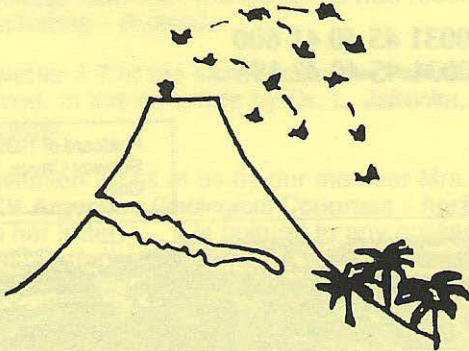


INTERNATIONAL UNION OF SPELEOLOGY
UNION INTERNATIONALE DE SPÉLÉOLOGIE

Commission on Volcanic Caves



30

Newsletter - June 2001

The Newsletter is send free to all members of the Commission. It is not possible to subscribe - but will be send to all interested in lava tube caves. News and info is always appreciated.

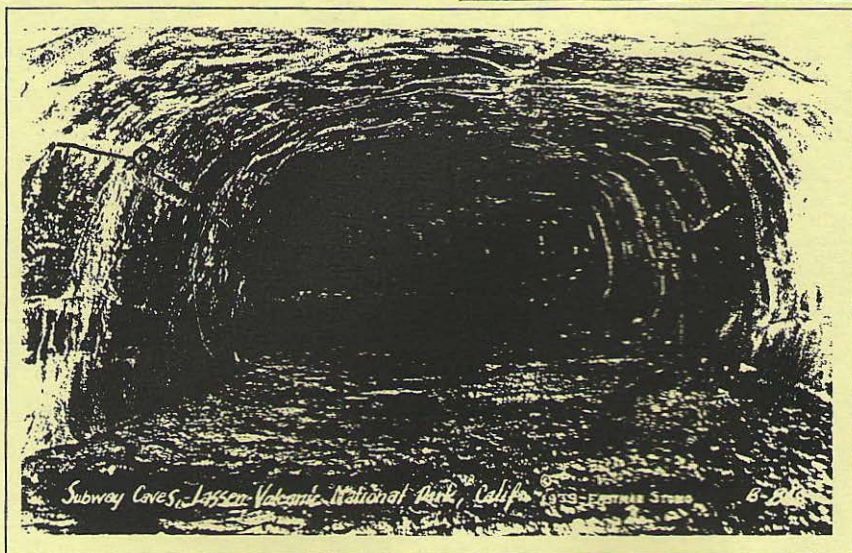
Honorary President: Dr. W.R. Halliday

Chairman & Editorial address:

J.P. van der Pas
Vauwerhofweg 3
6333 CB Schimmert
NETHERLANDS

TEL. 0031 45 40 41 600
FAX 0031 45 40 42 198

Postcard of 1939, depicting
Subway Caves, Volcanic National Park,
Calif.



Editorial

This newsletter will (hopefully) arrive just before the U.I.S. Congress in Brazil.

Actually we could call this issue a 'Bill Halliday' special, since virtually all material is his.

Dr. Halliday ('Bill') is still working on the 'Mowich Cave' argument about studying this cave (or better - the not-possibility of this). He made a report with all material concerning this - sorry, too much for publication in this newsletter. It contains some 80 pages of all reports, management recommendations and so on.

A message with best wishes for all was received from **Dr. Yuri Slezin** (Kamchatsky - Russia).

Newsletter # 7 of the **Commission for Pseudokarst** in U.I.S. was received. In this an article by **Dr. L. Jakucks**, reproduced in our newsletter.

An invitation for all of us by our member **Mrs. Lic. Silvia Barredo**: the **XV Argentine Geological Congress - April 23-26, 2002**.

From her letter: it is pointed to any colleague who might be interested to participate of the the XV Congreso Geológico Argentino to be held in El Calafate Argentina (the part of Patagonia characterized by an outstanding and marvelous landscape of glaciers and mountains). This would be the first time in our history that an Argentinean geological congress includes this scientific subject (Geospeleology) in its main symposia so it would be of a distinct interest. Furthermore, several experts in **volcanology and volcanic petrology** from our country will be present...

for more information from her:

sbarredo@mail.retina.ar or:

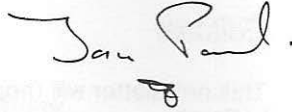
silvia@gl.fcen.uba.ar or:

spbarre@hotmail.com

The Congress web information is: www.cenpat.edu.ar/xvcga

This is the basic report about our commission since 1997.
For the symposium 'Kenya 1998' we still owe much respect to Jim Simons, and for 'Catania 1999' to Giuseppe Licitra.

