

Toller Porcorum: a post-medieval 'wetland' management landscape at Woolcombe, Dorset

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Abstract

Woolcombe Farm became the subject of archaeological excavations during 1966-69 following investigations by the resident Austin family earlier in that decade. The initial field programme was directed by George Rybot, however, Rybot's ill-health brought the project to an end after three seasons. A new programme of survey and excavation was established by Alan Hunt of the Dorset Institute of Higher Education (now Bournemouth University) in 1984 and this continued on an annual basis until 1992. This paper gives details of an archaeological assessment and fieldwork that was carried out in the vicinity of the farmhouse at Woolcombe by Bournemouth University in 1997. Taking into account the findings of the 1997 fieldwork, the authors indicate the potential for future investigations at this medieval settlement site (IH).

Résumé

Las primeras excavaciones en Woolcombe Farm tuvieron lugar entre 1966 y 1969, tras las llevadas a cabo anteriormente por la familia Austin, dueña entonces de las tierras. George Rybot fue el director de la primera campaña que terminó, tres años después, debido a sus problemas de salud. En 1984, Alan Hunt, del Instituto de Educación Superior (en la actualidad Universidad de Bournemouth) organizó un nuevo programa de prospección y excavación que se prolongó hasta 1992. Este artículo detalla una evaluación arqueológica y excavación realizadas en 1977 por la universidad de Bournemouth, en las proximidades de la casa de campo de Woolcombe. Teniendo en cuenta los hallazgos de la excavación de 1997, los autores consideran que hay potencial para futuras investigaciones en este asentamiento medieval (AGR).

Zusammenfassung

Woolcombe Farm war Gegenstand archäologischer Ausgrabungen in den Jahren 1966-69, die Untersuchungen der ansässigen Familie Austin folgten, welche in vorangegangenen Jahren desselben Jahrzehnts stattgefunden hatten. Die ursprüngliche Feldarbeit wurde von George Rybot geleitet, endete jedoch aufgrund seiner schlechten Gesundheit nach der dritten Saison. Ein neues Begutachtungs- und Ausgrabungsprogramm wurde im Jahr 1984 von Alan Hunt des Dorset Institute of Higher Education (jetzt Bournemouth University) aufgenommen und bis 1992 jährlich fortgesetzt. Die vorliegende Ausarbeitung präsentiert die Einzelheiten einer archäologischen Beurteilung und Feldarbeit, welche 1997 von Bournemouth University in der nahen Umgebung des Bauernhauses durchgeführt wurden. Unter Berücksichtigung der Funde aus der Feldarbeit von 1997, verweisen die Autoren auf das Potenzial zukünftiger Untersuchungen dieses mittelalterlichen Siedlungsplatzes (JF).

Archaeological background

Woolcombe is listed in the Domesday Book of 1086 (Morris 1983 [56, 50] and [57, 8]); it is also afforded a short entry in the Royal Commission on Historical Monuments, Dorset (1952, 253). Formal archaeological fieldwork at Woolcombe Farm commenced in 1966 under the direction of George Rybot. Part of the Rybot archive has been lost, but a competent analysis of the remainder was published by Poulsen (1984, 75-81). From 1984 Alan Hunt directed a further nine seasons of investigation by the Dorset Institute of Higher Education (later Bournemouth University) that were recorded in a number of annual interim reports (Hunt 1985-1993 inclusive). The Austin family, the owners of Woolcombe Farm, sold the property by 1996 and the land holding was divided. A

field called Lower Bottom, which included the source of the Woolcombe stream and the site of medieval settlement, became detached in ownership from the farmhouse. Woolcombe farmhouse was converted into a non-agricultural dwelling and the new owner's plans to develop it were the subject of an archaeological evaluation and a watching brief in 1997 (Fig. 1). It is the results of the 1997 programme of fieldwork that are the focus of this paper. Reference to earlier fieldwork will be limited to essential background context.

Site location

Woolcombe Farm lies in the bottom of a valley approximately 13k m (8 miles) to the north-west of Dorchester and close to the southern boundary of Toller Porcorum parish (SY 554 954 and ca 170 m



Figure 1: Woolcombe farmhouse south elevation, 1997, showing (to the right) the single storey byre with white painted wall-scar that denotes the area that was shared with the demolished bottling plant (Bournemouth University *BU*).

above ordnance datum). A spring rises 63 m to the south-west in the field known as Lower Bottom and this is the source of the Woolcombe stream which runs to the north of the farmhouse (Fig. 2). This stream is a tributary of the River Hooke, formerly the River Toller (Mills 1998, 145), which comprises part of the watershed of the River Frome.

Geology

The geology of the Woolcombe area is complex. Eggardon Grit (to the south-east of the farm), Cann Sand (Upper Greensand), Shaftesbury Sandstone and Zig-Zag Chalk are types that can be encountered. The Woolcombe farmhouse building is situated upon a superficial deposit of Head Clay, Silt, Sand and Gravel (Natural Environment Research Council 2016; Bloodworth 1990, 3). Archaeologically, it is not always easy to establish clear boundaries between these geological types which can be prone to overlap. A ruined lime kiln is situated *ca* 167 m north-west of the farmhouse, and the surrounding fields contain a number of chalk quarry pits (Table 1). These pits provide useful reference points in an otherwise diverse geological area.

Outline Archaeology of Woolcombe Farmhouse 1966-1992

Some *ad hoc* excavations had been carried out in the immediate vicinity of Woolcombe farmhouse (Standing Building 1 or SB1) during the 1960s by the Austin family, then owners of the farm. George Rybot and Alan Hunt continued and extended these investigations which are described under their trench numbers as follows:

Hunt III

This trench was also known as Austin Site 1 (Hunt 1985, 158). It was situated in the north-east angle of the farmhouse where it was cut into an earthen platform upon which the present house stands (SB1; Fig. 2). Two parallel walls of separate phases were exposed. The later wall was wider than the first with evidence of a doorway marked by roughly dressed stones for which a seventeenth-century date was suggested. Both phases were considered to be earlier than the present farmhouse building which also originates from the seventeenth century but which incorporates two stone windows possibly re-used from an earlier building (RCHME 1952, 253; Poulsen 1984, 77; Hunt 1985, 157).

