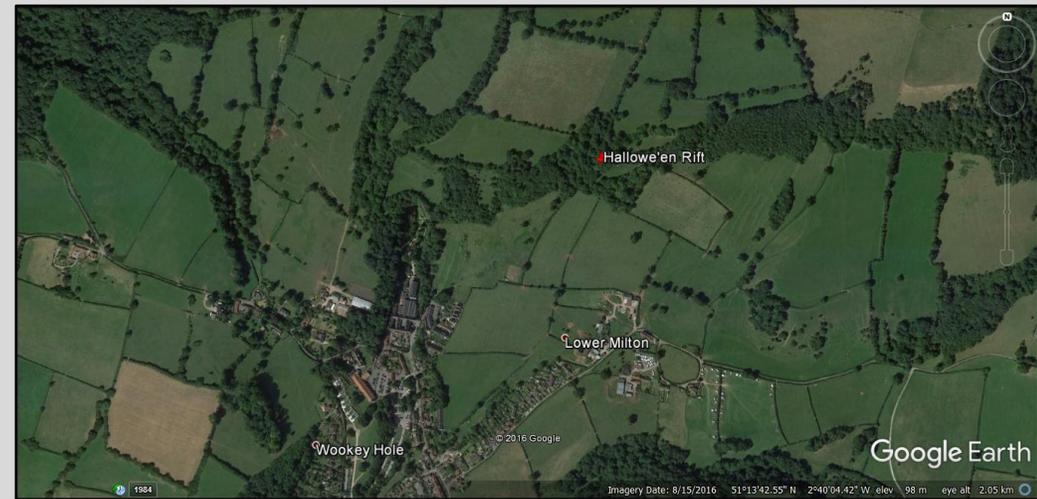
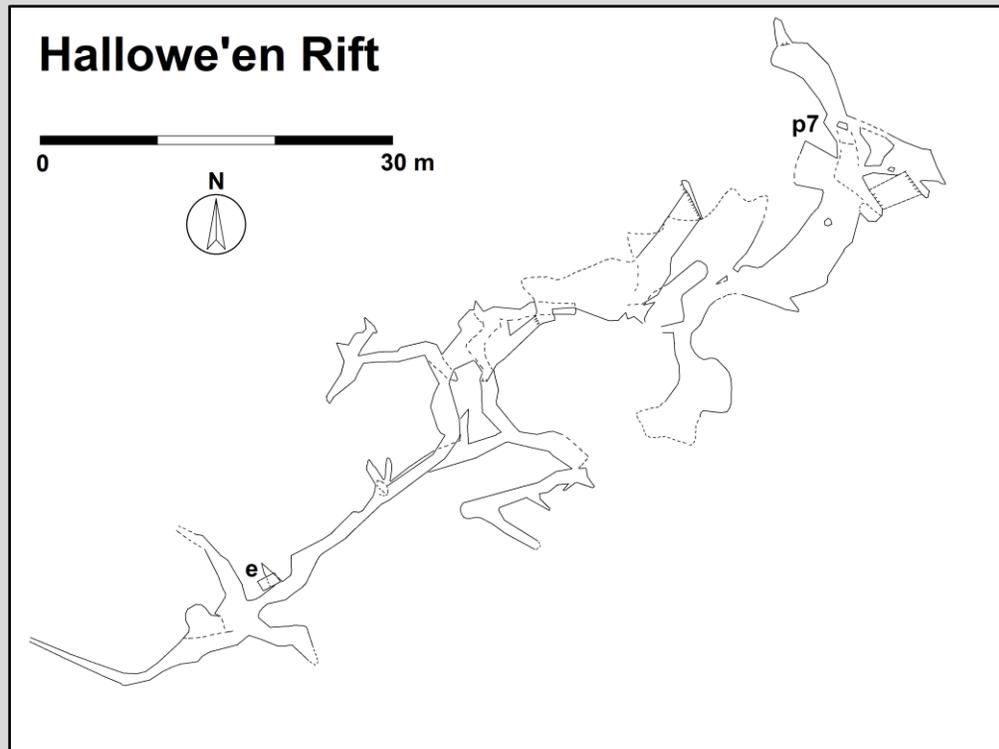


Hallowe'en Rift: An Unexpected Development



Survey drawn by Duncan Price 2018

Introduction

Hallowe'en Rift, NGR ST 5353 4809, altitude 130m aOD, has a current surveyed length, 304m with a vertical range, c.25m. The cave is located in the wooded hillside to the north-east of Wookey Hole Cave. Excavation of the cave was commenced in 1982, by the end of the 1980s interest at the site had waned. Then, in the early 1990s activity in the cave re-commenced, it was during these excavations that the dig on the north-east side of the entrance was started. Interest, once again, waned as the participants moved onto pastures new. In 2009, the current phase of activity was started, the work concentrated on extending the cave to the north-east side of the entrance.

