# EXCAVATION OF A MEDIEVAL SITE AT WEST WICK, WESTON-SUPER-MARE, SOMERSET

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SUMMARY

Excavations at West Wick, Weston-Super-Mare revealed two main phases of archaeology dating to the 11th and 12th centuries and the 16th to 19th centuries respectively. The earlier medieval activity comprised a sequence of intercutting ditches, a series of pits and a large pond-like feature. Artefactual and ecofactual evidence point towards small-scale specialised pastoralism and potentially seasonal salt working on the site, the latter previously unrecognised from this period in Somerset. Following a significant period of abandonment the site was reoccupied in the post-medieval period, when a series of drainage ditches predate the construction of two low-status farmhouses.

## INTRODUCTION

Oxford Archaeology carried out an area excavation at West Wick, Weston-Super-Mare, Somerset, centred on NGR ST 371618 adjacent to Summer Lane (Fig 1). The work was carried out in advance of development in August and September 2006, on behalf of CgMs Consulting Ltd for Persimmon Homes (South West). The excavation focused on an area identified as a zone of potential interest by trial trenching carried out by OA in March 2005. A summary of the evaluation results precedes the main site description below.

### Geology and topography

The site is located in the Somerset Levels, and more specifically the North Marsh, *c*. 100km² of low lying ground near Weston-Super-Mare, in North West Somerset. The area is predominantly surrounded by undulating foothills and incorporates a series of minor bedrock islands (Rippon 2004, 116; 2006, 8). The geology of the area mainly comprises a 20m deep sequence of intercalated peat and silty clay alluvium deposited during the post-glacial rise in sea level; surface deposits comprise poorly draining grey/brown silty clays of the Upper Wentlooge Formation, deposited in a mudflat/saltmarsh environment (Rippon 1994, 71; 2006, 8). The site is relatively flat at *c*. 5.5m aOD and the water table is high and was generally encountered at *c*. 1m below current ground level. The area as a whole is protected from flooding by an extensive and complex system of embankments and drainage ditches (Rippon 2004, 116). The site was specifically divided into a number of pasture fields bounded by hedgerows and water filled rhynes (drainage ditches). Several derelict farm buildings had been demolished prior to the commencement of work and demolition debris in addition to fly-tipping had substantially built up the ground level of much of the site. In places therefore the overburden was up to 1.2m deep.

