ART. I – *The Prehistoric Occupation of Blenkett Wood near Allithwaite*

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The woodlands known as Blenkett Wood lie to the south-east of the village of Allithwaite and below the summit of Kirkhead. The large number of caves, rock overhangs and fissures present in the wood have attracted the attention of geologists and archaeologists since the middle of the 19th century. The area of land now known as Kirkhead has been of considerable importance to the historian as there is evidence of a medieval occupation in the form of ancient woodlands, fruit trees, trackways and field systems.

In 1864, Bolton and Morris, two local geologists of some renown, investigated Kirkhead Cave and presented the results of their excavations to the Geological Society by way of a read paper. The artefacts from their excavations have never been found and whilst the modern archaeologist may smile at their attempts to carry out a demographic reconstruction of past populations, they never-the-less made a very valid contribution to our knowledge of past exploitation of the area.

A hundred years passed before there was any further serious investigation of Blenkett Wood. In 1969, a group of archaeologists and mining engineers excavated Kirkhead Cave on behalf of the Lancaster Caves and Mines Research Group. Whilst their findings were of great significance they were very much doubted by the academic community, if only on the grounds that they were presented by amateur archaeologists. The group published their results for a limited circulation and Kirkhead Cave later became a scheduled ancient monument. It was, in 1974, the most northerly Pleistocene occupation site in Britain.

Academic acrimony, a not uncommon occurrence, surrounds Kirkhead Cave. Since 1985, Kirkhead Cave and other caves in Blenkett Wood have been investigated by the author of this paper and results to date are now presented.

**Blenket Wood – The Topography**

Blenkett Wood is an extensive area of well established mixed deciduous woodland with many mature specimens present. The lithology is carboniferous limestone which rises almost vertical in places from the old sea shore at the foot of the cliffs to a height of approximately 40 m at the highest point. The woods are private and access is therefore limited. Whilst the present land owner is managing the woodlands and clearing undergrowth, the woods have been much neglected in the past. There is a varied range of fauna including red deer, rabbit, stoat, numerous badgers, green woodpeckers and a large owl population.

The valley sides are steep, often vertical in places with extensive hill wash at the toe of the cliffs. In several areas extensive and wide terraces exist, particularly in the southern section of the woods.

The limestone varies in quality over most of the area and whilst much is in fairly stable condition there are numerous locations where the limestone is friable and
FIG. 1. Blenkett Wood. Location drawing showing Kirkhead Cave, Whitton's Cave, Kents Bank Cavern and Site 17. Reproduced by consent of the Ordnance Survey
subject to sudden collapse. With such a varied lithology there is much evidence of
previous collapses and subsequent hill wash having formed at the toe of the cliffs up
to widely varying heights and in many cases at steep angles of repose. There are a
number of caves in the limestone which have been formed by geo-chemical solution
or as phreatic conduits. Many of the cave entrances have been sealed by collapses
and hill wash and are difficult to locate. Many caves have collapsed completely.

There is an ancient trackway running east/west through a steep sided ravine
which may be associated with the two lime kilns present in the area. There are
extensive areas of ancient fruit trees including sloe, other soft fruits and ancient
apple trees which yield very small, sweet yellow apples.

Several caves have been located in recent years and three have been excavated by
the author, Kirkhead Cave has not been excavated by the author but there has been
an extensive investigation of work carried out by others.

The Palaeolithic Background – Kirkhead Cave

Kirkhead cave is a large geo-chemical solution hole lying at an elevation of 30 m at
NGR SD 3910 7565 and facing west. The cave may have been formed by marine
action, there is a wave notch at the entrance to the cave. Sadly, this important late
Pleistocene occupation site is surrounded by academic acrimony; even the cave
formation is in doubt in that, whilst it quite obviously is a geo-chemical solution
hole, it has been referred to in a highly technical paper (Gale & Hunt 1985) as a
phreatic conduit.

