Digging Deeper

A Community Archaeology Project at Under Whitle, Sheen



The report on the excavations carried out between 23rd August to 12th September 2021 on behalf of The Tudor Farming Interpretation Group for the Digging Deeper Community Archaeology Project

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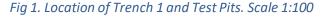
Summary

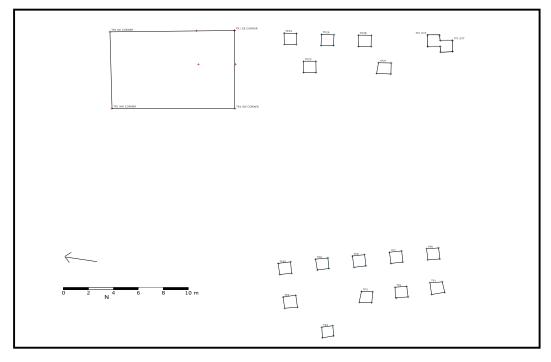
As a result of the previous excavation carried out in the summer of 2016, it was agreed with TFIG to undertake further work on the platform where Trench 3 was located. This took place between 23rd Aug and 12th September 2021. In an effort to reveal more detail of any potential structural remains, the excavation overlay the whole of the previous trench, including the extension. The excavation produced a significant number of finds in relation to the first excavation, with over 560 being recorded. The majority of the finds were ceramic with the typological range of this material suggesting a date range of over 200 years, whilst some suggest occupation perhaps as far back as the 13th century.

1 Methodology

The findings of the excavations carried out by the Peeling Back The Layers project in 2016 were presented and discussed with the TFIG in relation to the proposed fieldwork. It was agreed that further fieldwork should be undertaken in the area of the platform/Trench3 in a renewed effort to meet the project's objectives and these were agreed in negotiation with both TFIG Natural England and the HLF. It was agreed to place the trench as close as possible to the previous excavation to allow continuity. The location and extent of the trench is shown in the figure below. In addition to this trench, it was agreed with the TFIG and the Senior Peak District National Park Conservation Archaeologist that a series of test pits also be prepared and excavated as this would have the two-fold purpose of exploring more of the potential of the site and allay volunteer and visitor concerns regarding working close to people and Covid- 19 restrictions/transmission.

The trench and test pits were set out with respect to the topography of the edge of the platform and located on the OS National Grid (NGR) co-ordinates using a Sokkia Set 4 total station.





The trench was de-turfed and excavated by hand in accordance with the agreement reached with Natural England. All excavation was undertaken under archaeological supervision to the top of the first significant archaeological horizon or the natural substrate, whichever was encountered first.

All artefacts recovered were processed in accordance with Guidance for the collection, documentation, conservation and research of archaeological materials (ClfA 2(014)). Subject to the agreement of the legal landowner, the artefacts will be deposited with the Potteries Museum, Stoke-on-Trent, along with the site archive. A summary of information from this project, set out within Appendix, will be entered onto the OASIS online database of archaeological projects in Britain and be forwarded to the ADS in appropriate electronic format.

All elements of the excavation were recorded. Each context or feature was given a unique identifying number and associated record. All photographic recording was made using digital cameras and in colour.

2 Results of Fieldwork - Archaeology

This section presents a summary of the excavation results. The results from the main trench will be discussed first and the test-pits second. Further details can be found in the datasets from the investigation presented in the appendix section; Context list (Appendix 1) Drawings list (Appendix 2) Photographic list (Appendix 3) and Finds register (Appendix 4).

The work was undertaken over a 21-day period from Aug 23 to September 12, 2022. Overall the conditions were good with only a half day lost to rain. The degree of overlay of the extension trench and Trench 3 was a maximum of one metre, and whilst not a perfect right-angle, it did allow for contexts to be matched. The turf topsoil was regular across the trench much in keeping with that encountered elsewhere on the site. The topsoil was between 6cm to 15cm in depth with a mid-brown sandy clay natural encountered below and this subsoil was between 3cm and 15cm deep. Following the excavation, the trench was re-instated using excavated spoil and re-turfed by hand. The topsoil (001) was a dark brown sandy loam as was found in the first excavation and varied in depth along the length of the trench. It was characterised by a greater depth on the western side of the trench which was closer to the uphill slope and is likely therefore to have been the result of downward drift of the material. Almost immediately finds appeared, predominantly a range of domestic ceramics from 17-19th centuries to building materials in the form of Staffordshire Blue roof tile fragments of varying sizes.

Analysis by Goodwin (2022) points to a group of Midlands Purple Ware (MPW) sherds which potentially date to the 15/16th centuries as the earliest material in this layer, although it is also possible that that they represent later dates as production continued well into the 18th century. Within this layer almost 40% of the ceramic material was found to be coarse earthenware (CEW) which proved tricky to date, in part due to the number of production centres in operation over almost 250 years. There were some pieces that might be from the earlier end of this period. These may have been made in northern Staffordshire and as illustrated below, have an orange or red fabric (Goodwin, 2022: 5).

Fig 2. Flange rim of MPW (find #(005)) – potentially dated to 15/16th century.



Fig 3. Sherd of CEW (find #038) possibly from 17/18th century.



Unsurprisingly there was also material form the later 18th to later 19th centuries in evidence. Among them there was pearlware (PW) with 5 pieces recovered. There was a single sherd from a saucer (find #024) which features what might be an Oriental-style decoration from *c*1775-1810 (Goodby, 1999 cited by Goodwin, *ibid*:5). Mid-late 19th century finds were represented by several sherds of Whiteware (WW) featuring what is known as 'Asiatic Pheasants'. This print decoration began production around

1850 (Goodwin, *ibid*: 6), and an example is shown below. There were also more utilitarian wares such as Brown Stoneware, possibly of Derbyshire origin and these may well be from the latter half of the 19th century.





Fig 5. A sherd of Whiteware (WW) with 'Asiatic Pheasants' print decoration (find # 041)



The range of material recovered from the topsoil beyond the ceramics detailed here included a used shotgun cartridge case (20th century) some undiagnostic shards of plain glass also likely to be 20th century and a small piece of possibly worked gritstone. There were also several large fragments of machine-made Staffordshire Blue roof tile. This type of brick and tile was manufactured from around 1830 but

became widespread during the second half of the 19th century (Harley, 1974) and can be seen around the local area. However, none was recovered during the 2016 excavation and the only evidence of its use at Under Whitle is on the roofs of some of the outbuildings (E. Walker, pers. comm.).

