

An archaeological investigation of Whitcombe's Hole,
Burrington Combe: a summary report of the 2011 field
work.



Whitcombe's Hole location viewed from the east side of Burrington Combe.

Field work and summary report by Vince Simmonds

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The main aim of the project

The primary aim of the excavation at Whitcombe's Hole is to conduct a detailed investigation of the cave sediments to try and reveal if evidence of any possible human use of Whitcombe's Hole prior to the Early Iron Age can be found, and whether any indicators of past environmental conditions occurring in the Burrington Combe area can be found at the site.

Permission

Permission to dig at the site was granted by the landowner, Sir David Wills on 29th March 2011, subject to a number of conditions, the present permission is to extend to the end of November 2011.

My gratitude goes to Linda Wilson and Graham Mullan of the University of Bristol Speleological Society (UBSS) who conducted negotiations with the landowner on my behalf to gain the permission for the dig to proceed.

Location and brief site description

Whitcombe's Hole is located in Burrington Combe at NGR ST 47635827. The site has previously been excavated in c.1860 by William Boyd-Dawkins who recovered an unornamented blackware urn that was attributed to the Early Iron Age (EIA) along with various bones and teeth. A recent visit to the cave appears to indicate that there has been little disturbance of the cave sediments since that time.

Balch (1937) in his publication – Mendip: Its Swallet Caves and Rock Shelters described Whitcombe's Hole as an old outlet cave or as a passage that once fed into Aveline's Hole. He makes reference to the excavation work at the site by Boyd-Dawkins stating that very little debris was removed and that a complete excavation was not carried out. Balch adds "there is some deposit on the floor, which will repay excavation."

Whitcombe's Hole is situated at the northern end of a ridge of high ground formed by three valleys; West Twin Brook and East Twin Brook are on either side of the ridge and the cave overlooks Burrington Combe on the northern side. Both the West and East Twin Brook valley's run south onto the higher ground of Blackdown, the lower reaches of Burrington Combe have a north-south alignment before heading sharply to the east at the promontory where Whitcombe's Hole is located. All of these valleys may have been used as corridors to gain access to the higher Mendip Plateau perhaps to hunt grazing herds at particular seasons.

To the southwest of the Whitcombe's Hole is Goatchurch Cavern at a similar altitude but overlooking West Twin Brook, to the north of Whitcombe's Hole is found Aveline's Hole at the valley bottom of Burrington Combe.

Geology

According to the geological map (BGS: Sheet 280) of the area the site is within the Black Rock Limestone of Carboniferous Age, the strata has an inclination dipping 60° to the north-northeast. To the south the strata comprises Lower Limestone Shale while to the immediate north is a small outcrop of Dolomite then Burrington Oolite, these strata are also of Carboniferous Age; these limestones together represent the lower strata of the Dinantian sequence. To the west of the site is an outcrop of Dolomitic Conglomerate of Triassic Age, this particular rock type features as interdigitations along both the northern and southern flanks of the Mendip Hills.



Figure 1. Looking into the entrance chamber which, for the purposes of this investigation, has been designated the 'daylight' zone of Whitcombe's Hole, Burrington Combe

Excavation of the 'daylight' zone.

Work at the site commenced during April when a survey of the cave was conducted and photographs of the site were taken. Following this it was decided that the first task was to investigate the entrance chamber, this has been designated the 'daylight' zone.

