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SAYE'S HOLE, CHEDDAR, SOMERSET: A NEW LATE IRON AGE SITE

by

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ABSTRACT

In 1986 a sounding was dug to bedrock at the entrance to Saye's Hole in order to assess its previously unknown deposits. Below a modern constructed floor and a diffuse archaeological layer probably only a few centuries old at most, two dense Late Iron Age levels were discovered. A preliminary discussion of the Iron Age finds is presented here; these comprise hearths, pottery related to Glastonbury ware, small metal objects (including iron nails and a possible copper alloy stud head), and butchered animal bones. The role of the cave within the Cheddar karstic system is also considered. It had previously been demonstrated that the cave communicates with the main system, and a major post-Iron Age flood loam was recognized in the sounding. However, the bedrock uncovered in the sounding was blocky and angular, with no signs of water sculpting, and it was immediately overlain by Late Iron Age material; the origin of the present entrance chamber is therefore obscure.

INTRODUCTION

The site of Saye's Hole lies just above the Risings at c. 27 m OD, at the foot of the left-hand (southern) cliffs of Cheddar Gorge. The cave consists of a large entrance chamber intersecting, towards the back, an oblique rift; in its turn, the rift communicates with a passage leading down to the Risings themselves. Access to that part of the system beyond the light zone is controlled by a gate. A small-scale plan and a section of the cave have been published by Stanton (1953).

It is of some importance that, prior to the current investigation, very little was known concerning the entrance chamber. Shaw (1966) and Irwin (1986a & b) have reviewed the historical sources concerning the Cheddar caves. Saye's Hole (under the name of 'The Hall' or 'Cheddar Hall') is mentioned by the early eighteenth century as being frequently used by 'strolling beggars'. An 1872 map marks a footbridge and path leading to the cave. In the 1880s, R. C. Gough attempted to widen the Risings by blasting and,in so doing, may have disturbed a small part of the Saye's Hole talus. Early in this century, the entrance was used as a Tea Room (Barrington and Stanton, 1977); cement runnels for collecting wall moisture may date to this phase. One seemingly ominous feature of the entrance chamber as it now appears was the remarkably level floor; it was feared that large amounts of deposit had been evacuated to make a Tea Room possible, although no traces of a former sedimentary fill could be found on the walls. Quite extensive research over several years by a number of people (notably Dr W. I. Stanton and Dr R. M. Jacobi) has failed to discover any documentary evidence of prior excavations in what is, after all, a very obvious and accessible cave.

Given the proven archaeological importance of the great majority of excavated Cheddar caves, there was a clear need to assess the potential of Saye's Hole. Accordingly, Cheddar Caves Ltd., representing the owners of the cliff and cave interior, commissioned two of us (S.N.C. & R.N.E.B.) to undertake exploratory work in October, 1986. A sounding, 1×1.5 m in area and 2.65 m deep, was dug just inside the overhang (FIG. 1), in order to provide general details of the lithological, palaeontological and archaeological stratigraphy without disturbing the bulk of the deposits.

