

# Whitwell Moor Archaeological Survey



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Report prepared by  
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Bolsterstone Archaeology and Heritage Group

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# 1. Summary

In response to the anecdotal noting of probable archaeological features on Whitwell Moor, South Yorkshire, Bolsterstone Archaeology and Heritage Group undertook a walkover survey of the moor to investigate its potential for research. This took place between 2013-16. The study area was divided up into discrete portions that were surveyed in transects, recording the locations of features with hand held GPS devices. Many of the features were recorded in more detail using pro-forma sheets.

Numerous features were recorded that appear to belong to at least two broad phases of activity. The most recent relates to water supply management for the Little Don Valley in the late nineteenth century, and quarrying activity that probably also relates to recent centuries. They consist of installations and marker stones associated with the former, and pits of various sizes and character, some near to roughly dressed slabs of stone, associated with the latter. The earlier phase consists of linear embanked features, including one with a ditch, a hengiform enclosure, cairns, cup marked stones and numerous small standing stones that probably relate to later prehistory. It is suggested that the features relating to the earlier phase probably belong to a ceremonial landscape associated with the sources of Whitwell spring. This is supported by the presence of material culture in the form of chipped stone scatters, a polished stone axe and a palstave that were recovered in earlier archaeological activity and as stray finds in the vicinity of the wetland.

# 2. Location, geology, topography and current use

Whitwell Moor (SK 252 977) is situated to the eastern edge of the Millstone Grit group of carboniferous sedimentary rocks, approximately 12 kilometres from the centre of Sheffield (figure 1). The location of the moor is at the west end of Waldersshelf, one of the many long east-west orientated ridges that lies to the north of Sheffield, divided by river valleys. To the north side of Waldersshelf is the River Little Don or Porter, and to its south is Ewden Beck. At approximately 300-350 Metres OD on an east and north facing slope, the moor affords excellent views along the ridge towards the upper Don valley at Wharncliffe Crag, the neighbouring ridge of Hunshelf (north), and beyond to the valleys and hills of the River Dearne drainage basin. The beginning of the middle reaches of the river Don, where it has its confluence with the Sheaf in Sheffield city centre to the south west of Waldersshelf, is also clearly visible. There is no view west from the location, until standing at the apex of the aforementioned east and north facing slope. From there, however, views west to the watershed of the Don drainage basin are possible, incorporating Barnside Moor, the upper Little Don valley, and south to Ewden Valley including excellent views of Ewden Beck ring cairn and barrow cemetery, and Broomhead Moor.

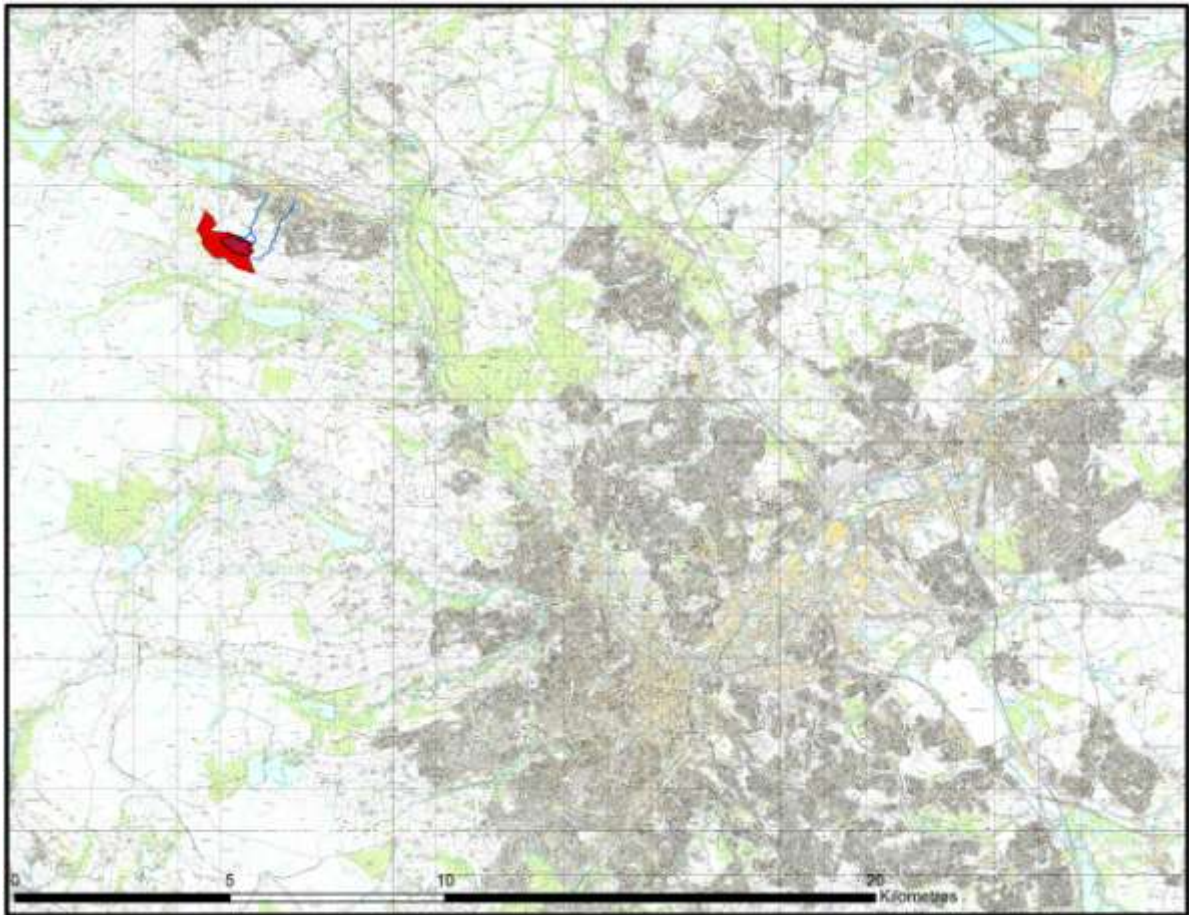


Figure 1: Whitwell Moor (red), Sheffield and North Sheffield district. © Crown Copyright/database right 2016 An Ordnance Survey/EDINA supplied service.

A curious feature of the geology at Whitwell Moor is that while consisting largely of Millstone Grit it also incorporates an island of Lower Coal Measures Sandstone bedrock (figure 2). This island is at the east edge of the moor as presently constituted and beyond in an easterly direction (figure 3). The Coal Measures bedrock coincides with dense superficial deposits of clay. It is perhaps no coincidence that this part of the local landscape, including the improved agricultural land of Stone Moor, forms a dished appearance that is particularly boggy. It is at the eastern edge of the present Whitwell Moor where this small dished plateau begins, where springs rise that drain into the Little Don to the north (figure 3).