Chairman of the Commission,



Report of UIS COMMISSION on VOLCANIC CAVES

- period 1997 till 2001 -

Activities 1997 - 2001:

- symposium **Kenya 1998** (proceedings published as U.I.S. publication).
- symposium **Catania 1999** (Sicily, Italy), proceedings to be published.
- during the SFCE-conference (Portugal, 1999) a post-conference excursion was organized to the Azores. Due to coincidence with Catania-symposium no one of the commission was able to participate.

Newsletters:

- a Newsletter is sent to all commission members and those interested. During 1997-2001 15 issues were produced with a total of around 140 pages.
- As requested by U.I.S. contacts were maintained with the Pseudo Karst and Glacier Karst Commissions.
- a contact was established with the non-speleological study-group L.A.V.E. members as Dr. Halliday and Prof. Kempe work(ed) on Hawaii, Prof. Wood and Greg Middleton worked on Iceland.

Future plans:

- next symposium will be on Iceland, **Reykjavik 2002** (organized by Dr. Sigurdur Jónsson).
- still not clear: a symposium on the Azores. Originally proposed for 2001, moved to 2002 for not to interfere with Brazil 2001, than interfering with Iceland, and also proposed for 2005. Hopefully this will solved during the Congress in Brazil.

This message, also delivered to the Newsletter by Bill Halliday, contains information about Mexican lava-tube caves. The editor (J.P. van der Pas) does not speak Spanish, but several contact points are mentioned.

LAVA TUBES in MEXICO

Mail message

From: johnpint@sps.net.sa (John and Susy Pint)
Date: Fri, May 4, 2001, 4:56pm (CDT+8)
To: bnawrh@webtv.net (William Halliday)
Subject: Ramon on Lava Tubes
Reply to: ThePints@Saudicaves.Com (John and Susy Pint)

Hi Bill!

Are you back?

Have some nice pix for you. Message below is from Ramon Espinasa to members of Spanish-speakers' Cavers Digest. If you don't read Spanish, will translate it for you... important!

John

----- Original Message -----

From: Ramon Espinasa <ramone@tonatiuh.igeofcu.unam.mx >

To: <iztaxochitla@yahogroups.com >

Sent: Monday, April 30, 2001 10:13 PM

Subject: Re: [iztaxochitla] Tubos de Lava

Los tubos de lava de la regi?e Tepoztl? fueron explorados por la SMES [Sociedad Mexicana de Exploraciones Subterr?as] hace ya varios a? y varios articulos han sido ya publicados al respecto, tanto en Mexico Desconocido como en la AMCS [Association for Mexican Cave Studies]. Yo hice mi tesis de maestria sobre los tubos de lava, y en ella pueden encontrar todos los mapas e informacion sobre los m?de 25 km de tubos de lava explorados en la zona. Quien est?nteresado, le puedo mandar una copia por mail, pero es un archivo bastante grande.

Ram?R >

Somos 371 miembros en 27 pa?s.

Congreso Mundial de Espeleolog? <http://www.speleobrazil2001.org.br> Primer Congreso Mexicano de Espeleolog?Oztomexica: <http://www.oztomexica.8k.com/>

The UIS International Speleo Calendar:

<http://rubens.its.unimelb.edu.au/~pgm/uis/events.html>

Su utilizaci?e Yahoo! Grupos est?ujeta a las <http://docs.yahoo.com/info/terms/>

Address until 31 July 2001:
6530 Cornwall Court
Nashville, TN USA 37205

Address after 31 July 2001:
101 Aupuni St. #911
Hilo, HI USA 96720

This letter, copy sent to the Newsletter, contains information which should be known to all. Next page gives an answer of the authorities of Mauritius.

Hon. Rajesh Bhagwan
Minister of the Environment
Government House
Port Louis, Mauritius

20 March 2001

Dear Sir:

It was my good fortune to spend several days studying lava tube caves of Mauritius a few years ago. I found them of exceptional interest and importance in the spectrum of lava tube caves of the world.