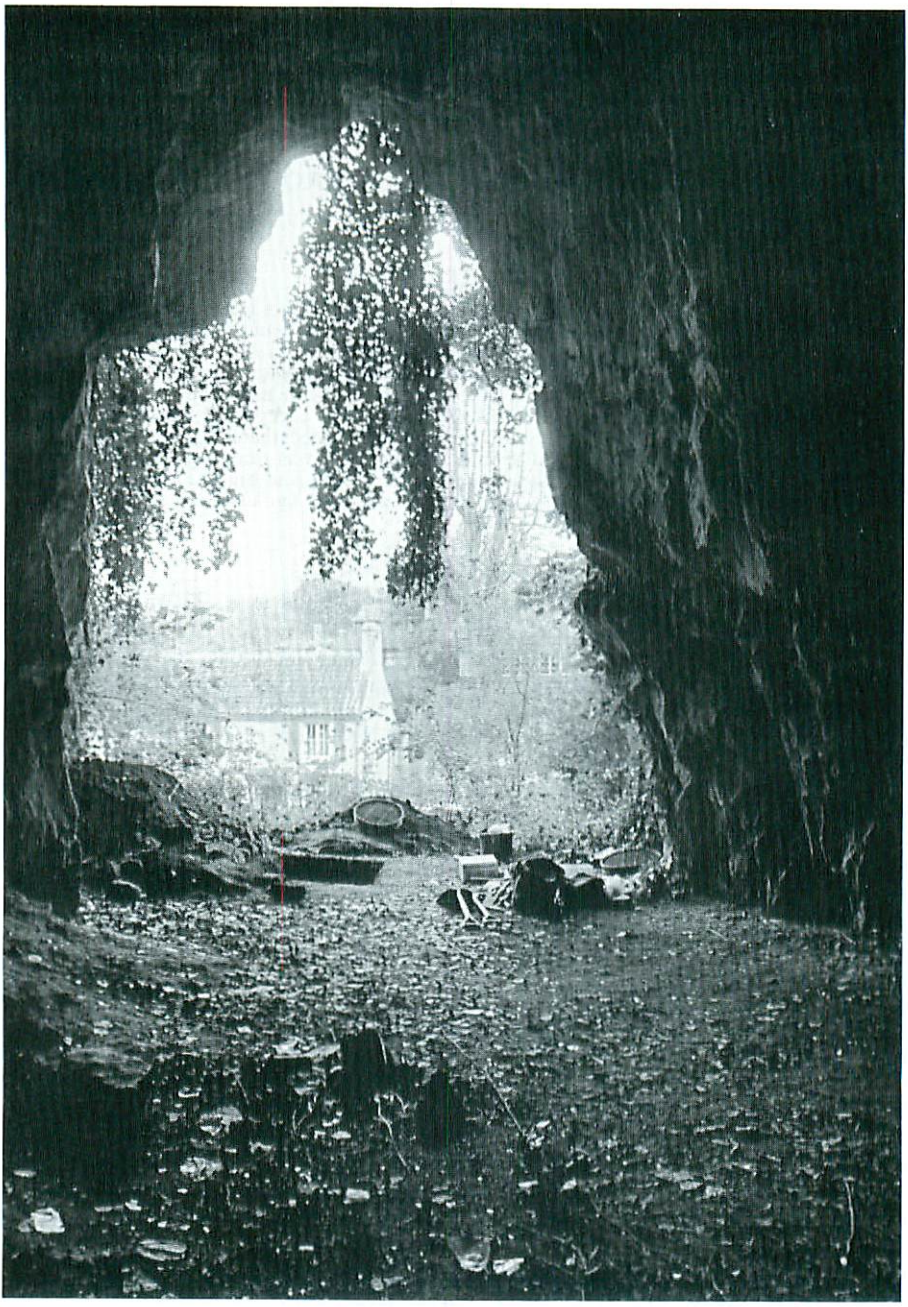

FIG. 1—SAYE'S HOLE. VIEW FROM THE CAVE INTERIOR, SHOWING THE LOCATION OF THE 1986 SOUNDING

STRATIGRAPHY AND CONTEXT

A section through the excavation is shown in FIG. 2.

Archaeological Unit (0)—Constructed Floor

Below a very thin cover of modern dust and leaves there is a continuous layer of brown (7.5YR 5/2), well sorted limestone grit (resembling roadstone), c. 10–14 cm thick. The top 3–4 cm of this grit is partially consolidated with bitumen. This level, constructed floor appears to be present throughout the entrance chamber. It is assumed that this construction phase relates to the use of the cave as a Tea Room. No evidence has been found to suggest that significant amounts of natural deposit were removed during this construction; there is reason to believe (see below) that the unusual flatness of the surface may be a natural feature.

Loamy Fine Scree

Below the constructed floor is a 30 cm thick unit of well consolidated sediment, with no signs of disturbance or anthropogenic input. The material is coarser at the top (with some limestone clasts in the 5–10 cm range) but becomes increasingly finer downwards save for a few medium (c. 15 cm) blocks; alteration of the limestone also increases downwards. The matrix is a reddish brown to brown (5–7.5YR 5/4) sandy loam. There are small fragments of corroded roof and wall speleothem (both laminated plaques and eucladioliths). Small fragments of mesofaunal and megafaunal bone are rare. Microvertebrates, including Anoura (frogs, toads, etc.), and mollusca are present.