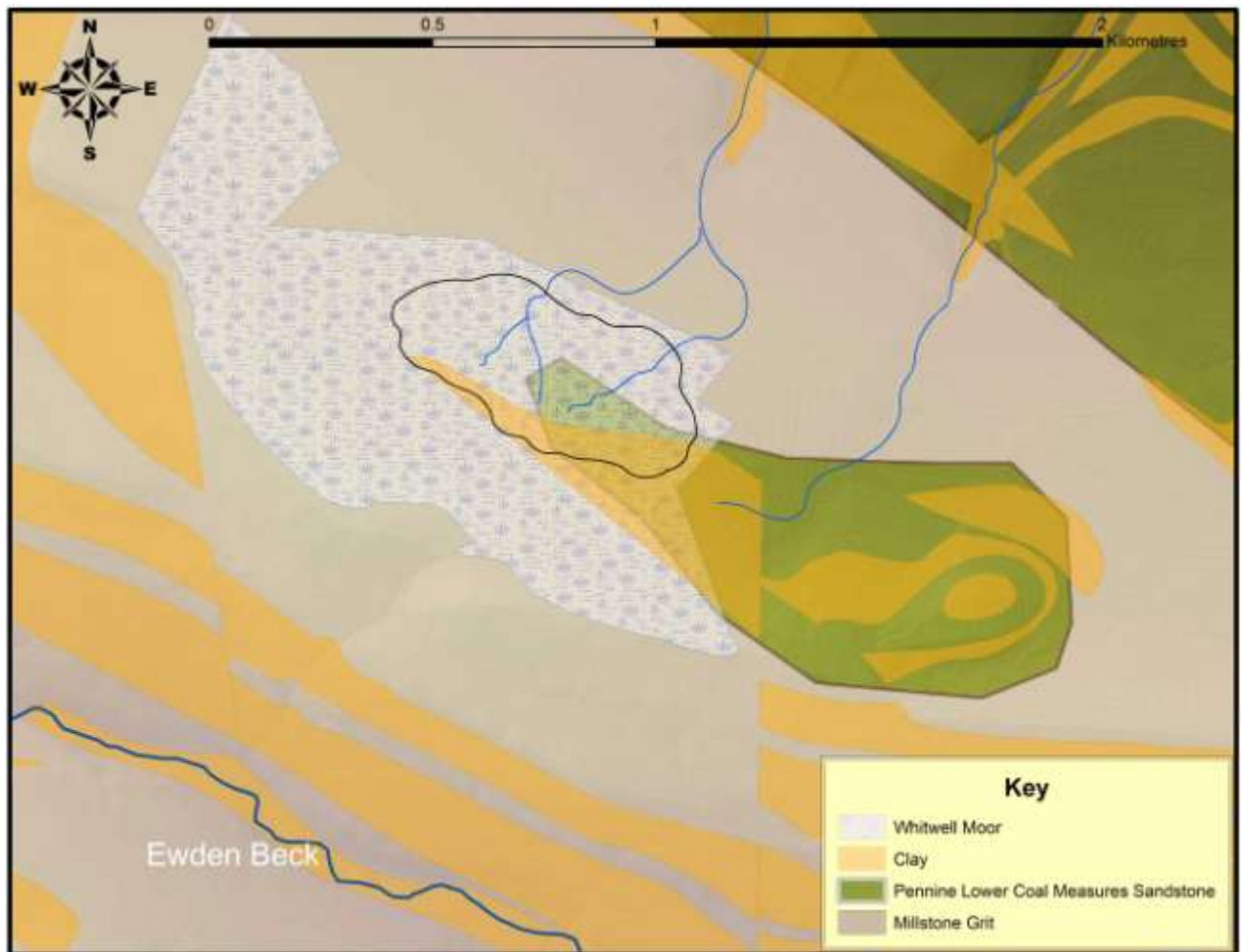


Figure 2: the geology and drainage of Whitwell Moor. The black lined enclosed area represents the approximate extent of the bog at the present time. © Crown Copyright/database right 2016 An Ordnance Survey/EDINA supplied service.

At present, the moor is characterised by the presence of heath, bilberry and sphagnum in places. It is designated by Natural England as Heathland with small areas of Grass Moorland (MAGIC). Small rectilinear plantations of trees bisect the moor at the site of the main spring, and to the immediate west of the bog. Stone Moor to the immediate east consists of improved pasture and marsh. Whitwell Moor itself is access land owned by Sheffield City Council. It is frequented by local members of the public for recreational purposes, mainly consisting of dog walking and hiking.





Figure 3: Whitwell Moor facing southeast along the ridge of Waldershelf from its north facing bilberry and heath covered slopes. Centre (background): Bolsterstone, with the dished plateau of Stone Moor downslope to the left (enclosed pasture). The stand of trees to the left (middle ground) is the small rectilinear plantation within which is Whitwell spring.

### 3. Historical and archaeological background

Evidence for early human activity in the immediate vicinity of the moor exists in the form of material culture (figure 4). Several flint scatters have been recorded on its periphery and individual stray finds of tools, including polished stone axes, have been recovered to the immediate east and north of Whitwell Moor in the vicinity of Stocksbridge (J. Radley unpublished archive (MuseumsSheffield); Kenworthy 1928; Baggeley 1932: 141; Clough and Cummins 1988: 218). One of the scatters is of probable Mesolithic date, of which a number of assemblages have been recorded along the Little Don valley. The well known Early Mesolithic site at Deepcar is sited adjacent to the confluence of the Little Don with the Don very close by (Radley and Mellars 1964). One of the aforementioned polished stone axes was recovered from the immediate north of the moor itself. The axe probably relates to the middle or later Neolithic, to judge from the date ranges available for their likely distribution from source (Cockrell forthcoming). Bronze Age finds include the cremation urn and associated finds from nearby at Barnside Common (Kenworthy 1928: 28-29), a palstave recovered at Bolsterstone, east of Whitwell Moor and the palstave recovered from the "stank pits" on the east side of Whitwell Moor itself (Kenworthy 1928: 31-33). Another

copper alloy axe has allegedly also been recovered from Whitwell Moor recently by a metal detectorist (W. Crossland, pers.comm.), although this (and any details relating to it) have yet to be confirmed.

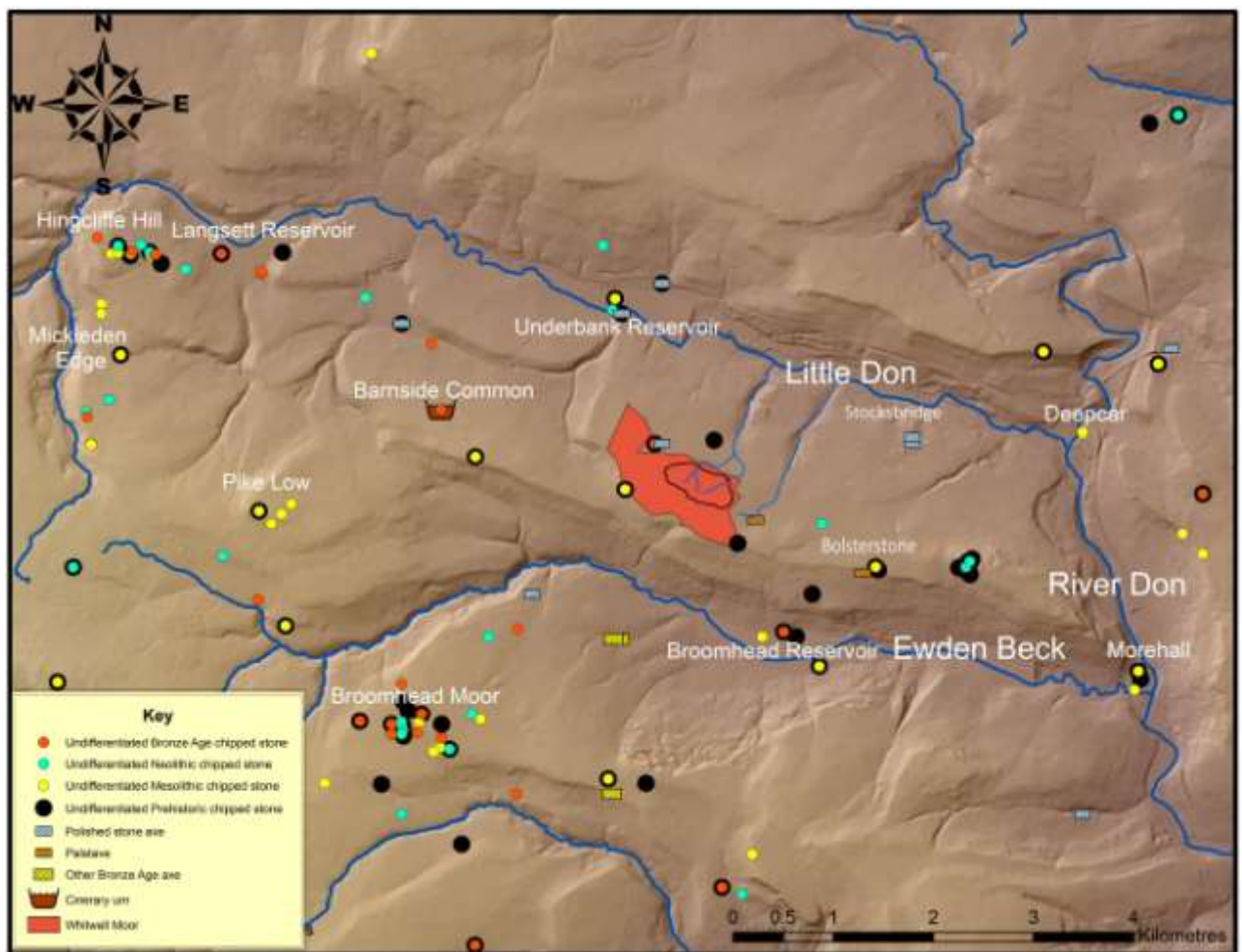


Figure 4: earlier prehistoric material culture from the vicinity of Whitwell Moor, including findspots on the periphery of the moor itself. The enclosed area marked by the ovoid black line within Whitwell Moor indicates approximately the wettest area of bog at the present date. Archaeological data is drawn from the database of Cockrell (forthcoming). © Crown Copyright/database right 2016 An Ordnance Survey/EDINA supplied service.

No significant data is forthcoming in the area for later prehistoric activity, the nearest important evidence consisting of the beehive quern crafting activity to the east of the River Don at Wharncliffe Crag (HER MSY4173). Two features on Whitwell Moor of nominally indeterminate date are known from HER records (MSY6214 and MSY6215), that are located along the south boundary of the area of the bog (figure 4) in the vicinity of the sources of Whitwell spring. These are both described as "unenclosed settlement" without further description or explanation. No information relating to later periods before the post-medieval period is available, when fields at Stone Moor, a natural extension of the bog at Whitwell Moor to its east side (front cover; figure 26) were enclosed and improved for



agriculture. The enclosure act of 1778 specifically mentions Whitwell Moor, along with other "waste ground and commons" (Kenworthy 1917:11), and reference is made to entitlements to coal, stone quarries and other minerals across the various waste grounds. In 1792, the owner, Lord Melbourne, leased part of the land associated with two farms at Waldershelf to John Wilson of Holborn (Broomhead Hall?), London. This was for the purposes of lead extraction (Sheffield Archives: WIL D/3/6/2), although whether this relates specifically to Whitwell Moor is doubtful, as "Waldershelf" here probably refers to the small settlement on the north flank of Ewden valley to the immediate south, recorded on a Fairbanks collection map (Sheffield Archives BRA 49s). Other evidence is reputed to link Ewden valley with lead mining (Kenworthy 1915: 29-48). Industry believed to have been undertaken on or adjacent to Whitwell Moor from this time included quarrying for building stone and millstones, and gannister mining (Kenworthy 1915: 9; 11; 16; figure 5).