Now I have learned from Hon. Greg Middleton that the Waste Water Authority of Mauritius is planning to use lava tube caves around Jacquot Hill for channelling treated waste water.

Even comparatively minor lava tube caves commonly have significant resources and values. For this reason, the National Speleological Society (of America) has a policy that no cave should be destroyed or damaged without a thorough inventory and study of its contents and features by specialists especially knowledgeable in the specific type of cave. From my time in Mauritius, I am confident that no such study has ever been made of the caves around Jacquot Hill. I know all the vulcanospeleologists in the United Kingdom, and none of them participated in the British studies said to have been conducted here.

Further, introducing even treated waste water into lava tubes has very serious public health implications. Last summer in Hawaii I chaired a symposium on lava tubes as natural conduits of water, and groups of speleologists in Hawaii now are cooperating with public health authorities to protect the ground water of Hawaii Island from pollution through lava tubes. Similar protection is needed for the ground water of Mauritius.

I urge you in the strongest possible terms to halt this extremely unwise project until appropriate studies have been performed by knowledgeable vulcanospeleologists and their conclusions and recommendations have been given due consideration.

Very sincerely yours.

Dr. William R. Halliday
Honorary President
Commission on Volcanic Caves of the International Union of Speleology

cc: President, Commission on Volcanic Caves (van der Pas)
Greg Middleton

Answer to the letter of the previous page.



MINISTÈRE DE L'ENVIRONNEMENT

Bureau du Ministre

ENV/1/117 V.4

24 April, 2001

Dr. William R. Halliday
Honorary President, Commission on Volcanic Caves
of the International Union of Speleology
6530 Cornwall Court
Nashville, TN
USA 37205

Dear Dr. Halliday,

Proposed use of lava tube caves around Jacquot Hill for channelling treated waste water

I acknowledge receipt of your letter dated 20 March 2001 on the above subject.

We have already received representations from several institutions on the same question and they are being processed in accordance with the provisions of the Environment Protection Act. Naturally your comments will also be taken on board.

I would like to avail myself of this opportunity to thank you for the keen interest you show on this delicate issue.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Rajesh Bhagwan', written over a horizontal line.

(Rajesh Bhagwan)

M...

10^{ème} Etage, Ken Lee Tower
Angle Rues Barracks et St. Georges,
Port Louis - République de Maurice
Tel: (230)208 1944
Fax: (230)211 9455

Again a letter from Dr. Halliday to 'Mowich Cave'. I think few persons have the perseverance to continue such a project.....

Address until 7 January and after 7 March 2001:
6530 Cornwall Court
Nashville, TN 37205

Winter 2001 field address:
101 Aupuni St. #911
Hilo, HI 96720

16 December 2001

Mr. John Ouimet, District Ranger
Diamond Lake Ranger District
Umpqua National Forest
2020 Toketee Ranger Station Road
Idleld Park, OR 97447

Dear Mr. Ouimet:

re: Mowich Cave

Thank you for taking the time to speak with me by phone when I was in the Roseburg office last month.

This is formal notice of withdrawal of my appeal of your various actions regarding Mowich Cave.

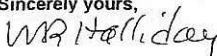
Actually this appeal became moot when you delayed until November 8 your response to my request to study the cave late in October. I only received a copy of it on November 13 in Roseburg.

Further, however, I subsequently obtained additional data indicating that my request was inappropriate anyway. This is because the autumn interim between critical seasons is in September, not October. This is clearly documented in Perkins 1990, already in the possession of the Umpqua National Forest, and in Howell et al ca 1998, which Mike Hupp copied on November 13. These are the reports I cited to you on the phone on November 13.

As a result of our meeting of November 13, Mike Hupp and I both are attempting to obtain further information about the dates of various population counts and estimates of the caves in Mowich Cave. It is meaningless to compare the number of bats in hibernacula with those in maternity colonies and/or with those using the cave only as a night roost in the interim periods. When we determine what valid data are available, I will contact you again about access at the optimum time in September 2001.

Please also note that Special Use Permits are not the optimum format for research permits.