Archaeological Unit (1)

There follows a 10–15 cm band of highly disturbed material (chaotic fabric), with small stones set in a silty clay; there are some blocks (up to 35 cm) near the base. There is much randomly distributed charcoal, and limestone clasts are often heavily burnt. Fragments of slag occur but no formal artefacts or structures were recovered. Bone and tooth material is relatively common (including horse, pig, large bovid and bird); butchery marks are present on some pieces. The deposit has an uneven dirty colour averaging dark brown (7.5YR 4/2) with black specks.

Silty Clay Transition

Below the archaeological layer is a mottled silty clay, showing major root bioturbation with down-movement of charcoal. It is possible that some anthropic disturbance has also occurred, although no large bones or slag were recovered. This zone is c. 20–25 cm thick, passing gradually down into the next unit at a depth of 0.75 m below the modern surface.

Clean Sands-Silts-Clays

Before root bioturbation (which blurs the upper limit but weakens progressively downwards), the surface of this unit was probably more or less horizontal throughout the chamber; this horizontality would have been inherited by all the overlying deposits.

The unit consists of a series of fining upward lamina sets, starting with thicker fine sand laminae, passing through silt laminae and capped by thin clay laminae; cycles are not always complete. Laminae are always less than 1 cm thick, commonly only 1 to 3 mm thick and sometimes of microscopic

