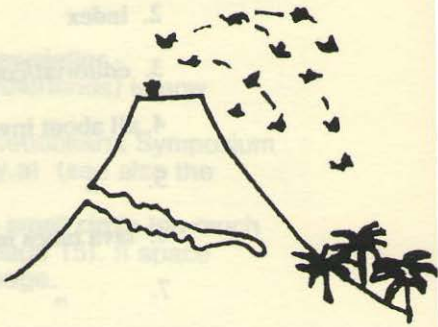
INTERNATIONAL UNION OF SPELEOLOGY
UNION INTERNATIONALE DE SPÉLÉOLOGIE

Commission on Volcanic Caves



Newsletter No 26 *April 2000*

Honorary President Dr. W.R. Halliday

Chairman & editorial address:

Jan Paul van der Pas *Tel **31 45 40 41 600*
Vauwerhofweg 3
6333 CB Schimert *Fax **31 45 40 42 198*

NETHERLANDS

26

INTERNATIONAL UNION OF SPELEOLOGY
UNION INTERNATIONALE DE SPÉLÉOLOGIE

Commission on Volcanic Caves

INDEX

number 26 - april 2000

Received publications:

Newsletter(s) of the Commission for Pseudokarst, Nr. 4 - Dec. '99, and Nr. 5 - March 2000. Now in German and English.

Mitteilungsheft der HFG Blaustein - ISSN 0720-3276 - Dec. '99. Actually this is a report on a pseudo-karst meeting on Caves in Sandstone and Granite, held in Bayreuth (Germany) Sept. '98. All info: Thomas Striebel - E-mail Thomas.Striebel@uni-bayreuth.de

A draft of an article by Greg Middleton: Sicily - 1999, 9th International Symposium on Vulcanospeleology - to be published in the Journal of the Sydney Speleological Society, 2000, 44( ):1-8.

⇒ CORRECTIONS !!!

Please note the following errors in previous newsletter -
- E-mail address of Mr. Herman de Swart (Netherlands) is now hw.d_swart@co.disp.mindef.nl
- correct the E-mail address for info on the Pseudokarst Symposium in Austria (2002) to: speleo.austria@netway.at (see also the official announcement on page 14).
- Jan Urban, Poland, pointed out there is one small circle too much on the map of his article in last newsletter (page 15). If space permits a corrected map will be on the last page.

Next note sent by Greg Middleton:

The following interesting snippet appeared in the latest issue of *Australasian Cave & Karst Management Association Journal* (#37, Dec. 99). In "New Zealand News" Dave Smith wrote:

A remarkable new cave underneath Auckland City (NZ) 9km long so far and growing. It is formed in both volcanic rocks and Waitemata Group sediments. The discovery of this cave has electrified the current caving scene. Auckland University cavers recently visited the site and found some interesting wood deposits to study.

Sorry - that's all I know at this time. Hopefully more details will emerge - such as whether it's in lava and how much of the 9+ km is 'volcanic'.

More news from New Zealand:

Apparently there was a note in the German 'Carl Zeiss Magazine' *Innovation* about a measuring set-up with laser to measure flaws in earth rotation in a lava cave. The cave is only mentioned as being on the Banks-Peninsula. I did not yet find anyone who could supply the original article. Will report as soon as the article is found.

ALL ABOUT THE INVENTORY OF LAVA TUBES

At symposia, meetings and this newsletter it has been mentioned that 'Ron Greeley' - Regents Professor at Arizona State University - kept an inventory of all lava tubes.
However, I never saw how this was managed on paper. So I asked him how this was managed. Here his complete statement about this operation.

1. We do keep a catalog (data base) of lava tubes, both in hard copy files and on our web site http://europa.la.asu.edu/spl/lavatubesearch.html

2. Keeping this valid is a long term commitment by NASA and the University.

3. Attached is an abstract giving the current status of the data base; this abstract will be part of the annual Lunar and Planetary Science Conference, held each March in Houston.

4. Our plan is to continue to add to the data base, as new information is made available. We welcome both in-put to the system and users to access it, either in person here at ASU or via the web site.

The ASU Global Lava Tube Database: A New and Expanding Resource

Steven D. Kadel and Ronald Greeley, Dept. of Geology, Arizona State University, Tempe, Arizona 85287-1404 (e-mail: kadel@asu.edu)

As part of our ongoing investigation of the dynamics of tube-fed lava flows on Earth and the terrestrial planets, the Arizona State University (ASU) Global Lava Tube Database has been compiled. In particular, the potential of lava flowing through tube systems to erode various substrates has been investigated. This investigation has produced several manuscripts in the past two years evaluating the erosive potential of tube-fed and channelized lava flow on Earth (Greeley et al., 1998; Fagents and Greeley, *in review*), the Moon (Williams et al., *in review*), and Io (Williams et al., *in press*). The Database has been a valuable research tool, allowing the identification of over two dozen terrestrial lava tubes where evidence of lava erosion has been reported. Follow-up field investigations by the authors and others have been facilitated by the Database and derived map products. Using this database, correlations previously difficult or impossible to evaluate due to a lack of data, such as potential for lava erosion vs. tube slope or substrate composition, can now be investigated.

