INTERNATIONAL UNION OF SPELEOLOGY UNION INTERNATIONALE DE SPÉLÉOLOGIE

# Commission on Volcanic Caves

# Newsletter 22

(reprint March 2000)

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# Commission on Volcanic Caves

Honorary President Dr. William R. Halliday

The Commission which takes care about caves of this and other worlds

Chairman & Editorial address Jan Paul van der PAS Vauwerhofweg 3 6333 CB Schimmert NETHERLANDS TEL/fax \*\* 31 45 40 41 600

NEWSLETTER Nr. 22 January 1999

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#### Message from the Chairman, and report over 1998

Apologies for still sending this by regular mail. I still have no E-mail, maybe in the famous year 2000. By the way, I noted the chairmen of the two other non-limestone commissions (pseudo-karst and glacier-caves & cryokarst) also operate without E-mail.

The year 1998 saw the fabulous symposium in Kenya organized by Jim Simons, with good news about the proceedings taken care by Prof. Forti and Prof. Ezio Burri.

For reports of other commission members see further in this newsletter.

Four newsletters, with some 30 pages total, were issued during 1998.

An important new commission member is Mr. Charles Larson, author of the 'Glossary of Lava Tube Features'. He has agreed to be moderator. More about this on one of the next pages.

Contacts were maintained with the other non-limestone commissions as ordered by UIS. Regrettable I could not visit the glacier-cave symposium but there were meetings with staff members of the pseudo-karst commission.

Wishing you a succesful 1999, and hoping to see many of you in Catania,

sincerely, <u>JUPA</u>,

### Recently received publications

Newsletter of the 'Commission for Pseudokarst' - Nr.2 / Dec. 1998. Editor István Eszterhás. Contains list of 1998 activities. Reference to newsletters of our commission. In German.

LAVE - Revue de L'Association Volcanologique Européenne - N° 76 - December 1998. Full of world-wide reports about volcanic activity. In French.

Vulkani na jadranskim otocima (Volcanoes on the Adriatic islands?) -Publication from the Croatian Natural History Museum for an exhibition during October 1998 - February 1999, by Marta Crnjaković. Croatian/English. Received as an exchange for our commission newsletter by courtesy of Dr. Vlado Bozić. The Croatian speleologists have not paid much attention to caves of volcanic origin, but will start to do so. They might send now some people to the Catania Symposium.

Conceptos de ESPELEOLOGIA VOLCÁNICA Canaria, by R.G. Becerra, F.G. Moreno, M.A.M. González. Not seen yet - reported by H. de Swart. Edited by Sociedad La Cosmológica, November 1997. TF-1792/97, ISBN: 84-923180-0-7. Some 120 pages. In Spanish.

#### Misc. articles and notes seen in publications

NSS News - September 1998. Page 266 - 270: Gypsum Cave, the longest lava tube in North America, by Tom Miller. History, exploration, big map. Nice color picture on front page.

NSS News - November 1998. 'Correction to September Issue':

Dead Horse Cave is likely still the longest surveyed lava tube north of Mexico. Scott Linn of Oregon tells me that Dead Horse's upto-date length is 4404 meters, with a map in progress, while Gypsum Cave (Idaho) is about 4350 meters. It seems that both caves are likely played out, with Dynamited Cave of Washington State a possibility to eventually pass both. In Mexico, Chris Lloyd says that two lava tubes near Mexico City are apparently about five kilometers each, and could potentially connect.

#### Tom Miller

Proceedings of International Working Meeting 'Preserving of Pseudokarst Caves' (now the pseudokarst commission). Slovakia 1995. Page 104 - 109: Nová Spopecná Jaskyna na Slovensku, by Juraj Galvánek & Ludovít Gaál. In Slovak, English abstract: New volcanic cave in Slovakia. ... Found in July 1995, named Sezam Cave, length 26,4 meter. It is the youngest volcanic cave in Slovakia. Dated by K/Ar as 0,53 mil. years...