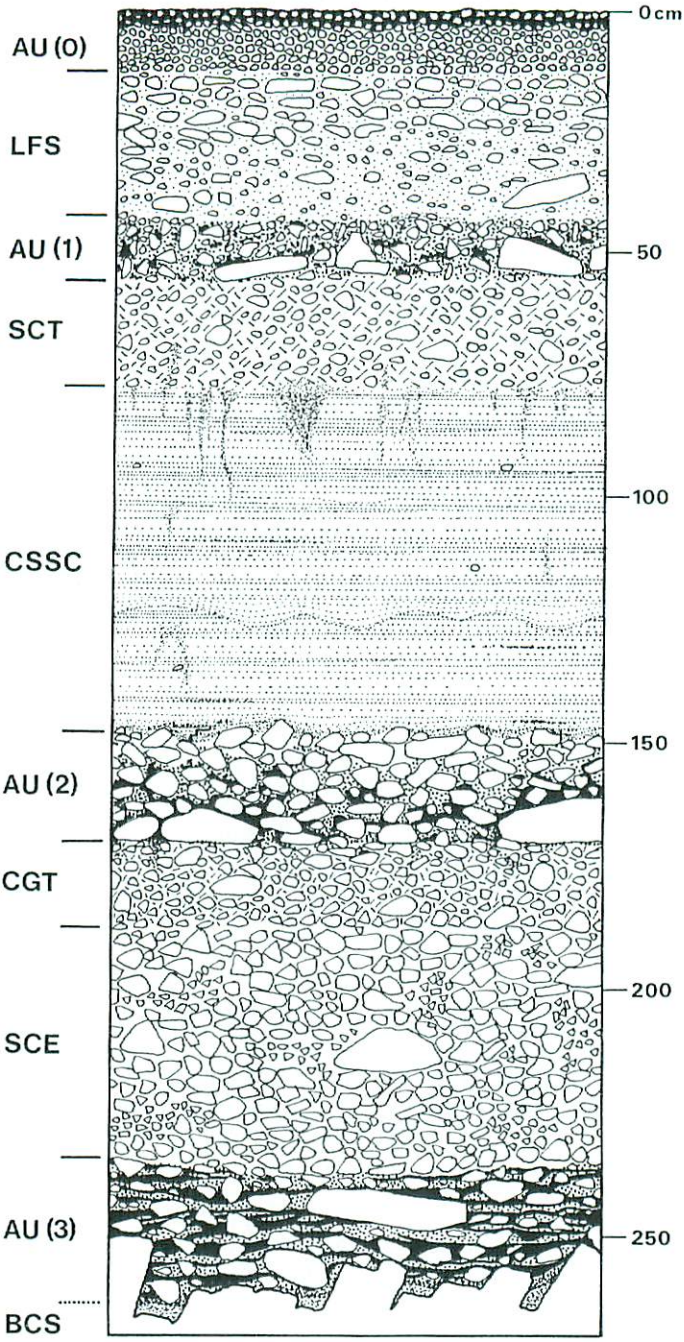

FIG. 2—SEE EXPLANATION OPPOSITE

thickness; lamina sets are rarely more than 4 cm thick. Limestone clasts are small, corroded and very rare. About two thirds of the way down the unit there appears to be a minor erosional diastem (wavey); there are no cut-and-fill structures and no cross-bedding. The bedding angle of at least the laminae lower in the sequence is high (up to 30°), with a dip into the cave (bearing 190–200°). Some laminae pinch out up-dip but others, especially clay, are strongly persistent. There is common high-angle normal microfaulting, probably resulting from post-depositional down-slope creep in the direction of unit thickening (into the cave). At the northern (outer) end of the sounding this unit is only c. 30 cm thick, whilst at the southern (inner) end it is 70 cm thick (horizontal top, dipping base). There are very thin, areally restricted charcoal laminae in the sequence; these may represent contemporary input or, more probably, minor erosion of the underlying unit (see below). Colours are of high chroma but variable, generally reddening down through the sequence (passing from 7.5YR to 5YR), with yellowish red (5YR 5/6) the dominant colour near the base. Rare microvertebrate and molluscan fragments were noted.

The unit is interpreted as due to composite flooding after backing-up of water in the tube at the rear of the cave connecting with the Risings, with sediment being deposited in slow-moving water from pulsed clouds mainly by sub-parallel accretion. There may be an overflow channel at the front of the cave, although no evidence of its proximity appeared in the sounding. Sand grains are mainly of relatively angular quartz and chert, with some hematitic particles; there is no sign of the type of wider regional suite of rocks and minerals seen in the Pleistocene deposits of Gough's (New) Cave (Collcutt, 1986) and there interpreted as input directly from the gorge bottom.

Archaeological Unit (2)

The boundary between this unit and the overlying flood deposits is very irregular on a tiny scale but very sharp. Major erosion does not appear to have taken place. The surface of this unit seems to represent the contemporary floor, sloping down into the cave away from a high point just beyond the cliff line (i.e. a normal 'entrance talus cone'). The impression that the flood deposits merely swamped this surface, without eroding it, is reinforced by the lack of compaction (moderately large airholes are even present) in the top 10–15 cm of the unit. The unit is c. 22 cm thick and is composed mainly of stones (with some blocks up to 40 cm) set in an 'earthy' matrix. Charcoal and bone fragments (some showing butchery marks and including an ovicaprid and a ?bovid) are common. Pottery is present and is described below. A few sherds and bone fragments refit along ancient breaks, suggesting a near-primary context. No archaeological structures were recognised, although some flatter limestone slabs near the base of the unit may have been deliberately placed. The overall colour is very 'dirty' but is in the range 5–7.5YR.

FIG. 2—(OPPOSITE)—SAYE'S HOLE. DIAGRAMMATIC SECTION OF THE SOUTHERN (INNERMOST) TRANSVERSE FACE OF THE SOUNDING

AU (0)–(3): archaeological units
LFS: Loamy Fine Sand
SCT: Silty Clay Transition
CSSC: Clean Sands-Silts-Clays
CGT: Clayey Grit Transition
SCE: Stony Cave Earth
BCS: pockets of Basal Clayey Silt

Clayey Grit Transition

Below the archaeological layer, with a diffuse boundary, there is a reddish brown (5YR 4/4) structureless clayey grit, c. 19 cm thick. The limestone grit (mostly in the size range 0.5 mm to 2 cm) and the occasional larger stones are relatively angular. Roots have dragged charcoal and a few faunal fragments down from above but there are no archaeological objects as such.