The cave was first investigated and excavated by J. R. Bolton in 1864, he may be
the actual discoverer of the cave in that he describes it as almost sealed in by hill
wash (Bolton 1864;1869). Bolton recovered a large quantity of human remains and
the bones of red deer, roe deer, fox, badger, boar, water vole, wild cat, goose and
other bird bones, horse, ox, goat and dog (Holland 1960). Bone, bronze and iron
artefacts were recovered together with sherds of a coarse unbaked clay vessel, a coin
of the reign of Domitian (AD 81-96), a bronze axe, a bronze spear head, one flint
flake, a trefoil shaped fibula, an enamelled pin and amber beads.

Eventually, Bolton encountered a stalagmite floor through which he penetrated
and continued excavating until he encountered horizons which he considered to be
sterile and devoid of any archaeology. When he abandoned the cave it is thought
that all that remained was a shallow stratigraphy with a saucer shaped depression in
the centre of the cave forming what is now the upper surface of the cave fill.

In 1969, R. M. and P. Ashmead, a father and son team of amateur archaeologists,
Together with R. H. Wood, a professional archaeologist, carried out an excavation
which lasted for five years. Part way through the work Wood left to take up another
appointment out of the area and the Ashmeads continued with the excavation.

Despite their amateur status they carried out the work in a highly competent and
very well organised manner. Within the confines of their somewhat limited trenches
they discovered 21 flint bladelets which they considered to be Late Upper
Palaeolithic. They also recovered an antler "boss" of Megaloceros sp. closely
associated with the flint tools which later yielded a 14c determination of 10700+
-200bp. (HAR 1059). Controversy now surrounds this vital piece of evidence.
The piece was initially identified by J. W. Jackson shortly before his death when failing eyesight may have led to a wrong identification of species. In any event it was only the "boss" or base of the antler without any attached skull that could readily have identified species. In a highly technical paper (Gale and Hunt 1985) the position of the antler within the stratigraphy was called into question without any justification. They stated that the antler may have been reworked into older deposits or that the excavators may not have correctly recorded the position of the antler, particularly its position relative to the flint artefacts. The implication of this is, of course, to call into question the position of all the artefacts that the Ashmeads recovered. An extremely unfair and unjustified criticism.

Gale and Hunt go on to state that the antler was recovered from pollen zone 3 deposits and go on to argue that *Megaloceros sp.* was extinct in Britain by the end of pollen zone 2. An argument that in itself is tenuous *in extremis*.

Following upon the publication of the Gale and Hunt paper in 1985, two separate papers, both criticising Gale and Hunt, were published (Salisbury 1988) and (Tipping 1988). Gale and Hunt subsequently published a further paper in 1990 in which they responded to their critics.

The author of this paper never intended to excavate Kirkhead Cave, there are other potential sites within Blenkett Wood. In 1985, a Late Upper Palaeolithic tool assemblage was recovered at Lindale Low Caves (Salisbury 1988:1991). Between 1990 and 1995, three caves in the immediate vicinity of Kirkhead Cave were excavated commencing with the cave now known as Whitton’s Cave.

**Whitton’s Cave**

Whitton’s cave is a remnant phreatic conduit lying at an elevation of 26 m at NGR SD 3915 7590. It is almost directly to the north of Kirkhead Cave at a distance of 250 m. It is located in the cliff face of a very steep sided ravine. It may well be the Allithwaite Cave referred to by P. Ashmead (Ashmead 1974) when he and others laid claim to having discovered the cave some time between 1969 and 1974 whilst they were excavating Kirkhead Cave. A coin dated 1972, was found on top of the inner cave earths during the recent excavations which does indicate that Ashmead may have discovered the cave.

The cave first attracted the attention of the author in 1991 and appeared to be similar to what Bolton may have discovered at Kirkhead Cave in 1864 in that the entrance was almost completely sealed in by hill wash with only a small triangular entrance measuring some 500 mm by 500 mm visible.