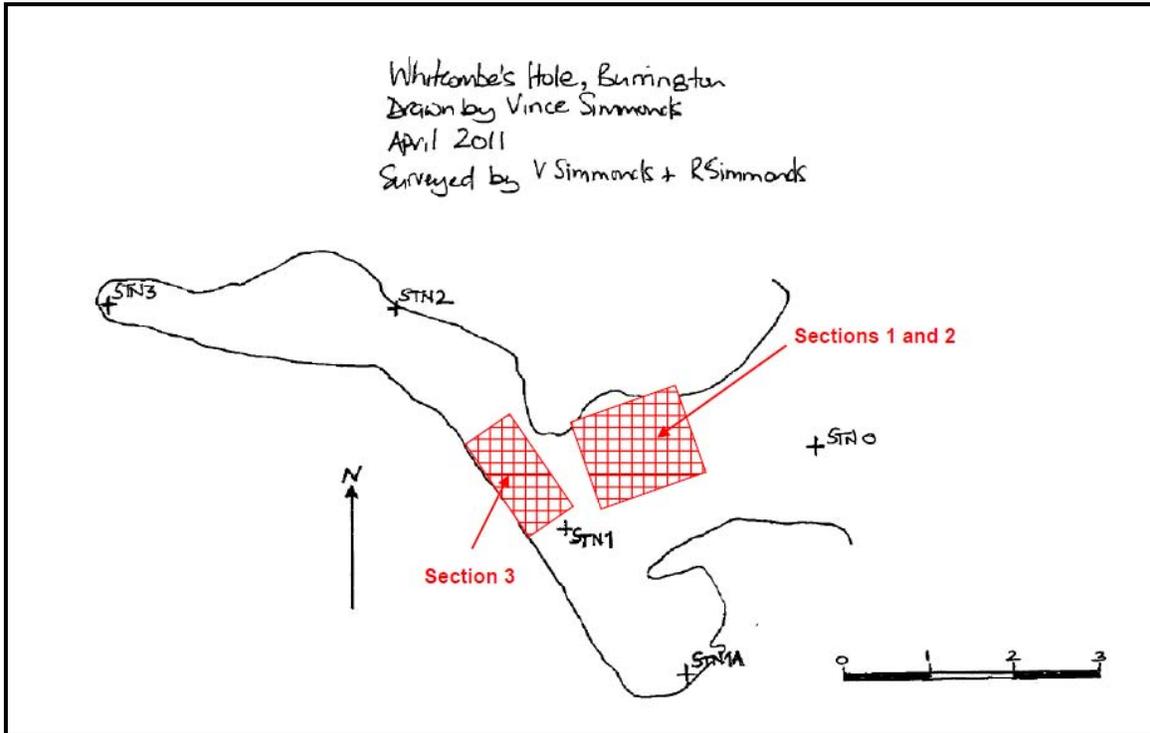


Figure 2. Cave survey with excavation areas within the 'daylight' zone shown.

Section1: initially the area was thoroughly brushed clean of surface material that comprised mostly moss, leaves, sticks and frequent coarse angular to sub-angular gravel and cobbles of limestone with very rare slate. There were some fragments of glass and an empty bottle [flagon] that possibly once contained cider and has been attributed to circa 1960s – 1970s. Some recent animal bones had been noted on the surface during a previous site visit. As the excavation proceeded the soil removed is described as fairly dry, non-cohesive/non-plastic brown silt/clay with high organic content including abundant root growth and earthworms. The few finds in these early stages included bone fragments, acorn shells and carbonized wood. With increasing depth the soil became slightly more cohesive and moist, there appeared pockets of lighter orangey-brown to brown-red clay and yellow-brown, possibly ochreous material (cave earth). The organic content

did not diminish and the extensive root growth and movement of earthworms appeared to have caused considerable mixing of the sediments. Clearance of the soils revealed limestone bedrock forms the cave floor.



Figure 3. Section 1 and 2 of the 'daylight' zone after excavation.

Section 2: was a forward extension of section 1 and the soil, similarly, comprised of dry, non-cohesive/non-plastic brown silt/clay with coarse angular to sub-angular gravel and cobbles of mainly limestone with occasional sandstone, also abundant organic content (roots and rootlets) and earthworms. Section 2 consisted of a 25mm to 100mm layer over the continuation the limestone bedrock floor. There were no finds of note and it is likely that these sediments represent more recent, probably wind-borne material as they are relatively close to the cave entrance/exit.

Section 3: is located to the rear of the 'daylight' zone and could be said to lie within a transitional area between light and increasingly dark zones.

The surface layer of this section consisted loose coarse angular to sub-rounded gravel and cobbles of mainly limestone with occasional red sandstone and some now degraded flowstone material. Below this a red-brown silt/clay with fine to coarse angular to rounded gravel of mainly limestone and occasional sandstone. There was a pocket of blackened coarse

rounded gravel with a number of blackened bone fragments and teeth. The black coating is possibly due to manganese.



Figure 4. Some of the blackened bones and teeth from the rear of the 'daylight' zone.

The organic content remained high and included root growth up to 15mm in diameter and much bioturbation caused by earthworms.

The soil became a mixture of brown organic soil and pockets of light red-brown silt/clay with frequent fine to coarse angular to sub-rounded gravel of limestone, sandstone, calcite and quartz pebbles. The brown organic soil is non-cohesive/non-plastic. There were more faunal remains recovered mostly bone fragments and teeth, rather disappointingly broken glass was also uncovered and there is a distinct lack of any stratigraphy, it was from this location that a single flint flake was found.