Sincerely yours,



William R. Halliday
Honorary President
Commission on Volcanic Caves of the International Union of Speleology

cc: IUS (van der Pas)
UNF (Mike Hupp)

A new approach to the problem of the formation of granite tafonis

by **Dr. László Jakucs**

Department of Geography, Natural Sciences Univ.,
Szeged, Hungary

To solve controversies present in academic works an attempt was made to clarify and to create a new approach to the problem of the formation of granite tafonis.

Based on our latest investigations it is considered very probably related to syngenetic magmatic processes. Observations have shown that certain tafonis have formed in the hot magma as 'gas bubbles'. In our idea the load of the overlying strata on the ascending and still hot and plastic magma diminishes with the decreasing depth. As a consequence endogeneous gas bubbles form of the gaseous components (steam, CO₂, SO₂) are always found in abundance in the acidic magma. Within this plastic mass these gaseous vesicular inclusions are forced upward into the zones of lesser load. Reaching however the outermost and already hardened magma they stop below this 'rock ceiling' and sometimes accumulate in a high number and eventually congeal into magmatites that keep on cooling. During multi-phase magmatic activities (e.g. repeated tectonism) tafoni benches composed by several superimposing layers form. Vesicular tafonis wear several evidences of the formation of cavities syngenetic with turning of the magma into granite rock. These are:

- Hermetic isolation of certain tafonis from the outside world;
- More or less regular spheric hollow shapes of tafoni;
- Where egg-shaped tafoni formed, the axis of elongation is always parallel with the past flows of matter manifest in the textural arrangement of the rock;
- Inside recently exposed tafonis (where primary cavernous surfaces of granite were not yet affected by weathering) concave surfaces are covered with a shining, vitous and hard enamel;
- In certain tafonis stalactite-like 'dripstones of melted granite origin', i.e. stretched rock fibres can be observed.

editor: about previous definitions of tafoni the following from 'lexikon für höhlenforscher' -

- in German: Tafoni, Bröckelhöhlen, Felstaschen - nahezu runde Aushöhlung am Fuss eines Kalk- oder Granitfelsens; am Ufer durch Salz- und Windverwitterung, im Boden durch das Zusammenwirken von Tau, Sickerwässern, Temperaturschwankungen und Verdunstung entstanden. Korsicher Begriff.
- English: Roughly hemispherical hollows weathered in rock either at the surface or in caves.

LAVA TUBE CAVES in ARABIA

This information was sent by Bill Halliday, and as you see it came via E-mail. Names, locations, all in this report.

Mail message

From: johnpint@sps.net.sa (John and Susy Pint)
Date: Fri, Jun 1, 2001, 2:03pm (CDT+8)
To: bnawrh@webtv.net (William Halliday)
Subject: Lava tubes in Arabia
Reply to: ThePints@Saudicaves.Com (John and Susy Pint)

Hi Bill!

I'm working on lava tubes here. The report below mentions some entrances I spotted by pure chance, but I got a description of a biggie only 2 hours by car from Medina. Locals said they entered the tube in the morning, walked all day and came out at sunset. They say there is walking and crawling passage and even water inside somewhere. Also expect a guy named John Roobol to be returning to SGS in the fall. He told me he saw several big entrances in harrats up north. When the weather cools down, I hope we'll start checking these out. I heard that poisonous snakes abound in the lava, so I'm sure the tight crawls will be great fun!

John
.....

ALTTITUDE TWO FEET, FULL SPEED AHEAD!

"We're sending a helicopter to Medina tomorrow; would you like to accompany the pilot?"

Well, I had long wanted to look at the lava fields or *harrats* around Medina from the air in order to find out whether there are any lava tubes there, so, of course, I said, "Na'am!" (yes)

The next day found me at the Jeddah Jet Facility, having my first look at helicopter 6014 to which I was about to entrust my life. It looked awfully small, with just about the same room inside as a VW bug.

A moment later, the pilot arrived. He was a thin Saudi named Saeed Al-Ghamdi, who spoke English very well and had done a lot of flying in the States, dusting crops, and in Arabia, dusting locusts.

As I was the only passenger, I got to sit next to the pilot in the clear plastic bubble that surrounds the front seats. Here they strapped me into a harness a bit like what we use in caving, with shoulder straps whose purpose, I guess is to keep you in your seat when the helicopter happens to be flying (gulp) upside down.

