Höhlenkundliche Berichte* Band 23 2nd edition

In previous issues the reports about cave mapping in Rwanda were reported. So the atlas #11 (2004) and #15 (2005) are known. However, after the successful trip/expedition in 2007 so much more info came available that a third update would be confusing – and so all the data is now contained in a new 'Atlas', the number 23.

This issue, 181 pages, A-4 size, and 12 mm thick with a weight of 600 gr (postal mailing 1 kg) is really the bible on Rwanda caves.

ISSN 1617-8572, Berlin 2007.

It gives all references known about caves in Rwanda. From the first 135 pages 5 are in color. Page 140-144 gives lists, and from 145 to the end maps. All maps scale 1:1000.

It also should be mentioned the publication is bilingual – French and English.

For all info:

Michael Laumanns  
Unter den Eichen 4c  
15834 Rangsdorf  
GERMANY

[michael.laumanns@bmf.bund.de](mailto:michael.laumanns@bmf.bund.de)

This publication is also available for U.S.A. cavers via Emily Davis

**Gneiss Cave, California**  
**Perhaps a Tertiary lava tube cave**

William R. Halliday  
6530 Cornwall Court  
Nashville, TN 37205  
[wrhbna@bellsouth.net](mailto:wrhbna@bellsouth.net)

In October 2007 I was able to determine that this curiously-named cave in Death Valley National Park (California) is a lava tube cave; it has a longitudinal central ridge of cauliflower lava. This is the first lava tube cave identified in this Park.

The entrance room of this cave is easily seen by visitors driving along the paved highway at Mormon Point, about 25 meters above the road. Because the scramble to the cave is steep and rubbly, it has had few visitors. It was named Gneiss Cave because a geological map of the area showed its location as being in gneiss. In 2005, NSS member David Ek became the Park's Assistant Chief of Resources Management. David was confident that it was not in gneiss, but he could not define its origin. When I was visiting this part of the American Southwest (with Ed and Kathy Block of the Havasu Cavers and former Oregon Grotto members), he took Ed and me to this cave as well as to some other pseudokarst features of the Park.

This is not a large cave. Its upper 10 meters consists a tube about 1 meter in diameter sloping downward at about 50 degrees to a spacious entrance room which opens on the steep western front of the Mormon Point Turtleback (Gregory and Baldwin, 1988). It is within a gully-filling basalt flow which has been overlooked by the several geologists who have mapped this part of Death Valley (Halliday, submitted for publication). Aside from old and recent bird and rodent droppings, the only prominent features of the cave are (1) the central ridge of cauliflower lava, and (2) a dusty sheet of banded brown flowstone about 0.5 cm thick and perhaps 0.5 m



square, partially covering the central ridge and a now-eroded space alongside the ridge. This speleothem does not effervesce with acid, and resembles banded siliceous flowstone and dripstone seen in some lava tube caves in southwest Washington state. The central ridge extends out of the tubular section of the cave, into the entrance room, but the banded flowstone is entirely within the tube.

In the absence of a reliable geological map of the area, the age of this cave will be difficult to determine. It looks very old, as does Pahihi Gulch Cave on the island of Maui, Hawaii (Szukalski, 2002), shown on the 1942 Stearns and Macdonald geological map of Maui as within Tertiary lava. Its age is constrained by extensive, active faulting in this area, so that it is unlikely to be as old as 5 million years bp (Ek, David, oral communication, 2007). An age of 4 million years bp would be consistent with that of a basalt which caps the Funeral formation a few km farther north (Gregory and Baldwin, 1988). If so, Gneiss Cave is a member of a notable group of Tertiary lava tube caves also including (1) Pahihi Gulch Cave, HI, (2) an apparently unnamed Miocene lava tube cave on the Pacific island of Truk (Rogers and Legge, 1985) and perhaps (3) three well-known, heavily marine-eroded horizontal caves near sea level near Haena, Kauai Island, Hawaii (Halliday, 1981)..

#### References

Gregory, J. L. and E. J. Baldwin, editors. 1988. Geology of the Death Valley Region. Guide for the South Coast Geological Society Field Trip October 21-23, 1988.

Halliday, W. R. 1981. Haena Caves. Introduction to Hawaiian Caves; Field Guide for the 6th International Symposium on Vulcanospeleology, Hilo, HI, August 1981. p. 45.