Hunt VI

Excavated in 1986, this trench was located 4 m north of the farmhouse and adjacent (immediately east) of Standing Building 3 (SB3) which was described as comprising at least six structural periods dating from the ~~sixteenth~~ ^{sixteenth to} seventeenth centuries (Fig. 2). Although at present an outbuilding (1997), SB3 clearly originated as part of a higher status structure (Hunt, 1986, 173; 1992b, 176). The excavated evidence from Trench VI included:

1. A chalk wall on the same alignment to those in Trench III and dated as late medieval, possibly the foundation of a timber-framed building (Hunt 1987, 187).
2. A layer of redeposited (Upper) Greensand thought to be the latest in a 'series of layers' of a building platform associated with the north range of the farmhouse in the second half of the seventeenth century (see Hunt III above and Hunt 1987, 187).

The Kitchen Garden, Subsite VI (or 6)

The Kitchen Garden adjoins the south-east end of the farmhouse (Fig. 2). This area was originally designated Subsite VI but here it is referred to as Subsite 6 in order to distinguish it from the nearby Trench VI. The resident Austin family reported the presence of chalk walls 'at no great depth' in this area (Hunt 1985, 157 and 159; Hunt 1992b, 176). During the 1991 excavation season one trench (Trench 1) and six test pits (TPs 2-7) were excavated in this area. In Test Pit 3 a possible post-hole was observed at the western end. A 'roughly metallised surface of flints' was also recorded. Test Pits

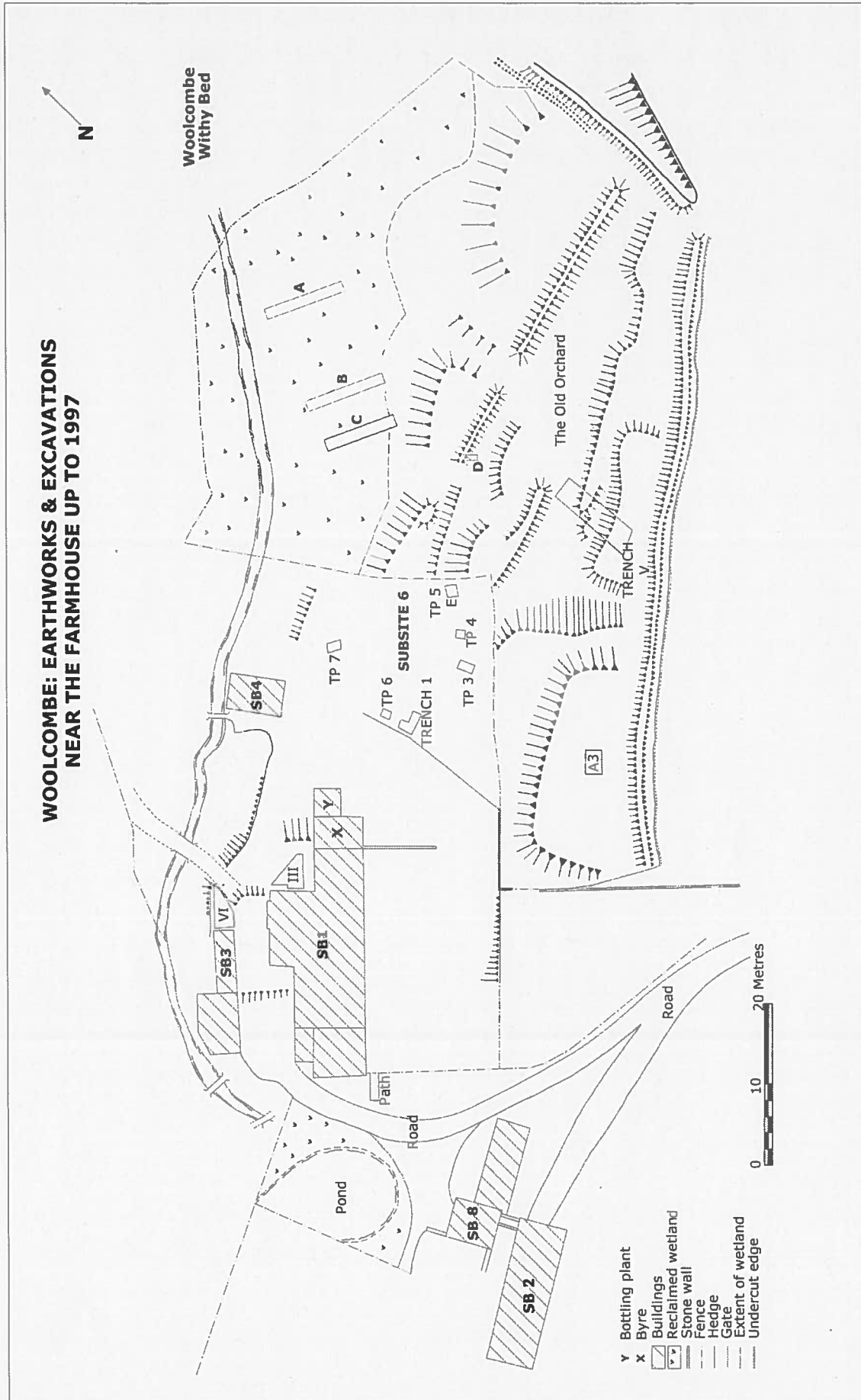


Figure 2: Plan of Woolcombe farmhouse SB1 and its immediate environs as marked. SB3 is the multi-phase building to the left (west) of Trench VI, SB4 is the ca 1840s cider mill next to the Woolcombe stream (Gonzalez Ruiz for Bournemouth University).

Larger please!

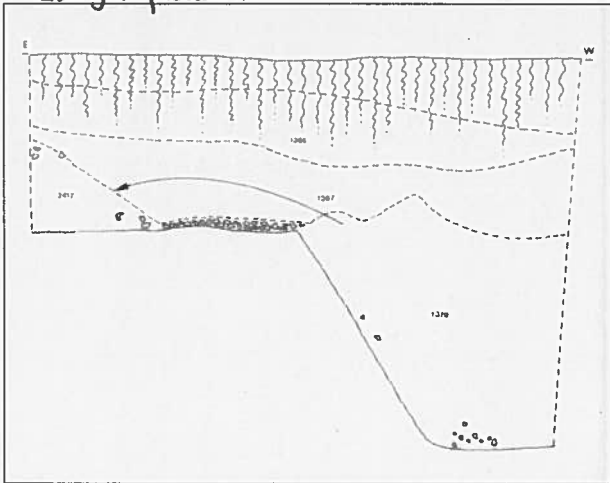


Figure 3: Section drawing of Test Pit 3 (1991). Context numbers: 3416 possible metallated surface; 3417 redeposited natural containing worked flint; 1365 topsoil; 1367 make-up layer; 1370 fill of ditch; 3340 cut of possible Bronze Age boundary ditch [drain trench] (BU 057 WF Sub-site VI, TP 3, Sheet 396, Section 271).