The ASU Global Lava Tube Database is a digital database and hard-copy collection including data sheets, maps, photographs and other documentation of lava tube caves throughout the world. No comparable resource exists for the study of lava tubes. The database contains entries for tubes from 34 countries on 6 continents. Tubes from 9 U.S. states are included, with information regarding lava tubes in Hawaii currently being added to the database. Data such as tube length in meters are available for 858 tubes (approximately 60%) in the database, as well as floor slope, volcanic complex name, tube system name, elevation, evidence for lava erosion, etc., for smaller percentages of the catalogued tubes. Data may be searched, sorted and used to derive data for lava tubes in general. For example,

continue next page

floor slope data exist for 56 tubes in the database, yielding an average slope of 4.9°; the average tube length is 646.5 m. Current summary statistics for the database are given in Table 1. See Figure 1 below for a sample page from the database.

Initial compilation of the database began in 1993, with large portions of the hard-copy database being obtained from Dr. William R. Halliday and the Hawaiian Speleological Survey. Detailed mapping (by the authors) of several lava tubes in the database began in 1969 and continued through 1995. Most of these field investigations took place in basaltic lava tube systems in Washington (the Cave Basalt lava tube system on Mount St. Helens), California (the Hambone lava tube system), Oregon (Bend area lava tubes), and Hawaii (several tube systems). The digital portion of the ASU Global Lava Tube Database continues to expand, with over 1440 individual lava tubes currently catalogued. Compilation of the database has taken place in the Space Photography Laboratory (SPL) at Arizona State University, and has benefited from a joint mentoring program involving students from North Canyon High School in Phoenix, Arizona.

Table 1. Selected Summary Data
for ASU Global Lava Tube Database

# of Lava Tubes	# of Countries	Tube Lengths (meters)	Tube Widths (meters)	Tube Heights (meters)	Tube Slopes (°)
>1440	34	5 to 47,200	1.2 to 20	0.2 to 20	0.57 to 30
		Average: 646.5	Average: 5.5	Average: 3.9	Average: 4.9

Sketch maps, photographs (both color and monochrome), and published references are available for many of the lava tubes. The maps provided in the digital database are low-resolution gif images. However, larger and higher-resolution image files can be made available (as scanned images of hard-copy maps) in a variety of image formats upon formal request. Over 100 plan maps, most with cross–sectional diagrams and longitudinal profiles, are included in the hard-copy collection. Photocopies of these materials may be obtained from the Space Photography Laboratory, by request, for educational purposes only. Scanning and addition of the remainder of these maps and profiles to the digital database will occur during the summer and fall of 2000.

The Arizona State University Global Lava Tube Database is currently accessible via the world wide web at address http://europa.la.asu.edu/spl/navigator.html. Please note this link has been updated within the past year and previous, outdated web links will not allow access to the database. Accessing the new web link will allow the user to search through the most complete database of its kind.

References:

Fagents, S.A. and R. Greeley, submitted to *Bull. Volcanol.*, 1999. Greeley, R., S.A. Fagents, R.S. Harris, S.D. Kadel, D.A. Williams, and J.E. Guest, *J. Geophys. Res. 103*, 27,325-27,346, 1998. Williams, D.A., S.A. Fagents, and R. Greeley, submitted to *J. Geophys. Res.*, 1999. Williams, D.A., A.H. Wilson, and R. Greeley, *J. Geophys. Res.*, in press.

Acknowledgments: Compilation of the global lava tube database has greatly benefited from the assistance of Dr. William Halliday; R. Scott Harris; Jim and Libby Neiland; Charlie and Joe Larson; the Hawaiian Volcano Observatory; Hawaii Volcanoes National Park; Charles Hewitt and Jody Kerr (ASU SPL); Lynn Fraser, Brenda Brinckman, Adam Eisenberg, Jamie Fairchild, and Joshua Strong (North Canyon High School).