The cave consists mostly of low bedding, partially filled with sandy silt with cobbles and boulders of dolomitic conglomerate and frequent fragmented calcite speleothems. The low bedding occasionally has intersected several rifts. Most of the low bedding passages have been excavated. In 2018, progress along the bedding accelerated and following several minor breakthroughs, An Unexpected Development was entered in August, it is c.80m long and contains an abundance of shattered speleothems and interesting geo-morphological features.



The entrance



Matt Tuck

The descent

At the bottom of the climb, passages lead to the south-west and to the north-east. The main cave passages are to the north-east.



Bridging over the pot,

A climb down the pot leads to an excavated chamber and access to Toil and Trouble, leading to T Junction and Trick or Treat beyond.



passing Merlin's,



Merlin's Magic Milk Parlour

down the slippery slope.

At the bottom of the slippery slope, the Tuck Shop. A low arch on the right leads into Another Emotional Journey and the low bedding approach to An Unexpected Development.

There is an alternative (and easier) route leading to T Junction and Trick or Treat from here.



Then there's some crawling,





plenty of crawling.



Along the route to Broken Stal Aven,
an abundance of fractured flowstone.



Broken Stal Aven



A small rift chamber is entered before climbing down into the last bit of crawling leading to An Unexpected Development.



Approaching the breakthrough, fractured flowstone becomes the predominate fill in the passage.

LOG EXTRACT: 4th August 2018. An unexpected development! With Jonathon, Duncan, Tav, Brockers and Alex.

The first task of the day was to set-up a drag tray to make the digging in the low bedding a bit easier. That done, I went into the bedding and filled the skip, Jon hauled the full skip back to the rift chamber and bagged the contents, the bags then sent on their way to be stashed in the entrance. The spoil mostly comprised variable sized lumps and slabs of degraded and fractured calcite flowstone, occasionally some finer sediment. Progress along the low bedding was rapid and it wasn't too long before I was able to gain access to the roomier chamber on the south-side. A quick scan of the chamber, some gardening to make it more comfortable, then, at the base of a marl-filled fissure a small gap was noticed, beyond which a mud-covered floor could be seen. "There has been an unexpected development" I called back to Jon, who followed me through into the chamber, later Duncan joined us. I pulled some rocks from the small gap and soon it was just big enough to wriggle through on my back kicking finer sediment ahead of me. I was gobsmacked by what I saw, a roomy chamber with some very fine formations, at the end, an opening to a continuation, the air was cool. Jon and Duncan followed me through, Duncan then went back to get the others. While we were waiting the access-point was enlarged.

The team assembled in the chamber, there was excitement, Jon led on through the window into the space beyond, taking care to avoid a rather fine, but vulnerable, stalactite. I followed Jon and was surprised to see him standing-up, "got a ladder" he said. He was standing on the edge of a rift c.15-20m deep. Everyone came through and it was an exhilarating experience after all these years. Tav tentatively descended the slope with Alex but they decided a handline was required and came back-up, Brockers went back to get a rope. Meanwhile, I partly descended to the slope and dug my way into an annex chamber, a continuation of the main rift. I returned to find the handline was in place and climbed down to a jammed rock part way down the rift, from the boulder a clear drop to the floor below. It was decided that we should return with bolts and ladders so that a safe descent to the bottom could be made. A traverse across the rift and scan with a torch revealed what looks to be a continuation, but that will be confirmed later in the week. We exited the cave to clear the bags from the entrance, perhaps for the last time!

Beyond the breakthrough point there are fine, but delicate formations.