#### La Palma / Canary Islands

A small group of Dutch cavers visited some lava caves together with Mrs. Conny Spelbrink. One cave the recent discovered 'Cave of the Home of the Elderly'. Discovered due to building activities. Mrs. Spelbrink is looking for some people for topographic work on La Palma in 1999. Contact: Conny Spelbrink, E-mail conny @ ing.iac.es

#### Spain:

In the last years I visited some caves in Canary Island. Again the most important caves in Lanzarote and Tenerife. Besides I worked in several small caves in Hierro and Fuenteventura. Also visited Pico Island in Acores with a catalan team who mapped the Gruta des Torres.

> Alfred Montserrat Nebot E-mail: alfred.montserrat @ infomail.lacai.es

#### Mexico / Yvo Weidmann

I was very busy with my transfer from Switzerland to Mexico, and will now for the next (or two) years(s) be in Oaxaca. Working now on the evaluation of biological resources of the State of Oaxaca. Due to this reason I was not very active the last time about volcanic caves. At the moment I'm working on a publication about the lava tubes of the Tolbachik and Gorely Volcano on Kamchatka, together with a geografical information system, and hope to finish this publication soon. Will soon visit the Mexican Speleological Congress and find out about the situation of the Mexican situation of volcanic caves.

Yvo Weidmann fax: 0052 951 600 98 E-mail: serbo @ eawag.ch

#### New and important Commission Member

In an earlier Newsletter "The Glossary of Lava Tube Features", by Mr. Charles Larson was mentioned. Not mentioned was an argument of this commission with the 'working group on symbols'. This was due to some lack of information. Myself I'm not an expert on definitions and terms. So I'm very proud to welcome a new member to our commission:

Mr. Charles Larson 13318 NE. 12th Avenue Vancouver WA 98685 U.S.A.

E-mail: books @ Pacifier.com

Mr. Larson is willing to function as a 'reporting point', in effect a moderator.

So - for those who do not have it yet I would strongly advise to obtain the 'Glossary', and use it as our bible. All remarks and additions should go to Mr. Larson. The Glossary is available at: National Speleological Society

2813 Cave Ave Huntsville, AL 35810-4431 (256) 852-1300 U.S.A. E-mail: nss@caves.org and : www.caves.org

### CHRONOLOGY of SYMPOSIA on VULCANOSPELEOLOGY

- 1° White Salmon, WA USA, August 1972. Organizer: Western Speleological Survey (William R. Halliday). Proceedings published (in English) by organizers in 1976.
- 2° Catania, Italy, August 1975. Organizer: Gruppo Grotte Catania CAI (Giuseppe M. Licitra et al.). Proceedings published (in Italian + English) by organizers in 1977.
- 3° Bend, OR USA, Jun/Jul. 1982. Organizer: National Speleological Society (William R. Halliday). Proceedings published (in English) by International Speleological Foundation in 1993.
- 4° Catania, Italy, September 1983. Organizer: Gruppo Grotte del CAI Orazio Mirabella, Giuseppe M. Licitra et al.)(UIS). Proceedings published (in Italian) by Centro Speleologico Etneo in 1987.
- 5° Izu-Nagaoka, Japan, November 1986. Organizer: Japanese Vulcanospeleological Society (Takanori Ogawa). No news about proceedings.
- 6° Hilo, HI USA, August 1991. Organizer: Hawaiian Speleological Survey (William R. Halliday)(UIS). Proceedings published (in English) by National Speleological Society in 1992.
- 7° S.ta Cruz de la Palma, Canaries, Spain, November 1994. Organizer: Fed. Canar. de Espeleologia (Pedro Oromi & Conny Spelbrink)(UIS). Proceedings published (in English) by Federacion Española de Espeleologia in 1996.
- 8° Nairobi, Kenya, February 1998. Organizer: Caving & Exploration Group of East Africa (Jim Simons)(UIS). Proceedings to be published in English by Istituto Italiano di Speleologia dell'Università di Bologna.
- 9° Catania, Italy, September 1999. Organizer: Centro Speleologico Etneo (Nicola Barone, Giuseppe M. Licitra et al.)(UIS). Proceedings to be published in English by Area della Ricerde di Catania of the National Research Council.