3 to 5 revealed a ditch associated with flints that were provisionally dated as Bronze Age (Figs 3 and 4; BU archive 057, director's site notebook 1992, 21-4). A 'later' unspecified soil deposit included a few sherds of possible 'late Saxon' pottery (Hunt 1992b, 176).

The Old Orchard (Austin Trench 3 and Hunt Trench V)

The Old Orchard occupies an area of land that extends east to south-east of the farmhouse. North of this plot, the Woolcombe stream runs towards the southern boundary of Woolcombe Withy Bed. The area of the Old Orchard is defined by two linear earthbanks, the more northerly of which is much reduced. The southern earthbank carries a hedge. Within the Old Orchard (between the earthbanks) is a number of earthworks which resemble house or garden platforms (Fig. 2). Two excavations took place here prior to 1997.

1. Site A3 was the work of the Austins *ca* 1972. The trench was situated on a platform where 'the goose house' had once stood. Undated roof tiles not seen by later excavators, were recovered (Hunt, 1985: 157).
2. Trench V (excavated in 1984 and 1985) was situated some 30m north-east of A3 (Hunt, 1985, 157 & 1986, 173). The trench cut across two earthen platforms but no structural evidence was found. The limited finds of abraded pottery did not indicate a firm date for these features.

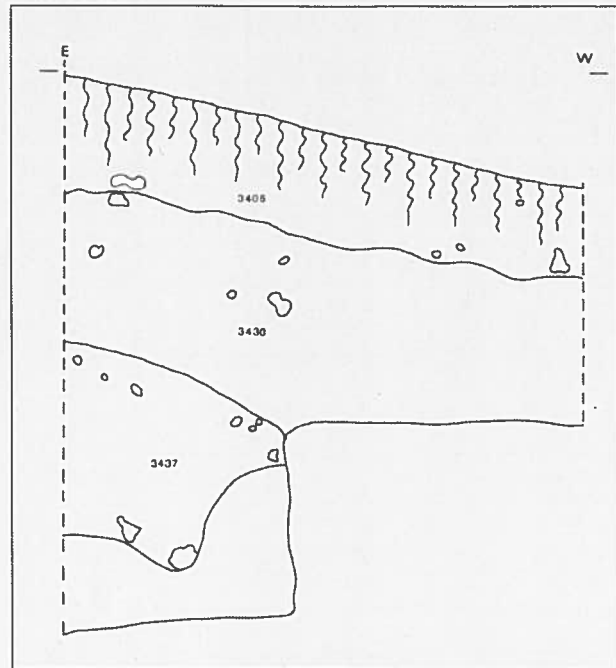


Figure 4: Section drawing of Test Pit 5 (1991). Context 3437 probably represents a former pipe trench with shallow gully for a section of clay field drain pipe (BU 057 WF Sub-site VI, TP 5, Sheet 401, Section 273).

The Old Orchard excavations were inconclusive but it should be noted that this area is interrupted at its west end by the Kitchen Garden which is known to contain archaeological features (see above).

Archaeological Evaluation and Watching Brief, 1997

In 1997, the new owner's aspirations to develop the Woolcombe farmhouse site prompted an archaeological evaluation (targeted excavation) and a watching brief in response to the requirements of the planning process. These investigations were contracted out to Bournemouth University (Hewitt 1997a; 1997b). The following paragraphs in this section are a precis of the principal results of these limited field programmes. Trenches A, B, and C were all set out to the north-east of the farmhouse in an area that was the proposed site of a pond (Fig. 2). Context and feature numbers are given in brackets as appropriate (see also Table 2). Feature numbers are prefixed by the letter 'F'.

Trench A (Figs 2 and 5)

Trench A measured 10.0 m x 1.2 m and was set out north-south. A sandy loam topsoil (001) sealed a sticky subsoil of mixed Upper Greensand, clay and weathered

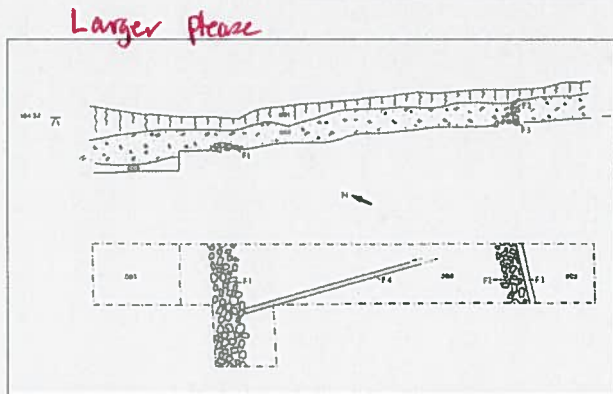


Figure 5: Trench A (1997) west-facing section and plan. F1 and F2 are Type 1 field drains, F4 is a Type 2 drain and F3 a Type 3 drain. Context 003 is organic material at the base of the sondage (Hewitt 1997a, 28)

flint fragments (002). Within this mixed deposit, chalk rubble drains (F1, F2) were visible running east-west across the trench in two places (hereafter Type 1 drains). Undisturbed drains of this type were found to be in working order when sectioned. At right angles to the Type 1 drains, a second drainage system had been laid out made up of continuous sections of ceramic pipe of a buff to cream fabric (F4). Each drain section measured *ca* 300 mm long x 110 mm wide, the bore being 80mm. The fabric of the pipe contained grog inclusions and these are referred to here as Type 2 drains. The southerly (up-slope) Type 1 drain had been disturbed and apparently replaced by a ceramic pipe drain of a different sort (Type 3). This time the fabric was a consistent orange colour and much harder than Type 2. Dimensions measured as 300mm x 130 mm, 96mm bore (F3). The action of laying-out this drain had disturbed not only the southern chalk drain but also the adjoining Type 2 arrangement, some of which had been removed. A *sondage* was cut into the subsoil which revealed a layer of saturated organic material that consisted of tree roots and other plant remains. (Hewitt 1997a, 15-16).