Halliday, W. R. (submitted for publication). Differentiating Karsts From Pseudokarsts in the American Southwest. Proceedings, Ninth Biennial Conference of Research on the Colorado Plateau. Flagstaff, Arizona, October 29-November 1, 2007. Charles van Riper III, editor.

Rogers, B. W. and C. J. Legge. 1985. The 1994 Micronesian Karst Reconnaissance (abstract). National Speleological Society Bulletin 47 no. 1. n.p. (p. 62), October 1985.

Stearns, H. T. and G. A. Macdonald. 1942. Geology and Ground-Water Resources of the Island of Maui, Hawaii. Hawaii Territory Division of Hydrography Bulletin 7, Plate I.

Szukalski, B. 2002. Pahihi Gulch Cave - One of Maui's Oldest. Hawaii Speleological Survey Newsletter no. 12, Fall 2002, p. 7.

---

The 10th International Symposium on Pseudokarst will be held  
29 April – 2 May 2008 at Gorizia (Italy).  
Gorizia is some 50km's north of Trieste.  
Final registration 15 April 2008.

It will be organized by the U.I.S. Commission for Pseudokarst, the Societa' Speleologica Italiana and the Centro Ricerche Carsiche "C. Seppenhofer".  
Participation fee € 70 + € 40 for fieldtrip.  
All info: seppenhofer@libero.it



3

**Many commission members will have received this question(s) by Bill Halliday. Although the dead-line is passed some of the questions maybe are not answered yet. Just for information .....**

Hello, all; greetings from Tennessee.

I need your help, urgently and quickly.

You may have learned about the "identification of possible cave skylights on Mars", in Science Daily 9-22-07 or elsewhere. These seven black vertical orifices are said by NASA to range in diameter from 100 to 250 meters (one looks smaller to me).

I am working with Jut Wynne at Northern Arizona University to document our concept that these orifices are the vertical openings of an unnamed type of pit crater with these dimensions, represented in Hawaii by the Kau Desert Pit Craters and Wood Valley Pit Crater on the southwest rift zone of Kilauea Volcano, and Parrot Pit and some unnamed pit craters on the rift zones of Hualalai Volcano. Devil's Throat on Kilauea Volcano may qualify (see the photos on page 335 of Volume 1 of "Volcanism in Hawaii"), and the inner pit of Na One on Hualalai may qualify. Hapai Mamo Pit on Mauna Loa and Bottomless Pit in Haleakala Crater and the inner pit of Kaupulehu Crater on Hualalai appear to be too narrow to qualify, but Kauhako Crater Pit on Molokai Island may qualify even though water-filled.

We are presenting a preliminary paper on this topic at the USGS symposium in Flagstaff, Arizona on 31 October. Beginning 24 October I will be in the field in the American Southwest, studying other pseudokarstic topics.

We are anxious to locate other examples, both in Hawaii and throughout the world. I have spent the last three days in library search, with much less success than I would like. Nearly all the published references I have found dealing with pit craters refer to the larger, genetically unrelated type found along the Chain of Craters Road in Hawaii Volcanoes National Park and in many other parts of the world, or else to open sections of linear tectonic features. There is a considerable literature on open vertical volcanic conduits but most or all of these are much smaller than the sizes calculated by NASA..

2.

From this review and from my own knowledge I have listed some features which perhaps may meet these diameter constraints and I urgently request feedback from you about these and any other features which may come to your mind. Time is very short and speed is more important than normal degrees of accuracy.

USA:

1) Hunts Hole and Kilbourne Hole, New Mexico, near Aden Crater, and any other relevant features in New Mexico lavas. Or Mexican lavas?

2) Two comparatively small, apparently unnamed pit craters seen on aerial photos south of Alae Crater, Hawaii.

3) The Snake River volcanics in Idaho look like good locations for this type of feature, but I haven't found anything definite in this area. The Great Rift and other linear tectonic features don't qualify, nor do pits surmounted by hornitos or pahoehoe-plastered cones. Has anyone relevant information in this area?

4) Dante's Descent, Arizona is too shallow to qualify. Has anyone information on more relevant volcanic pits in Arizona or California?

Elsewhere:

1) re Algar do Carvao, Azores: is the diameter of its orifice large enough to qualify?