In the Proceedings of the 12th International Congress of Speleology (Switzerland - 1997) the abstract (in German) was to be found concerning an expedition to Kamchatka (1996) by a Swiss team. They mapped 14 caves in North Gorely (GO 9601-9614) and 12 in South Tolbachik (TO 9601-9612).
The GO caves have lenghts of 55, 55, 55, 140, 16, 38, 19, 48, 76, 68, 110, 55, 68 and 120 meters. The TO caves 540, (= TO 9601+9602), 25, 25, 12, 15, 24, 23, 97, 185, 22 and 65 meters.

So the longest in the Gorely area is 140 meters, in the Tolbachik area 540 meters.

A full report is in preparation.

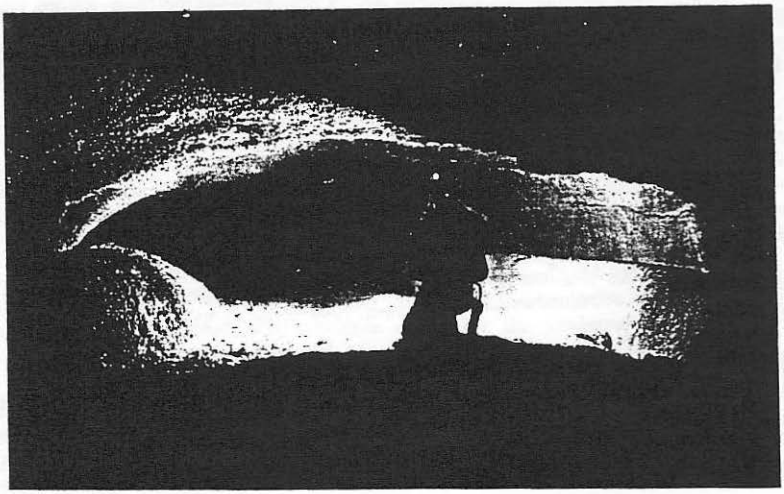
All info: cath.yvo@bmf.ch

Lavahöhlen in Zentral- und Südkamchatka, GUS

von Yvo Weidmann[1], Catherine Perret[2], Markus Adank[3]
[1]Steinstrasse 72, 8003 Zürich, [2]Rue de la Côte 85, 2000 Neuchâtel, [3]St. Luzi 27d, 7306 Fläsch