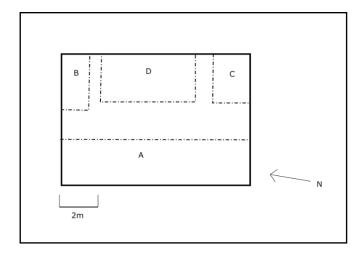




The trench was then subdivided into smaller working areas to focus on potentially more significant areas. Area A was the western half of the trench, Area B the north-eastern corner of the trench (1m x 2m), Area C was in the south-eastern corner (2m x 2m) and Area D was on the eastern side of the trench between Areas B and C. Baulks were instituted between Areas B, C and D.

2.1 Area A

Fig 7. Plan of areas of excavation instituted in Trench 1



In Area A context (004) was below (001) and was a hard and compacted mid-brown sandy clay loam covering the almost the whole of the trench. The only area of the trench not covered was in the NE corner of the trench where a relatively small area contained contexts (005)-(008).

Fig 8. Context (004) NW corner Trench 1



In the NW corner of the trench and Area A there was a broadly quadrant shaped area of material consisting of two contexts – (009) and (015). These were evidence of the

podsolization, a natural soil forming process. This process can happen in poorly drained areas where the upper horizon of a soil becomes acidic through leaching and the deposition minerals, particularly iron, in the lower horizons. Iron oxides collect in what is known as the 'B' horizon where they can accumulate to form a thin layer of hardpan, which impedes drainage through the soil. This can be seen as the thin orange layer running horizontally through both the east and south facing sections in Fig 26. There were no finds in (009/015).

Area A was excavated a further 10cm before it was thought that on the evidence of the previous excavation any remains of the structure that was sought would more likely be towards the eastern side of the trench. This layer was labelled (014) which was a mid-brown sandy loam containing occasional sub-angular stones of up to 10cm diameter. The soil in both (004) and (014) was surprisingly dry, compacted and very hard to trowel on excavation. The small number of angular stones present in both contexts, accounting for less than 5% of matrix were often tipping in-situ but in all directions. The layer was of a relatively uniform depth across the area excavated and it was considered to cover the whole of the trench. As the trench was divided into working areas (014) was in area A. The same material appeared in areas C and D where it was identified as (016) and (017) respectively.





In terms of finds, the overwhelming majority of finds were pottery, with a small number of other materials which will be dealt with first. In (004) 11 pieces of glass were found - green 7, clear 4 – and are either bottle glass (e.g. #176, #211, #353) or window glass (e.g. #078, #110, #114, #170, #227 #309, #458). The bottle glass sherds are undiagnostic beyond being body sherds but are almost certainly post-medieval in origin, whilst the window glass was all post-medieval in date.

Fig 10. Sherd of bottle glass – body (find #176)

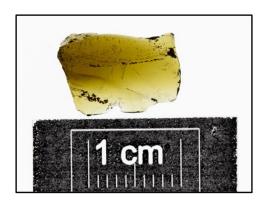


Fig 11. Handmade nail (find # 174)



Metal finds were few, with just two handmade nails, a tack and two pieces of blade being readily identifiable. There were also three amorphous lumps of corroded metal (Iron). One of the possible blades appears to have most of the tang – the end of the blade which anchors the blade to its handle. In all likelihood this is the remains of a bladed agricultural tool, but it is difficult from its current state to say much beyond that.

The other possible blade (find #379) is badly encrusted, and again little more can be made of it.

Fig 12. Possible blade with tang (find #293)



Fig 13. Probable tip of metal blade (find #379)



There was a small amount (3 pieces) of burnt or degraded stone recovered. This was likely to be limestone which may have been processed as fertiliser and given the proximity of limestone to the site this is not unexpected. Further slight evidence of activity is two small pieces of clinker from this layer.

Fig 14. Bowl of clay pipe (find #181)



Turning to the ceramics, the overall picture is of a concentration of post-medieval wares, particularly rich in 17-19th century material much as (001). There were four fragments of clay pipe stem and a single bowl recovered. The bowl (find #181) is thin-walled and unburnished with incomplete/partial milling marks at the top of the bowl, and it is in generally poor condition with damage to the rim of the bowl and mottling inside and out. There are no mouldings or manufacturers marks on any of the stems or the bowl. The form of the bowl and the heel suggest a date of 18th/19th century manufacture.

There were 52 sherds of MPW – 14% of the sherd count for the context. The different vessels present include jars (x3), a cistern and a possible cistern/large jug, a chafing dish and a bowl. Find #406 illustrated below, is a base sherd with bung hole. A more complete example recovered from Swan Bank Pottery, Burslem can be seen here.

Fig 15. Part of a MPW jar (find #055)



Fig 16. Sherd of MPW from cistern (find #406)



Broadly contemporary with MPW, Cistercian ware (CistW) also features in this layer although to a significant lesser degree. Just 3 sherds, 0.5% of the number of sherds from this context, were identified, although two of these are conjoined sherds from a

small, finely potted cup (Goodwin, *ibid*: 7). As can be seen in the image below there is decoration on one of the sherds – applied white clay – which may prove to extend the date of this type of decoration (Goodwin, *ibid*: 7).

Fig 17. Sherd of MPW from chafing dish (find #393)



Other fabric types recovered include two sherds of 17th-century yellow ware (YW) representing a hollow ware and a dish (#100 and #216 respectively) and the latter shows signs of abrasion or wear. There were examples of slipware with six sherds of an orange fabric where differences in the matrix means that they are from at least three dishes. These dishes had everted rims and the interiors of which are decorated with trailed slip.

Fig 18. Conjoined sherds of Cistercian ware cup (find #164)



Fig 19. 17th century yellow ware from a dish (find #216)



Decoration takes the form of simple lines of cream slip applied directly to the pottery body (as demonstrated by #066 #068 and #145) or dark and light brown slip trailed over a cream slip ground (#385 #396 #399). A late 17th/early 18th-century date (c.1670-1710) is likely for these sherds (Barker 1999). Goodwin believes that another sherd is of 'potentially similar date' – find #219 a red-bodied cup or mug rim sherd with lines and dots of cream slip trailed onto the vessel exterior and illustrated below.

Fig 20. Example of trailed slip decoration (find #068)



Fig 21. Find #219 - red bodied cup/mug with trailed slip decoration



Other slipware forms from the 17th and potentially of early 18th-century dates include two press-moulded dishes in either buff (#250) or orange (#091 #247) fabrics, decorated internally with white and brown or black slips (Fig. 22 below).

