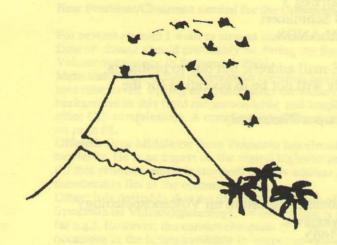
Commission on Volcanic Caves

of the International Union of Speleology



Nov./Dec. 2001

Newsletter # 33

Editorial address

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

(there is an E-mail address, but due to problems it most likely will not be in operation for the rest of 2001:

)

jpgvanderpas@hetnet.nl

Important:

Xth International Symposium on Volcanospeleology Iceland / Reykajavik 9 - 15 Sept. 2002 http://www.iceland2002.com

For the future:

There is an offer for the XIth International Symposium on Volcanospeleolgy on the AZORES (2004/5)!

COMMISSION ON VOLCANIC CAVES of the International Union of Speleology

New President/Chairman needed for the Commission

For several reasons I want to stop as chairman of this commission. Date of change should preferably be during the Symposium on Volcanospeleology in September 2002.

Main task: keeping this commission together, having a serious interest in lava tube caves, willing to do this under the name of UIS, a scientific background in this field recommendable, and keeping contact with some other UIS commissions. A complete list of the objects of this commission on page #8.

Offered: Greg Middleton from Tasmania has already offered to do the newletter. He is an expert on the digital highway and probably only waiting till this printed issuing is stopped! See his address in the attached membership list of the commission.

Other: it is desirable that the president/chairman visits UIS congresses and Symposia on Volcanospeleology. Of course this is not always possible (too far e.g.). However, the current chairman (J.P. van der Pas) will be at several occasions in the future available to 'represent' this commission if no one of the commission is available.

Sorry, sorry.....

In the previous newsletter it was proudly announced that finally I had an Email address (.. J.P. van der Pas). Within a few weeks this was an disaster, a virus had wrecked my system. Worse even, letters and calls from friends showed my system was disturbing them, and an angry phonecall told me to pull the plug of my PC. Which I did. However, since than still problems are chasing me. To summarize: some E-mails were not received, some outgoing E-mails destroyed by a superior virus-killer. I'm now warned never to open an attachment (I did not even know how to do this), so probably a lot of other information was wasted on me. Sorry for this. One way to solve this problem: just start reading the top of this page again. Address until 14 January 2002 and after 15 March 2002: 6530 Cornwall Court Nashville, TN 37205 bnawrh@webtv.net

Winter 2002 field address: 101 Aupuni St. #911 Hilo, HI 96720 (no e-mail access)

11 October 2001

Steve Cross, PhD 12015 Dead Indian Monument Road Ashland, OR 97520 The Story (a sad one) continues. Bill still has to fight 'all' around Mowich Cave. Here the latest update.

Dear Dr. Cross:

by Certified Mail

Last December I wrote you, about the ongoing problem at Mowich Cave. A copy of this letter is enclosed for your easy reference. If you did not receive it (I addressed it to your office in the Biology Faculty at Southern Oregon University), I will be pleased to send the lengthy attachments. Please let me know.

Charlie Larson in Vancouver tells me that you and he have talked at some length, at Lava Beds National Monument. Last Friday evening he and I discussed the problem at Mowich Cave, and he suggested that I meet with you, if possible, while I was in southern Oregon over the long weekend. From your answering machine, you probably know that I called several times from Medford, finally asking you to call back if you received the message while I still was at the motel. I regret very much that you evidently were away for the weekend.

Last Tuesday morning I met with Acting Supervisor Richard Sowa and two other staff persons of the Umpqua National Forest, proposing several alternative "win-win" courses of action, any of which (at least in my opinion) would quickly resolve grievances arising from the unlawful closure of this cave while protecting its Plecotus population and its other resources and values.

Unfortunately it became apparent that no quick resolution is possible at their level and higher level administrative remedy must be sought in order to bring this unfortunate matter to a timely conclusion.

In the course of escalation of administrative remedies, photocopies of any field notes you may have for the period October 1-15 (of any and all years) about direct observations at Mowich Cave undoubtedly will become increasingly important. In the event that litigation unfortunately becomes ultimately necessary, I am confident that both parties will want them, by subpoena if necessary.

Therefore I am writing at this time to request that you send photocopies of whatever field notes you have on Mowich Cave, for direct observations during the period of October 1-15 (of any year) to me, and also to the Acting Supervisor of the Umpqua National Forest. I will be happy to reimburse you for copying and postage costs, including Certified Mail if desired.

I regret very much the necessity for this request, having expected the matter to be amicably resolved last Tuesday, but it was not to be.

Very sincerely yours,

in Hallida

PS I am enclosing for any interest you may have in it, a note from Carol Jo Rushin which seems to indicate that the maternity colony in Mowich Cave (presumably Plecotus) developed AFTER the trail was constructed the cave in the late 1970s, thus encouraging public visitation. At the time, CJ was stationed at Toketee, and now is a Senior Forester with USAID. She was part of the USFS team which mapped the cave.