Figure 5: millstones surviving in situ at "millstones", to the west edge of Whitwell Moor. Source: author.

The first edition Ordnance Survey map (figure 6) shows that in the mid nineteenth century, at the moment when Stocksbridge first burgeoned as an urban and industrial town (Branston n.d), the area was clear of woodland. The map also shows the location of the aforementioned "stank pits". Mucky lane is also visible, bisecting the Moor along the line of a proposed 27 feet wide road to have been constructed between Ewden valley and the Little Don valley (Chapman 2006: 15). The whole road was not constructed, but the portion known as Mucky Lane still exists at the present date (figure 29). The second edition map

(figure 7) indicates the extent to which woodlands had developed by that date, including stands of trees in the vicinity of the spring and further northwest that appear to be plantations.

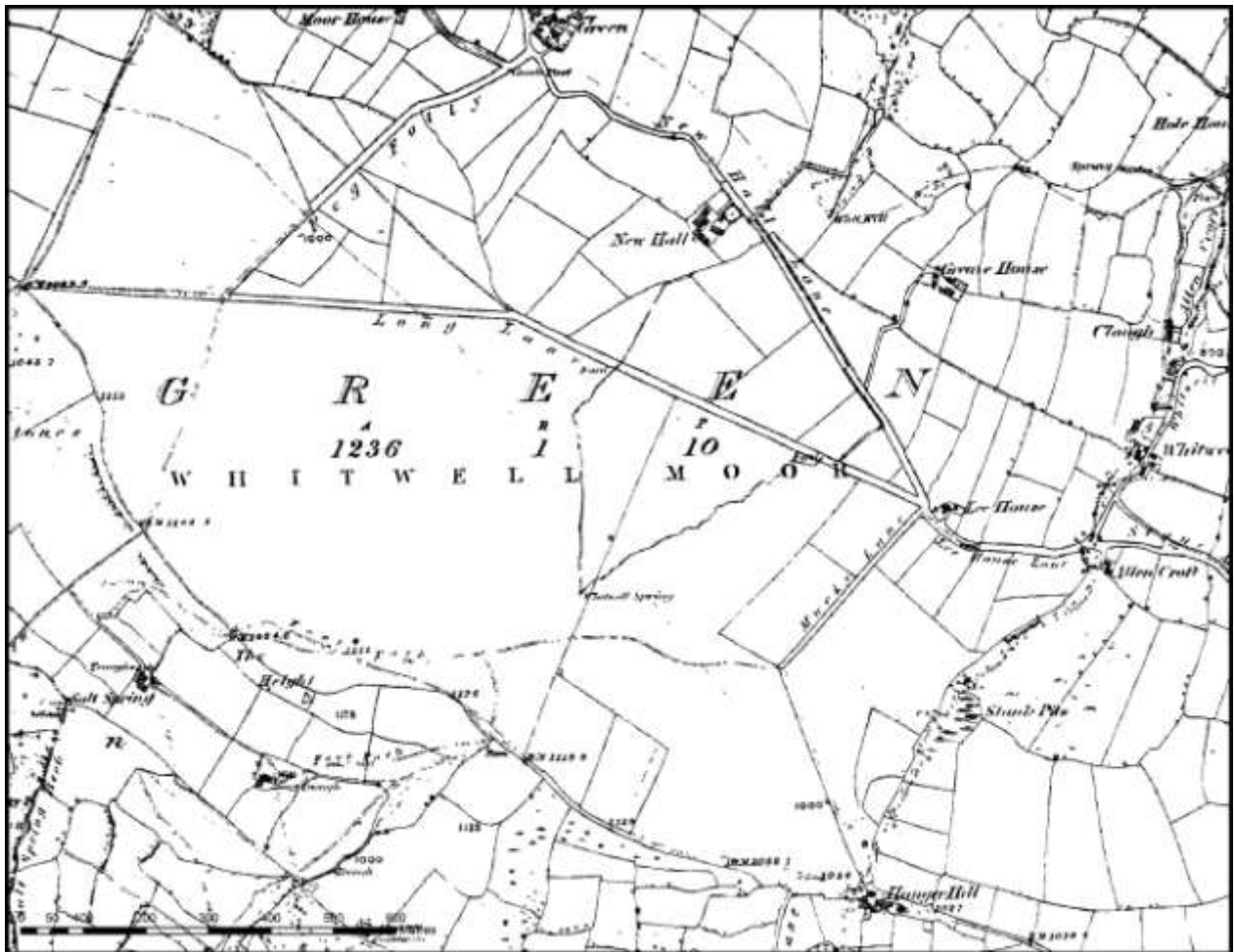


Figure 6: first edition OS map of Whitwell Moor (1855), showing the "Stank Pits", Mucky Lane, and the lack of tree cover at that date. © Crown Copyright/database right 2016 An Ordnance Survey/EDINA supplied service.

The remaining known activity on the moor before the present date relates to the late nineteenth and early twentieth centuries and concerns the water supply. Water supplies for the rapidly expanding population of the Little Don valley depended on local springs and wells that were proving unequal to the task. Reservoirs were under construction, but until they were completed the spring at Whitwell Moor was furnished with facilities including storage tanks adjacent to Long Lane and at Hungerhill Farm that were for the supply at Bolsterstone (Figure 6). The supply was administered by Stocksbridge Local Board ( Branston

n.d.: 16-18) until 1896, when the water rights were sold to Sheffield Corporation. The corporation undertook to supply local needs, which were met by Whitwell spring until being superseded by the newly constructed reservoir at Langsett (Chapman 2006: 18). The installation at Whitwell spring was later dismantled.



Figure 7: detail of the 2nd edition OS map (sheet CCLXXXI SE 1906) showing the limits of the water works of Stocksbridge Urban District Council in 1896. The installation at Whitwell spring is marked in yellow, with the mains water pipes and minor installations marked red. Courtesy of Sheffield Archives.

Prior to the present study, known archaeological activity on Whitwell Moor itself consists only of the rapid walkover assessment and desk based report by Chapman (2006).

## 4. Aims and Objectives

Attention was drawn to the landscape of Whitwell Moor by local members of Bolsterstone Archaeology and Heritage Group whose familiarity with it spans decades (A. Fillingham, A. Drabble and W. Crossland pers.comm.). They had noted the existence of "standing stones" visible near some of the footpaths that cross it which local people had speculated on for some considerable time. The author became involved when asked to examine a recumbent stone with curious markings that proved to be a fossilised leaf, associated with probable cup



marks (figure 8). Large stones within a few metres of this had similar cup marks, and a groove of probable artificial nature (figure 27). The location was adjacent to the "Stank Pits" referred to earlier from where a palstave, apparently unused and retaining its edge, was recovered by workman in the late nineteenth century (Kenworthy 1928: 31-33). The anecdotal evidence was, *prima facie*, supportive of an interpretation of possible Late Neolithic and Early to Middle Bronze Age activity at Whitwell Moor, in the vicinity of the springs that rise there and contribute to the formation, in a small dished plateau, of an upland bog.



Figure 8: a recumbent stone that was probably once standing. The stone is in two fragments, with a fossilised leaf spanning both (the tip of the leaf is just visible on the smaller fragment above and to the right). Small probable cup marks are visible in an arrangement of five marks on the small fragment, and along a line bisecting the leaf at an angle on the large fragment. Source: author.

The above possibilities notwithstanding, other explanations might account for the "standing stones", and the "cup marks", which are rather small. It was decided that the only way to answer the question, and attempt to suggest reasons why these features (whatever they were) existed at this location was by undertaking a complete survey of the moor in as much detail as possible and subjecting the data to rigorous analysis.

## 5. Methodology

The study area was divided into discreet "areas" (figure 9) that were investigated separately for the purposes of administering and organising the information, and in order to minimise potential confusion over how much and which parts had been covered on each visit. Each area (with the exception of area A) was walked across in approximately ten metre wide transects by team members, moving along a north-south axis in a line. All potential archaeological features were to be recorded regardless of possible date or function. Boundary walls on existing mapping were not included. When a feature was encountered, its location was marked approximately on a map (with maps being prepared for each area, as well as a map of the whole study area being available). This was for the purposes of minimising overlaps or gaps in coverage while walking, and as a general aide memoire during later analysis. Each feature was also located using hand held GPS devices, with the data being added to the map or recorded separately in notebooks while in the field. Features that were deemed to be of sufficient importance were also recorded in more detail on pro-forma sheets and given a "monument" number and then photographed. Area "A" differed from the rest of the study area in being private property bordered by public footpaths. It is characterised by grassland and marsh and generally free from the dense undergrowth characterising most of the rest of the study area, and is small and easily visible from the footpaths. Therefore, observation from the footpaths was deemed sufficient for present purposes and permission to walk across the land itself not sought.