Fig 22. Press-moulded slipware sherd (find #250)



Fig 23. Find #034 – Coarse Earthenware from pancheon



The single most prevalent ware is Coarse Earthenware (CEW) of the 17th to mid-18th centuries which accounted for almost 35% of the material in this layer. They are described by Goodwin as 'unremarkable', being a mix of mottled wares, slip-coated and black wares with pancheons being the most numerous vessel form (Goodwin, *ibid*: 7).

Fig 24. Find #0337 – Coarse Earthenware from probable bowl



At the other end of the scale, the layer also produced the only piece of white saltglazed stoneware (WSGSW) found on the site and this is thought to have been produced between 1750-1800. The remainder of the pottery found dates to the late 18th to late 19th century characterised by a rather limited range of material with Creamwares (CrW) (n = 30) Pearlwares (PW) (n = 9) and Whitewares (WW) (n = 17) and this accounts for just 15% of finds in this layer.

Fig 25. The sole piece of WSGSW found on site (find #195)



Of the 9 sherds of Pearlware 5 constitute a single plate, find #059, which Goodwin (*ibid*: 8) describes as having:

"moulded shell-edged decoration, picked out under-glaze in blue. The evenly scalloped and well-embossed moulding of the rim can be placed stylistically between c.1800 and the 1840s (Miller & Hunter 1990, 115)."

Fig 26. The five sherds of Pearlware from a single plate (find #59)



Fig 27. Conjoining finds - #401 & #243



2.2 Area B
Fig 28. Contexts (005), (006), (007) and (008) Trench 1



At the northern edge of the trench was Area B which included the contexts (005), (006), (007) and (008). The soil was dry and friable with each context being only subtly different from each other apart from (008) which contained a spread of subangular stones between 3cm and 8cm in diameter. (005) abutted (004) and was slightly firmer but of very similar colour and texture. As can be seen in the image here contexts (006) and (007) tipped down to the eastern edge of the trench and represent the very edge of the platform which appears very much as if it is crumbling with (007) being particularly fine silty clay loam.

Stratigraphically, (006) abutted (005) and (007) was beneath (006). There was only a single find from these four contexts – a piece of CEW (find #448) in (005). This sherd conjoins with find #337 found in (004) and both bear transverse ridges on the underside which is suggested to be evidence of the use of multi-strand wire used to remove the pot from the wheel during manufacture (Goodwin, *ibid*: 8). This suggests that the deposition of these sherds in (004) and (005) was contemporaneous. There was no further excavation in this area.



Fig 29. Coarse earthenware (find #448) from context (005) – reverse side showing ridges

2.3 Area C

Area C was excavated at the southwestern corner of the main trench and as in most of the trench context (004) was present. Beneath this was context (016), evident in the south facing section of the baulk between Areas C & D and it is therefore interpreted as being the same as (017) in Area D - a medium to light brown sandy clay. In the upper horizon there was a shallow spread of angular stony material as can be seen in Fig 30 below. Other than this the context was the same as context (014) in Area A and (017) in Area D.

Fig 30. Spread of stony material on the upper horizon of (016) in southwest corner of Area C



Fig 31. Part of East facing section Area C.



Below (016) was (022) which was of a similar colouration and consistency to (016) but was noticeably wetter on exposure. In the western side of the southern facing section (022) came down onto a narrow band of dark sandy clay (027) which was a maximum of 7cm in depth, whilst in the east facing section (016) was above a thin, undulating band of lighter brown clay (052) which in turn was above (027) with its grey colouration shown in the foreground of Fig 31. (027) was sampled for environmental evidence

(sample 10). In turn this layer was on top of (028) a grey clayey deposit/band, with lenses of fine pea gravel-like again sampled for environmental evidence (sample 11). This was the limit of the excavation in this area. Turning to the finds in this area, (016) yielded two sherds of Midlands Purple Ware, one of which (#404) represents a large jar or cistern of possible late 15th or 16th century date. The other fragment (#405) comes from a hollow ware, such as a jar and is probably of similar date. In (022) a single sherd of coarse earthen ware (#403) appeared in addition to Midlands Purple ware jar and/or cistern sherds of probable late 15th to 16th century date.

Fig 32. Find #404 – inner aspect of MPW jar or cistern



Fig 33. Find #415 MPW



Fig 34. Underside of find #426 showing fusing and scaring

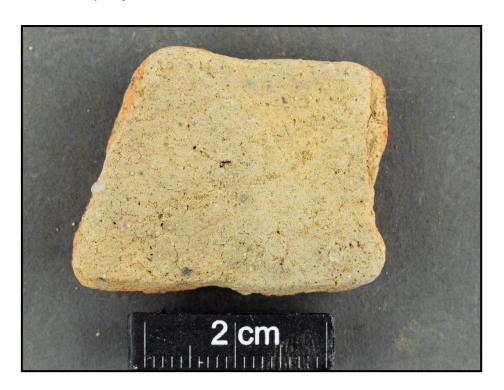


Fig 35. Finds #425 #430 & #431



Two conjoining sherds (#415) share the same lower-fired fabric as #425, #430 and #431 from context (026) in Area D and may form part of the same vessel. These are illustrated above. On the final clean-up for photographs a single piece of pottery emerged from a half-section – find #455. It was moderately abraded and reported b Goodwin (ibid: 10) as an "unattributed medieval fabric (MF4)". Its characteristics were that it was "very soft, unglazed, sandy fabric, oxidised orange on the outside of the vessel, with a reduced pale grey core and interior surface. Fine, rounded, and subrounded quartz inclusions are very common within the fabric, supplemented by rare, sub-rounded coarse quartz grains" and is shown here.





2.4 Area D

A notable feature of Area D was the presence of backfill from the previous excavation ((023) [053]), and this covered the western half of the area and was thought to be the most promising location for a built structure. In Fig 37, (023)/[053] is above (017) which itself is above (032). Layer (023) is interpreted as the backfill from the T3 extension of the 2016 excavation including the protective material placed in-situ at the completion of the 2016 excavation forming a barrier and [053] is the cut of this earlier trench.

