Ref:	Report Date 27-3-2010	Club: WA Museum, VSA	Hours: 3	Name of Cave / Feature: Mt Widderin Cave, Skipton.	Visit Date: 23-3-2010	Cave No: 3H-1	
Names in Party (<u>Author</u> , <u>Leader</u>): WA Museum: <u>Danilo Harms</u> , Michael Rix. VSA: <u>Nick White</u> , Lynne Amore, Tom Duff, Peter Freeman, <u>Ken</u> & Janeen Grimes,.						If no number, tick reason New Cave [] Unidentified Old Cave [] Can't tell which: []	
Purpose and result of visit: Collection of invertebrates (pseudoscorpions, assassin spiders, etc) for the Western Australian Museum - part of an extended survey in eastern Australia. KGG sketched some detail and					Area Name: Volcanics	(Skipton)	
cross-sections to augment the Ollier (1963) map. Six specimens of pseudoscorpions were collected (Pseudotyrannocthonius hamiltonsmithi). 10 specimens of an interesting spider (Micropholcommatidae, sp indet) were also collected. Examples of small proto-tubes were found in the walls of the upper level.						Type of feature (if not Cave):	

Comments/recommendations (if anv):

The owners charge \$5 per head for visits - the money is used for local projects. There is a brick toilet block for the use of visitors.

Description:

Overview: A broad collapse doline has two hollows. The southern one leads via a short stoop to the cave. The cave comprises two large mud-floored chambers (Main and Ballroom) connected by a small arch. A climb up a mud slope to the south leads to the Upper Level passage, and then drops down into a squeezy breakdown section which leads to the small Lake Chamber.

The large chambers: The Main Chamber now has a smooth flat mud floor with "brain patterned" dimples that have resulted from compaction of the mud by foot traffic (a similar pattern is seen in other mud-floored tourist caves). There is some rubble on the south side. The Main chamber originally had large conical mounds of guano, described by Robinson in 1843 (see diary extract and map in Clarke, 2007) but most of that was mined in the mid 1800s. The mining activities may have contributed to the disappearance of the large bat colony (reported by Robinson and by Selwyn in 1875, but gone by the time the cave was visited by Fletcher in 1895,). Shallow pits in the floor show a vague banding which might be the original guano, but could also be compaction bedding. Some of the mud has shiny flecks which are probably insect fragments from the guano. The Ballroom is reached from the Main Chamber by a short arch and is similar in style. The walls and ceiling of both chambers is largely a broken surface, but still fairly smooth, not jagged. Only in a few places are there preserved lava linings with small drips and dribbles (photos KG100114, 118-9). As well as the lava formations the walls have some small areas of paler brown to cream speleothems (corraloids and small flowstone areas) – these are probably calcite but we cannot be sure without an analysis (photos KG100144).

The Upper Level Passage: One climbs up a slippery mud slope to a low-roofed passage. This is floored partly by rubble and partly by mud, with drip pits. There are several small proto-tubes in the west wall (see below).

Breakdown section & lake: From the far end of the Upper-level passage one drops into a small hole and squeezes and crawls through a complicated rockpile area to eventually pop up into a small breakdown chamber that slopes down to the start of the low lake chamber (photo KG100143). This had about 1m depth of clear (nearly invisible) water at the time of our visit. As well as the lake much of this area was wet and dripping.

Proto-tubes: Several small tubes with linings were seen on the west wall of the Upper Level passage (see map). See photos KG100123 & 124 (stereopair). These were typically 0.6-1.5 m wide and 20 to 50 cm high. They generally extended only a metre or two into the wall, but one continued (very tight) into darkness after about 3m (photo KG100135P). Most had a lining about 10-20 cm thick and some showed ropy structures, lava drips etc. One had ragged lava drips that all lent in one direction (photo KG100128) -- presumably blown by a blast of hot gas. Similar small tubes have been seen in other lava caves in the region and they are interpreted as drained remnants of the initial cores of small lava lobes that formed at the leading edge of the lava flow (see Grimes 2007 and Grimes 2008). The lobes crust quickly but the cores can stay liquid. Some of these proto-tubes enlarge and become major feeder tubes carrying lava to the ongoing flow, other stagnate and solidify completely but any of the proto-tubes adjacent to a major tube can drain back into that to form small open tubes – as seen here. One of the proto-tubes was blocked by a plug of ropy (pahoehoe) lava (photos KG100129-131)

Graffiti: The wall of the entrance area (twilight) has some old names with dates going back to 1899 and the early 1900s (when the cave was used for balls and other social gatherings). The oldest graffiti seen during this visit was carved into the north wall of The Ballroom "AR, WW, TB, GR(?), WK, 1856" - see photo KG100113. Some of the older entries in the entrance area included: "G Harrison ~1899~" and "Bella Notman, 1903".

Topo Sheet:	Scale: 1:	Best Grid co-ords: GDA 606.5 km E, 5820.9 km N.	Parish/Hundred:	Allotment:
How to get there: F-18 on Fire Map 437. About 6km south from Skipton. Owners are Geoff & Diane Notman, phone 03 5340-2018, Mail: "Mt Widderin" Skipton VIC 3361 http://www.showcaves.com/english/au/caves/Widderin.html Also try http://skiptonaustralia.com/mtwidder.htm			Equipment: Standard horizontal.	

Tick the boxes for selected headings, then write about each in sequence, using the correct numbers and headings.