Trench B (Figs 2 and 6)

This trench (10.0 m x 1.2 m) lay parallel with, and west of, Trench A but approximately 3.0 m further to the south. The topsoil (011) was identical to that of Trench A but towards the south it contained a concentration of unabraded *ca* late eighteenth- or early nineteenth-century potsherds of Verwood type, most of which had an internal green lead glaze. These sherds represented more than one pot. The subsoil was also similar to that encountered in Trench A, and it sealed

a section of Type 1 drain near to the mid-point of the trench continuous with the northern section of Type 1 drain in Trench A (F12). The Type 1 drain had been disturbed and over-laid by a Type 3 drain (F13). A Type 2 drain (F11) ran north-south along the trench but was absent from the southern third of the cut (Hewitt 1997a, 16-17).

Trench C (Figs 2 and 7)

Trench C lay south of B and parallel to it but was 1.0 m shorter in length. The topsoil (021) remained consistent with that of the other trenches and contained a few fragments of pottery similar to that described in Trench B. The course of the southern Type 1 chalk rubble drain was found to continue from Trenches A and B, but in Trench C it appeared to be undisturbed by Type 3. At the north end of the trench, the usual subsoil gave way to a cleaner version of Greensand with flints (024). A *sondage* at this point revealed that context 024 sealed a deposit of organic material (025) similar to that noted in Trench A (Hewitt 1997a, 17).

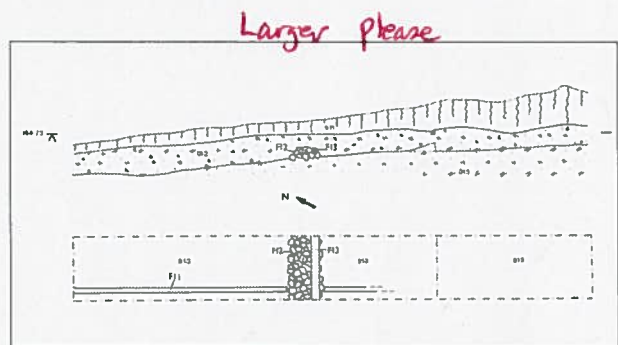


Figure 6: Trench B (1997) west-facing section and plan. F11 is a Type 2 drain, F12 is Type 1 and F13 Type 3 (Hewitt 1997a, 29).

Trench D (Figures 2 and 7)

Measuring 2.0 m (north-south) x 0.5 m, this trench was cut into the reduced northern earthbank boundary of the Old Orchard (F31). The purpose of the trench was to produce dating evidence for this boundary feature and consequently only the south side was excavated. The boundary material was a silty clay loam which contained four abraded sherds of medieval pottery and post-medieval green bottle glass. This pattern of mixed period finds was repeated throughout the soils that were sealed by the bank material. In the last of these layers (033) post-medieval bottle glass, animal bone and a gun flint were associated with a

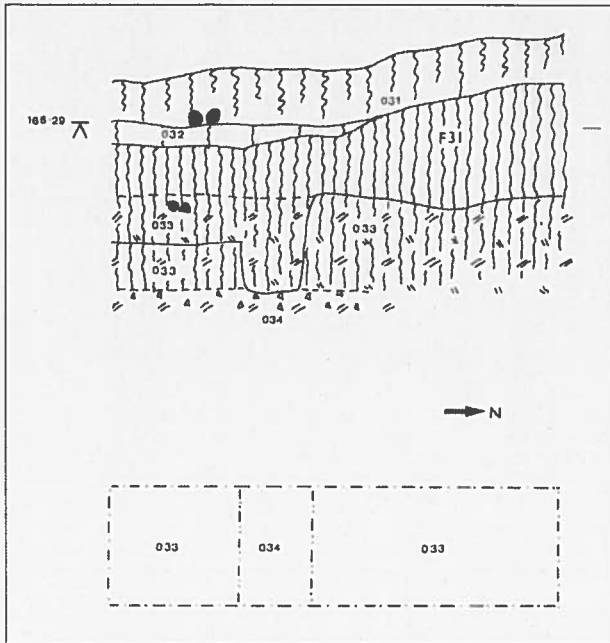


Figure 7: Trench D (1997) east-facing section. F31 is the earthbank. An apparent cut into context 033 might represent the source of the bank material (Hewitt 1997a, 31).

single fragment of medieval sandyware. This mix of materials of various periods suggests a post-medieval date for the bank. Beneath context 033 was a natural layer of Upper Greensand with sharp weathered flints (034) similar to that observed in Trenches A, B and C (Hewitt 1997a, 17-18).

Trench E (Figs 2 and 9)

Trench E was set out on the eastern edge of the former Kitchen Garden (Fig. 2). In 1991, Bournemouth University had excavated a Trench and five test pits in this area, then designated Subsite 6 (Hunt, 1992, 13; 1992b, 176; BU archive 057 site notebook 1991, 21-22). Features identified in Test Pits 3 and 5 had been tentatively dated as prehistoric on the evidence of flint debitage that was associated with a ditch (Hunt 1992b, 176; Figs 3 and 4). In order to clarify this issue, Trench E was located on a north to south slope, east of the 1991 Test Pit 5 (Fig. 2; Hewitt 1997a, 18).