Fig 37. Area D north and east facing sections - contexts 017, (023) [53] & (032)



Beneath [053] was (017) and this is considered to be stratigraphically the same as both (014) and (016). This layer was presumed to be approximately 50cm in depth across the whole trench based on the sections evident in both Area C and D, relatively uniform in consistency of its matrix and there were relatively few finds made. Under (017) at the southern end of Area D was (026) - a mid-brown clay deposit. It was similar to (017) above it but had a higher moisture content with occasional subrounded stones up to 6cm diameter. This is interpreted stratigraphically as being the same as (022) in Area C and Given this it was sampled for environmental evidence.





In the northwest corner of Area D and seen in the east facing section was (029). This was a relatively thick layer of podsolised material, approximately 20cm in depth and a width of 35cm, with a characteristic leaching of the soil and a band of orange/iron-rich beneath. It appeared to be a continuation of (009/015) seen in Area A, but lower down what would have been the then natural slope of colluvial material drifting down the valley side. This suggests that this process post-dates the creation of the platform which, taking the dating evidence from the previous excavation, dates to at least the mid-14th century.

Also seen in the east facing section were (030) and (032). The former was a dome-shaped lens of mid-light brown clay some 15cms in depth and width. There were no finds from this context. A little to the south and in the southwest corner of Area D was (032). Again this was a lens of mid-light brown clay but was also evident in the north facing section and in the plan, forming a quadrant of 40cm. This in turn was surrounded by (033) and (034) which formed bands in plan, but their upper horizon formed the extent of the excavation. These three contexts were similar to (026) on the eastern side of Area D at this level in colour, texture, and moisture content. However, this was the extent of excavation in Area D and the appearance of larger stones as seen in Fig 38 suggest there are further deposits below.

Turning to the finds recovered from Area D, (023) contained but a single find (#413). This is a possible bowl base sherd of what Goodwin identified as Medieval Fabric 1 – "a moderately hard, abraded sandy fabric with sparse quartz and iron-ore inclusions, and features streaks of olive-green lead glaze". Its presence in this context would suggest that it was missed in the earlier excavation and was redeposited during backfilling. At the horizon between (017/026) a single fragment of a hard, unglazed orange fabric, probably a coarse earthenware hollow ware of 17th-19th century date was found (find #403 shown below). It is likely that this is a stray find or has been re-deposited as it is of considerably more recent date than the rest of the finds in this context.

In terms of the other finds, 13 sherds of MPW were recovered and the vessels represented include a cistern or jar (base sherd -find #426) which has a fused sherd and firing scar on its underside. Goodwin believes this is potentially indicative of its use as a rudimentary sagger in the production of Cistercian ware as identified by Ford (1995, 14). Among the finds other vessels appearing include at least one large jar or cistern (find #429) and a smaller jar (#425/ #430/ #431) of probable late 15th or 16th century date. The latter jar sherds are of the same slightly lower-fired fabric as that observed in (022), and find #415 may be part of the same vessel. These also feature the same fabric as finds #355, #356, #378 & #380 from (004) with both groups illustrated here.

Fig 39. Find #413 an example of Medieval Fabric 1.



Fig 40. Find #403 coarse earthenware 17-19th cent.



Fig 41. Finds #355 #356 #378 & #380









2.5 Area E

Prior to excavation a broadly circular possible feature was identified on the southern edge of the platform. A little over 1m in diameter the feature was located at the platform's very edge of the platform and its southern half was marked by a greater slope than the norther half, suggesting that it had been placed there deliberately. An extension to the main trench was opened – Area E. The feature was quartered, and the NE and SW diagonal quarters excavated.





On removal of the turf the topsoil (001) was shown to be a layer of variable depth in both quadrants. In the NE quadrant the south facing section was the shallowest at only 5cm whilst the maximum depth was 20cm in the west facing section of the SW quadrant, suggesting that there is some continuing drift of material down the south facing slope.

Beneath this was a thin deposit of charred/burnt material which was approximately 1cm deep. In the SW quadrant this was context (018) and was continuous in 3 sections, only incomplete in the south facing section. There were two things to consider here, the first is that the eastern part of the section was partly removed when the NE quadrant was removed. The second is that this deposit dipped down to the west ending

at the intersection of two contexts -(013) and (020) - sealing the former and post-dating the latter and illustrated in Fig 43 below.





Fig 44. West facing section of SW quadrant Area E (001) (018) (013)



(018) and (025) should be considered the same event - the covering of (013) and (020) - as both would have formed the surface of this feature at this time. Both can be seen as present across the full extent of both quadrants exposed in Area E, in a deepening band from north to south and there is a clear horizon between (018)/(025) and both (013) and (020). (013) is a light brown deposit of hard, dry clay, which appears to have been deliberately laid over (020) which in turn was deliberately levelled which can be seen in Figs 44 and 45.





Finds from Area E were limited to (020) which produced several finds which for the most part were a group of 17th-18th century slipware/yellow ware hollow ware and coarse earthenware fragments. The exception to this was a single abraded sherd (#419) of a cream/ buff fabric (MF3). The fabric of #419 probably represents a bowl with a thin, streaky greenish-yellow lead glaze on the vessel interior which Goodwin believes to be comparable with the probable 13th-14th century fragments of MF2 found in context (004) (finds #316 and #357). These are shown for comparison below.

Fig 46. Finds #316 and #357 from context (004)



Fig 47. Find #419 from context (020)



Although the excavation of the feature in Area E was not total, what can be said is somewhat limited. There were no further finds or evidence of any kind that suggested #419 was in a medieval context. The fact it was markedly abraded shows it had been exposed on the surface for some time and given that the rest of the finds date much

later point to it being disturbed by activity on or around the platform, which was probably contemporaneous with the deposition of the other finds in the context.

2.6 Test Pits

In order to facilitate both exploration of the site and social distancing guidelines for the then Covid-19 regulations a number of test pits were planned, although not all were opened, and none were fully excavated. They did however produce some environmental samples and interesting snapshots of the potential for future work. Test pits 1-10 were situated at the top of the bank above the platform and are shown in Fig 1 above. One factor in determining their setting was the location of another, smaller platform of unknown function and date.

2.6.1. Test pit 1

This test pit was the southern/westernmost of the upper test pits. Below (001) was (002) and this was a mid-light brown sandy clay. On excavation it was clearly retaining more moisture than any of the other test pits at this level but was not excavated any further. This context was sampled for environmental evidence {sample 003}. It produced two finds; a single hollow-ware body sherd of a Cistercian ware, dated to between the late 15th and early 17th century. The second was a probable coarse earthenware pancheon sherd of 18th/19th century date.