	•						
4 Cave type	[x]	24 Hazards	[]	38 Air temperature	[]	Geol. Strata names	[]
5 Rock type	[x]	25 Difficulties	[]	39 Humidity	[]	Dip & Strike	[]
6 Other entr numbers	[]	26 Degree explored	[]	40 Moisture level	[x]	Main stream flow	[]
7 Total entrs	[]	27 Prospects	[]	41 Discoverer & date	[]	Inflow & Outflow points	[]
8 Entr type	[]	28 Owner category	[x]	42 Extension discov.	[]	Water composition	[]
9 Development	[x]	29 Present Cave Use	[x]	44 Contents	[]	Gases	[]
10 Decoration	[x]	30 Present surface use	[]	45 Species	[]	Likely archeol. Site?	[]
11,12 Length & method	[]	31 Damage	[x]	46 Important for	[x]	Age of archeol. material	[]
13-14 Vert Range/method	[]	32 Management class	[]	47 References	[x]	Age of paleontol. Material	[]
15 Largest chamber	[x]	33 Protection	[]	Entr Doline size	[]	Peak tourist count / day	[]
16 Pitches	[]	34 Permission from	[]	Watersheds	[]	Yearly tourist count	[]
17 Horizontal Extent	[]	35 % mapped	[x]	No. Of levels	[]	Conservation rating	[]
18,19 Latitude & Longitude	[]	36 Widest Map	[x]	Accidents	[]	Best area map	[]
23 Entr elevation	[]	37 Entrance Marker	[]	Rescue comments	[]	2 bearings & distances	[]

- 4: Type: = lava tube
- 5: Rock = basalt
- 9: Dev = Small entrance leads to a pair of large chambers and smaller passage with final rockpile section and lake.
- 10: Decs = A few unusual speleothems. A few lava coralloids and drips, and local small patches of calcite(?) speleothem (coralloids, flowstone & narrow draperies).
- **15: Chamber** = $50m \times 18m \times 9.5m$ high (height by laser rangfinder)
- 28: Owner = Private
- **29: CUse** = Self-guided wild tourist cave.
- **31: Dmg** = extensive compaction of seds, removal of guano (in 1800s), some historic markings.
- **35:** %Map = 100%
- **36:** Map = 3H1.VSA 428, PLX herewith
- 40: Moisture = damp environment
- **46: Sig** = Geomorphology, minerals, biology, history.

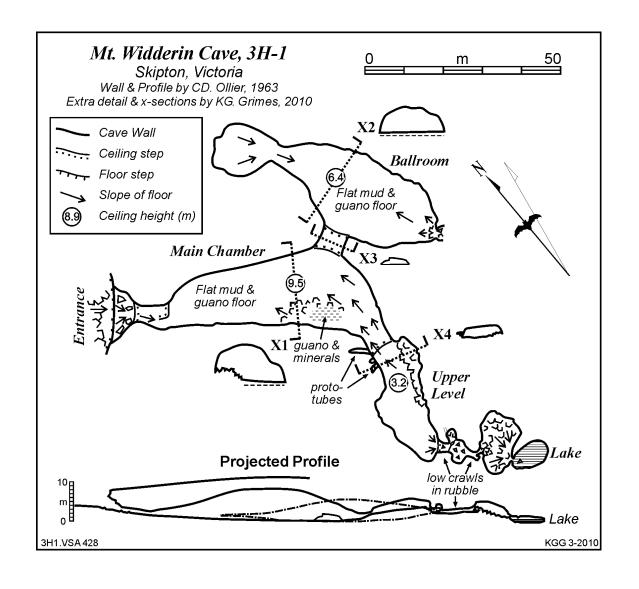
47: References:

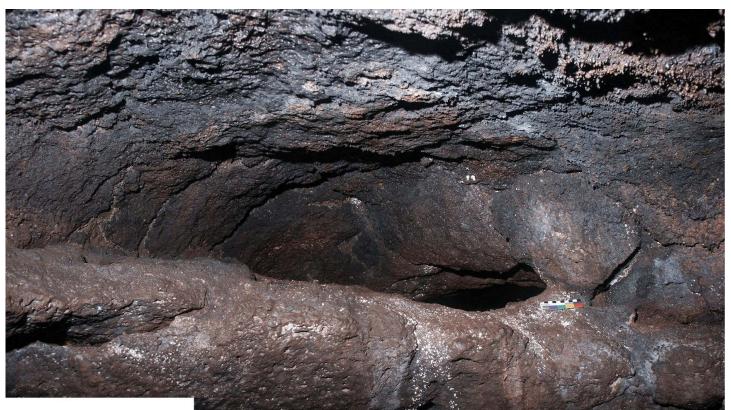
Clarke, ID., 2007: The abode of malevolent spirits and creatures - Caves in Victorian Aboriginal social organization. Helictite, 40(1): 3-10. [includes 1843 map of cave by George Augustus Robinson]

Grimes, KG., 2007: Volcanic Caves of Western Victoria. Proceedings of the 26th Conference of the Australian Speleological Federation, January 2007 (in press)

Grimes, KG., 2008: Small Subcrustal Drainage Lava Caves; examples from Victoria, Australia. *in* Ramón Espinasa and John Pint [editors], Proceedings of the X, XI, and XII International Symposia on Vulcanospeleology. Association of Mexican Cave Studies, Bulletin **19:** 35-44.

Ollier, CD., 1963: The Skipton Lava Caves. The Victorian Naturalist, 80(6): 181-193.





3H-1, Mt Widderin Cave, Skipton, vic.au Large Proto-tube in upper part of Main chamber [Pan] KG100134 K.G. Grimes, 2010

PHOTOS:

Above: A large proto-tube, that runs diagonally back from the wall of the upper level passage. 10cm scale bar at right.

Below: Stereo-pair of a set of three proto-tubes in the upper level passage. Linings up to 20 cm thick can be seen in places. 10 cm scale bar in lower tube.

The diagram (at same scale) tries to make the form of the tubes and linings more obvious.