Excavation of the entrance chambers and terrace commenced in 1991 and was completed by the end of 1992. The work was as much an engineering exercise as it was an archaeological excavation. Not only had the cave entrance been sealed by hill wash from the extensive over burden, it had also suffered a series of rock collapses with very large boulders, mixed within the hill wash, sealing the cave entrance. Quite early in the excavation it became apparent that the cave was a phreatic conduit with a very prominent vadose. Many of the boulders that had to be removed to facilitate the excavations were in excess of 3 tonne in weight and often defied the combined efforts of two heavy duty chain blocks to remove them. The cave developed into a
mini phreatic delta, as the work progressed, with a secondary passage joining the main chamber at almost a right angle.

The outer, or entrance chamber, would appear to have been in use as a burial chamber for some time, the remains of a number of individuals were recovered and are detailed later in this report. Unfortunately, the horizons containing the human remains have been extensively disturbed by burrowing animals, mainly badger, and as a consequence of this loss of integrity, it is impossible to effectively date the burials. However, the presence of coarse, unbaked pottery fragments closely associated with one of the human skulls has led the excavators to conclude that the burials may be mid-Bronze age but in view of the disturbed stratigraphy this is highly conjectural.

**Whitton's Cave – The Stratigraphy**

The stratigraphy, particularly the upper horizons, have been so badly disturbed by the activities of badgers that only three contexts could lucidly be identified, the boundaries between the upper two units (Contexts 1 and 2) could only be ascertained by a change in water content and artefact content. Unit 1, is 1.8 mm thick (mean) and consisted of hill wash from the over burden made up of fine dark grey loams containing pebbles of varying size and large quantities of angular limestone boulders.

Unit 2 has a mean thickness of 2.0 mm and is identical to Unit 1 except that the soils are wet and contain clay lenses.

Unit 3 has a mean thickness of 1.2 mm and consists of a yellow/brown fine silt compacted into a heavy clay. The unit contains large quantities of water rounded erratics from a large source area. The erratics are slate, limestone and sandstone.

Unit 4 is of unknown thickness and consists of red/brown sand containing large quantities of water rounded erratics similar to those contained within Unit 3. The Unit was excavated to a depth of 2 m within the entrance chamber and was devoid of archaeology or even faunal remains. This unit may well have been deposited in the cave during an inter glacial period as there is no evidence of similar soils in other caves in Blenkett Wood, or outside any of the caves. A core taken in the entrance reveals that the Unit is of considerable thickness.

**Whitton’s Cave – The Artefacts**

One small dark green flint blade, unfortunately not diagnostic, was recovered from Unit 2 when the terrace was excavated. A coarse unbaked fragment of incised pottery was recovered from an area close to an almost complete human skull. All other finds are considered to be of recent origin and because of the burrowing animals must also be considered to be unprovenanced.

**Whitton’s Cave – The Faunal Remains**

Generally, the fauna encountered throughout the cave system is of little archaeological interest being an extant assemblage. It consists of cow, rabbit, deer,
sheep, fox, badger, goose and other birds, and several rodents. Several bones were recovered from beneath the stalagmite floor present in Chamber 5 in close proximity to, but not thought to be associated with, a human clavicle also recovered from beneath the stalagmite. The faunal remains from beneath the stalagmite floor are:

- WX/2 100 and WX2 101 two small fragments of un-identifiable bone.
- WX/2017 one small fragment of un-identifiable bone.
- WX/2016 right femur of fox.
- WX/2062 a small number (10) of sheep bones are assigned to this single archive.
- WX/2020/2029 cranial fragments of sheep.

The presence of sheep beneath the stalagmite floor effectively destroys the floor as a dating marker.

Whitton’s Cave – Human Remains

Human remains were recovered from the entrance chamber to the cave and three individuals are represented. Two are mature but the bones and teeth of a juvenile are also present. A fourth mature person may be represented by a single fragment of bone recovered from beneath the stalagmite floor in Chamber 5. The author is indebted to Kath Baxter of Lancaster for the identification of the bones and the compilation of the bone reports.