The soil continued to be a mix of brown organic soil and red-brown silt/clay with gravel and cobbles as described above. Throughout this section were frequent finds of naturally carbonized wood with rare small lumps of charcoal. With depth the light red-brown silt/clay became more frequent and this material has been described as 'cave earth'. Even with increasing depth shards of broken glass were still appearing among the other finds that

consisted mostly of small mammal bones. These mixed soils were found to be overlying yellow (ochreous) sandy clay with abundant medium and coarse sub-rounded to rounded gravel of mostly red sandstone with some infrequent quartz and limestone.

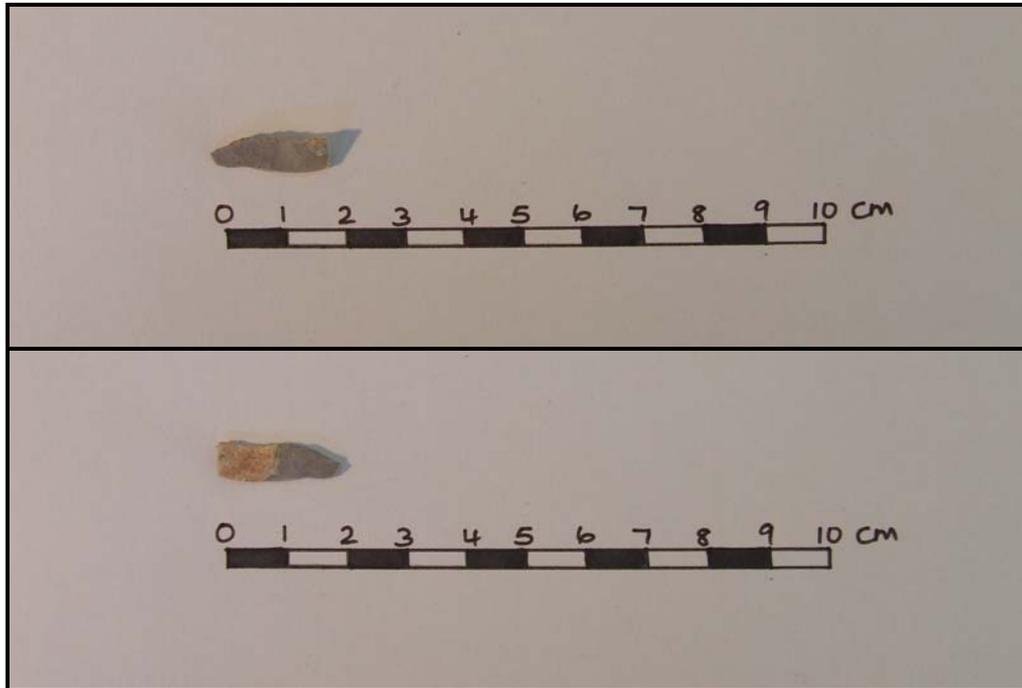


Figure 5. The single flint flake recovered from the rear of the 'daylight' zone.

Discussion

The single flint flake (pictured above) has been compared to a collection of flint on public display in the Balch room at Wells Museum and bears some similarities to those flint flakes attributed to the Mesolithic period. It should be noted that a single flake recovered from Whitcombe's Hole might be an accidental find and does not, at this stage represent any evidence of occupation. It is hoped that further excavation in other sections of the cave site might reveal more finds of this type and provide more information and lead to enable a better interpretation of the site.

The faunal remains recovered mostly consisted of bone fragments and teeth that initially appear to fall into two categories, those stained black (possibly due to manganese, as mentioned previously) and paler bones. The blackened bones and teeth appear to be from a pocket that had rounded gravel (pebbles) and included a relatively large canine tooth from badger or fox and teeth might originate from domesticates perhaps sheep/goat. On average the blackened bones appear to slightly larger than the paler bones.

There is still more work to be carried out on identification of the bones and species types.

There are some anomalies, for example, in all sections a black material was found, as yet unidentified that adhered to the bedrock and cobbles and also present as lumps. In a flotation experiment this material sank, whereas carbonized wood/charcoal floated. This material requires further consideration before an interpretation is possible.

There has been a quantity of broken glass found and it is apparent that throughout this phase of the investigation there lacks evidence of any stratigraphic layering and, hence context to the excavation of this section of the 'daylight' zone and this is most likely due, not only to prolific root growth and bioturbation but the result of other mechanical means. When the disturbed mixed layers were excavated to reveal the cave sediment layer it was apparent that passing through the cave sediment layer was a 'cut' line and this has been interpreted by the author as representing the line of a previous excavation possibly that of Boyd-Dawkins original 1860s dig. This might give some explanation to the lack of stratigraphy and the mixing of the material excavated.