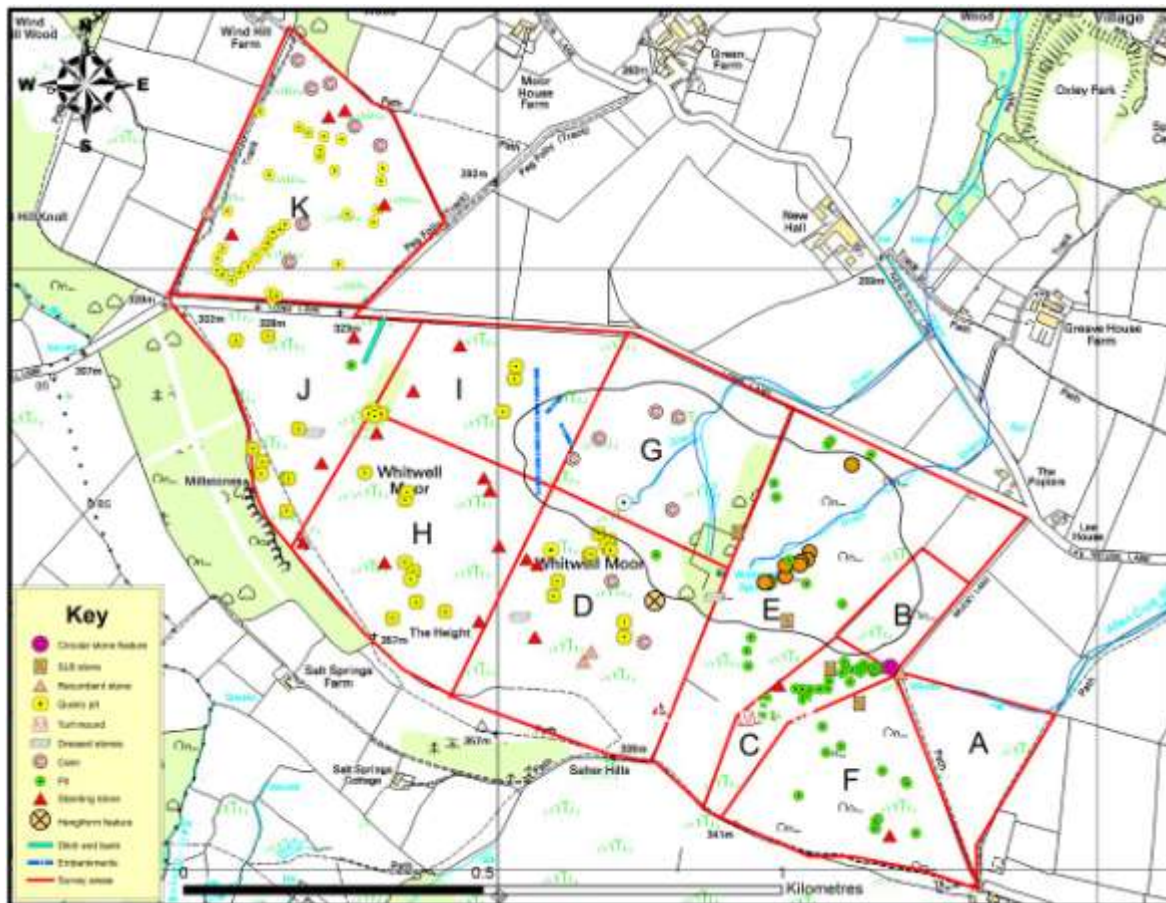


Figure 9: the survey area and its divisions, including the mapped archaeological features. © Crown Copyright/database right 2016 An Ordnance Survey/EDINA supplied service.

## 6. Fieldwork

The moor was visited on 15 separate days between 2013-2016, by teams that varied considerably in size and composition drawn from members of Bolsterstone Archaeology and Heritage Group and associates. Almost all visits took place in the late winter or early spring. This was done in order to maximise visibility in undergrowth that is dense during the summer, minimise disruption to wildlife, as well as minimise discomfort at a location that can be inhospitable at times.

Area A was, as explained above, not given the same attention as other parts of the study area for the reasons stated, but did yield in the vicinity of the former "Stank Pits" the recumbent stone with fossilised leaf and cup marks as well as the possible pollisoir and other cup marked stone. This was within metres of the junction between the public footpath from Hungerhill farm and Mucky lane. At the west side of the boundary wall at the junction was recorded a crude circular arrangement of broad and squat stones of indeterminate function and date. This was at the interface between areas B, C and F. The rest of area B, and area E yielded very few features in one of the lowest lying and wet areas



of the bog. Much of area E was in fact too wet to walk across and investigate effectively, and included many small areas of standing water. Nevertheless, several larger and well defined inundated pits were recorded as "pools" that could conceivably be flooded quarry pits.

The adjacent areas C and F together formed part of the north and east facing slopes rising above the vicinity of the bog. Several different kinds of features were recorded here. By far the most numerous consisted of small pit like features, some filled with water. Sub-circular in plan and approximately 2-3 metres in diameter, these features (hereafter referred to as "pits", which is how they came to be termed in recording) for the most part had distinct near vertical sides descending approximately 0.5 metres deep. Their reasonably well defined and distinct form showing few signs of erosion were not indicative of great age but there was no other evidence in situ to aid in determining their date or function. Three identical examples of roughly dressed small ashlar blocks of gritstone were recorded in this general area, in a line between Hungerhill farm and the site of the water tank at Whitwell spring. These were inscribed with the legend "SLB" (figure 10). The blocks are at locations marked on the 1906 map (figure 7) where "stones" are marked, along the line of the water main that ran from the spring, via Hungerhill Farm, to Bolsterstone. "SLB" presumably stands for "Stocksbridge Local Board" (Branston n.d.: 16-18). It can be suggested on this basis that the "SLB" stones relate to the water supply activities on the moor taking place in the last quarter of the nineteenth century.



Figure 10: one of the stones marking the line of the water main shown in figure 7. Source: author.

A group of the aforementioned "pits" were clustered at the junction between two former field boundary walls at the edge of the study area at the highest point of the slope in area C. In the immediate vicinity were also recorded three low mounds, turf covered, that might be cairns, upcast from the pits or possibly associated in some way with the former walls, the lines of which are visible and were recorded due to their partial absence from contemporary mapping. They are visible on the first edition OS map (figure 6). Close to these features was recorded a partially buried sub-rectangular slab of gritstone that might have been a gatepost, or possibly stone quarried from one of the nearby pits.

It was on the slopes of areas F and C that the first two examples of many small orthostats were recorded. These were termed during recording "standing stones", for the simple reason that they were of narrow width and clearly standing on end as free standing slabs. These will be discussed in more detail below, but apart from the foregoing, their chief characteristics included being of undressed gritstone, weather worn and smooth edged at breaks of angle, usually with erosion gullies to their top surface and often running down their sides. They were for the most part either sub-rectangular or sub-triangular in form, although several examples that were more squat and flat topped in character were also recorded (figure 11). Few exceeded 1 metre in height or 0.6 metres in length, and many were below 0.5 metres in height. Some had packing stones visible at their bases, although the orthostats were clearly embedded in the soil to an indeterminate depth. In no cases was there, *prima facie*, any evidence to indicate either their date or function, apart from one recorded in area J that appeared to be modified with a small cup mark.

The features constituting what remains of the water tanks at Whitwell spring were not recorded in detail, but were photographed. These lay at the interface between areas C and E, and D and G respectively. Far fewer of the "pits" were recorded from this point onwards, but an increasing number of features termed "quarry pits" that were larger, and frequently edged with exposed bedrock (figure 33), often with presumably quarried or upcast chunks of rock in their immediate vicinity. The largest of these were located adjacent to the area of bog where the springs rise, immediately upslope on the south side. These features, located in areas D and H, were flooded for the most part.





Figure 11: a small standing stone from area H. Note the orientation of the stone in relation to the direction of slope in this and figure 17. Source: author.

Three standing stones and a recumbent stone (monument 20) were recorded in area D towards the top of the slope south of the spring, approximately at the same elevation. The recumbent stone had a distinct erosion gully to its west end, indicative of it having been eroded by rain and wind at that end. This implies that it had at one time been erect, with the west end exposed to erosion. Had it been, and had it been embedded in the ground in a pit, its morphology and dimensions would have been similar to the standing stones already recorded. The presence of cobbles, and subsoil exposed in erosion to its west end indicate that this might well have been the case, with the break of slope above the south edge of the stone perhaps showing where the edge of the former pit in which the stone was embedded had existed, still intact where better protected from the weather (figure 12).



Figure 12: a recumbent stone adjacent to possible former packing stones and eroded cut. Source: author.