Bone Report (Human)

WP92J1-32 are 32 fragments of an almost complete skull of a mature individual. The mandible is not present. The skull has been rebuilt but 15 of the fragments could not be refitted. Three of the teeth are present, the 1st molar in the left arch of the upper maxillary and the 2nd and 3rd molars in the right arch. The presence of the 3rd molar indicates an age at death in excess of 20 years. The two teeth in the right dental arcade are in very good condition with cusps prominent and little sign of excessive wear. The single tooth in the left dental arcade is heavily worn with the dentine visible. Bone loss at the socket of the 1st incisor in the left dental arcade is indicative of a dental abscess. Excessive bone loss in the area of the premolar and 1st molar of the right dental arcade may be due to a suppuration, possibly osteomyelitis having developed from a dental abscess. On the skull, the Coronal suture has almost fused in the region of the Bregma but all other sutures are clearly visible. The excessively open Lambdoid suture is due to post mortem separation and subsequent abrasion and erosion. The fusing of the sutures in the Bregma region may indicate an upper age at death of 30 years. Cause of death and sex of the individual cannot be established.

W92HRC3, W92HRC4 and W92HRC7 are skull fragments from the occipital and parietal bones with some suture visible representing a second mature individual. W92HRC2 is a small fragment of skull from a juvenile with the mastoid process visible. W92HRC1 is a small fragment of the same skull. W92/303 and W92/304 are two human teeth from a juvenile.
W92/299 is the shaft of left femur of a mature individual with both proximal and distal epycondyles missing.

W92/285 is shaft and distal epycondyle of left humerus of a mature individual, proximal epycondyle is not present.

W92/286 is shaft and proximal epycondyle of a left radius of a mature individual, distal epycondyle is missing.

W92/288 is another left radius from a mature individual but most of the shaft and the distal epycondyle is not present.

W92/287 is a right fibula from a mature individual with proximal epycondyle missing.


W92/290 and W92/291 are two thoracic vertebra from two individuals, one mature, the other juvenile.

W92/289 is the shaft only of left clavicle of a mature individual.

W92/292 is the proximal end of left scapula of a mature individual.

W92/293 is a left talus of a mature individual which has some peculiar features that are separately described later in this report.

W92/294 is right talus of a mature individual in very eroded condition.

W92/305 and W92/306 are 3rd and 5th metacarpals of the right hand of a mature individual.

Bones assigned to numbers W92/307 to W92/314 are bones of the foot representing more than one mature individual.

WX2019 is the shaft only of a left clavicle of a mature individual recovered from beneath the stalagmite floor in Chamber 5.

None of the human bones exhibit any sign of carnivore damage, several are badly eroded due to the inconsistency of the stratigraphy and most of the damage is considered to be post mortem. Several bones are abraded due to the activities of burrowing animals. All the human remains, with the exception of one clavicle, are considered to have been deliberately deposited within the entrance to the cave.

The fragment of clavicle (WX2019) was recovered from beneath a stalagmite floor in Chamber 5. It was an exasperating find in that it was the only item of human bone recovered from beneath the floor and it is no doubt derived. Calcite in large quantities now blocks access to all further chambers but there is some evidence that soils and other materials have been, and continue to be, transported down the conduit from other, now inaccessible chambers. There is no evidence that badgers could have transported the bone from the entrance chamber, particularly as they could not gain access to the soils beneath the stalagmite.

**The Left Talus** (Bone numbered W92/293)

The left talus recovered with the right talus of another mature individual is particularly interesting in that the posterior calcanean articular surface is very much enlarged. Erosion of the right talus prevents comparison. The enlarged articular surface is strange as it is enlarged by almost 100%, an enlargement that would have allowed greater mobility of the foot than that found in modern populations.

There is no suggestion that this enlargement could have occurred as a result of
squatting, or as the result of any bone disorder that would have softened the bone and allowed the enlargement to occur as a result of pressure.

It could well be a congenital condition or, as is more likely the case, an inherited/acquired characteristic. The author does not wish to formulate a hypothesis on the facet enlargement but merely to bring this feature to the attention of the reader. It is not suggested that this bone is anything other than the talus of modern *homo sapiens sapiens*.