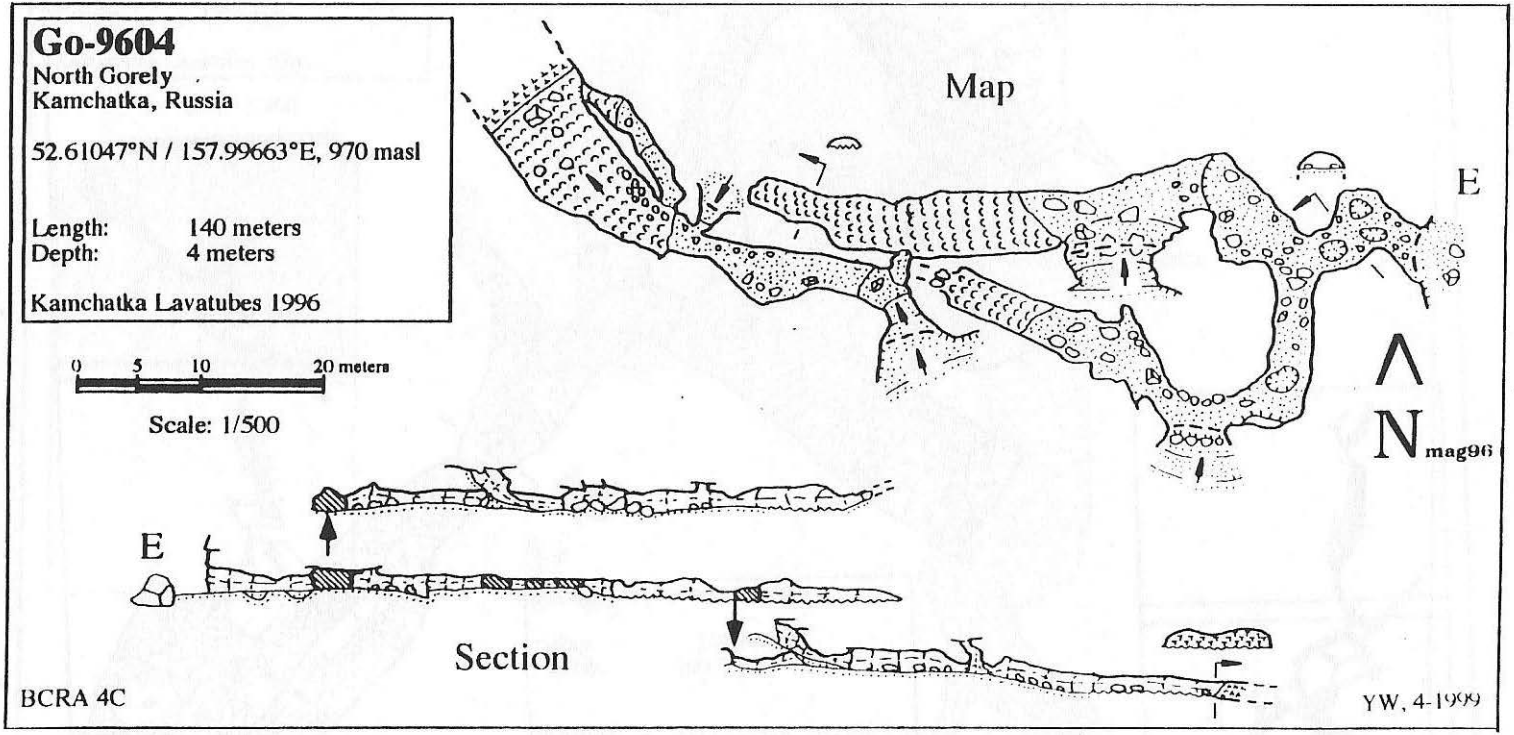
Zusammenfassung

Kamchatka ist eine Halbinsel, bildet den fast östlichste Teil des eurasischen Kontinentes und befindet sich etwas nördlich von Sachalin und Japan. Diese Halbinsel ist auf dem sogenanten Feuerring angelegt und ist eines der vulkanisch aktivste Gebiet der Erde. Viele der Dutzenden von Vulkanen besitzen lange Lavaströme die zum Teil erst zwanzig Jahre alt sind und laden nun nach dem erstarren zum Lavahöhlenforschen ein. Eine kleine Gruppe von schweizer Höhlenforscher besuchten im Sommer 1996 diesen abgelegen Teil der Erde um Lavahohlen zu vermessen. Quer durch den russischen Urwald der Administration und russischen Seele mit allen organisatorischen Hindernissen und Schwierigkeiten gelang es, wahrend vier Wochen in zwei verschiedenen Lavaströmen nach Höhlen zu suchen. Diese war einerseits das Gebiet im Südtolbachik und andererseits im Nordgorely. Es konnten in beiden Gebieten je rund 15 Höhlen entdeckt und vermessen werden. Die Höhlen verlaufen direkt unter der Oberfläche und sind zwischen 15 und 500 Meter lang. Während dieser Zeit konnten auch sehr enge Kontakte mit dem Institut für Vulkanologie geknüpft werden, was für die weiterführung des Projektes äuserst wichtig ist. Denn es warten noch einige Lavaströme auf die Bearbeitung, aber auch Wodka Kartoffeln und Kaviar warten.



Lavatube im Gebiet vom Gorely-Vulkan in Südkamchaka

continue next page


Go-9604
North Gorely
Kamchatka, Russia
52.61047°N / 157.99663°E, 970 masl
Length: 140 meters
Depth: 4 meters
Kamchatka Lavatubes 1996
0 5 10 20 meters
Scale: 1/500
Map
E
N mag96
E
Section
BCRA 4C
YW, 4-1999