Downslope of the recumbent stone and standing stones, a little to the north-east, a disturbed cairn was recorded. To its north side facing downslope two stones set side-by-side with a gap between formed a possible small entrance (figure 13). Further downslope from this, directly adjacent to the bog where Whitwell spring rises, one of the "unenclosed settlement" features noted from South Yorkshire HER's database was located and recorded (figure 14). The feature consists of a 23 metre diameter circular earth and stone bank less than 0.5 metres high. The feature is cut by a narrow path on its east side, exposing the sections which reveal its composition of earth and rubble. A large gap on its west side seems to be where part of the bank has been destroyed by erosion, with sufficient material from the bank, and occasional large cobbles, indicating that the bank originally had a greater circumference than at present. Nevertheless, a small entrance to the enclosure might well have existed in the general location of the eroded area. In the middle of the feature a small recumbent sub-rectangular stone with a possible cup mark was present. The second "unenclosed settlement" feature recorded in the HER database was not located despite exhaustive searching by team members.





Figure 13: The cairn in area D with its apparent entrance. The true extent of the perimeter of the feature is indicated by the presence of the large outlying stones, one of which is being scrutinised by Andrew Drabble. Source: author.



Figure 14: The hengiform feature, facing north-east. The circumference of the bank is shown by the circular band of bilberry overlying it. Ken Dash, pictured, observed that there was significantly fewer patches of heather growing within the feature than beyond it. Source: author.

To the immediate north of the circular "hengiform" feature Whitwell spring rises in two channels that flow north downslope in the direction of the Little Don Valley, along steeply incised small valleys as they descend the slope. Standing water is in evidence in a number of natural pools in the vicinity of the sources. At the head of the western channel at either side are located a small stone with a deeply incised U shaped linear depression on one face (monument 25), and a small stone with shallow linear striations to its surface and two cup marks (monument 26). To the north west of this location were 4 cairns, and beyond that in the same direction in area I a series of badly eroded linear embankments, the longest of which appeared to be divided by an entrance. Erosion at several locations on these features revealed that the construction of these was of earth and gritstone cobbles (figure 15). The cairns were approximately located to the western edge of the wettest area of the bog and the linear embankments a little to the north-west on slightly drier ground. At this point the drier land surface, away from the source of the springs, west forms with the north facing slopes of area H, a shallow theatral shaped perimeter to the bog rising south and west (figure 16). Two standing stones were recorded in area I, along the west edge of the area adjacent to area J, away from the vicinity of the bog. These, as well as most of the standing stones along the western edge of area H, were of noticeably larger girth than the majority to the east (figure 17).



Figure 15: an eroded section of one of the banks in area I, showing its construction of earth and gritstone cobbles. Source: author.





Figure 16: the east and north facing slopes of Whitwell Moor, from Stone Moor. The springs rise in the area of the bog to the right (north) extremity of the moor in the vicinity of the stand of trees visible. Source: author.



Figure 17: one of the larger of the standing stones to the west end of Whitwell Moor on the north facing slope overlooking the bog. Source author.



On the slopes of area H more quarry pits were recorded, as well as an artefact providing further evidence supporting the interpretation that the "quarry pits", or some of them, were stone quarries as opposed to prospection for minerals (figure 18). The quarry pits were dispersed widely with the exception of a group on the interface with area J and fewer in number than the clusters in areas D and J. Area H yielded, in addition to the above, a further eight standing stones, all located away from the bog on the north facing slopes.



Figure 18: a crudely dressed ashlar block of gritstone recorded in area H. Source: author.

Area J was the last part of the study area to be surveyed that had at least part of its surface sloping towards Whitwell spring. The watershed with localised shallow slopes descending into Ewden Valley falls approximately in the middle of area J, not apparent from mapping. On the Whitwell spring side of this watershed, close to the location of standing stones along the west edge of areas I and H, two more standing stone were recorded. No more were forthcoming from area J. Other features to be recorded in area J were quarry pits, mostly located towards the field boundary separating the study area on its western side from the

Beech woods of Millstones. In addition, another crudely dressed block of gritstone was recorded close to these quarry pits, with similar surface finish to that in figure 18 including distinctive tool marks (figure 19). In this case, however, the block was sub-rectangular in shape.



Figure 19: detail of monument 43, a sub-rectangular quarried gritstone block largely buried under heather.

The last part of the study area to be surveyed was area K. Area K lies beyond the catchment of Whitwell spring and largely out of sight of the rest of the study area. Thirty five more quarry pits were recorded in area K, that had very similar characteristics to those in other parts of the study area except in one respect. They were somewhat smaller in size, resembling in size rather the small pits recorded earlier in areas E, C and F (figure 9; figure 20). Although of indeterminate date, their different size indicates that they belong to an activity undertaken at a different date, or in different circumstances to those recorded elsewhere in the study area. Some of the pits were close to the locations of cairns that did not appear to be of great age, since their stones were loosely embedded in the soil and did not appear particularly weather worn. One of them contained fragments of CBM. Four more standing stones were recorded in area K, very similar in morphology to those already recorded.





Figure 20: one of the small quarry pits from area K, facing south west. The angular character of the bedrock exposed on the edge of the pit is indicative of working, while the sphagnum grass to the left indicates the extent of the small pit. Source: author.

## 7. Discussion

### Pits and Quarry Pits

To date and characterise the features recorded in the survey presents challenges, because they are not, *prima facie*, diagnostic of particular demonstrable activity in most cases that can be associated with specific date ranges. Nevertheless, in most cases it is possible to suggest both approximate dating and even broad meaning or function based on either circumstantial evidence or by analogy with better understood features of similar character that have been recorded elsewhere.

First, the easiest of the features to discuss are the so called "SLB" stones (figure 10). For the reasons already explained, we can be reasonably sure that these features mark the line of the former mains water supply for the nearby village of Bolsterstone, featured on the map produced by Stocksbridge council at the end of the 19th century (figure 7).

The features recorded as "quarry pits" are not so easy to associate with a particular date, but have been interpreted as small quarries on several grounds. Firstly, almost all of them have been excavated deep enough to have exposed the bedrock, which is Millstone Grit

(figure 21). Where this is the case, signs of working are visible usually in the form of angular cuts indicative of the removal of squared blocks of stone, such as that discernible in figure 20. This is supported by the presence across the moor of several crudely dressed block of ashlar (figure 18-19), most of which lie close to quarry pits. The fresh, unworn, character of both the exposed bedrock in the pits, as well as the ashlar blocks themselves indicate that this activity is relatively recent in date. The tool marks visible on the blocks are also relatively unworn and fresh in appearance and appear to have been caused by chisels.

A total of 72 quarry pits were recorded, in two almost sized equal groups. The 35 in area K are smaller and less well defined than the remainder. They are not associated with any of the crudely dressed blocks. The distinct character and distribution of the two groups indicate that they might relate to events taking place at different times, and I would suggest that those in area K are older. Their size and character might be due to exposure to erosion and gradual infilling over a longer period of time than those in the vicinity of Whitwell spring. Nevertheless, neither group appear to be of great age, and the most likely context for their excavation is the urban expansion due to industrialisation that took place in the area from the early 19th century onwards.

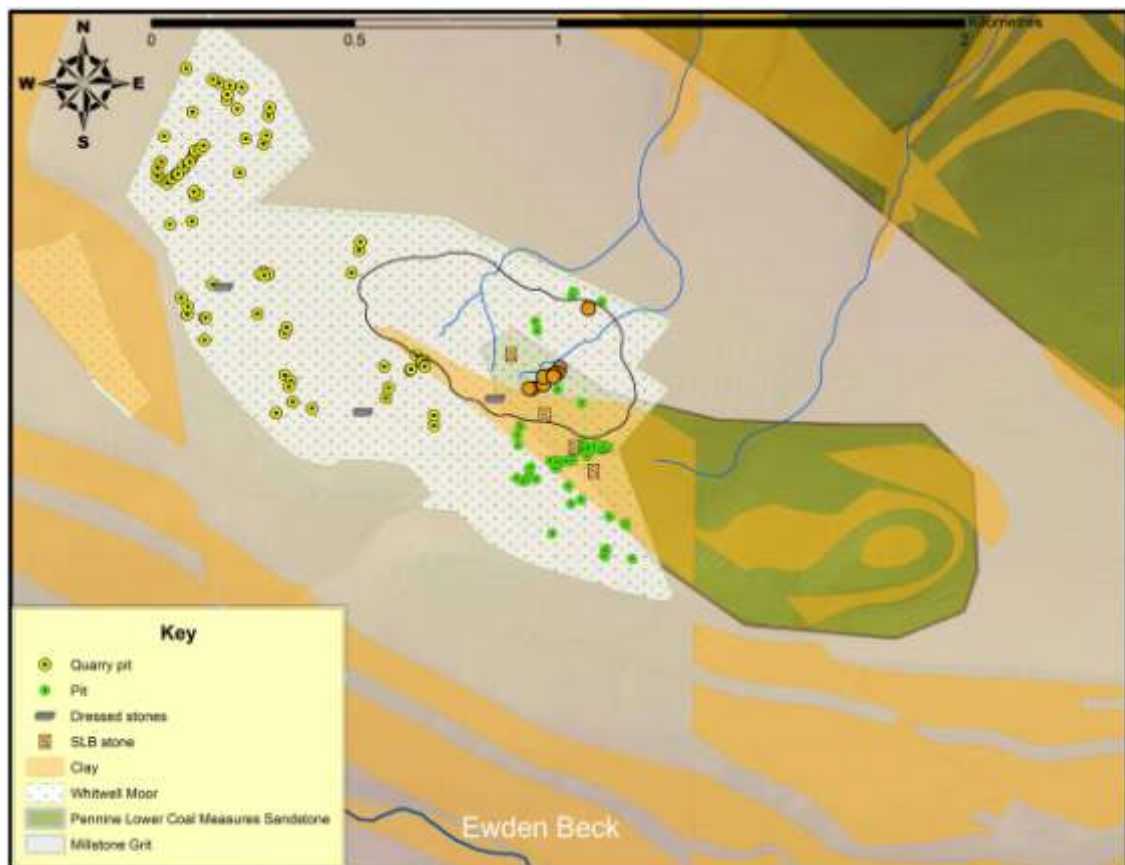


Figure 21: Distribution of archaeological features of probable recent date, and how they relate to bedrock and superficial geology. © Crown Copyright/database right 2016 An Ordnance Survey/EDINA supplied service.