2.6.2. Test pit 2

Beneath the topsoil there was a mid to light brown sandy clay (010). This was observed to be less moist than (002). The was just one find a single sherd of the 19th century 'Asiatic Pheasants' print whiteware (#328), the same as three other sherds (finds #024, #041 and #400). There were no further finds and no further excavation took place.

2.6.3. Test pit 3

This test pit produced almost the similar results as test pit 2. Beneath the topsoil there was a mid to light brown sandy clay (011) which was observed to be less moist than both (002) and (010). The context was sampled for environmental data {005}. The same context produced a fragment of a late 19th-century stoneware preserve jar

(#329) and a mid-late 19th-century whiteware hollow ware, the outside of which features a pink under-glaze painted horizontal band (#331). Again there were no further finds and no further excavation took place.

2.6.4. Test pit 4

This test pit produced almost the same results as the other test pits. Beneath the topsoil there was a mid to light brown sandy clay (012) which was observed to be less moist than (002), (010) and (011). The conteFigt was sampled for environmental data {006}. There were no finds, and no further excavation took place.

Fig 48. Find #331 19th century whiteware.



2.6.5. Test pit 5

Beneath (001) was (003) which was again a mid to light brown sandy clay. Unlike other test pits there was some variation in this layer with increasing depth in the western edge. This was sampled for environmental data {001}. (003) was above a layer of slightly darker, drier sandy clay (019). Here there some finds recovered. As Goodwin notes (*ibid*: 11) of the finds in this test pit 96% (42) of the sherds from relate to a single blackware or fine coarse earthenware hollow ware of late 17th- to 19th-century date (#457). The context group is completed by an early 19th-century underglaze painted pearlware tea bowl, which probably belongs to the same vessel

recorded as #444 from Test Pit 24 (see below), and a small under-glaze transferprinted pearlware or whiteware fragment of undiagnostic form (#457).

Fig 49. Finds from Test pit 5.



2.6.6. Test pits 6-10

Although these were marked out, none were excavated.

2.6.7. Test pits 21-29

A second group of test pits was created on the southern half of the main platform. The rationale for this was that they might show a relationship between stratigraphy and finds in Trench 1 and Area E on the southern edge of the platform. Test pits 21, 22, 25 and 29 were marked out but not excavated.

This series of test pits produced very similar results in terms of the contexts and their interpretation. Across this half of the platform the topsoil (001) elsewhere on the site is the same as (035) (037) (039) (041) and (043). This layer sits on top of a mid-light brown loamy clay which is represented by contexts (036) (38) (40) (42) and (46). This layer in turn is above a light brown sandy clay represented by contexts (47) (48) (49) (050) and (051).

2.6.8. Test pit 23

This test pit produced three contexts (035) (036) and (047). As can be seen in the image below the upper contexts (035) and (036) were a mid-dark and mid-light brown loamy clays respectively, with few inclusions and just a single find in (035) – 19th century coarse earthenware (#446). As (047) was emerging it appeared to be similar to (036) in both colour, texture and consistency.

Fig 50. Test pit 23



2.6.9. Test pit 24

This test pit produced three contexts (037) (038) and (048) and as noted above they should be thought of as the same layers evident in the other test pits in this area. This test pit produced a group of finds which comprised of a probable Midlands Purple ware jar sherd of the late 15th to 16th centuries (#445), a coarse earthenware pancheon fragment of 17th- to 18th-century date (#443), and three pieces of an under-glaze painted pearlware tea bowl with a floral design rendered in the muted 'earth' colours typical of the period c.1790-1830s (#444). This latter find is from the same type of ware as finds #182/3. However, they are from different vessels with #444 being from a tea bowl and #182/3 from a saucer (Goodwin, *pers. comm.*), and would have looked very much like this.

Fig 51. Test pit 24



2.6.10. Test pit 26

This test pit contained contexts (039) (040) and (049) and as noted above they should be thought of as the same layers evident in the other test pits in this area. In context (040) a single body sherd of a Midlands Purple ware cistern or large jar body (#442) of late 15th- to 16th-century date was recovered.





Fig 53. Find #441 sherd of MPW, 15th-16th century



2.6.11. Test pit 27

This test pit contained contexts (041) (042) and (050) and as noted above they should be thought of as the same layers evident in the other test pits in this area. The colour and consistency of each layer was the same. No finds were recovered.

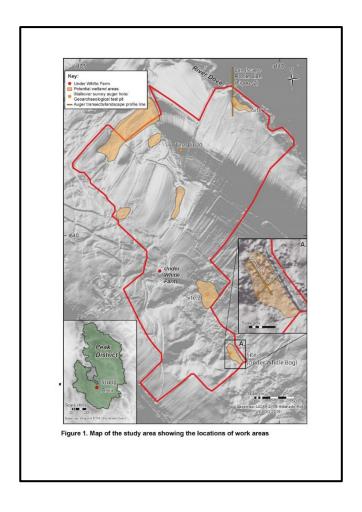
2.6.12. Test pit 28

This test pit contained contexts (043) (046) and (051) and as noted above they should be thought of as the same layers evident in the other test pits in this area. Context (046) contained a single find - #44 - a rim sherd from a late 15th/early 16th century Midlands Purple ware cistern or large jar. As can be seen in the image above, the everted rim is slightly warped.

3 Paleoenvironmental Results

A major element of this season's fieldwork was research into the palaeoenvironment of Under Whitle. To this end the TFIG commissioned specialists to undertake a programme of sampling to establish a better understanding of the environment and possibly farming practice and diet here in the past. The full reports including methodology etc. are to be found in Appendix 2. Briefly, there were two strands to this programme of work – one was to assess potential wetland areas within the current boundaries of Under Whitle and where possible examine them for palaeoenvironmental evidence. The second was to sample the contexts exposed during excavation to give data specifically about the platform and its immediate locale. It was hoped that it might also be possible to obtain firm dating evidence from either strand which might support that gained from the 2016 season of work on the property.

Fig 54. Map of Under Whitle showing areas of potential interest. Courtesy of T Davis.