With the compliments of Giuseppe M. Licitra

## Reports and notes recently received from Commission Members

Lic. Silvia Barredo / Buenos Aires:

I belong to GEA, which means "Speleological Group of Argentina", and also to the University of Buenos Aires where I am finishing my PhD in geotectonics.

As a speleologist I work in different types of caves but find more attractive the volcanic caves. I conducted some researches in the Misiones caves (Northeast of Argentina), developed in the Serra Geral plateau basics, this unit is considered the thigkest and most

extended plateau around the world. With more than 10°Km<sup>2</sup> it covers Brazil, Paraguay, Uruguay and Misiones in Argentina, 11 flows had been reported each of them ranging in thickness from 3 to 80 m. They correspond to dark grey to red glassy tholeiitic basalts (see "Speleology in the red land of Misiones" (Barredo y Chavez, 1997) V Congreso espeleológico de América Latina y el Caribe - III Encuentro Internacional del FEALC, Malargue, Argentina), and caves follow the jointing specially in the upper portion of the bodies and of course, the feeding tubes.

I have been also working in lava related caves like Halada basalt cave, La Pampa Province (central-west of Argentina), and some more ones like Auca Mahuida hill in Neuquen Province (Patagonia). In all cases the main objective was the tectonic understanding of the origin of the lavas and the time and genesis of the cave development in a tectonic context.

My recent work, in press, consist of the analysis of the origin of the Misiones plateau as an ingneous province (also known as LIP or swell) in a passive margin and how these lavas yield caves apparently developed during the Quaternary - Tertiary? times.

As every little piece of information is got 'ad honorem' all these works come to light very, very slowly.

> Lic. Silvia Barredo Grupo Espeleologico Argentino (GEA) CONICET - Laboratorio de Tectónica, Universidad de Buenos Aires.

> > E-mail: sbarredo @ mail.retina.ar silvia @ gl.fcen.uba.ar

#### Iceland:

Everything is in good order here and no particular breaking news from the speleological field.

We organized an expedition to Surtsey in late August and it was successful despite the foul weather we experienced. We spent some time inside the hut doing nothing, since the weather was at the time quite severe. Nevertheless we managed to explore all the 10 known caves on the island and I sampled them all for minerals. I am currently working on analysing.

> Sigudur S. Jonsson chairman of the Icelandic Speleological Society P.O. Box 342 121 Reykjavik - Iceland

> > E-mail: ssjo @ os.is

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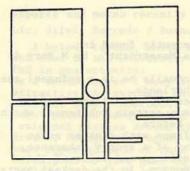
#### Lava cave history

An old reference on volcanic caves I recently found in: "Description du Plateau de St.Pierre de Maestricht", by M.Bory de St.Vincent, 1821 (page 274). Monsieur Bory de St. Vincent visits (actually he is a refugee) the subterranean chalk quarries of the Netherlands. This book, originally in French was recently translated in Dutch. During a visit to the quarries he notes a certain substance, which he compares with something he has seen before: ..... I recognized an utmost resemblance with another moist substance, soft, greenish-white and of a spongy coherence, which I prevously discovered on ceilings and walls of the volcanic caves on the Island of Réunion. In the darkest parts of these caves even an inch thick. Investigation showed this to be 40% siliceous earth, the same amount of water, and

caustic magnesium, calcium carbonate and iron oxyde. It should be noted that indeed at the entrances there is a very thin green cover on the walls of the Dutch quarries, but never as thick as Bory de St.Vincent noted.

Original title of this publication: Description du Plateau de St.-Pierre de Maestricht, par M. Bory de St.-Vincent, Bruxelles, Chez Weissenbruch, Imprimeur du Roi et du la Ville, Rue du Musée, Nº. 1057

> please note the dates for the 7th symposium for Pseudokarst: 06 - 10 Oct. 1999 Romania - Arad - Macea - Moneasa all info: UNIVERSITATEA DE VEST VASILE GOLDIS ARAD Bulevardul Revolutiei 81 Arad 2900 Romania Prof. Tiberiu Tulucan tnt @ uvgar.sorostm.ro tulucan @ hotmail.com





COMMISSION ON VOLCANIC CAVES