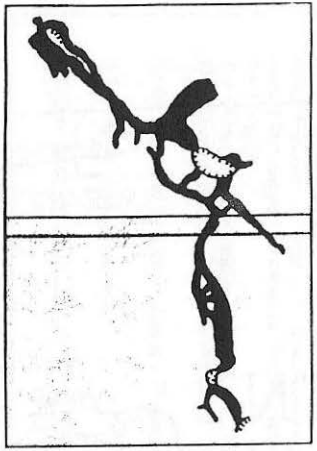
To-9601/02

South Tolbachik
Kamchatka, Russia

55.61883°N / 160.17227°E, 390 masl

Length: 540 meters
Depth: -11 meters

Kamchatka Lavatubes 1996



Map

E

0 5 10 20 meters

Scale: 1/500

N_{mag96}

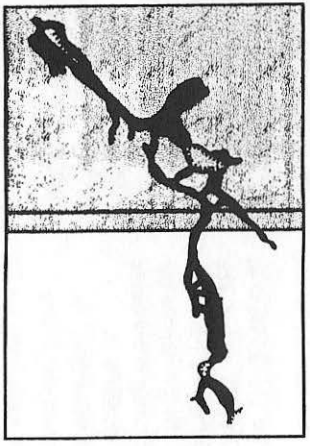
To-9601/02

To-9601/02
South Tolbachik
Kamchatka, Russia

55.61883°N / 160.17227°E, 390 masl

Length: 540 meters
Depth: -11 meters

Kamchatka Lavatubes 1996

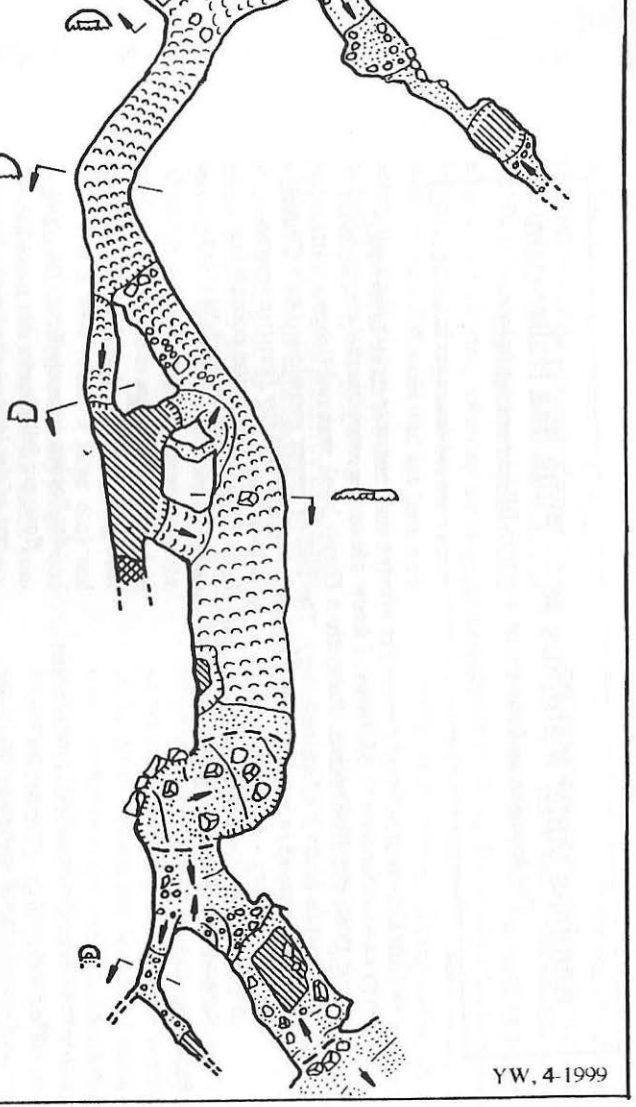


Map

0 5 10 20 meters

Scale: 1/500

N_{mag96}



BCRA 4C

YW, 4-1999

Rambles under Mauritius #6 — Puits des Hollandais

The location and survey of a water-filled vertical shaft

Greg Middleton

As Dutch speleologist of course I'm always interested if there is anything with cave-reference to 'Holland'. I knew about the story by Greg Middleton about Puits des Hollandais. Recently a Dutch book was publishes about 'our' part in history of vulcanology. The author never mentioned this 'Dutch Pit', so I wanted to send him this article. It turned out my favorite source - the UIS library - could not supply a copy of it. The magazine containing this article (J. Syd. Speleol. Soc., 40(1):3-5 - 1996) never reached them. So here again for all those who never saw it.....

Jan Paul (editor)

In his "Guide to Mauritius", Ellis (1988) wrote:

> *The fishing village of Trou d'Eau Douce is an early Dutch settlement. The Puits des Hollandais, meaning Dutchman's Well, is an extinct crater well still used for fresh water. Trou d'Eau Douce refers to this sweetwater spring although, since it is pronounced Tro, do-doo, some historians have assumed it is named after the dodo, which lived in this region.*

While it seems most unlikely to me that Trou d'Eau Douce derived its name from anything other than a source of freshwater, this reference to an "extinct crater well" clearly warranted investigation. Ellis, unfortunately, gave no clue to its location so I left it for investigation "sometime later".

Subsequently, thanks to Dr Trevor Shaw in England, a copy of Haig's (1895) paper, The physical features and geology of Mauritius came into my possession. Haig describes the geology of the island, including a few caves and, of particular interest (p. 467):

> *The lower part of these lava-flows,* [in the region of Flacq] *called the Plaine des Roches, is nearly flat ... These lava-flows are full of caves and steam-holes; one of the latter, called the 'Puits des Hollandais' is worthy of notice. The hole is nearly circular, with a bell-mouth, and about 35 feet across. It is filled with water to within 15 feet of the ground-level. The sides are perfectly vertical and the author found the depth with a sounding-line to be from 82 to 86 feet in different parts.*

Now here was clearly an item of speleological interest. Haig gave no better clue to the feature's location than Ellis but inspection of the 1:100,000 tourist map showed a "Pointe des Puits des Hollandais" at a place called Belle Mare on the east coast of Mauritius in the Flacq Municipality. Assuming the "well" would be nearby, I set out on 22 May 1994 to find it. After wandering around "Dutchmans Well Point" for a while and finding no sign of a pit or crater, I asked a few locals – none, including a policeman and two hotel gate-keepers, knew of the "Puits des Hollandais". After a few hours I decided to call it a day but resolved to make further investigations.

continued next page

A few days later I obtained a large scale (1:2,500) map of the area south of where I had been looking ("Palma" 2696) which showed the "Puits" – about 5 km from the point named after it! On 28 May, following the map, I found the object of my search but not without difficulty as a high stone wall has been built across the track giving access to it and the surrounding area is heavily overgrown.