Three potential sites were identified and assessed initially and the full report by Dr Davies discusses the sites in more detail. Suffice to say that only one of the three proved to be suitable for further work which would benefit the project. This area of wetland was a previously unknown peat bog on the southern edge of the property at SK1086 6369 at approximately 900m AOD, located at the base of the western valley slope and was not recorded in any previous work on the property, due in no small part to the restrictive nature of the covering woodland. The bog was thought to be suitable for sampling for both dating material and organic remains in the form of pollen with sampling carried out by Dr Davies and several TFIG volunteers. It showed three phases of development, these being from upper to lower levels - organic-rich sediments, colluvium and spring deposits. The upper phase or layer was a mixture of peat, silt and clay deposits with signs of a more stable surface developing, despite the on-going addition of colluvial material from the valley side. The colluvial layer was produced by the continued erosion of material above the bog, and it was noted that there seemed to be a natural bank at the north-eastern end of the bog which was probably the site and cause of the formation of this feature. The lowest layer contained deposits of coarser material, not of the local bedrock, showing the influence of a spring at this location which resulted in waterlogged ground.

The bog also proved to be the key site for obtaining radiocarbon dates with samples from the bog being tested at the Queens University Belfast Radiocarbon unit. The full report from Dr Davies is imminent but initial results on the dating have been made available to us and are illustrated in Fig 55. To date we have 4 dates from the bog, and these dates are essentially taken from the upper surface, the middle and the base and track changes in the composition and deposition in the bog itself. The dates of interest are the ones from the middle and base of the bog. There are two dates which show increased formation activity once the bog had formed. The later of these is c1250 AD and the earlier one which points to a resurgence in the process dates to the 9th century AD. The earliest date we have, and which provides an onset date, is c1100 BC. In effect this is telling us that the formation of the bog began in the late Bronze Age. The full report from Dr Davies will detail a full palynological assessment from this site, and it is only now that we have dates to inform further work that it can now be undertaken. It is hoped that a focus on the period between the 9th-13th

centuries will give us much more detail on this exciting development.

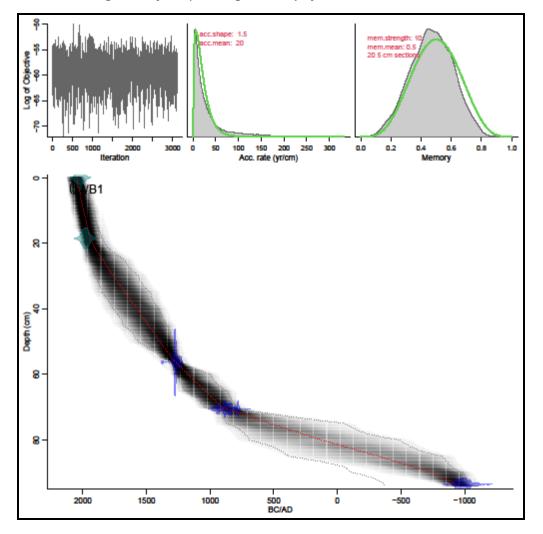


Fig 55. Radiocarbon dating results from peat bog. Courtesy of T Davis.

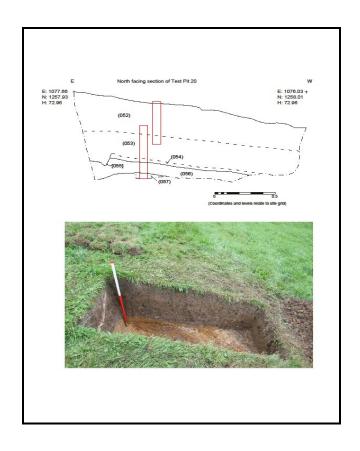
In addition to the work undertaken at the bog, a programme of sampling for other plant remains was undertaken within the main trench and test pits. The assessment of charred plant remains was undertaken by Ellen Simmons of the Sheffield Archaeobotanical Consultancy. The samples were taken from contexts within Trench 1 and several of the test pits, and while it was hoped that this would lead to the identification of both crop husbandry and processing practices at Under Whitle, the results were very disappointing. There were significant amounts of modern roots in the samples which is indicative of bioturbation on the site. Additionally, there were very low concentrations of charred plant remains and although cereals were identified they were in very small numbers, and with oat grain it was impossible to determine whether it was wild or cultivated. This left barley as the sole evidence of cereal grown at Under Whitle.

In terms of the woody material recovered, the samples contained tubers and twigs of probable heather/gorse/broom which Simmons thought to be evidence of collection locally for use either as turves or firewood. Given that there is Broom/Gorse currently growing in abundance within sight of the platform, we should not be too surprised at this finding. There are alternatives possibilities to this. There are many references to the use of Gorse and Broom as winter fodder for cows, horses and sheep - a practice that was widespread in the north Midlands and elsewhere – and their use in crop rotation and as a nitrogen fixing crop (e.g. Ely, 1848; Nevens & Harshberger, 1940; Radley, 1961; Spray, 1981; Atlan *et al*, 2015). Given Under Whitle's location on the gritstones which are known for poor grazing, there is perhaps some merit in considering this role. As disappointing as these results are, they still represent progress toward our improved understanding of the site.

A further target was a field to the east of the platform where three lynchets are situated. The field is known variously as Whitlelow or X and is field 28 on the 1845 tithe map. On the NGR the field is centred on approximately SK107 642 and was identified by Rylatt (2005) as feature 30 in his survey. It was agreed with specialists that samples from one of the lynchets would hopefully provide evidence of crops and other vegetation in the area and possibly dating evidence too. A test pit (020) was opened at SK10734 64247, and samples were taken. In Fig 56 below, the north facing section of test pit 20 is illustrated and the location of the sample area is illustrated in red.

As can be seen in Fig 56, five distinct deposits were identified, and these tell the story of the formation of the lynchet. The upper contexts of (052) and (053) exhibit very little bioturbation and represent the subsoil deposits and this similarity points to their being evidence of the continued, gradual formation of the lynchet by means of the addition of eroded soils from above the lynchet, most likely by ploughing. Context (054) is thought to be the original soil surface or palaeosol prior to the onset of ploughing and interestingly, (055) may be original cut or ploughscar as it cuts contexts (056) and (057) the natural subsoil/bedrock.





4 Discussion

The rationale for this project was to further our understanding of both the occupation and paleoenvironment of Under Whitle, building on the findings of the 2016 excavations. Central to this was the hope that the tantalizing glimpses of medieval material recovered at the conclusion of that project would lead us to more substantial evidence of occupation.