Stony Cave Earth

The upper boundary of this unit is moderately abrupt. The 50 cm thick unit consists of small to medium (up to 10 cm) limestone scree with a matrix of undercompacted loam; there are some zones of angular grit with little or no matrix, and clast support is common throughout the unit. The limestone is often heavily altered and there are some totally unsound clasts. Fragments of roof speleothem are common. Matrix colour is reddish brown (5YR 4/4), with decomposition products giving white, buff or pink flecks. Megafaunal and microfaunal bone fragments are present; mollusca are abundant. Small charcoal flecks are not common but nevertheless occur throughout the unit. There is no archaeological material.

Archaeological Unit (3)

This unit is 50 cm thick at the north end of the sounding, 27 cm thick at the south (inner) end; the top of the unit slopes into the cave at an angle of 20°–25°. This material is very stony, with some blocks up to 40 cm; most stones are fire-reddened and even shattered to the core. The matrix shows extreme anthropogenic influence, being made up almost entirely of relatively discrete lenses of hearth material; each lens is composed of charcoal, passing down into light grey ash-saturated clay, and is underlain by a thin zone of baked (indurated and reddened) fine mineral sediment. A number of small flat limestone slabs appear to have been deliberately placed in or near hearths, although no complex structures were observed. Large lumps of charcoal, sometimes showing complete cross-sections of branches, are common. Pottery sherds, metal artefacts and slag (all described below) are present, as well as an imported sandstone block and animal bones, especially those of an ovicaprid. A few sherds and bone fragments refit along ancient breaks and, together with the hearth structures, indicate a primary context. Micro-vertebrate and molluscan remains were noted.

Basal Clayey Silt

Very small pockets of clayey silt are sometimes present in the irregularities of the bedrock floor. This material is cleaner (tending towards a buff colour) than the hearth material above but charcoal still occurs and the pockets are likely to have been disturbed. It is not clear whether this clayey silt is the remains of a former sedimentary unit or whether it is a decomposition product of the altered bedrock.

Bedrock

Limestone was exposed over the whole floor of the sounding. The surface is very irregular, with upstanding ridges and intervening troughs. Although chemical alteration has set in, forms are generally angular, enhanced in places by fire shattering, and there are no signs of sculpting by running water. It was deduced that this is indeed bedrock because the dip and strike of the prominent jointing observed were identical to those seen in the cave walls and roof.

POTTERY

Generalities

The material recovered comprised 54 sherds weighing 712 g and was distributed within two distinct contexts, 35 sherds (520 g) from Archaeological Unit (2) and 19 sherds (192 g) from Archaeological Unit (3). With a single exception, the sherds were in a fairly hard calcite-tempered fabric which was fired variably from black through grey and reddish brown to dark buff colours. The calcite crystals were 1–2 mm across, scattered fairly densely throughout a non-sandy matrix. The sherds were examined briefly in hand specimen by Dr David Peacock of Southampton University. They were identified as being almost certainly related to the fabric used to manufacture his 'Group 3' Glastonbury wares (cf. Peacock, 1969), with a probable source in the Mendip limestone. The exception was a shell-tempered sherd, hard-fired and dark pinkish brown in colour, with, in addition, sparse fragments of calcite measuring up to 3 mm across. The potsherds from both layers had suffered from a moderate degree of wear and several from Unit (3) preserved a burnt deposit on the interior walls. This appeared, in some cases at least, to derive from original use of the vessel rather than being a secondary deposit from the burnt material within the layer. A small, very worn fragment of daub or briquetage was recovered from Archaeological Unit (3).

Archaeological Unit (2)

Nine rim sherds, representing six individual vessels, were recovered from this layer. All were in calcite-tempered fabric. Of the body sherds, nine were fairly thin-walled with an overall burnish. The remaining fourteen were thicker and more coarsely finished. Three of the rim sherds were very fragmentary and could be identified only as small non-necked jars or bowls with short out-turned rims. The remaining three vessels were identified as follows:

(*a*) A large coarsely finished, necked bowl with a flattened, enlarged rim. The form closely resembles that of Glastonbury ware bowls but the vessel was undecorated and the general appearance was that of a more crudely made piece. The calcite was leached out of the damaged interior surface of the vessel. A number of body sherds recovered from the context almost certainly belong to this vessel, although they do not join.