Approaching from the south I first came across a flight of old stone steps leading down to an almost circular pool, the diameter of which I measured at 10.5 metres (equivalent to 34.4 feet – this was the feature described by Haig). Although dense vegetation hangs over the pool it was possible to see the stone edge and imagine how the French settlers, finding what looks like a well (albeit a large one) and knowing the Dutch were the only people who had inhabited the island before them, concluded that this was a well dug by the Dutch.

Nearly opposite the stone steps were a more recent set of concrete steps and a small concrete building which had obviously formerly housed a water pump, long since removed. The water was very clear and fresh and it was possible to see large fish swimming about, but not the bottom. A diver would be necessary to determine if this was indeed a straight-sided shaft as described by Haig or if it was an opening into a horizontal passage – a collapse into a 'normal' lava cave.

Although I tried to interest local scuba divers in the "well" no one showed any real enthusiasm until Richard Dodson, an English astronomer who came to work at the nearby radio telescope, turned up. With his colleague Sundeep Suchdev, we went to the "well" on 17 September 1994 and Richard dived it. He took a tape to the bottom and measured 28 metres. This was not vertical but it was not possible to determine the exact angle; however at the equivalent of 91.8 feet it is not far from Haig's measurement of 86 feet.

Dodson reported that the pit was bell-shaped with a couple of distinct steps in its profile, that there was a conical pile of rubble and debris at the bottom with a dead tree standing almost upright on the top. He estimated that the radius at the bottom varied between about 20 and 25 metres. At about minus 15 metres he reported a sharp change in visibility due to silt hanging suspended in the water. This formed a band about 5 metres thick, with more-or-less clear water below it. The section in the accompanying map was drawn from Richard Dodson's reports.

Unfortunately he reported finding no horizontal passage running away from the main shaft. I have been unable to get other divers to dive in the pit to confirm this finding. I subsequently learned that the "well" had been dived in October 1966 by members of the Mauritius Underwater Group. A very brief report recorded only that they found a Triumph motor bike at the bottom (Latimer 1977).

Puits des Hollandais was visited by eminent vulcanospeleologist Dr Bill Halliday on 17 May 1995. He expressed the view that this was most likely part of a collapsed lava tube, rather than a vertical volcanic conduit. The finding of a horizontal passage – running inland or towards the sea – would help to confirm this. Meanwhile it remains an intriguing geological feature almost totally overlooked by Mauritians and most visitors to the island.

REFERENCES

ELLIS, ROYSTON. 1988 *Guide to Mauritius – for tourists, business visitors and independent travellers.* Media House Publications: Sandton, S.A. p. 167.

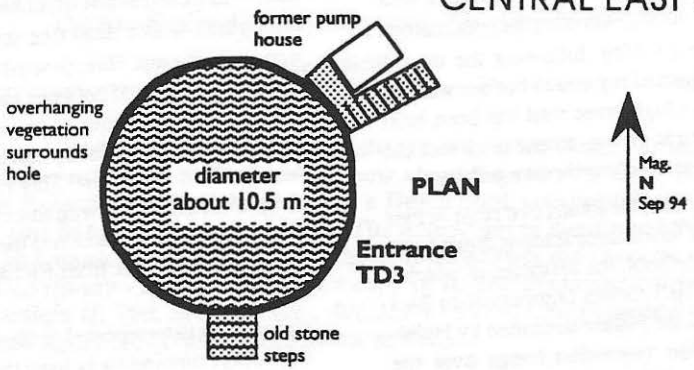
HAIG, H. DE HAGA 1895 Physical features and geology of Mauritius. *Quart. J. Geol. Soc. London,* 51(Aug. 1895):463-471