2) Algar do Enxofre on the island of Graciosa won't qualify until the rest of its roof falls in, but does anyone know other features in the Azores which should be considered?

3) I have information on several volcanic pits on the island of La Palma in the Canary Islands, but all are too small to qualify. Does anyone know of relevant features in the Canaries?

4) The orifice of Thrinukagigur is too small to qualify, but are there pit craters elsewhere in Iceland which do qualify?

5) "Bottomless Pit", Rwanda is mentioned in Laumann's Band 11. Is this large enough to qualify, and are there other pits/pit craters in Rwanda which do qualify?

6) Puits des Hollandais, Mauritius. Water-filled pits are OK but is this one wide enough to qualify?

7) I found a sketch map of the volcanic region of Spain's Catalonia. It apparently shows Puig Astrol and Puig d'Agonia as being about the right diameter, but provided no information about them.

8) On Reunion, Cratere Commerson is too wide to qualify; are there more relevant examples? (I know of none on Mauritius and in the Comoros.)

9) Jim Simons has told me of an apparently unnamed wide pit on the heavily vegetated south or southwest flank of Mt. Suswa in Kenya, but I lack information on its dimensions. And what about the rest of the Rift valleys?

10) On Mt. Etna, the diameter of the vertical orifice of Grotto Corsaro Superiore may be wide enough to qualify, but it appears to be too shallow to qualify. Is this correct, and are there any other features on Mt. Etna which are more relevant? The pozzos about which I have information are too small.

11) What about the volcanics of Saudi Arabia and Jordan (and now Yemen)? Has anyone identified such features there?

XXX) What have I missed?

Please note that the features we are seeking are

- (1) vertical,
- (2) approximately round orifices,
- (3) orifices 50 to 250 meters in diameter, and
- (4) deep enough that aerial photos show them as black holes.

I hope to hear from you in the immediate future.

Please cc Jut Wynne at the above address. We'll keep you informed of progress. AND PLEASE NOTE MY NEW EMAIL ADDRESS ABOVE.  
Aloha, Bill Halliday

William R. Halliday  
6530 Cornwall Court  
Nashville, TN USA 37205  
615 352-9204

William R. Halliday

## Just in case you have to add something .....

### ***Atlas of Great Caves of the World*** — revised edition

Cave Books, the publication affiliate of the Cave Research Foundation, USA, is pleased to announce their plans to update and revise the existing version of *Atlas of the Great Caves of the World*. This all new English-language edition will be completed and in press in time for the 2009 International Congress of Speleology to be held in Kerrville Texas. The editors for this revision, Joel Despain, Lee Florea, and Pat Kambesis, each have years of international caving experience and a lifelong interest in cave cartography and karst research.

The previous edition of the atlas was originally published in French in 1986 by Paul Courbon and Claude Chabert. The English version by Courbon, Chabert, Bosted & Lindlsey was published in 1989. Dedicated exploration and major discoveries since that time have greatly changed our knowledge of caves around the world. For example, at the time of the 1989 publication, Lechuguilla Cave was 50 kilometers long (now 180 kilometers in length) and the world's deepest cave, Krubera, had not been discovered.

For this revision of a well known book to be a successful project we need your help. Updated maps, articles, photographs and information on the World's significant long and deep caves are critical to complete this book. The information can be submitted to us in any format. However, the project webpage ([www.cave-research.org/greatcaves/atlas.html](http://www.cave-research.org/greatcaves/atlas.html)) contains an electronic submission form that can be filled out and sent to us via the project email account ([caveatlas@gmail.com](mailto:caveatlas@gmail.com)) or via standard mail to: Great Caves Atlas, 41170 Oak Ridge, Three Rivers, California USA 93271. This electronic form will help guide you through the submission process and convey to the editors the critical information needed to produce an accurate and up-to-date publication in the format best

suited for print.