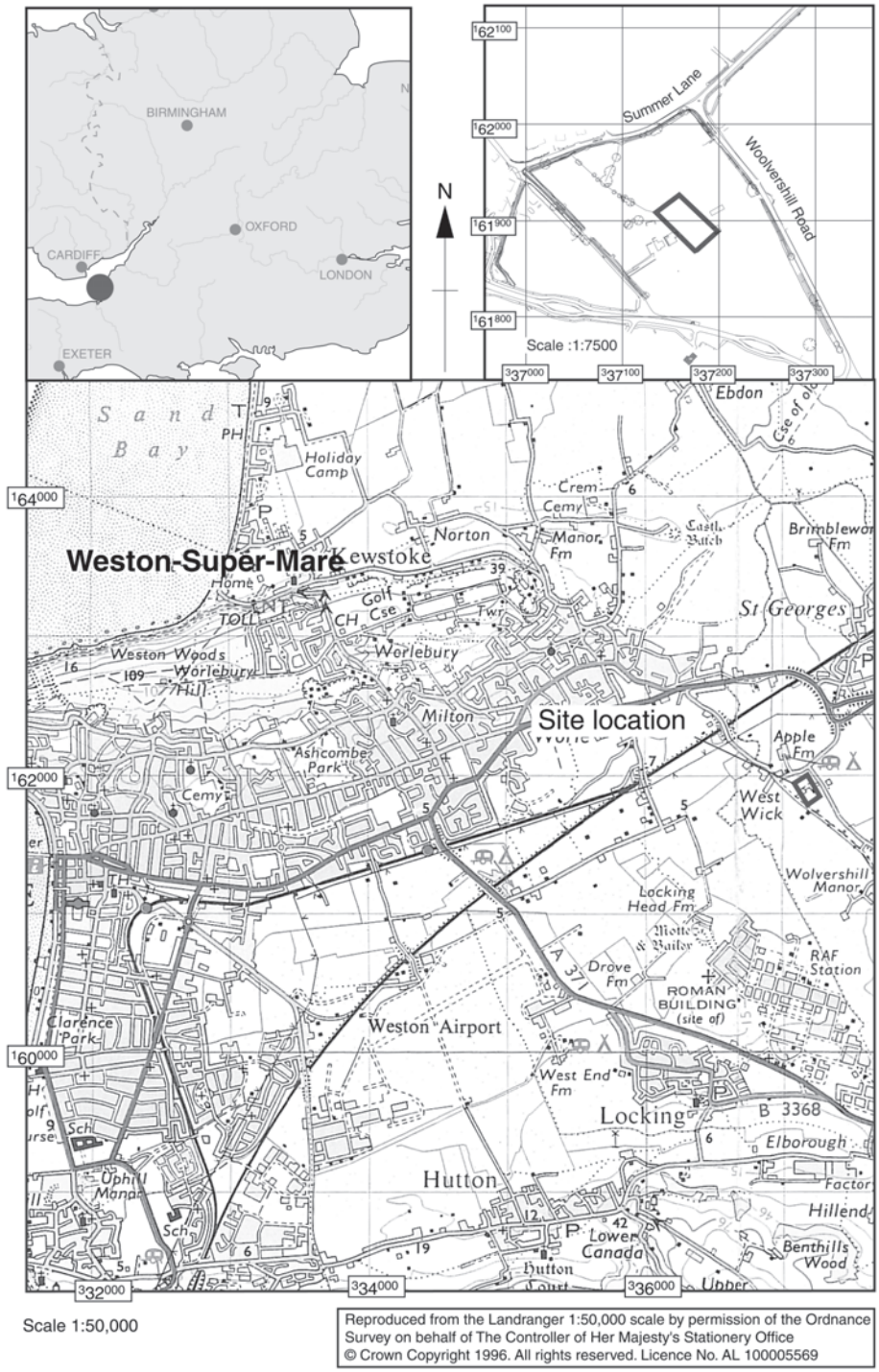


*Fig. 1 Site location*

**Archaeological and historical background**

In the wider environs of the site there is evidence of human activity as far back as the Neolithic. In particular, Neolithic flint tools and Iron Age burials have been discovered on Worlebury Hill, an outcrop of the limestone which forms the main mass of the Mendips. The feature is most well-known for its Iron Age hill fort, after which it is named. However, archaeological investigations indicate that in the area around West Wick and similar low-lying areas, prehistoric activity is likely to be sealed by peat deposits or alluvium at considerable depth below present ground level.

Recent archaeological investigation and survey work in the general vicinity of Weston-Super-Mare and specifically, West Wick and St Georges (eg Clarke 1998; Burchill 2000; Cotswold Archaeological Trust 2002a, b and c; Ducker 2002a and b; Jordan 2002; Young 2002; Lankstead 2003; Cox and Lankstead 2004) has indicated that two horizons of Iron Age and Roman activity exist at a depth of *c.* 0.3m–1.5m from present ground level. Features uncovered include ditches, ground surfaces and slots containing occupation material. At West Wick bypass, although no buried ground surface was discovered, a linear gully and two oval shaped features were sealed by 0.3–0.9m of alluvium (Ducker 2002a).

The Somerset Levels were predominantly salt marsh and intertidal mudflats in the Iron Age. However, in the Roman period when sea levels were naturally low, reclamation generally took place in the context of prosperous villa estates (Rippon 2006, 277) including Wemberham, Locking, Banwell and Congresbury. Roman occupation of the North Somerset Levels comprised loose clusters of farmsteads based upon slightly raised platforms and small paddocks or enclosures set amongst larger fields (ibid., 72–3). Settlements were engaged in arable cultivation and animal husbandry, dominated by cattle and in the area including West Wick and St Georges there are at least four sites per square kilometre (ibid., 72, 76).

Salt production was key to the economy of the area during the Roman period and the Brue Valley was left in its intertidal state and used for this purpose (ibid., 75).