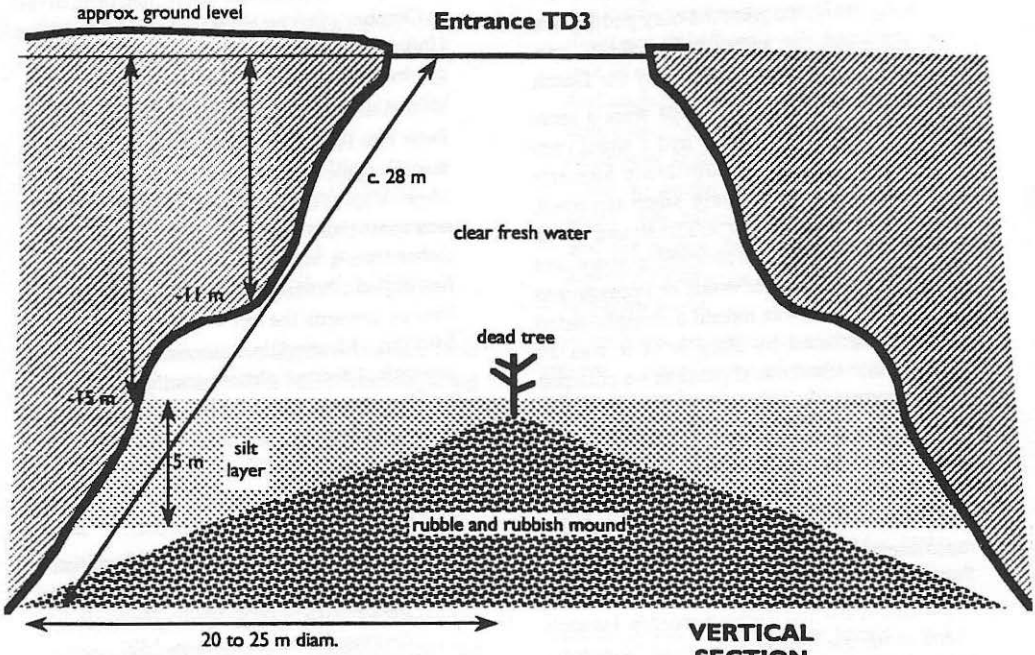
LATIMER, BOB 1977 *The Mauritius Underwater Group 1963-1977.* Michel Robert Printers: Quatre Bornes, p.3

continued next page

PUITS DES HOLLANDAIS TD3

TROU D'EAU DOUCE CAVE AREA
CENTRAL EAST MAURITIUS





VERTICAL SECTION

Sketch by G. Middleton
with underwater details from R. Dodson
17 September 1994
Drawn by G. Middleton © 1994

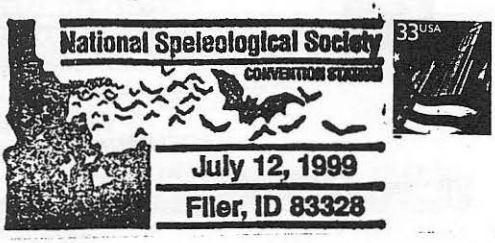
0 5 10

SCALE in metres
horizontal and vertical

SELECTED ABSTRACTS FROM THE 1999 NATIONAL SPELEOLOGICAL SOCIETY CONVENTION IN FILER, IDAHO

National Speleological Society
July 12-16, 1999
Filer, Idaho

Indian Tunnel
CRATERS OF THE MOON



(ABSTRACTS REGARDING LAVA TUBES AND VULCANOSPELEOLOGY, from JOURNAL OF CAVE AND KARST STUDIES, April 2000, Vol. 62, Number 1, ISSN 1090-6924)

Defining the Trout Lake System - Garry Petrie

Estimating Depths and Volumes of Lava Tube Plunge Pools -An Ongoing Study - Kevin and Carlene Allred

Some Unusual Caves in HAVO (Hawaiian Volcanoes National Park) - Dave Bunnell

Studies in Young Lava Tubes of Hawaii Volcanous National Park - Bobby Camara

Geophysical Detection of Entranceless Lava Tubes - Dale J. Green

Conduit Flow of Water in Volcanic Pseudokarsts - William R. Halliday

The Roots of Vulcanospeleology Keynote Address - William R. Halliday

Lava Surfaces of Lava Tubes - Russell Harter

Channel and Cave Systems of the Puhia Pele Flow, Hualalai, Hawaii, and its Relation to the 1801 (Huehue) Flow - Stephan Kempe, Christian Lerch & Matthias Oberwinder

Waipouli and Kamakalepo, Two Sections of a Large and Old Mauna Loa Tube on Hawaii - Stephan Kempe

Rock Ring/Lava Tube Relationships on Hualalai Volcano, Hawaii - Doug & Hazel Medville

Ka'eleku Caverns and other Recent Survey Activities in Lava Tubes on Maui - Bob Richards