In the southern (up-slope) area of Trench E the topsoil sealed a residual subsoil which in turn, covered a packed layer of sharp flint. The flint fragments had been formed by weathering, but were too sharp (unworn) to represent a trackway or house floor. Removal of a sample of this flint material to a depth not exceeding 0.1m revealed undisturbed Upper Greensand/clay below. Down-

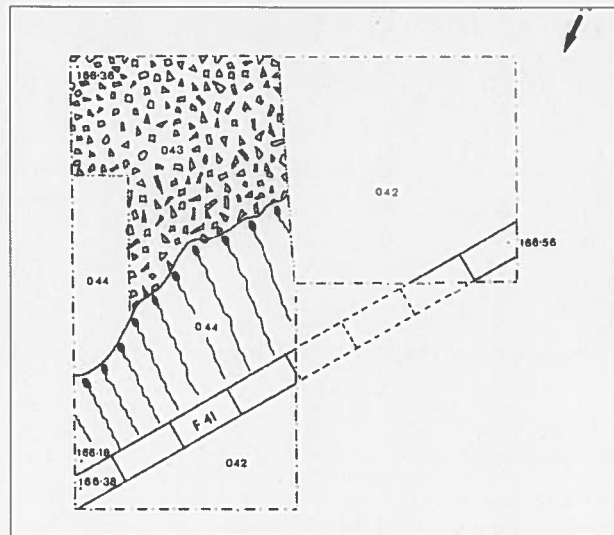


Figure 8: Trench E (1997) plan. F 41 is a Type 3 field drain that lies within a drainage trench. Context 043 is a layer of natural flint gravel that has been cut by the drainage trench (Hewitt 1997a, 32).

slope (northwards) was a distinct north-east / south-west boundary of the flint layer where this horizon had been cut away. This interruption represented the edge of a north-east/ south-west ditch within which lay a Type 3 field drain (F41). It was apparent that the course of the ditch also crossed into the former Test Pit 5 of 1991 and therefore the feature in the 1997 Trench E is identical to the ditch noted there six years earlier (Hewitt 1997a, 19).

The Farmhouse, east range watching brief

In 1997, development of the farmhouse included the demolition of a 1980s bottling plant at the north-east end of the farmhouse range. Demolition work revealed that part of the north-east elevation of the farmhouse byre which previously had been obscured by the bottling plant (Fig. 10). The wall of the byre was of generally poor construction below the gable, and significant cracks were in evidence that had required the construction of a brick buttress to prevent collapse. This south-east wall had been partially rebuilt on at least one occasion. The south quoin comprised various materials from brick at the base to dressed stone and finally irregular stones near to the wall cill (Hewitt 1997b, 10 and 12).

Construction of a new residential extension on the site of the bottling plant entailed the removal of its concrete floor and this revealed a layer of modern

identified

building rubble into which was cut the foundation trenches for the new building. At 167.15 m AOD, the digging of the foundations revealed a ceramic field drain (Type 3). This drain ran from the brick buttress of the byre north-eastwards towards the Woolcombe stream (Fig. 11). Sections of the drain were missing and it is probable that these were removed during the construction of the bottling plant. At Lower levels, and down to foundation base (166.63m AOD), the soils were much disturbed; Upper Greensand predominated, but continuous natural horizons were hard to find. There was a paucity of artefacts, these being limited to two out-of-context, unabraded sherds of green glazed post-medieval pottery (Hewitt 1997b, 11).

As part of the recording process, a 24.0 m base line was extended eastwards from the south-east corner

of the farmhouse. Along this line, levels were plotted at 2.0 m intervals from zero (platform at 166.63m OD). This procedure revealed the contours of a building platform upon which the demolished bottling plant had been constructed (Fig. 12). Beneath this platform, was undisturbed Upper Greensand that was heavily waterlogged. These wet conditions had preserved the remains of an arrangement of eight hardwood posts, typically, *ca* 0.25 m in diameter, though numbers 6 and 7 measured not much more than 0.15 m. These posts were observed within the foundation trenches only; similar posts are likely to have been concealed within unexcavated areas of the building footprint. Three of the stumps were removed from their post-holes and found to be *ca* 0.3m in residual length (Fig. 13 numbers 2, 6 and 8). The posts had been packed into their holes with chalk lumps, perhaps



Figure 9: The east elevation of Woolcombe farmhouse in 1997 showing the ground floor byre wall. The white-painted area to the right of the downpipe and window represents the area adjoined by the former bottling plant. This part of the wall seems to have been made good and it is supported by a brick buttress (Bournemouth University).

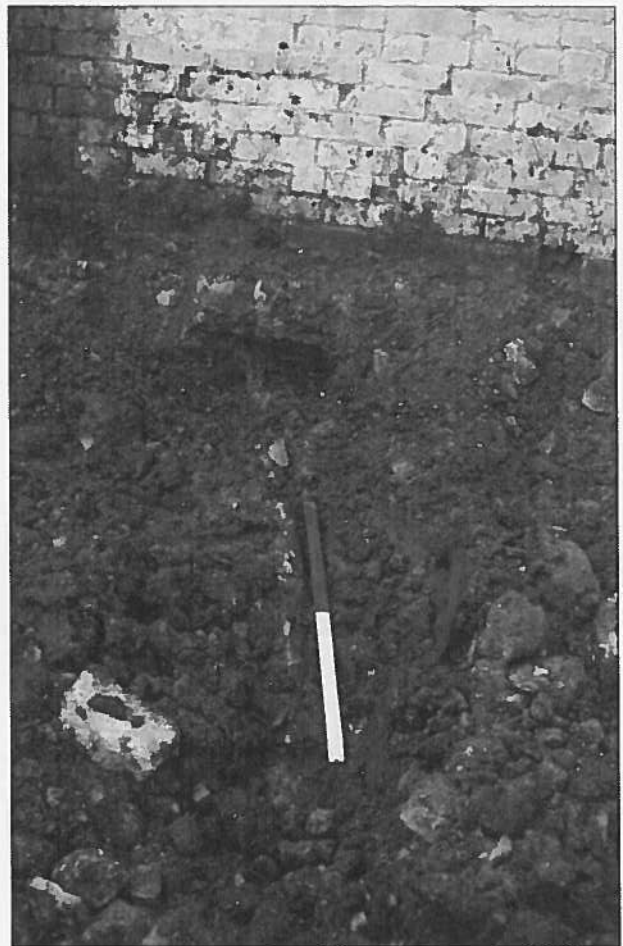


Figure 10: Site of bottling plant (1997). The course of the Type 3 field drain is visible to the bottom centre of the photograph (Bournemouth University).