We were supposed to take off at noon, but the pilot discovered our fuel tank wasn't full. At 12:30, with a tankful of 75 gallons of jet fuel, we rose into the air and in five minutes were floating above the rocky volcanic terrain that begins just inland from the Red Sea coast. Here, lava rubble meets sand dunes and I could enjoy one of my favorite scenes: "waves" of yellow sand carpeting the sides of rugged black mountains.

"John, you're wearing sandals. By the time we arrive, your feet will be burnt to a crisp," said Saeed's voice, booming through the clunky pair of enormous earphones on my head. I pushed a button on the floor and replied through my mike: "Thanks for the tip - now I know what to do with this jacket I brought along."

Yes, I had been told to bring a coat in case it got cold, but Saeed assured me that cold was hardly going to be the problem this time of year. "By the way, exactly what is the temperature right now?" I asked him as I put my feet into the sleeves of my windbreaker.

"John, the console thermometer is reading 53 degrees right now."

FIFTY-THREE DEGREES? Well, if you translate that into gringo, it's a whopping 123 F.

"Why aren't we dead, Saeed?" I asked.

"You can thank the cockpit fan and the air blowing through the side windows. But, you know, this dry air will eventually suck all the moisture out of your lungs. Luckily, our flight will only be an hour and a half, in sha'allah."

"How about the, um... AC?"

"AC? There is no AC!"

I reached into the back seat (no easy task with all those straps plus two cameras and a GPS around my neck) and got out my canteen. Nobody had told me to bring along water (!) but I had done so out of habit. Now I realized that my supply and Saeed's little bottle of mineral water was all the liquid we had on board and I wondered -- should we break down somewhere enroute -- just how long two men could last under the merciless sun with only a liter of water between them.

Every time we spotted high tension wires, Saeed would fly well above them, but in most areas he would fly low "to avoid turbulence." Soon we were above *harrats* or lava fields which were tabletop flat and we began to fly very low. As we whizzed along, I asked Saeed what our altitude was in relation to the ground. "Three meters," he replied.

"And our speed?"

"160 kilometers per hour."

Before I could even gasp, Saeed reported that we were now flying lower still. "It's two feet now," he blithely announced.

I guess we would have taken the head off any creature unlucky enough to peek above the long stretch of small black rocks, but creatures were far and few between. Along the way from Jeddah to Medina we spotted some domestic animals like sheep, goats and camels (normally all running for their lives in the opposite direction from the noisy chopper) but as for wildlife, all I saw the entire time was one pair of small birds!

We were zooming along, practically shaving the top of that harrat, when suddenly the floor of the world fell out from under our feet. We had gone from two feet above ground to a thousand in a split second, right off the end of a sheer cliff and now, there we were, floating high above a stupendous gorge.

"Wow! Where are we?" I asked the pilot.

"How should I know? he replied.

"You mean you aren't looking at wadis and mountains and power lines all the time?"

"No, I just follow the GPS," replied Saeed and I could see he had about as much Bedu in him as I do.

Now we were flying over mountains and the farther we went, the wilder and higher they got. As we skimmed over each peak, another incredibly deep gorge would suddenly open up beneath us. This was repeated over and over until what looked like the grand daddy of all mountains loomed ahead of us, its top way above our level of flight.

For a while we hovered in one spot, the engine roaring. "I'm trying to go higher, but I can't," said Saeed, "the air is too thin." We were around 6000 feet at that moment (pilots don't seem to like the metric system, even over here) and the air whistling past our window actually felt "cool" in comparison with the blast furnace effect we had been suffering at lower levels, but I suspect it was still over 100 degrees Fahrenheit. At that particular moment, I wasn't thinking about temperatures.

We edged closer and closer to the sheer vertical wall in front of us and inch by inch crept upwards. It seemed to take an eternity.

"Too bad we only have one engine," remarked Saeed.

"Now you tell me," I answered. "...so what happens if our one and only engine quits on us? Can you land this thing or are we just a splotch on the rock?"

"If there were a flat spot somewhere, I could land, but in mountains like these..."

Well, every surface I could see was straight up and down and jagged to boot, so it was a great relief when we finally flew around the side of the BIG one and eventually returned to flatlands: the harrat just south of Medina.