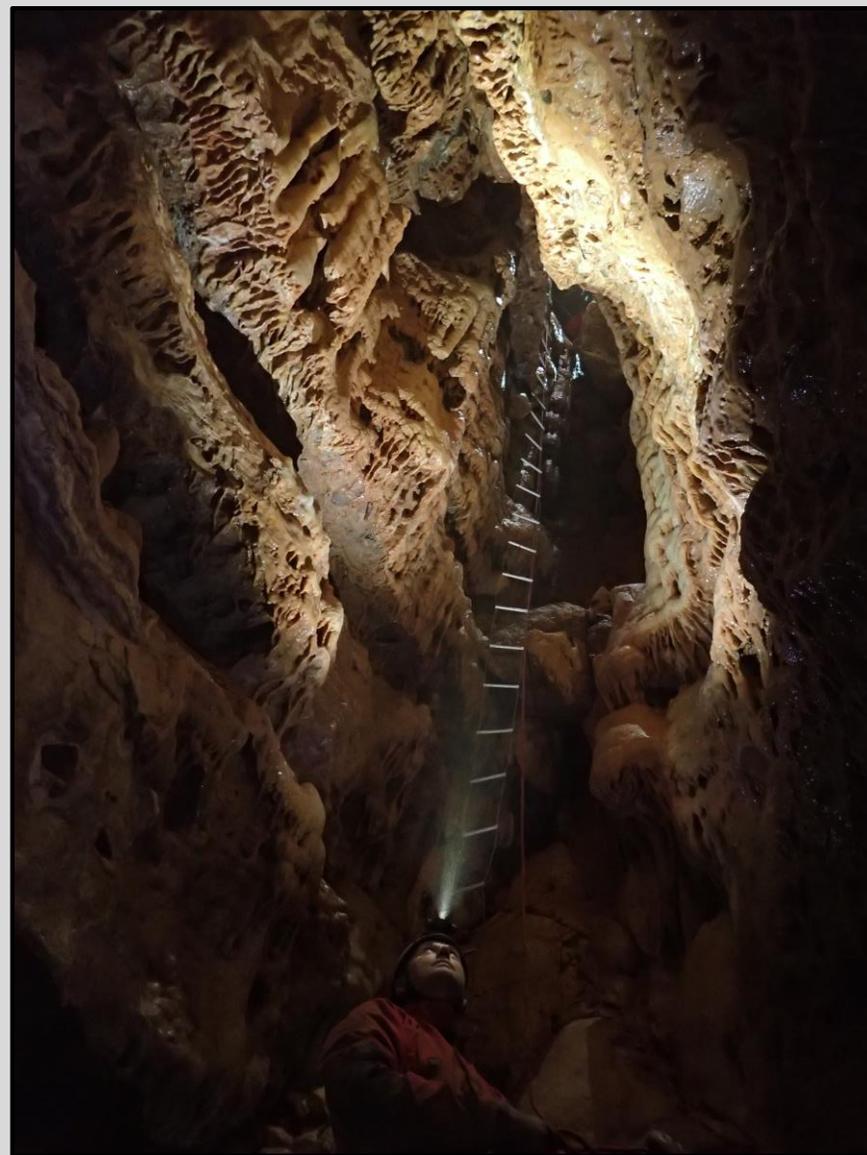
A variety of speleothem types: drapery, straws, stalagmites, etc. in a range of colours.



The Rift, An Unexpected Development

First descent 8th August 2018

Photographs by Roz Simmonds



The sloping floor at the bottom of the rift is comprised of shattered calcite speleothems and some conglomerate. At the lowest point, a potential lead requires some digging, and some thought.



There are sheared speleothems and piles of fractured flowstone throughout An Unexpected Development.



This damage interpreted as evidence for Pleistocene frost and ice damage

Kempe (2004) describes wide range of phenomena as evidence for ice related damage, including:

- Missing ceiling formations of older generations
- Sheared-off stalactites and curtains, deposited on top of floor speleothems
- Broken and deposited stalagmites
- Sheared-off stalagmites which have shifted from their base but still stand upright
- Cracked conical stalagmites
- Tilted and leaning stalagmites
- Moraine-like piles of floor flowstone
- Precariously placed ceiling deposits



Following the recent BCRA Cave Science Symposium held at the University of Bristol, 13th October 2018, a visit to Hallowe'en Rift by Professors Gina Moseley and Marc Leutscher, with Vince & Roz Simmonds and Ray Deasy.

Here, discussing the processes that can cause a cave to become filled with ice during glacial periods and, subsequent thawing during interglacials.



References:

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The dighalloween team

L to R: Graham Johnson, Jonathon Riley, Duncan Price, Paul Brock, Nick Hawkes, Vince Simmonds, Robin Taviner, Mike Moxon, Alex Gee.
Photo taken by Roz Simmonds