The 2016 excavations did not provide any structural evidence of occupation, rather there were subtle colour changes in the soils, raising the possibility that there may have been post holes for a dwelling. However, they proved to be too shallow to be such although one context - (210) -, proved to be more durable on excavation. The appearance at the end of the fieldwork of possible badly degraded daub suggested that there may well be value in further excavation at some future date. At the end of the excavation, we were left with a terminus post quem, or the earliest date so far, for the creation of the platform with the dating of the charcoal sample from context (230) giving a date of 1350 AD +/- 30. In terms of artefactual evidence there were three pieces of late 16th ware and a single piece of unattributed medieval fabric - not substantial evidence of settlement, but certainly evidence of activity. In the interpretation of the stratigraphy there appeared to be an artificial bank or small earthwork running almost east west across the platform which may have been part of a small enclosure for agricultural activity possibly related to the period of occupation of the 17th century farmhouse revealed in 2016's Trench 2. We know from historic records that in 1622, Abraham Harrison leased Under Whitle from the Harpur-Crewe estate. This may be of particular relevance to the results and interpretation of both this excavation and the platform in general.

This season's efforts have produced something of a mixed picture, but one which nonetheless adds to the story of Under Whitle. Beginning with the excavation of the platform, this did not produce the much hoped for firm evidence building or farmhouse but did yield more medieval evidence in the shape of ceramics. In terms of the findings, how can these be interpreted? Before moving on to the ceramics and other finds it is appropriate to begin with the relationship between the contexts in

which finds occurred.

Table 1. Fabrics/wares recovered from context (004).

Ware/ fabric type	No. Sherds
Medieval Fabric 2 (MF2)	2
Cistercian Ware (CistW)	2
Cistercian Ware/ Blackware? (CistW/ BW?)	1
Midlands Purple ware (MPW)	52
Coarse earthenware/ Midlands Purple ware? (CEW/MPW?)	6
Blackware (BW)	22
Yellow ware (YW)	2
Slipware/ Yellow ware? (SLW/ YW?)	2
Slipware (SLW)	15
Slipware? (SLW?)	5
Mottled ware (MW)	14
Slip-coated ware (SLCW)	35
Coarse earthenware (CEW)	116
Coarse earthenware? (CEW?)	13
White salt-glazed stoneware (WSGSW)	1
Creamware (CrW)	30
Pearlware (PW)	9
Whiteware (WW)	17
Pearlware/ Whiteware? (PW/ WW?)	6
Refined Yellow ware (RefYW)	1
Brown Stoneware (BStW)	19
Total	370

As can be seen in this table, 370 pieces of 21 different fabrics or wares were recovered from a single context (004), and this represents two thirds of the total ceramic material recovered across the whole excavation. The type of ware is also important, with the majority pieces being Coarse Earthenwares spanning two centuries. This in itself is significant as it tells us that deposition of material more likely to have occurred in the 17-19th centuries and consistently. In a sense, the platform was something of a 'dumping ground' for broken pottery in particular as there were negligible quantities of other material such as metalwork recovered from this, or indeed any other contexts. This context then, may well have been an 'active' surface at the time of the Harrison household mentioned above. If we consider the possible earthwork noted above, which ran east-west across the platform, and the interpretation of it being part of agricultural, or more likely horticultural in nature, then such activity could be expected

on a levelled surface close to a house. The use of broken pottery as manuring from at least the medieval period has been detailed extensively both here and abroad (e.g. Jones, 2004; Poirier, 2016) and it would not be unexpected here. The underlying clay would benefit from aeration provided by the addition of such material. The depth of this layer is consistent with the use of hand tools to turn over/dig the area. Beneath this layer the ground appeared to have been less disturbed, suggesting the limit of disturbance. The presence of two sherds of medieval pottery is a little surprising, but they may well have been redeposited at some time in the past, even during the two excavations. Beneath this context, considerably less material was recovered and, for the most part, it was predominantly dated to the 15-16th centuries and was principally Midlands Purple Ware excavated from Areas C and D (contexts 016 and 017). These areas in the centre of Trench 1, and in part a re-excavation of the 2016 Trench 3 and its extension, clearly tapped into a similar assemblage of material to that earlier excavation which helps us to date this phase of activity on the platform to the late medieval/early modern period.

The ceramic assemblage from the 2021 season was discussed by Goodwin (2022) and he believes that the assemblages from both excavations are comparable, particularly the later material. The overall picture from the ceramics is that there is indeed a long occupation of the site, lasting until the mid-late 19th century. Quite when this occupation begins however, remains unclear. The medieval wares recovered in the latest excavation may have the potential of reaching back as far as the 11th century, but this requires confirmation. It is likely therefore that the contexts encountered toward the end of the excavation were the upper horizon of medieval activity on the platform. From these we saw the sherds of medieval ceramics appearing as the lower levels of the trench were cleaned back. Yet again we have a tantalizing glimpse of medieval activity on the platform with more medieval pottery than the 2016 season suggesting we were on target but needed further time to perhaps arrive at a definitive answer about the occupation of the site. There are questions as to the provenance of the medieval ceramics and we await a report which should answer some of these, but what can be said at this point is that the assemblage gathered from the projects indicates the longevity and continuity of occupation at Under Whitle, going back 800 years at least.

Since the inception of this project prompted in no small way by the walkover survey of 2004, the archaeological story of this seemingly quiet rural backwater has added a considerable amount to the story of the parish and has continued to throw up surprises. The features recorded, mapped and subsequently excavated have led to a significant increase in the content of the county HER for the parish. In terms of artefacts the excavations have recovered everything from 13th century pottery to a Swiss Army knife. The targeted areas have revealed, for the most, part their secrets. There still remains potential in areas and features not yet explored such as the widespread, and in places, well-preserved ridge and furrow. These may be for future projects and could build upon this programme of sampling for environmental evidence, which produced a somewhat mixed picture.

From the charred plant remains we were only able to identify a single cereal crop with anything like certainty – oats. The presence of gorse/broome in the samples may well point to it being used as winter fodder for cattle or sheep, as well as firewood. Implicit in this finding is the question of whether there was any sort of crop processing on and around the platform, and the impression gained so far is that there wasn't any. This is somewhat surprising given the proximity of the platform to both domestic and agricultural buildings, and the general topography of the site. Perhaps future work at Under Whitle can resolve this question.

Whilst this is disappointing, a rather more positive is the finding of the peat bog and in particular the associated dates. They point to the changing climactic conditions over the last 3,000 years and can be compared to evidence from nearby Fox Hole Cave, which pointed to wetter conditions in the Bronze Age (e.g. Bramwell, 1971; Lawson, 1982).