**Whitton’s Cave – Discussion**

The disturbed stratigraphy and successive rock falls have denied the author any means by which he may effectively date the occupation of the site. Radiometric dating methods could be used to date the human remains but there seems little point in undertaking this very expensive method of dating when dealing with disturbed sites. The pragmatic approach to the problem is merely for the author to state that in his opinion the most probable first use of this site, which is purely that of burials, is Bronze age.

The large amount of calcite now blocking, the route to any other chambers cannot be removed without resorting to the use of high explosives, a course of action for which most archaeologists would be severely criticised. In view of all the circumstances, the author moved his operations from Whitton’s Cave to Kents Bank Cavern in 1993.

**Kents Bank Cavern**

Kents Bank Cavern was discovered by the author in 1993, it lies at an elevation of 28 m at NGR SD 3915 7850 some 28 m to the south of Whitton’s Cave on the opposite side of a steeply sided ravine. It is a phreatic conduit but much of the entrance has suffered a series of rock falls, the limestone being extremely unstable. The presence of the cave was not suspected in 1993, but it did appear to have perhaps been an attractive site for occupation. It was a rock over-hang with a level terrace and it was felt to be worthy of examination.

The terrace was excavated and almost immediately the entrance to a cave system of some description was encountered. The terrace proved to be the collapsed roof of a cavern and excavation revealed that the roof had not collapsed at one single time, there had been a series of rock falls, indicated by the presence of faunal and human remains between different layers of rock.

Again, the exercise on the terrace was as much an engineering exercise as it was an archaeological excavation with rocks weighing up to 4 tonnes having to be removed. The roof formation of the cavern, which is a quite large cavern, is in extremely unstable condition and work has been suspended until such time as engineers report on the feasibility of removing the roof.

This short report on the cavern is included within this paper but a full report will be issued when Phase 2 of the excavation is completed. Work is due to recommence...
in late 1996. The results to date are very encouraging indeed and are briefly described.

The cave has not yet been examined, only the terrace has been partially excavated. Sandwiched between two of the rock falls were two flint blades, identical in every respect to the Kirkhead assemblage and which the author is happy to state are Late Upper Palaeolithic, if only on the basis of typology.

At a lower level, and again sandwiched between two rock falls were 31 fragments of human skull lying in isolation with no other remains near to them. These few fragments are the only human remains recovered to date. The skull fragments are small but peculiar in that they are very thick, certainly thicker than a modern skull. At the same level as the human skull fragments, a part of a horse skull was recovered. It consists of partial upper maxillary complete with teeth and part of the mandible with teeth. The horse is extremely small but is mature with an age at death of four years.

The horse and human remains are so closely associated that they are considered to be contemporary.

The faunal remains from the upper horizons are identical to those recovered from Whitton's Cave.

Kents Bank Cavern is certainly the most promising of the cave sites in Blenkett Wood that the author has examined to date. A full report on the excavations will be issued in due course.

**Site 17**

Site 17 is another collapsed cave lying at an elevation of 22 m at NGR SD 3890 7600 some 400 m to the north-west of Kirkhead Cave. Excavation of this particularly unattractive site was undertaken in 1994, prompted by the discovery of a flint blade during building operations on land immediately above the cave. The blade is identical to those recovered at both Kirkhead Cave in 1973 and more recently at Kents Bank Cavern.

Unfortunately, little now remains of the original cave, most having collapsed and fallen into the valley below the site. The terrace and what little remains of the cave were excavated down to a depth in excess of 2 m but nothing other than a modern fauna and very modern artefacts were encountered.

The author considers the cave to have completely eroded away and a series of rock collapses no doubt took any evidence of occupation down to the valley floor. Work on this site was abandoned in late 1994 and there is little point in it ever resuming.

**Conclusions**

The only conclusions that the author has been able to arrive at to date is that Blenkett Wood is rich in evidence of a prehistoric, particularly a late Pleistocene, occupation of south Cumbria, that work will continue and that further reports will be issued at some future date.
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References

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