(*b*) A bead-rim bowl with flattened bead. This piece is fairly finely made and burnished, and fired to a dark grey colour.

(*c*) A very finely made, thin-walled vessel. This may be a necked bowl but incompleteness and distortion of the rim render the angle difficult to ascertain. The surface is highly burnished and the vessel fired to a uniform black colour. Two body sherds which almost certainly belong to this pot preserve shallow tooled decoration in the form of two parallel lines. These are so fragmentary that the vessel cannot be positively identified as an example of Glastonbury ware proper, although it may be.

Archaeological Unit (3)

The nineteen sherds recovered from this context need represent no more than three vessels: the shell-tempered vessel mentioned above; a calcite-tempered vessel of unspecified form, which had a distinctive burnish leaving

a faceted effect on the surface; and a finely finished ovoid jar. The jar, in calcite-tempered fabric, had a slight groove around the rim interior and was burnished overall but undecorated.

METAL OBJECTS

Archaeological Unit (3) produced a small quantity of metal artefacts and slag, 29.3 g in total and comprising two copper alloy objects (1.5 g), three iron objects (7.6 g) and two pieces of metal slag (20.2 g). The iron and copper alloy artefacts can be briefly listed as follows:

(*a*) Iron nail—circular-sectioned shaft, flat roughly circular head, near complete with a total length of 54 mm.

(*b*) Iron rod—fragment of circular-sectioned rod, perhaps a nail shaft (incomplete).

(*c*) Iron sheet—precisely cut piece of sheet metal, 2 mm thick, two straight parallel edges, the remaining two opposing edges cut into concave curves; length, 19 mm; width, 11–20 mm; possibly a waste fragment.

(*d*) Copper alloy, rod—short fragment of curved, circular-sectioned rod; diameter, 4 mm; length incomplete.

(*e*) Copper alloy stud head fragment (?)—thin sheet metal beaten into a possible circular domed stud head with semi-circular cross-section; metal thickness, 1 mm; stud diameter, 13 mm; stud depth, 8 mm.

(*f*) Metal slag—two pieces of metal slag, outwardly differing in colour and in apparent density and composition (metallurgical analysis will be required before any further comment can be made).

DISCUSSION

Archaeology and Dating

The time range of the above sequence is suggested by the contents of the four archaeological units (including the constructed floor, AU(0)).

No artefacts have yet been recovered from Archaeological Unit (1). However, small-scale smelting in response to an immediate local need is known to have continued on Mendip until the beginning of the last century. Couple this with the lack of evidence for significant deposit removal during the emplacement of the Constructed Floor (0) and there seems to be no reason to suspect any significant lack of continuity up to the present.

Looking at the pottery from Archaeological Units (2) and (3) as a whole, it cannot be said to belong to the Glastonbury tradition of the 1st Century B.C. as such, although there are similarities in fabric and form. It would, however, be reasonable to assume that the assemblage can be dated to the Late Iron Age, within the last two centuries B.C. The superficial resemblance to Glastonbury types may indicate one of two possibilities. The sherds may represent a tradition of hand-made pottery, produced locally in the Mendip region, which preceded and possibly influenced the Glastonbury industry. Alternatively, the group may comprise coarsely made imitations of a well-established Glastonbury tradition. The latter possibility seems less likely in view of the almost total absence of decorated sherds amongst the Saye's Hole assemblage.

The number of vessels and the range of forms is too small to distinguish a chronological difference between Archaeological Units (2) and (3). Considering the uniformity of the fabrics within both contexts, it is unlikely that the

deposits were significantly separated in time. The temporal significance of the intervening Clayey Grit Transition and Stoney Cave Earth cannot be accurately assessed in such a small sounding. If human interference with the environment (e.g. by felling of trees above the site) had occurred, scree could have been destabilized and redeposited at the cave entrance very quickly. Similarly, fires would have weakened the rock of the walls and roof, facilitating breakdown, especially if the entrance cavity had only been formed shortly before and had not reached equilibrium (see below).