We await a full analysis of the pollen data from both the bog and the lynchet as selection of samples was subject to dates obtained by radiocarbon dating. Due to unforeseen circumstances, these are now expected to be available before Christmas 2022 and will be immediately made available to the public via the upgraded website.

What have *Peeling Back The Layers* and *Digging Deeper* told us of the history of Sheen and the Dove Valley and how does Under Whitle fit into the story? The Victoria County History of Staffordshire calls Sheen an 'ancient parish' and states that the present village probably existed by 1175, whilst in the northern part of the parish Whitle was settled by at least the early 15th century (Baggs *et al*, 1996). Yet to the south, Pilsbury, Ludwell, Alstonfield and Hartington are all recorded in Domesday as is Longnor to the north. There is also evidence of Saxon ceramics and milling activity at Crowdecote (Guilbert, 2004; 2005), along with well-preserved ridge & furrow. This suggests that this stretch of the Dove valley was a relatively well-settled area and of some importance.

Pilsbury, for example, prior to its inclusion in the endowment of land by Robert de Ferrers to Merevale Abbey in 1148, was already an area of "common pasture" (Baggs et al, 1996), so clearly people were living close by. The Peeling Back The Layers project secured a radiocarbon date of 1350 AD from the platform revisited in this project. The presence of 13th-14th century ceramics further consolidates an earlier date of settlement at Whitle than that suggested by Baggs et al (ibid). This is further supported by the fact that Under Whitle sits just a few hundred meters upstream from Pilsbury Castle, a known motte & bailey of post-conquest date and one of several Norman structures built locally, the most significant of which was Peveril Castle in Castleton. Both may have been built relatively soon after the Conquest, but Peveril was constructed in stone from the outset (English Heritage, 2018). The siting of these castles was typically done with protection of communication and trade routes, and although the Dove is not a major river, there are several fords in this stretch of the river's course including those at Hartington, Pilsbury and Crowdecote. Dodd & Dodd (2004: 85 & 127) and Wood (2007: 67) note these three local crossings as being on well-understood medieval trade routes for goods including salt. A castle, even a motte & bailey, and its garrison would have afforded protection to merchants and travellers. However, they were also constructed with the reinforcement of Norman rule in mind, making visible to the local population the power of the new world order. It is possible that Pilsbury castle was a replacement for the smaller motte and bailey construction at Bank Top just to the north of Hartington. It is certainly a larger, more impressive construction and would have

afforded a larger garrison to be stationed there, and a settlement in the area now called Under Whitle would have had a close relationship with the garrison in a similar manner to the *vici* associated with Roman forts a thousand years earlier.

During the course of this phase of the project, members of the group who have been researching historical sources discovered references suggesting that there were people living locally in the early 13th century with the family name de Withul/Wythul appearing in the records of the Oakover family dated to 1220-1235. This is the earliest known use of the name discovered by the TFIG so far. If this is the case, then it is entirely possible that there were people living in Whitle (in its broadest sense) when Pilsbury Castle and the common pasture were in use. Although the date when the castle was abandoned is uncertain, the fact that it was never converted to stone suggests it had probably been abandoned in the last quarter of the 12th century as many others across the country were (e.g. Pounds, 1994) and this only adds to the uncertainty.

5 References

Atlan, A., Udo, N., Honroy, B. & Darrot, C. (2015) Evolution of the uses of gorse in native and invaded regions: what are the impacts on its dynamics and management? *Revue d'Ecologie (Terre et Vie)*, 70 (12) 191-206.

Baggs, A P, M F Cleverdon, D A Johnson, and N J Tringham. "Sheen." *A History of the County of Stafford: Volume 7, Leek and the Moorlands.* Eds. C R J Currie, and M W Greenslade. London: Victoria County History, 1996. 239-250. British History Online. Web. 21 July 2022. http://www.british-history.ac.uk/vch/staffs/vol7/pp239-250.

Barker, D. (1986) 'North-Staffordshire post-medieval ceramics – a type series. Part two: blackware', *Staffordshire Archaeological Studies no.* 3. Stoke-on-Trent City Museum & Art Gallery, 58-75.

Bramwell, D. (1971) Excavations at Fox Hole Cave, High Wheeldon, 1961-1970. *Derbyshire Archaeological* Journal, 91, 1-19.

Dodds, A.E. & Dodds, E.M. (2004) Peakland Roads and Trackways. Landmark Publishing, Ashbourne.

Ely, S. (1848) On the cultivation of Gorse as food for cattle. *Journal of the Royal Agricultural Society of England*, 1, 523-528.

English Heritage (2018) Peveril Castle https://www.english-heritage.org.uk/visit/places/peveril-castle/history/

Goodwin, J. (2022) Medieval and Post-Medieval Ceramics from Under Whitle, Staffordshire. Unpublished Report for Tudor Farming Interpretation Group.

Goodby, M. (1999) Pearlware. Unpublished Historic England training handout.

Guilbert, G. (2004) Some work undertaken by Trent & Peak Archaeology in Derbyshire 2000-2001. *Derbyshire Archaeological Journal*, 124.

Guilbert, G. (2005) Some work undertaken by Trent & Peak Archaeology in Derbyshire 2002-2003. *Derbyshire Archaeological Journal*, 125

Harley, L.S. (1974) A Typology of Brick: with Numerical Coding of Brick Characteristics. *Journal of the British Archaeological Assoc*, 37 63-87.

Jones, R. (2004) Signatures in the Soil: The Use of Pottery in Manure Scatters in the Identification of Medieval Arable Farming Regimes. *Archaeol J*, 161, 159-188.

King, D.J.C. (1988) The Castle in England and Wales. Routledge, London.

Lawson, T. (1982) An analysis of sediments from Fox Hole Cave, High Wheeldon, Derbyshire. *East Midland Geographer* 8:38-50.

Nevens, W.B. & Harshbarger, K.E. (1940) Broomcorn Silage for Dairy Cattle. *Journal of Dairy Science*, 23, 10, 1023-1029.

Poirier, N. (2016) Archaeological evidence for agrarian manuring: Studying the timespace dynamics of agricultural areas with surface-collected off-site material. In: Klapste J. (ed.), Agrarian technology in the medieval landscape, *Ruralia* X, Brepols, p. 279-290.

Pounds, N, J, G. (1994) The Medieval Castle in England and Wales: a social and political history. Cambridge: Cambridge University Press.

Wood, E. (2007) The South-West Peak: History of the Landscape. Landmark Publishing, Ashbourne.