KARST- UND HÖHLENKUNDLICHE ABTEILUNG
NATURHISTORISCHES MUSEUM WIEN
Museumsplatz 1/10/1
A-1070 Wien *(Austria)*
Tel: (+431) 523 04 18
FAX: (+431) 523 04 1919
e-mail: speleo.austria@netway.at

PRELIMINARY SETUP FOR THE

VII . INTERNATIONAL SYMPOSION ON „PSEUDOKARST"

June 2002 (thursday to sunday)

NEW JUST CAME IN

in Austria

Waldviertel/Danube valley, Lower Austria

preliminary programme

1. day	(thursday)	*evening*: opening, info about the excursions. videos/slides...
2. day	(friday)	*before noon*: lectures/posters
		afternoon: excursions
		evening: session of the UIS commission for Pseudokarst
3. day	(saturday)	*before noon*: lectures/posters
		afternoon: excursions
		evening: closing/farewell party
4. day	(sunday)	facultative excursions

Excursions could include the „Saubachl-caves", some 500 m sometimes wet passages within large granite bolders, caves connected with joints and mass movement in granites, smaller caves of prehistoric interest in crystalline rocks and in siliciclastic rocks and a 200 m long karst/pseudokarst (?) cave (to be discussed !) in conglomerates. Another possibility will be the visit of the caves in the area of Frein („Eisleiten") in the Czech Republic.

We will try to keep the costs down as much as possible to enable all interested scientists to take part. Due to limited accomodation available in both areas there might be a need to set up restrictiions in the number of participants.

The proceedings will be published in time for the symposion, thus meaning that the *full* papers should reach the editors until *February 2002*.

status: 2000-01-17

Organizers: Dr.K.Mais, Dr. Rudolf Pavuza & Anton Mayer[1)]
(Dept.of Karst and Caves, Museum of Natural History Vienna)
[1)] *Speleo-Club Hannibal (Vienna)*

Here two sources of information about speleological information:
- The specialized documentation center for vulcanospleology - Catania,
- An all-about-speleology source, which also includes vulcanospeleology - the Swiss library.
Find below some details (of course there are more sources - please forward details to this newsletter about the access to these).

INTERNATIONAL CENTER of DOCUMENTATION

Giuseppe M. Licitra, Catania - ITALY

The Centro Speleologico Etneo - Via Cagliari 15, 95127 Catania, ITALY - specializes in Vulcanospeleology and is organizing an International Center of Documentation on Vulcanospeleology.
The aim of the Center will be the collection of papers and audiovisual materials published on vulcanospeleological topics throughout the world, a yearly publication of a national bibliography and photocopy services. The center seeks submissions of materials from everybody who has published material.
The CSE was established in 1984, but has over 30 years experience, documentation and field work in Vulcanospeleology. Today the CSE has the largest documentation on Mount Etna caves (over 200 lava tubes and volcanic fractures surveyed), and has already organized three Symposia on Vulcanospeleology (1975, 1983 and 1999).

E-mail: licitra@ mail.asianet.it

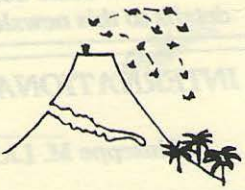
Société Suisse de Spéléologie - Bibliothèque
Schweizerische Gesellschaft für Höhlenforschung - Bibliothek
Società Svizzera di Speleologia - Biblioteca
Swiss Speleological Society - Library

Centre de documentation de l'Union Internationale de Spéléologie
Dokumentationszentrum der Internationalen Union für Speläologie
Centro di documentazione dell'Unione Internazionale di Speleologia
Documentation Centre of the International Union of Speleology

Bibliothèque de la SSS
c/o Deriaz Patrick
Ch. des Invuex
CH-1614 Granges
Fax (41) 21 947 53 78
tél. (41) 21 947 40 68
E-Mail : ssslib@vtx.ch

Much information about speleological articles can be found in the library of the Swiss Speleological Society, which also takes care of all U.IS. information. Actually: all info they get they publish in an inventory.

Yearly a 'bible' is published by/via the Swiss Speleological Society. This contains the titles of all speleological publications they know/have. Last issue has been in 1997, the '98 one still in process. The '97 issue contained 6674 entries. This are just titles, with minimal abstracts. However, the publication - with address - is mentioned. Last issue was number 36, having 448 pages. Lately parallel CD-roms were issued, nr. 1 cotained all info from 1989-1995, nr. 2 all info from 1989-1992, together with many other inventories, nr. 3 all info from 1993 - 1997(again together with other inventories). Number of 1997 contained 'only' 4 direct vulcanospeleological references - one mentioned 17 of our newsletters, but some 100 crossindex issues. Photocopies of mentioned articles can be ordered.



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 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 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.