Probably the most informative metal artefact amongst the small collection from Archaeological Unit (3) is the possible copper alloy stud head. Similar examples are represented on a number of Iron Age sites, normally in association with beaten copper alloy vessels/bowls, serving both a useful and ornamental purpose in riveting the composite parts of a vessel together. The Saye's Hole stud seems a somewhat large example. The sizes of studs from other sites are compared in TABLE I.

TABLE I—*Stud heads of copper alloy*

Site	*Diameter* mm	*Depth* mm	*Reference*
Saye's Hole	13.0	8.0	
Glastonbury	10.8 av.	2.2–5 av.	Bulleid and Gray, 1911
Meare	12.5 av.	6.4 av.	Bulleid and Gray, 1953
	17.6 max.	9.0 max.	
Danebury	11 max.	–	Cunliffe, 1984
Maiden Castle	12.0 max.	7.0 max.	Laws, forthcoming

Despite its large size, the Saye's Hole stud head does fit into the observed range. Those examples from Danebury have been dated to Ceramic Phase 6 or 7, that is, to the Late Iron Age.

Cave Formation and Resurgence Activity

The question remains as to why the earliest known deposits in the cave are as young as the Iron Age, granted that the deeper parts of the cave undoubtedly constitute a fossil section of the phreatic system. Three hypotheses (or combinations of these), which would need testing by future fieldwork, might explain this situation:

(*a*) The Iron Age occupants emptied the cave of earlier deposits; partial removal is certainly a strong possibility at other sites in the region (cf. Badger Hole, Wookey Ravine) but it would have had to have been very thorough at Saye's Hole.

(*b*) Earlier deposits do exist in pockets or channels in the floor, the area of the cave observed in the sounding representing a perched and perhaps atypical sequence; at least the expected basal water-laid deposits might then exist somewhere in the outer part of the system.

(*c*) The entrance chamber is a comparatively recent feature, representing a link produced by rapid and massive breakdown of the joint-weakened rock, between a much older karstic rift (now seen to pass obliquely across the SW end of the chamber) and the exterior cliff; Iron Age deposits would then have been the first to have been laid down in the new collapse cavity.

That the entrance chamber at Saye's Hole has acted as a temporary resurgence for flood waters is demonstrated by the presence of the Clean Sands-Silts-Clays. This is not particularly surprising, since the entrance deposits today lie only 4–5 m above the main Risings, and some 6 m *below* the mouth of Gough's Cave through which floods often pass. Indeed, one might have expected evidence of many more flood events in Saye's. Stanton (1986), noting the absence of flood loams in the Holocene deposits at the entrance to Gough's, has suggested that the flooding may be a comparatively recent effect, due to construction of dams downstream of the Risings over the last few centuries, and a similar argument might apply to Saye's. However, Barrington and Stanton (1977, p. 50) state that Saye's is known to have overflowed, presumably quite recently (cf. the floods of 1968), and yet there is no trace whatsoever of flood loams above the Constructed Floor (0) which itself must date from the 1930s or earlier. It would appear that flooding does not always leave a clear sedimentary record.

CONCLUSION

Further work on the existing archaeological and palaeontological collections from Saye's Hole is planned and an additional publication will appear shortly. However, it is already clear, even judging from this restricted sounding, that the cave contains at least two Late Iron Age levels of considerable significance. No detailed interpretation is yet possible but the density of finds is greater than that which would result from a few casual visits. Saye's Hole is by no means the only cave site of this period in the area; (pre-Roman) Iron Age material has been reported from Gough's Cave, Gough's Old Cave, Great Oone's Hole, Cooper's Hole, Soldier's Hole, Pig's Hole, Sun Hole and Chelm's Combe Shelter, minor sites all in the immediate vicinity, as well as from other Mendip caves with evidence of more substantial use, such as Wookey Great Cave (Wookey Hole) and Rowberrow Cavern (cf. Balch, 1947). However, most of the Iron Age levels at these sites were excavated, often completely, many decades ago, so that the intact deposits at Saye's take on even greater importance. Any future excavator at Saye's Hole should bear this point in mind and ensure that the full power of modern methods is applied.

ACKNOWLEDGEMENTS

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