Here we flew over large areas where bulldozers had scraped away the top layer of black rock, exposing parallel rows of yellow earth. It looked like a huge farm growing nothing. Saeed explained that the volcanic ash under the rubble was fertile and that some people made it a practice to scatter melon seeds over these "fields" in the hope that the rains which sometimes fall in this region might produce a nice crop. It was an iffy sort of farming that only occasionally paid off.

In this flat area we spotted three "dust devils" or whirlwinds nicely lined up. Before I could poke my camera out the window, all three vanished in puffs of dust. That got Saeed talking about dangerous currents of air and he told me about one time when his helicopter was suddenly lifted 3000 feet straight up in the twinkling of an eye. This, it seems, was a rather benign incident because "sometimes the current of air takes you straight down instead -- and at the same speed."

But a far worse experience for Saeed was the time he found himself inside a mass of air where water droplets were forming right before his eyes. "In an instant, I was engulfed in a swirl of whiteness and I totally lost all sense of orientation. This produced in me a state of shock, so that I couldn't even make sense of the instrument panel. All I could do was say into my mike, 'I don't know where I am or what I am doing.'"

This sounded to me a lot like the description of how people die while cave diving and I am sure it will be a consolation to all practitioners of that sport to know that scuba diving at 6000 feet is even more dangerous than inside a cave.

About ten kms from Medina, the harrat suddenly changed from rubble to what looked like smooth, "hoy hoy" lava, the sort where I had hopes we might find lava tubes. I had my GPS ready at hand and got the coordinates of two cave entrances and three "likely" areas where tubes might be found. A few minutes later, we were hovering over the SGS "permanent camp" outside Medina. I had made it alive and could now look forward to a similar trip back, on the following day. But this time I'd be wearing socks and carrying plenty of liquids.

John Pint

Special Training Needed for Cave Cleanups?

by Bill Halliday

The Hawaii Chapter of the NSS has encountered what may be a serious obstacle to the dump cleanups planned in follow-up of its highly successful August 2000 conference. As described in the November 2000 NSS News, the grotto organized the first-known conference on lava tubes and groundwater pollution. It was well attended and well received, with the appropriate Health Department and other governmental agencies initiating follow-ups on the alarming data presented at the conference.

The grotto planned to begin actual cleanups in January 2001. However, Dr. John Bowen, retired University of Hawaii-Hilo professor, has told us that OSHA regulations require persons involved in such cleanups to have had training in handling of hazardous and toxic substances.

John is the person who trains the Hilo Fire Department in handling such wastes, so we cannot ignore his instructions. We are attempting to arrange such training-at least for some people, but it certainly will impact the availability and the enthusiasm of many volunteers and the momentum generated among the government agencies.

It may be that cave dumps in Hawaii contain a much larger percentage of hazardous and toxic substances than elsewhere in the USA. Automotive wastes are very prominent-everything from rotted motor blocks, auto bodies and transmissions, to disintegrated batteries, rusted oil cans, and drums that long ago lost their residue to the groundwater. Nearly empty herbicide and pesticide drums and other agricultural wastes are common. Household medical wastes are obvious, and so are discarded druggie syringes and needles. All these and many more components of Hawaii cave dumps qualify as hazardous or toxic substances and we know that special care is needed in removing them. But special training to comply with OSHA regulations?

If you have successfully dealt with this kind of situation or have useful information, feedback is urgently needed. Please contact Ric Elhard, caver@hialoha.net

In the NSS News of March 2001 an short note by Bill Halliday concerning a problem for those who are friendly enough to cleanup caves. Protection and conservation are very important, another form of protection was seen in Portugal.

Another Way to Conservation?

Recently I visited the famous rock-art side of the Cõa Valley Park in Portugal. It is not cave-related, but protection is universal. To avoid over-visiting an interesting approach is practiced here... No good roads to the sites... Three park-centers offer transport with (not too big) 4-wheel drive cars. Groups can hardly be bigger than 5 or 6. Mine was just three, in 'spring'. They bring you into the Park, than you walk. For two hours. And in summer it can be hot.... Just cross-country. No cafeteria. This will keep a lot of people out. Due to the small engravings sometimes only one visitor could be briefed at a time. So, no groups. People who can not walk cross-country can forget it. This is ideal to protect the location, but will everyone accept this?