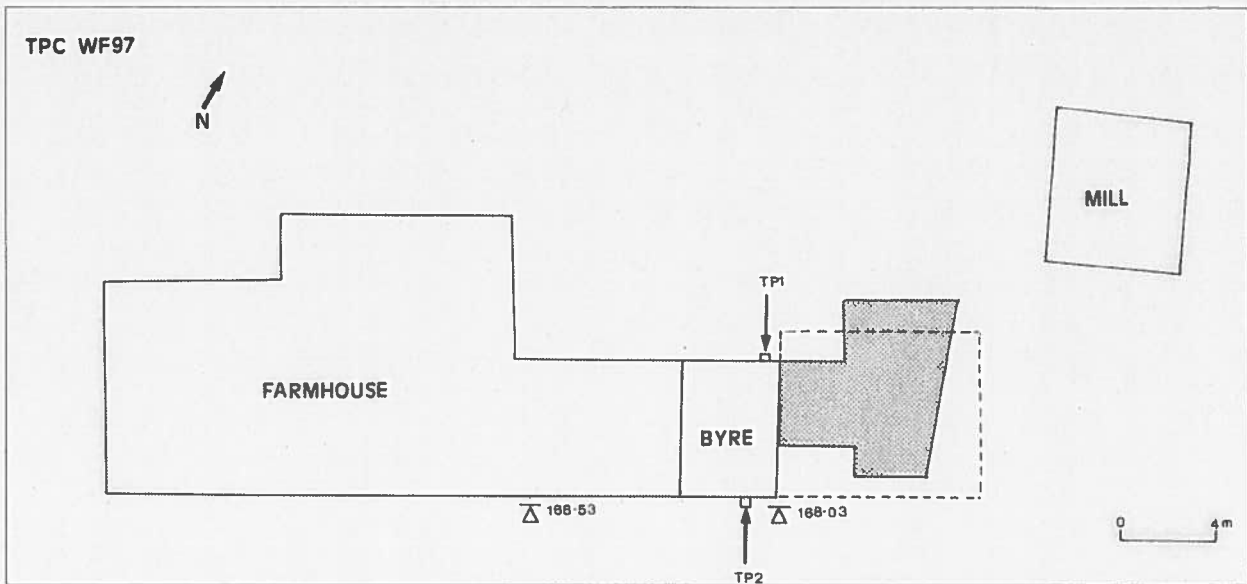


Figure 11: Footprint plan of Woolcombe farmhouse (1997). The site of the bottling plant is shaded, the dashed line shows the approximate area of new building foundations (see Figure 12) (Hewitt 1997b, 19).

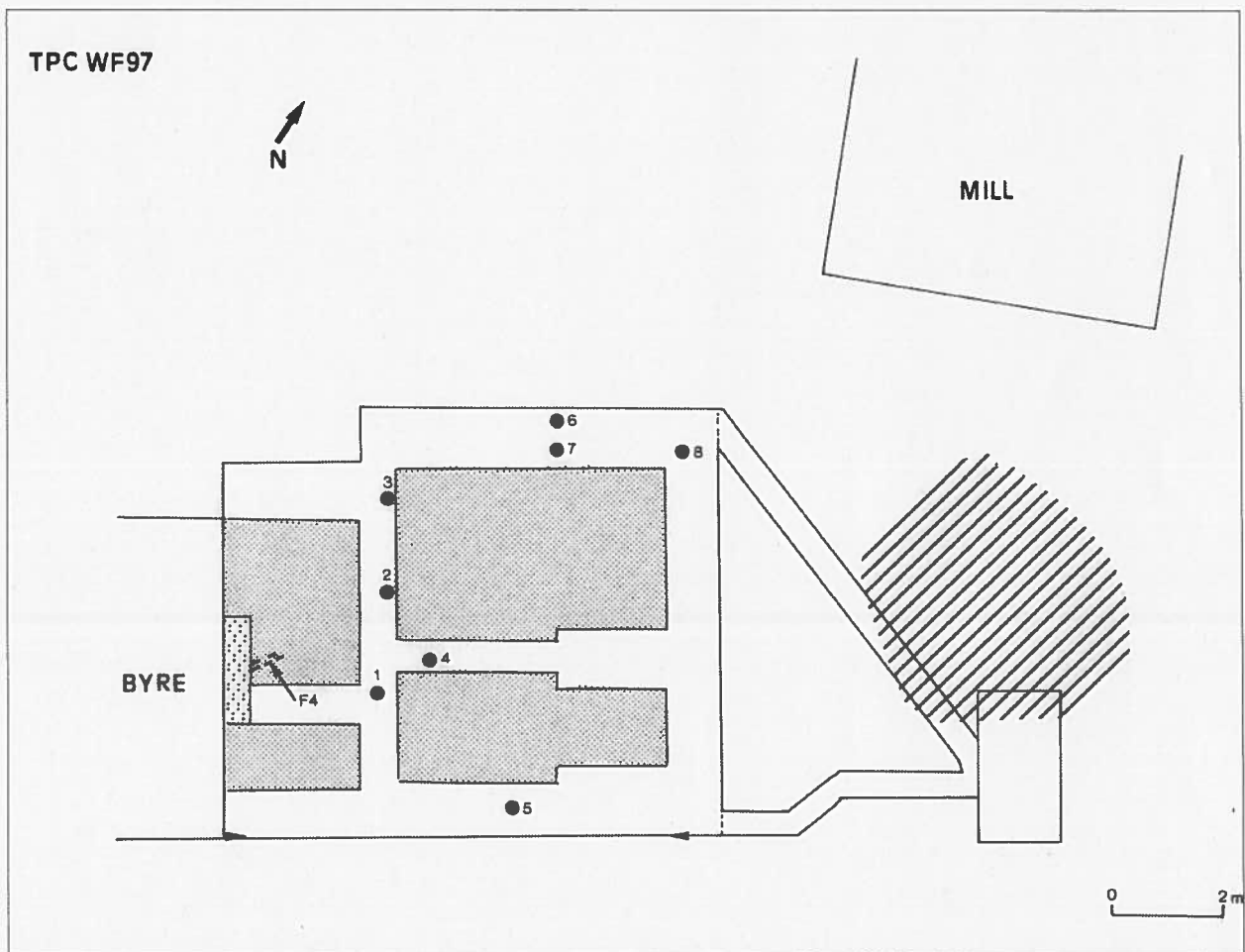


Figure 12: Woolcombe farmhouse (1997) plan of new foundations on bottling plant site. Numbered dots 1 to 8 are the locations of the remains of hardwood posts within the new foundation trenches. F4 is a Type 3 field drain. The shaded zone to the right is the site of a former cess pit (Hewitt 1997b, 20).

sourced from a disturbed Type 1 field drain. The packing of post 6 included a sherd of green glazed post-medieval pottery sealed at sufficient depth as to preclude any possibility that it was intrusive. The visible tops of the stumps were rotten and fibrous (Fig. 14). Further inspection revealed that the posts were fashioned from axe-felled tree trunks with little attempt at finish other than the removal of branches and shoots. The post-holes had been cut into the natural Upper Greensand and, for general reference, the base of number 2 was measured as being 166.36m AOD (Hewitt 1997a, 11-12).