Figure 6. Some of the paler bones recovered from the rear of the 'daylight' zone, mostly of small mammals.

This report presents a preliminary summary of the field work; the evidence collected to date remains inconclusive due largely to the lack of stratigraphy which has not allowed a chronology to be established. The disturbed sediments are unlikely to provide any tangible evidence so sieving is not believed to be warranted at this stage. It is thought that the further investigation of the site might reveal undisturbed sediments that will provide some context and possibly the recovery of more diagnostic artefacts and other evidence and enable an interpretation of Whitcombe's Hole cave.

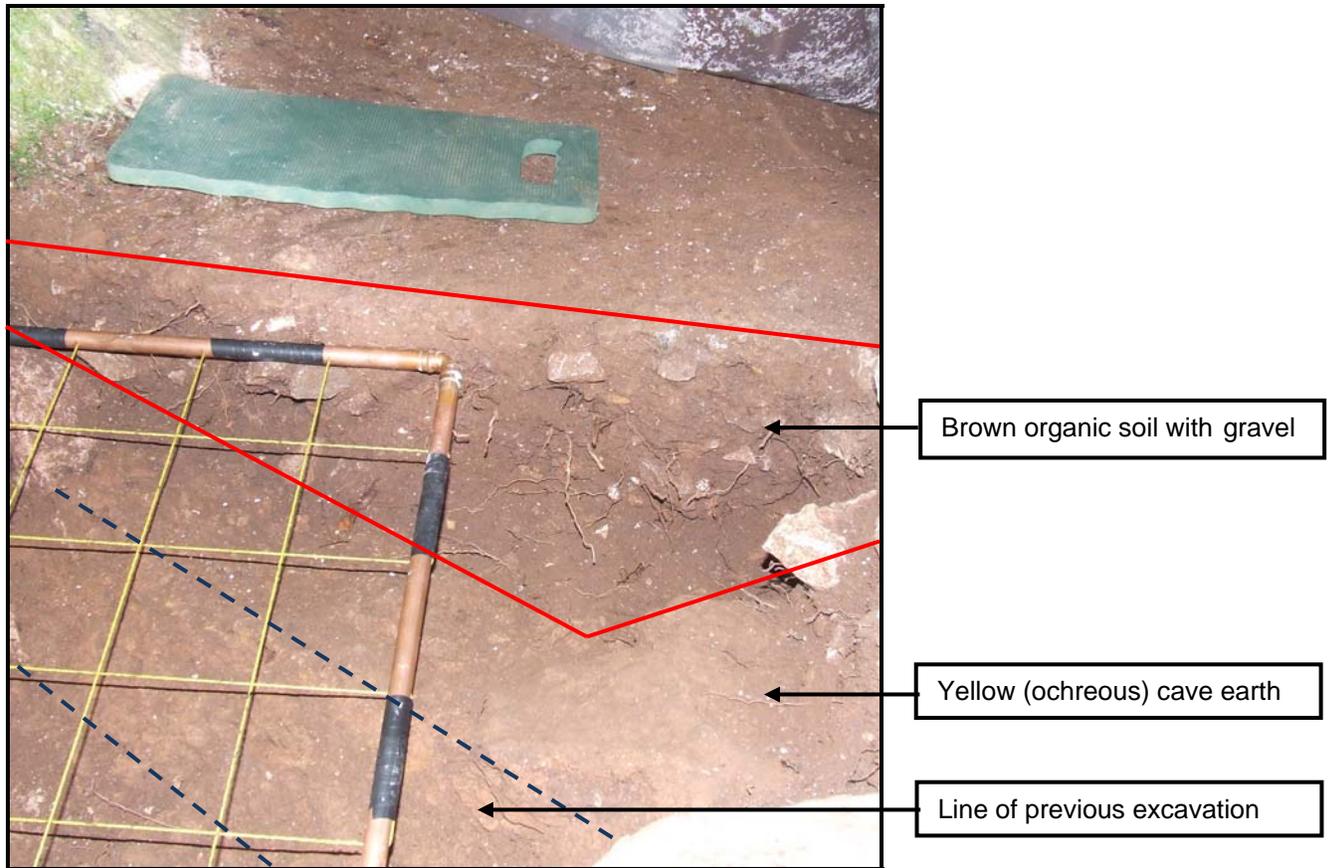


Figure 7. The finished excavation showing the boundary between the organic soil and cave earth. The line of previous excavation is also evident.

Throughout the excavation in addition to field notes and sketches, a photographic record has been maintained. In addition to the images used in this report there is a gallery containing more photographs of the excavation that can be accessed via the website: www.mendipgeoarch.net

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