Info about this N.P.:
<http://silex.ipa.min-cultura.pt/coa>
e-mail: pavc@mail.telepac.pt

J.P. van der Pas

For a long time in our files....
Taken from the Web.
For those going to South Korea, some lava tubes
can be visited as tourist.

Vulcanospeleology & Lava Tube Caves of South Korea

Cheju Island

A travel company that offers trips to Cheju Island, including trips to the extensive lava tubes:

Eastern Cheju

Songsan Ilch'ulbong Peak The Songsan Ilch'ulbong Peak, which means "Sunrise Peak", is located 48 km (29 miles) east of Cheju City on the Songsan Peninsula. It is a volcanic cone rising 182 m (597 ft.) high around a huge crater. The crater is shaped like a crown, with 99 curious rock peaks surrounding it. The peak is famous for its spectacular view, especially at sunrise. From the west Songsan port, a ferry cruises around Songsan Ilch'ulbong Peak and nearby Udo Island every hour. [A] Songsanri, Songsan-up, Namcheju-gun [T] 1 hr. 20min. by intercity bus from Cheju Bus Terminal [H] Sunrise to sunset [F] W 1,000

San-gumburi Crater

Along with Mt. Halla's Paengnoktam Crater Lake and Songsan ilch'ulbong Peak, San-gumburi Peak is the third of the notable formerly active volcanoes on Chejudo Island. The circumference of the crater is 2 km (1.2 miles) with a total surface area of 298,000 sq. m (71.5 acres). Within the crater are 420 different species of tropical and subtropical plantlife, making it a natural botanical garden. [A] San 38, Kyorae-ri, Chochoon-up, Pukcheju-gun [T] 40min. by intercity bus from Cheju Bus Terminal [H] 09:00-18:00 [F] W 1,000

Manjanggul Cave

This lava cave located 30 km (18 miles) east of Cheju City was designated as Natural Monument No. 98 in 1970. The 13 m (42 ft.) - wide, 15 m (49 ft.) - high cave runs for over 13km (7.8 miles). The cave is inhabited by bats and many rare species of animals making it of great scientific interest. [A] Tong(East) Kimnyong-ri, Kujwa-up, Pukcheju-gun [T] 40min. by intercity bus from Cheju Bus Terminal [H] 09:00-18:00 [F] W 1,600

Kimnyongsagul Cave

Connected to Manjanggul Cave, the 705 m (0.4 mile) - long Kimnyongsagul Cave is located southeast of Kimnyong Village. It is called "Snake Cave" because the interior looks like a snake. [A] Tong(East) Kimnyong-ri, Kujwa-up, Pukcheju-gun [T] 35min. by Intercity bus from Cheju Bus Terminal [H] 09:00-18:00 [F] Free

Advertisement

Looking for the proceedings of the **3rd Symposium on
Vulcanospeleology (Bend - OR, U.S.A. 1982).**

J.P. van der Pas
Vauwerhofweg 3
6333 CB Schimmert
NETHERLANDS

Still available

The proceedings of the **7th Symposium on Vulcanology, Sta. Cruz de
la Palma, Canaries, Spain (1994)** .

(the price indication was from early 2000, so might be changed)

Surface mail world 800 Pesetas,

Air mail - Europe 1245 Pta, Africa 2105 Pta, America 2630 Pta,

Asia/Australia 3700 Pta.

If paid in other currency, 1000 pesetas must be added for change
expenses.

Pedro Oromí
Depto. Biología Animal
Universidad de La Laguna
38206 La Laguna
Tenerife - Islas Canarias
fax: 922 31 83 11
tel : 922 31 84 29
e-mail: poromi@ull.es

Entrances of lava caves to be seen on Icelandic stamp of September 1964.

This stamp (face value 3.50 Isk.), issued 23 June 1965, depicts the famous Surtsey eruption. It is part of a set of three stamps. Information by Dr. Siggi Jónsson, President of the Icelandic Speleological Society:

... I have marked the vents on the 3.50 Isk stamp, as it is the best for locating the cave entrances. The picture shows the main lava-vent in action. Inside the vent (marked **A**) are many caves and another entrance is just south of the vent, (marked **B**). The caves inside the crater (vent) are all marked in any of the articles on the speleology of Surtsey, i.e. in the first issue of Surtur (= the publication of the I.S.S.). There is a lava tube going all the way from crater (**A**) to the sea.