The 57 "pits" recorded lie directly over, or very close to clay deposits overlying Pennine Lower Coal Measures Sandstone (figure 21). They are very similar in size to the quarry pits recorded in area K, but much better defined for the most part, with sections that drop in near vertical fashion to their depth. None are deep enough to reveal exposed bedrock. Their relatively well defined form, cutting superficial soil deposits, does not indicate great age, but otherwise there is no evidence to help date or characterise the features. Given the nature of the deposits that they overlie, and their relatively good state of preservation, it is likely that they are prospecting for gannister or perhaps coal of recent date, possibly even more recent than some of the quarry pits.

Alternatively, given that there was a local pottery industry nearby at Midhope, it is also possible that clay itself was the object excavated for (Kenworthy 1928: 60). Clay for the Midhope potters is believed to have been extracted from clay pit lane in nearby Stocksbridge (Kenworthy 1928: 46). Kenworthy also claimed that the so called Stank Pits on Whitwell Moor were the source of clay used to make bricks and "land-tiles" approximately between 1855-65 (Kenworthy 1928: 60).

## Linear embankments and ditches

A number of embankments were recorded at the north west end of the bog where Whitwell Spring rises (figure 9). These were difficult to record meaningfully or accurately in a walkover survey, particularly since the features were very poorly preserved in places (figure 15), and obscured by undergrowth. The illustration in figure 9, and the data in the database should therefore only be used as a guide, rather than a definitive record of what exists. They did not appear to form a coherent pattern in terms of their layout and plan and might well relate to different activities taking place separated by long periods of time. One or more of the shorter stretches could be interpreted as Neolithic long mounds, but this is speculative. A number of cairns were also recorded in the vicinity that appeared eroded and worn enough to be potential prehistoric features (figure 22).

To the north west of the bog in area J another linear embankment was recorded, separated from the ones at the bog by several hundred metres. This was quite different in character to the features recorded earlier. This feature (monument 44) consists of a well defined bank, with a ditch to its west side (figure 23). It has suffered from erosion in several places where footpaths cross the feature, but otherwise is much more clearly defined and better preserved than the linear embankments recorded earlier. The only evidence relating to its date consists of the nearby field boundary. A possible remnant of the bank and ditch exists on the other side of the wall next to Long Lane, and an infilled former entrance at that point is clearly positioned to take advantage of the ditch (figure 24). The earliest Ordnance Survey



map depicting Long Lane dates to 1855 (figure 6), indicating that the feature (assuming that it has been cut by the road) presumably pre-dates that.



Figure 22: A possible prehistoric cairn adjacent to the sources of Whitwell spring. Source: author.



Figure 23: The bank and ditch in area J. Source: author.



Figure 24: The boundary wall by Long Lane and former entrance in relation to monument 44.

## Standing stones

The 22 orthostats recorded, some of which are clearly visible from footpaths crossing Whitwell Moor, along with the first noticed recumbent stone (figure 8) were what drew the attention of Bolsterstone Archaeology and Heritage Group to the moor initially. They are, *prima facie*, particularly problematic when attempting to understand in terms of character, date and significance. Part of the problem is to do with the fact that they are not worked, or



not obviously so, and therefore can easily be mistaken for outcropping to the inexperienced eye. They do, however, have a particular morphology that is reasonably predictable which can be recognised with care and patience. The stones on Whitwell Moor are mostly sub-rectangular in plan, with a narrow end elevation and wide side elevation (figure 10; figure 17). Their side elevation is usually sub-rectangular or square, although examples are sometimes sub-triangular in form. Their height above ground does not exceed one metre and of the 22, 63% (14) are between 0.45-0.80 metres high. They stand erect, or leaning over slightly in the direction of one of their side elevations. This is indicative of them being free standing features rather than outcropping (which is rarely to be seen with parallel sides, at right angles to the surface). This seems to be confirmed by examples that have packing stones visible at the base after overlying moss is peeled back (figure 25).



Figure 25: Detail of monument 27, in area H, showing a packing stone at its base. Source: author.

A recumbent stone that appears to be a collapsed standing stone (of identical morphology) shows more such packing stones, cascading from their eroded stonehole (figure 13).

In the absence of excavation, no data has been recovered that can indicate either the date of these features or provide evidence for their purpose, but suggestions can be made based on circumstantial evidence. Almost all of the recorded stones appear weather worn and 86% (19) of the 22 have erosion gullies visible to their top face, which in some cases are deep. This indicates that they have been exposed to the elements and subjected to wind



and rain erosion for a very long, if indeterminate, period of time. This differentiates them, for example, from quarrying debris, the aforementioned dressed slabs, or recently exposed bedrock. The setting for these features appears to show a relationship with the sources of Whitwell spring and the surrounding dish shaped plateau, forming an area of bog and marsh (figure 26).

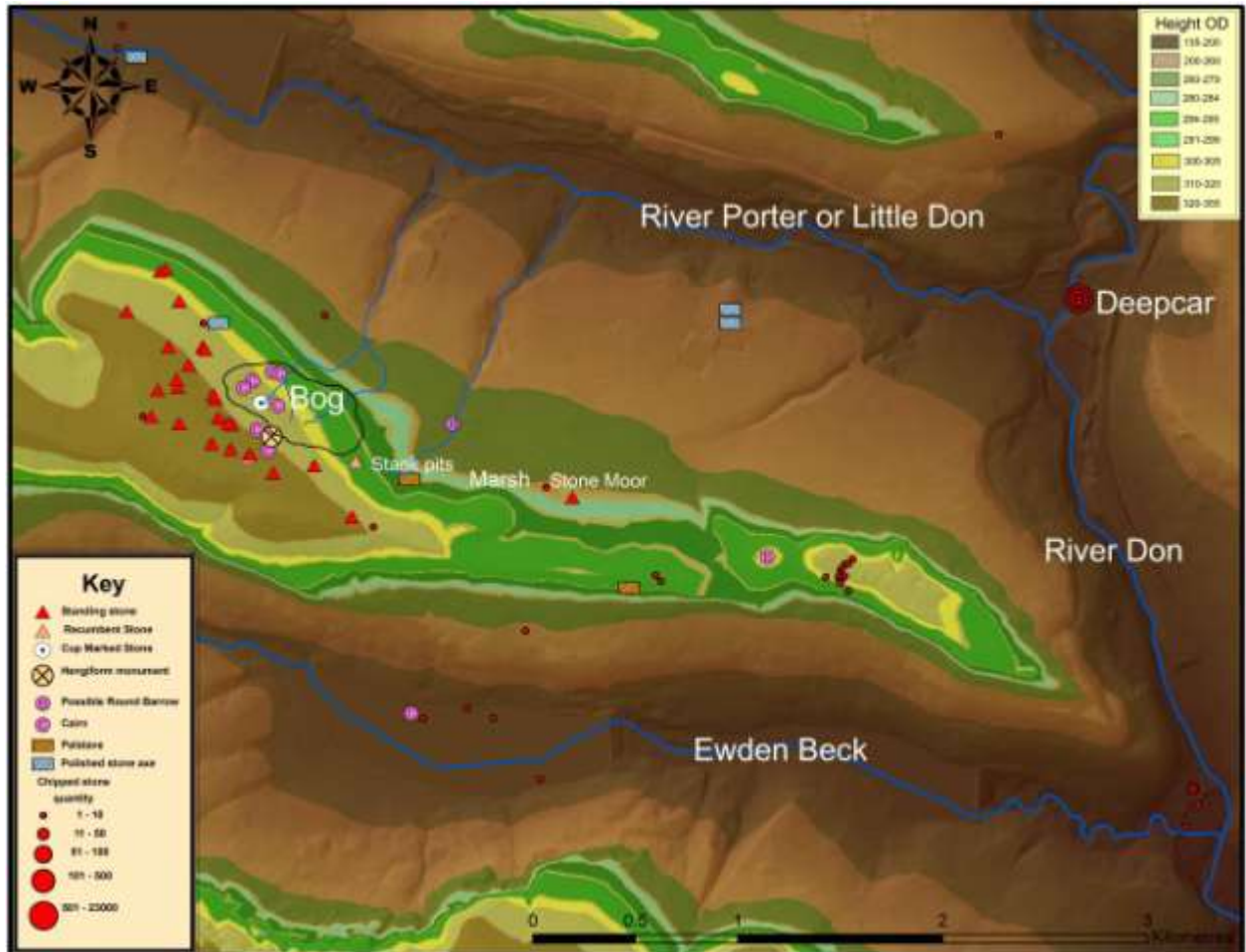


Figure 26: the standing stones of the survey area and other possible prehistoric features, in relation to elevation, hydrology and recorded prehistoric material culture. © Crown Copyright/database right 2016 An Ordnance Survey/EDINA supplied service.