The present set of criteria for submitted caves comprise:

- All caves over 30 kilometers long (currently there are 117 on the list compiled by Bob Gulden)
- All caves over 1000 meters deep (currently that includes 84 caves)
- For each country of the world, the longest and deepest caves regardless of their size
- Caves that include the world's largest underground chambers (greater than 30,000 m<sup>2</sup>)
- Greatest entrance to entrance traverses (e.g. longest distance or depth between entrances)
- Greatest underground ascents and descents (vertical shaft(s) or canyons)
- Record cave dives (e.g. depth or distance of penetration)
- Greatest hydrogeologic systems (e.g. longest or deepest dye trace)
- Greatest non-limestone caves
- Great vertical pits either solitary or within a cave.
- Caves with other particularly outstanding and extraordinary features such as mineral deposits, archaeology, paleontology, etc. as determined by the editors

If you have such information, please submit it to us for inclusion in the revised version of the Atlas. Thank you for your assistance. Your suggestions and comments on the project are always welcome.

**Joel Despain**

*Cave Management Specialist, Sequoia  
and Kings Canyon National Parks*

**Lee Florea**

*Mendenhall Postdoctoral Fellow, United  
States Geological Survey*

**Pat Kambesis**

*Assistant Director, Hoffman  
Environmental Research Institute at  
Western Kentucky University*



International Conference on Granite Caves  
Coruña / Santiago / Vigo – Galicia, Spain  
18-21 Sept. 2007

By the U.I.S. a request was that the non-limestone commissions would keep contact. So I (chairman of the volcanic caves commission) visit regular pseudo-karst symposia. The Pseudokarst Commission has 'Symposia', but also 'Workgroup' meetings. So there was this Conference on Granite Caves – in my eyes a symposium in itself, but working together with the pseudo-karst commission. Next 'Pseudokarst Symposium' (the 10<sup>th</sup>) will be held in Gorizia (Italy) on April 29 – 2<sup>nd</sup> May 2008.

This conference in the north-east of Spain (Galicia) was a great success. Participants from all over Europe, but also South- and North America, total 13 countries. The field trips went to the "O Pindo System" - a Plio-Quaternary granite boulder fragment cave, "Os Profundos System", "O Folon" – a system with 32m depth and 835m length. And than trips to all kind of other caves, but all in granite and quartz. This combined with some archaeological features as repustrian art.

The lectures were very diverse, but all related to the topic and the area. Fascinating I found the lecture of Nils-Axel Mörner from Sweden, explaining pseudokarstic caves in his country (in gneiss and granite) by methane explosions and high-magnitude-paleoseismic events.

A key lecture is given by Juan Sergio Sorocco Hernández from Tenerife. This an overview of lava-tubes of the Canary Islands. It is fascinating – I guess some 1000 pictures are shown in an hour. Quality is superb, some animation is used which repeats pictures, and the speaker can hardly keep up with the text. He is really panting at the end. Sorry for the speed, because also biological features and other details are passing too fast.

Franco Urbani of Venezuela gives an update about the huge caves in quartzite in his country. Fascinating pictures, which also show the difficulty to explore these caves.

The fieldtrips are very interesting and are all before or after discussed with the lectures. Many discussions about origin of 'tafoni' and other features we meet and observe.

Most strange are (for me) huge boulders, some which are hollow and where you

can crawl around. And some nearby, apparently not hollow. There are lectures about these origins, but as far as I understand also huge controversions between the participants. But most fascinating – this area is studied in depth by the 'local' caving club. Their enthousiasm is enormous, hospatility unmatched!

So many thanks to Marcos Rodríguez and Ramon Romani, but also all the other members of their team!

#### More about the conference .....

This region of Spain has its own language: Galic. Some of the organizers speak only Spanish or Galic. No problem – they are so friendly that actually language is not needed. Except for a lecture about prehistory and archaeology: no one of the visitors has a clue of what we are told. The Commission President gives an openings speech in Hungarian. Although the English text is prepared for the stand-by beamer, it is not shown.

During each field-trip a sheet is given to us. A special group has been collecting legends, stories and beliefs about the objects we are going to see. Fascinating. Interesting (for me) is the abundance of opal-A in several of the caves we visit. A lecture by Penelope Boston tells us about biothems (= biologically influenced speleothems). Besides she tells interesting stories about the future research of caves on Mars and so.

During this conference we receive several publications about the area and the speleological research done. Two important booklets are issued for the participants – the conference abstracts, and the programme with the field trips. The last one has a reference - ISBN: 978-84-9749-257-7

D.L.: C-3067-07

For further information: Marcos Rodríguez      [mauxo@mauxo.com](mailto:mauxo@mauxo.com)  
Ramon Romani                                      [xemoncho@udc.es](mailto:xemoncho@udc.es)