The groundworks confirmed that the demolished bottling plant sat on an artificial platform that comprised modern building rubble and loamy re-deposited soils, possibly associated with the former Kitchen Garden.



Figure 13: The bottling plant site (1997). Two of the remnant hardwood stumps (Figure 13 nos 2 and 3) can be seen within the new foundation trench (Bournemouth University).

Discussion Of The Archaeological Evidence

Woolcombe Farmhouse: the environmental context

The Woolcombe stream rises to the west of the farmhouse and follows a course that lies within 25 m to the north. From here the stream, continues eastwards through the Woolcombe Withy Bed (Fig. 2). The soils in this valley or coombe include Head Clay and this combination of heavy soils and spring water make for generally wet conditions that have presented a challenge to those who have farmed at Woolcombe. The excavated evidence from Trenches A, B and C included deposits of organic material which suggests that the Woolcombe Withy Bed once extended further to the west, towards the farmhouse. Indeed, it is possible that the site of the farmhouse was the result of clearing the withy bed in order to create a settlement site (an assart). Given these conditions, a medieval moated site of Wilson's 'valley moat' class would have been a logical consequence of a settlement of gentry status in this location (1985, 12). However, fieldwork to date has revealed no evidence of a moat. Nonetheless, water management must have been a high priority for the medieval and later tenants of Woolcombe. The evidence of this need for water management is described in the paragraphs that follow.

Building platforms

Woolcombe farmhouse stands upon an earthen platform that is probably of medieval date (Hunt 1987, 187). This platform has been traced to the north-west through to north-east of the farmhouse. The 1997 excavation and watching brief also established that a platform was constructed to accommodate the construction of the 1980s bottling plant although this later platform was of rubble construction. This late example of a building platform exemplified the need for such features in a wetland environment: beneath the concrete floor of the bottling plant and the rubble building platform was found a stretch of Type 3 field drain sections. Below the Type 3 drain was an arrangement of eight wooden posts that were preserved in a waterlogged anaerobic environment. These posts represented the remains of a building that was not constructed upon a platform and which may have been prone to rot as a consequence. Building

platforms were created to prevent, or limit, an ingress of water into the building above and this principle is well demonstrated by the archaeology at Woolcombe farmhouse.

As late as 1902, the cultivation of cider apple trees occupied The Old Orchard and beyond into an area north and west of Woolcombe farmhouse and north of the Woolcombe stream (Landmark Information Group, County Series 1:2500 1902). The management of apple cultivation in waterlogged soils was potentially problematical and the creation of flat terraces upon which the trees were planted may have been a response to this challenge. Three examples of these terraces were examined during the course of the excavation of Trenches A3 and Hunt V and none produced evidence of occupation which seems to confirm their function as horticultural features. Neither of these trenches produced evidence that determined whether any of the Old Orchard terraces pre or postdated the three types of field drain schemes (see below), consequently it is not possible to suggest a relative date for their construction.

Field drainage schemes

In simple terms, the need for field or under-drains was to reduce or control the moisture content within the soils. In 1997, field drainage schemes of Woolcombe Types 1 to 3 were identified in Trenches A, B, C and E and it was clear from the excavated evidence that none of these underdrainage types was mutually contemporary in date. The excavation within a single trench of three field drainage types is rare. It is herefore ^{therefore} important to understanding the the Woolcombe site that dates should be attached to each of these types of field drain.

Type 1 drains, chalk-filled trenches, were the most primitive form of field drain to be identified at Woolcombe. The chalk fill of the Type 1 drains would have been available from the several chalk pits that have been identified to the north and west of the farmhouse (Table 1). These early chalk field drains belong to a group of similar types that are generally referred to as 'hollow drains' examples of which include trenches filled with faggots, stones, shells and gravel (Anon March 1974, 3). Armitage *et al* give details of drainage



Figure 11: Footprint plan of Woolcombe farmhouse (1997). The site of the bottling plant is shaded, the dashed line shows the approximate area of new building foundations (see Figure 12) (Hewitt 1997b, 19).

trenches filled with horn cores which they date to the seventeenth or eighteenth centuries (undated, 408-12). If the Type 1 Woolcombe drains are ascribed a similar date range, then it is feasible that they belong to the seventeenth century when the present farmhouse was built (RCHM(E) 1952, 253). For field drains to work effectively it is necessary for them to deliver the excess water from the fields to a stream or artificial water course that removes the water from the site. Straight water courses fulfil this function with the greatest efficiency and for this reason meandering natural streams were usually straightened (canalised) in order to produce the desired effect (Smith 2013). Figure 2 illustrates that the Woolcombe stream was canalised just below the cider mill (SB4) to the north of Trenches A, B and C.

It should be noted that the Austin family had observed chalk walls 'at no great depth' in the Kitchen Garden (Hunt 1985, 157 and 159, Table 2, Site 3; Hunt 1992, 176). Here it is argued that what the Austins had seen was Type 1 chalk field drains that run straight and would be easily mistaken for walls. Re-examination of the 1991 excavation photographs has revealed the course of a probable chalk rubble drain (Type 1) in Trench I, just a few metres east of the farmhouse (BU Archive 057 Sub-site V1 (6); Fig.14).

Type 2 and Type 3 field drains can be broadly dated with more certainty. Clay field drains of several types were produced and an illustrated inventory of many of the available forms has been produced (Ministry of Agriculture Fisheries and Food undated). In 1845 Thomas Scragg invented a machine for extruding clay into cylinder pipe forms for kiln firing (Robinson 1986, 79). Woolcombe Type 2 drains were not, with certainty, extruded and this type of drain, being hand-formed, more comfortably belongs to the first decades of the nineteenth century. Statutes of 1826, 1839 and 1840 exempted from duty 'bricks' that were made expressly for land drainage provided that each item was stamped DRAIN (Anon. March 1974, 3). The Type 2 drains were not stamped therefore suggesting that they predate the 1826 statute.