An analysis of the orientation of the stones shows that 68% (15) present one of their lateral faces to the area of localised wetland, or to where the wetland probably extended prior to recent drainage. There seems, therefore, to be a deliberate referencing of, and relationship with, the bog and sources of Whitwell spring. The stones are not the only features to have an apparent relationship with the wetland. The recorded cairns (excepting those in area K, which are of probable recent historical date) are also in close proximity to the spring, along with the majority of embankments. This is close to where a polished stone axe find has been recorded (figure 26). The recumbent stone with fossilised leaf and cup marks (monument

10, figure 8) is located along the edge of the wet area by the "stank pits", from where the palstave was recovered by workers engaged in drainage activities (Kenworthy 1928: 33). Within metres of monument 10 are boulders marked with small cup marks and a possible axe sharpening groove (figure 27).



Figure 27: The cup marked and grooved boulders adjacent to the stank pits on Whitwell Moor. The cup marks are small and poorly defined, but with precedents from elsewhere on the southern Pennines (see below). Source: author.

Another boulder with cup marks is located where one of the sources of Whitwell spring rises, along with another possible axe sharpening stone (figure 34). Very close by, directly upslope of where the sources of the spring are located is the hengiform enclosure mentioned earlier (figure 14; figure 26).

Looked at individually and without corroborating data, none of the features above can be dated or characterised with confidence. However, examined together and in their landscape context and with the known material culture that has been separately recorded, there is a strong case for arguing that the standing stones are of Late Neolithic or Early Bronze Age date occupying an area of probable ceremonial importance at that time. Support can be given to the interpretation by the increasing body of information being documented about very similar prehistoric settings for small standing stones from various locations across the British Isles (Swarbrick 2012), including Caithness, County Tyrone, South Wales (Gillings 2015), and Bodmin Moor, Dartmoor and Exmoor (Burl 1993; Gillings *et al* 2010; Gillings 2015). Recently, "miniliths" (to use the term coined by Aubrey Burl) have been excavated in West Yorkshire, near where rather small cup marks on small boulders have also been recorded in abundance (Boughey 2016; Shepherd *et al* 2016). Locally, these kinds of arrangements combining miniliths with other small late prehistoric features are also known from Ewden Beck, Hallam Moors and Totley Moor (Cockrell forthcoming).

## 7. Post script

During the course of the survey two more features in the area that were noted but did not fall within the survey area itself are worthy of note. One is the small standing stone depicted at the east extremity of the wetland discussed above at Stone Moor (front cover; figure 26). Its existence offers support to the idea that the stone setting at Whitwell Moor framed and referenced the area of the upland bog and sources of the spring. The absence of more such stones in the area either adjacent to the marsh or on the slopes flanking it can probably be attributed to the fact that the area has been enclosed and improved for pasture.

The other feature of note is a large row of stones of larger size than the diminutive stones of the study area. It is located just beyond its edge. The stones overlook the upper reaches of Ewden Beck in the vicinity of the millstones, but to their immediate south east (figure 9; figure 28). A plausible interpretation of the feature is that it is the basal course of a field wall, but some of the stones appear too large and awkwardly shaped to fulfil this function. Their proximity to the millstones working area perhaps offers an alternative explanation, but if so it is unclear what the relationship and function could plausibly be. The stones are not dressed or modified in any way which means that the only other plausible explanation is that they are a prehistoric stone row. Burl (1993: 5) defines a stone row as "a prehistoric linear setting of regularly spaced standing stones, closely set, uninterrupted by any other



structure". In Burl's scheme this row would be of the long, single row, variety. If this is the case, it is unique in eastern England.



Figure 28: The long row of irregular shaped stones descending the south facing slopes of Ewden valley, near Ewden Beck ring cairn. Source: author.

## 8. Conclusion and recommendations

Whitwell Moor is a landscape with a complex and diverse range of archaeological features that have the potential to add greatly to the history of the region. This potential cannot be realised unless further work is undertaken to better characterise and date its features.

More detailed surveying of the embanked features in the vicinity of the bog should be undertaken, and detailed plans drawn of other features on the moor, such as the hengiform enclosure. Parts of the moor would also benefit from a magnetometer survey, particularly in the vicinity of the embanked features. Excavation would also help to characterise and date a number of the features that have been recorded.

The importance of North Sheffield District in general and the Little Don and Ewden valleys as a historic resource cannot be over emphasised, and its potential as a resource is yet to be realised. Many members of the local community took part in the survey, and it is clear from

that and other activities in the area that Whitwell Moor is of considerable importance, interest and local value.

## Acknowledgements

I would like to thank Sheffield Local Studies Library and Sheffield Archives for their help in searching for information about Whitwell Moor. The members of Bolsterstone Archaeology and Heritage Group and associates are warmly thanked for the many hours of labour they provided, and good humour with it in often inhospitable conditions. I would especially like to thank the following individuals: Brian Howard, Andrew Tissington, Ruth Morgan, Sally Chapman, Andrew Drabble, Wendy Crossland, Giovanna Fregni, Ken Dash and Chris Cumberpatch.

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## Appendix 1: Database

east.	north.	mon.type	form	material	damage	modif.	orient.	date	ar.	no.	H/L	W	T
425401	397255	field	rectilinear	gritstone	destroyed	none	N/A	P.M.	C	2			
		_boundary											
425342	397102	field	rectilinear	gritstone	destroyed	none	N/A	P.M.	C	2			
		_boundary											
425269	397269	S.Stone	triangular	gritstone	leaning	none	E-W	B.A.	D	3	79	122	28
425423	397251	slab	rectilinear	gritstone	none	none	N/A	P.M.	C	1			
425630	397338	pit											
425639	397333	pit											
425635	397335	pit											
425626	397329	pit											
425627	397331	pit											
425618	397336	pit											
425627	397332	pit											
425627	397334	pit											
425604	397328	pit											
425610	397342	pit											
425603	397336	pit											
425590	397332	pit											
425587	397312	pit											
425574	397327	pit											
425574	397442	pit											
425578	397344	pit											
425577	397346	pit											
425554	397334	SLB stone	rectilinear	gritstone		pock_ marked	NE-SW		C	4	56	31	18
425552	397314	pit											
425550	397301	pit											
425536	397300	pit											
425521	397299	pit											
425514	397286	pit											
425509	397295	pit											
425508	397300	pit											
425496	397301	pit											
425508	397283	pit											
425444	397278	pit											
425448	397285	pit											
425461	397256	pit											
425439	397257	pit											
425434	397251	pit											
425430	397250	pit											
425414	397258	pit											
425412	397250	mound								6			
425413	397252	mound								7			
425416	397253	mound								8			
425468	397307	S.Stone								5			

425671	397326	R.S.Stone								10			
425654	397337	S.Circle								9			
421224	399794	pit											
425417	397339	pit											
425415	397364	pit											
425422	397386	pit											
425451	397478	pool											
425444	397478	pool											
425478	397488	pool											
425479	397488	pool											
425479	397506	pool											
425486	397516	pit											
425555	397714	pit											
425550	397708	pit											
425622	397671	pit_stone											
425622	397691	pit											
425590	397674	pool											
425519	397528	pool											
425515	397516	pool											
425505	397513	pool											
425503	397507	pool											
425514	397476	pit											
425516	397470	pit	cluster-x4										
425142	397347	R.S.Stone							D	20			
426128	397525	P_round _barrow sub_circular		earth		Pos_ditch		B.A.					
425243	397378	cairn	circular	gritstone	disturbed	4m_dia.		B.A.	D	21			
425261	397447	embanked _circle	circular	earth _stone	eroded_ west_side	23m dia.		B.A.	D	23			
425360	397453	dressed_ stones	rectilinear	gritstone	2	c.2m_long		P.M.	D	22			
425653	397056	S.Stone	triangular	gritstone	e.gullies		E-W	B.A.	F	17			
425602	397276	SLB_ stone	rectilinear	gritstone				1873	F	14			
425400	397561	SLB_ stone	rectilinear	gritstone		"SLB_FT.14" inscription		1873	D				
425697	397060	pit							F				
425501	397123	pit							C				
425547	397195	pit											
425541	397238	pit											
425572	397205	pit											
425641	397164	pit											
425680	397146	pit											
425682	397143	pit											
425634	397084	pit											
425630	397081	pit											
425628	397068	pit											
425630	397068	pit											
425628	397068	pit											
425464	397620	pit											