- cc: USFS: R. Sowa, J. Trout IUS Commission on Volcanic Caves (J. van der Pas) Bat Conservation International (M. Tuttle) National Speleological Society (M. Hood, G. Veni, C. Larson, the Werkers)
- att: Itr 15 Dec. 2000 (w/o attachments) CJR note 1-15-01 William R. Halliday abbreviated vita

About caves from 'other' worlds: (From Science News, December 11, 1999)

The Voyager spacecraft visited Io in 1979 and detected, among many other things, a volcanic plume. When Galileo imaged the same area from a low altitude in 1999, it observed a plume that matched the characteristics of the Voyager plume. Except the recent plume was 100 kilometers away. Scientists opine that the probability of identical plumes is effectively zero, so believe that the plume migration is due to lava tube flow. Earthen volcanic plumes are propelled by water vapor. On Io, sulfur dioxide drives the plumes, and than falls as snow. In Newsletter # 29 the report 'Laki Underground 2000' by Chris Wood was mentioned. I can only hope each of you has this in the mean time. In 2001 Chris went again, and a preview of this - again highly successful - expedition here (the shown part is less than the original preview of 5 pages, partly in color).

Bournemouth University/Shepton Mallet Caving Club in association with the Icelandic Speleological Society (Hellarannsóknafélag Íslands)

LAKI UNDERGROUND 2001

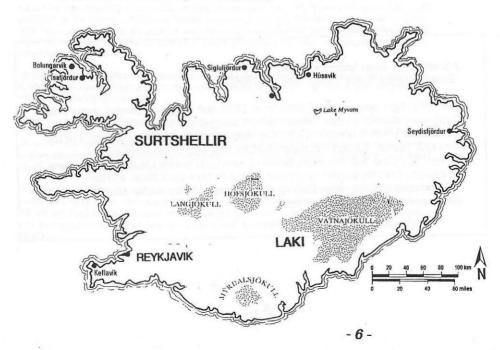
A research expedition to search for and map lava tube caves and associated landforms in the Skaftáreldarhraun and Hallmundarhraun, Iceland

9 July -10 August, 2001

Initial Feedback Report

The purpose of this project was to build upon the successes of the Laki Underground 2000 Expedition¹.

The 2001 expedition involved much original exploration of caves and lava flow terrains, while the geophysical and topographical survey methods employed were new to this field of enquiry. In combination, the two expeditions have contributed detail to the topographic map of Iceland and have revealed a wealth of hitherto unrecorded geological features. The most significant results of the two expeditions have been:



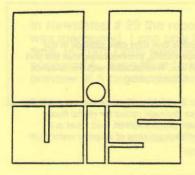
- discovery and mapping of over 10km of accessible lava tube cave passage in the upper Eldhraun, some caves being of very large volume, demonstrating that this part of the Skaftáreldarhraun at least was tube-fed and, in association with the evidence of surface landforms, emplaced by a process of flow inflation;
- discovery of a complex water hydrology in the flow field, with some large caves in the northern part of the study area providing major drainage routes for glacial floods (seasonal melt and jökulhlaups) originating from the Vatnajökull, and caves and fissures near the Laufbalavatn conveying significant amounts of seepage water from the lake edge and the outlet river;
- completion of a detailed morphological map of the Laufbalavatn cave area, showing the complex relationships between the general surface topography and the following lava landforms: lava tube caves, lava rises, lava rise pits, collapse depressions, collapse trenches and deflated or collapsed domes.
- demonstration of a method of detecting cavities in basaltic lava flows with nearsurface geophysical methods and for efficiently mapping entranceless (hidden) lava tube caves;
- recognition from the results of the magnetometer surveys from the upper Eldhraun and the Hallmundarhraun that, while both flow fields harbour lava tubes, their internal structures are considerably different;
- discovery through the use of magnetometry that the well-known cave system Surtshellir/Stefánshellir, in the Hallmundarhraun, continues as an open cave for at least 300m (limit of survey) beyond the upflow termination (lava seal) of Stefánshellir;
- first identification and recording of a remarkable line of approx. 20 large-diameter shatter rings in the Hallmundarhraun and at least two others overlying the cave Víðgelmir
- discovery through the use of magnetometry that selected shatter rings in the Hallmundarhraun are underlain and probably genetically linked to large-volume lava tube systems

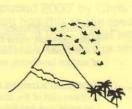
The expedition returned to the UK with over 70 sheets of cave survey data (involving more than 800 separate cave survey stations), photographic and written records, and approx. 1Gb of electronic data. The area covered by the geophysical surveys totalled 92,400m², while collection of this data involved walking 46.2km of survey traverses. The distance walked to collect topographical data with the Leica GPS has not been calculated, but was in excess of 100km.

A sample of images from the expedition is attached as a part of this feedback report. All material will be processed and plotted before the end of the year, with the intention of publishing the full report of the 2001 expedition by May 2002.

In the meantime, further information about the work of the two expeditions may be gained from:

Dr Chris Wood, School of Conservation Sciences, Bournemouth University, Talbot Campus, Poole BH12 5BB, UK Tel: +44 (0) 1202 595134 E-mail: cwood@bournemouth.ac.uk





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 vulcano-speleologists from each country or area with especially important lava tube caves or related figures. Members are expected to keep the Commission informed about progress and problems in vulcano-speleology and to disseminate vulcano-speleological 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 Commision 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 <u>Volcano Quarterly</u>.

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 International 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 vulcano-speleology.