Type 3 field drains were formed by machine extrusion. Although unstamped, duty was no longer chargeable after 1850 (Anon. March 1974, 3). Taking these details into account, it is reasonable to suggest a *terminus ante quem* of 1850 for the Type 3 drainage

scheme. Agricultural depression from ca 1890 to the 1930s brought about a decline in the laying out of new field drainage networks (Robinson 1986, 79) which suggests that Type 3 Woolcombe field drains are not later than the end of the nineteenth century. It was a series of Type 3 drain cylinders that sealed the setting of wooden posts that was discovered beneath the floor of the bottling plant. A working hypothesis is that the posts represent the former location of a cart shed or general purpose store that was destroyed when the Type 3 drains were laid out.

Drainage trenches

Regardless of drain type, underdrainage schemes required linear trenching in order to facilitate the laying out of the hollow drain fill, such as chalk, or for the clay drain pipes. Such trenching creates a distribution of upcast which, in the case of Woolcombe, would have included gravel and Upper Greensand. Distributions of these materials were noted during the excavation of Trench A (context 2), Trench B (context 12) and Trench C (context 034). In all cases, these deposits were associated with field drainage trenching. The findings in Trench E were similar but here the profile of a drain trench was also noted (Fig. 9).

'Redeposited Greensand' was also noted during the excavation of Trench VI in 1986 where it was associated with a 'narrow chalk wall' (Hunt 1987, 187). In the light of the evidence from the 1997 evaluation, an alternative interpretation is that the features noted in Trench VI represented a chalk field drain and upcast derived from the digging of associated drainage trenches.

Earthbank boundaries of the Old Orchard

It is not clear whether or not the two earthbank boundaries within The Old Orchard were a feature of the post-medieval wetland management scheme. The constraints of the archaeological evaluation brief did not allow the time or resources for detailed excavation of either feature and examination was limited to the earthbank section in Trench D. Finds sealed by the bank material indicated that the feature dated to the seventeenth century or later, but it was not possible to determine whether the two earthbanks sealed or were cut by any or all of the three field drain types. Had this been the case, then a relative date for the earthbank could have been suggested.

Metalled surfaces

In 1997, two features were prominent in Trench E; an horizon of sharp flints and a field drainage system. The layer of flints is natural gravel (Natural Environment Research Council 2016) but it was cut through and the spoil redeposited when field drains were laid. This flint layer has been noted in earlier excavations in the Kitchen Garden area (Sub-site 6) where, in Test Pit 3 (context 3416), it was described as a possible metalled surface. It is probable that it was this natural deposit of flints that was recorded in Trench I, Subsite 6 (1991), as a 'roughly metalled surface of flints' (BU Archive: WF91; Sheet 396, Section 271, context 3416; Fig. 14). This surface had been cut by a drainage ditch, an observation also made during the 1997 excavation of Trench E. It is also clear that the ceramic field drain in the nearby Trench E (Fig. 9) crossed into the 1991 Test Pit 5, and probably into Test Pit 3 too. In both cases the edge of a ditch feature was observed. In fact, the section drawing of Test Pit 5 (BU Archive 057, Sheet 401, Section 271) shows a scoop in the natural of just the right size to accommodate a length of 130mm diameter pipe (Fig. 4). In places where the natural gravel had been disturbed by digging, the loosened and redeposited stones had the potential to resemble flint scatters that were variously interpreted.

Conclusions

The 1997 evaluation and watching brief demonstrated that the land broadly to the east of Woolcombe farmhouse was a spring-fed wetland

with water management features that can be dated to the seventeenth century and later. Evidence for medieval settlement is scarce and essentially limited to occasional potsherds that are without meaningful context. Since archaeological investigation in this area of the former farm holding is more limited than in Lower Bottom to the west of the farmhouse, it is important to re-evaluate such evidence as is available in order that it might serve to inform any future opportunities to carry out fieldwork at Woolcombe.

The Woolcombe Kitchen Garden (Fig. 2) was a comparatively late enlargement of a smaller garden plot. The County Series 1: 2500 map shows that the extended garden, which included much of Alan Hunt's Subsite 6 and the 1997 Trench E, did not exist until the early twentieth century or later. Therefore, the greater part of the Kitchen Garden had once formed part of the Old Orchard and, as a result, it had been disturbed by Type 3 field drains as revealed by Alan Hunt's test pits 3 and 5, and confirmed in 1997 by Trench E.

The archeological evaluation and watching brief of 1997 made a small but important contribution towards understanding the settlement and land use history of Woolcombe Farm. However, this limited fieldwork programme does not clarify the pattern of medieval settlement in Lower Bottom, to the west of the farmhouse which, in the context of Dorset, remains an important medieval site that awaits further research and field investigation opportunities.

Table 1: Chalk pits and other principal features in the vicinity of Woolcobe farmhouse, Toller Porcorum

<i>Feature</i>	<i>Direction from Woolcombe farmhouse</i>	<i>Linear distance from Woolcombe farmhouse</i>	<i>OS 10-figure map reference</i>
Chalk pit	North-east	122.54 m	SY 55629 95458
Chalk pit	South-south-west	195.36 m	SY 55292 95246
Chalk pit	South-south-west	195.74 m	SY 55471 95238
Chalk pit	West	439.01 m	SY 55024 95163
Chalk pit	West	463.06 m	SY 55026 95123
Lime kiln	North-west	166.96 m	SY 55297 95438
Spring	West	62.7 m	SY 55329 95397
Pond	West	31.32 m	SY 55359 95403

Table 2: Woolcombe excavation contexts 1997 (Hewitt 1997a, 42)

Context	Description	Trench
001	Topsoil	Trench A
002	Clay/Greensand/flint	Trench A
003	Organic material	Trench A
011	Topsoil	Trench B
012	Clay/Greensand/flint	Trench B
013	Greensand	Trench B
021	Topsoil	Trench C
022	Silty loam	Trench C
023	Clay/Greensand/flint	Trench C
024	Greensand/flints	Trench C
025	Organic material	Trench C
031	Topsoil	Trench D
032	Sandy loam (same as 022?)	Trench D
033	Clay loam	Trench D
034	Greensand/flints	Trench D
041	Topsoil	Trench E
042	Silty clay?	Trench E
043	Flints	Trench E
044	Greensand/clay	Trench E

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Toller Porcorum: a post-medieval 'wetland' management landscape at Woolcombe

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