425460	397643	pit											
425263	397524	pit							D				
425210	397412	quarry_pit							D				
425210	397387	quarry_pit							D				
425155	397363	R.S.Stone	triangular	gritstone	e.gully_ broken		E-W	B.A.	D	23	240	110	29
425167	397559	quarry_pit							D				
425185	397548	quarry_pit							D				
425180	397542	quarry_pit							D				
425185	397534	quarry_pit							D				
425187	397532	quarry_pit							D				
425152	397523	quarry_pit							D				
425154	397525	quarry_pit							D				
425061	397387	S.Stone	triangular	gritstone	e.gullies_ leaning		S-N		D	24	73	36	30
425092	397455	quarry_pit											
425099	397480	quarry_pit											
425377	397490	water_ instalation	square	concrete	disused_ dismantled			19th_ century	G				
425189	397480	cairn	sub_ circular	gritstone				B.A.?	D				
425088	397532	quarry_pit_ cluster	sub_ circular			centred (several)		P.M.	D				
425168	397718	cairn	sub_ circular	gritstone		loose_ stones		P.M.?	G				
425263	397762	cairn	sub_ circular	gritstone				P.M.?	G				
425209	397611	cup_marked_ stone	sub_ angular	gritstone		rock_art_ striations		neo	G	25	67	110	70
425216	397613	pollisoir	sub_ angular	gritstone		deeply_ incised_ grooves		neo	G	26	40	53	
425290	397599	cairn	sub_ circular	gritstone				B.A_or_P.M.?					
425300	397753	cairn	sub_ circular	gritstone				B.A_or_P.M.?					
425065	397508	S.Stone	triangular	gritstone	slight_ e.gullies_to_ top.leaning		E-W	B.A.	H	27	65	80	30
425047	397517	S.Stone	sub_ rectangular	gritstone	slight_ e.gullies. _to_top.leaning	poss.rough_ dressed	E_-W	B.A.?	H	28	65	30	30
425036	397420	dressed_block	square	gritstone	tool_marks			P.M.	H	29	57	70	86
424968	397413	S.Stone	sub_ rectangular	gritstone	deep_e.gullies_ _to_top		E-W	B.A.	H	30	90	123	41
425001	397539	S.Stone	sub_ rectangular	gritstone	e.gully_to top		SE-NW	B.A.	H	31	64	62	23
424810	397511	S.Stone	triangular	gritstone	e.gullies		SE-NW	B.A.	H	32	100	100	52
424823	397418	quarry_pit							H				
424844	397511	quarry_pit							H				
424859	397497	quarry_pit							H				
424854	397483	quarry_pit							H				

424863	397445	quarry_pit							H				
424911	397429	quarry_pit							H				
424844	397615	quarry_pit							H				
424848	397628	quarry_pit							H				
425104	397743	bank(north)	rectilinear	earth/ stone	badly_eroded		N-S		I	33	112m	3m	
425124	397703	bank(south)								33			
425107	397788	bank(north)	rectilinear	earth/ stone	badly_eroded		NE-SW		I	33			
425081	397760	bank(south)							I	33			
425064	397835	bank(north)	rectilinear	earth/ stone	badly_eroded		N-S			33			
425067	397623	bank(south)								33			
425124	397684	cairn	sub_circular	earth/ cobbles	eroded_ at_centre				I	34	500	400	
424986	397631	S.Stone	sub_ square	gritstone	erosion_ gullies	sub_square _in_plan	E_W	B.A.	I	35	50	47	46
424976	397652	S.Stone	sub_ rectangular	gritstone	erosion_ gullies_ to_top	cup _mark. dishing	N-S	B.A.	I	36	48	60	39
424936	397873	S.Stone	sub_ triangular	gritstone	erosion_ gullies		E-W	B.A.	I	37	100	100	50
424858	397797	S.Stone	sub_ triangular	gritstone		packing_ stones	N-S	B.A.	I	38	90	130	25
425008	397762	quarry_pit							I				
425027	397817	quarry_pit							I				
425030	397838	quarry_pit							I				
424783	317771	quarry_pit							I				
424792	397764	quarry_pit							I				
424805	397759	quarry_pit							I				
424784	397759	quarry_pit							I				
424794	397755	quarry_pit							I				
424797	397727	S.Stone	sub_ rectangular	gritstone	erosion_ gullies_to_top	packing_ stones	E-W	B.A.	I	40	50	83	50
424777	397661	quarry_pit							I				
424674	397545	S.Stone	sub_ rectangular	gritstone	erosion_ gullies_to_top		N-S	B.A.	H	41	50	60	36
424755	397840	pit							j				
424705	397677	S.Stone	sub_ rectangular	gritstone	erosion_ gullies_to_top		SW-NE	B.A.	j	42	40	43	33
424693	397727	dressed_slab	rectangular	gritstone	3_chisel_marks			19th_cent.?	j	43			
424647	397597	quarry_pit							j				
424666	397734	quarry_pit							j				
424647	397651	quarry_pit							j				
424650	397651	quarry_pit							j				
424604	397659	quarry_pit							j				
425482	397414	SLB_stone						1873					
424759	397887	S.Stone	sub_ rectangular	gritstone	erosion_gullies _to_top_ and_sides		E-W	B.A.	j	45	45	50	20
424811	397919	bank_and_ _ditch_N	linear	earth/rubble	eroded_bank_ at_paths		SW-NE	?	j	44			

424776	397842	bank_and _ditch_S	linear	earth/rubble	eroded_bank_ at_paths	sub_square_ in_plan	SW-NE	?	j	44			
424606	397679	quarry_pit											
424590	397701	quarry_pit											
424616	397888	quarry_pit											
424562	397881	quarry_pit											
425681	397314	cup_marked _stone	small	gritstone				L.neo-EBA					
424673	398075	cairn							k				
424651	398012	cairn							k				
424719	398309	cairn							k				
424727	398164	quarry_pit							k				
424622	397951	quarry_pit							k				
424631	397955	quarry_pit							k				
424702	398187	quarry_pit							k				
424595	398018	quarry_pit							k				
424596	398024	quarry_pit							k				
424596	398024	quarry_pit							k				
424540	397991	quarry_pit							k				
424555	397981	quarry_pit							k				
424568	397994	quarry_pit							k				
424579	398005	quarry_pit				gritstone slab in centre			k				
424582	398004	quarry_pit							k				
424616	398044	quarry_pit							k				
424623	398057	quarry_pit							k				
424624	398062	quarry_pit							k				
424635	398066	quarry_pit							k				
424644	398074	quarry_pit				photo			k				
424683	398227	quarry_pit							k				
424709	398221	quarry_pit							k				
424703	398199	quarry_pit							k				
424733	398007	quarry_pit							k				
424792	398078	quarry_pit							k				
424799	398099	quarry_pit							k				
424738	398216	quarry_pit			particulalry badly eroded				k				
424531	397998	quarry_pit							k				
424620	397961	quarry_pit							k				
424531	398018	quarry_pit							k				
424540	398035	quarry_pit							k				
424610	398034	quarry_pit							k				
424548	398097	quarry_pit							k				
424602	398263	quarry_pit							k				
424667	398236	quarry_pit							k				
424617	398157	quarry_pit							k				
424804	398147	quarry_pit							k				
424807	398168	quarry_pit							k				
424748	398091	quarry_pit							k				
424760	398238	cairn							k				



424517	398092	cairn							k				
424665	398348	cairn			a single brick in cairn				k				
424688	398301	cairn							k				
424803	398206	cairn							k				
424555	398059	S.Stone		gritstone	worn, erosion gullies		N-S	B.A.	k	46	50	130	35
424717	398254	S.Stone		gritstone	slight erosion	possible packing stone	NW-SE	?	k	47	80	130	40
424744	398265	S.Stone		gritstone	worn, erosion gullies to top		E-W	B.A.	k	48	80	130	20
424810	398108	S.Stone		gritstone	worn, slight erosion gullies		NE-SW	B.A.	k	49	45	130	20

## Appendix 2: Additional Photographs



Figure 29: Mucky Lane, facing north east. To the west is edge of the bog at Whitwell Moor and to the east the improved and enclosed pasture of the Stank Pits. Source: author.



Figure 30: recording the circular stone feature (see figure 9) facing north west towards the bog. The canes mark individual stones. Source: author.





Figure 31: Recording an "SLB" stone, facing west. This photo conveys well the character of the north facing slope of Whitwell Moor, where many of the standing stones are located. The spring is located amongst the trees in the background to the right. Source: author.





Figure 32: The putative stone row beyond the immediate edge of the study area, facing north.



Figure 33: One of the quarry pits in area H, facing upslope south west. Source: author.





Figure 34: possible pollisoir at the source of one of the springs.





Figure 35: One of the larger standing stone presenting its north facing lateral side to the south side and west end of the bog.



Figure 36: Another of the larger standing stones presenting its east facing lateral side to the west end of the bog.