A large early Roman salt manufacturing industry has been recorded in the vicinity of St George village *c.* 1 mile to the north-east of the current site. At the end of the Roman period sea levels once more rose and most of the Levels was abandoned or saw a period of decline, much of the land reverting to salt marsh and mudflats. In Somerset as a whole evidence suggests some Roman sites continued to be occupied, while others were abandoned (Aston and Lewis 1994, 4).

The Somerset area as a whole had become part of the kingdom of Wessex by the late 7th century, its growing importance signalled by the religious house at Glastonbury, established in the 7th or 8th century, and the late Saxon palace at Cheddar. On a local level the early church at Wells became a cathedral in 909 creating a powerful ecclesiastical centre, and monasteries also developed at Congresbury and Banwell. The region surrounding West Wick and more generally the North Marsh appears to have been divided between the two latter estates in the early medieval period but had begun to fragment into a series of smaller manors by the 11th century (Rippon 2006, 95). Evidence for smaller settlements in the period 400–1100 is scarce (Aston and Lewis 1994, 11). The North Marsh underwent a period of genuine 'dark age' after the Roman period (Rippon 2006, 85) with re-colonisation beginning around the 10th century (ibid., 81). The Domesday survey of 1086 indicates that reclamation was being undertaken on the North Marsh at that time but does not mention West Wick itself.

West Wick was known to be within the manor of Banwell, in turn within the hundred of Winterstoke. There is some confusion as to who owned the manor of Banwell prior to the 11th century (ibid., 132) but sometime between 1016 and 1033 the land was granted by Cnut to a royal priest, Dudoc, who became Bishop of Wells in 1033. With the exception of brief seizures by Earl Harold in 1060 and the Duke of Somerset under Edward VI, both resulting in crown ownership, the land remained the property of the Bishop of Wells (later the Bishop of Bath and Wells) until the late 18th century.

Written evidence suggests considerable expansion in the rural economy in Somerset from the 11th to the 13th centuries (Aston and Lewis 1994, 8). The name of West Wick is typical of the late Saxon reoccupation of the North Marsh – 'wick' often indicating farm sites associated with known Romano-British settlements (Aston 1994). However, the relative depth of Roman remains in the surrounding area makes this unlikely at West Wick, where the medieval landscape was in essence created on a 'clean slate' (Rippon 2006, 8). It is possible that 'wick' refers to a specialised dairy farm (Cameron 1996, 27). During the medieval period the landscape around the site was probably a patchwork

of arable, meadow and pasture land with extensive areas of low lying moor, West Wick itself lies between higher coastal marshes and low-lying backfens, part of a fragmented tenurial structure with small, loosely nucleated hamlets and occasional isolated farmsteads (Rippon 2006, 105, 122).

Reclamation continued and increased throughout the medieval and post-medieval periods with construction of low embankments and, finally, sea walls. By the 16th century Banwell had been broken down into tithings. West Wick was in the tithing of 'le Marsh' which also encompassed St Georges, Waywick, and East and West Rolstone. In the later medieval period a settlement known as West Wick Green is recorded in the vicinity of the site. By the 19th century St Georges, Waywick and West Wick were characterised as hamlets with a degree of interspersion with each other, suggesting they represent the subdivision of once larger tenements. In 1815 the excavation area was the site of two farmhouses. A series of agricultural buildings demolished to either side of the area, prior to commencement of work were thought to be the remains of these structures.

Since the 18th century the landscape has been transformed as Weston-Super-Mare developed into a coastal resort, a process accelerated by the arrival of the railway in 1841. The town remains a seaside resort and West Wick has been incorporated into its eastern edge.

**Summary of evaluation results**

Evidence from the evaluation included medieval ditches and gullies, a pit and possible oven or hearth structure and post-medieval ditches and pits. Pottery evidence indicated that two main phases of activity were represented on the site, within the ranges of the 10th to the 14th centuries and from the 16th to the 19th centuries.

**Excavation methodology**

Based upon the results of the evaluation an area of approximately 2275m² was subject to an area excavation. The overburden of topsoil and debris was removed using a mechanical excavator under close archaeological supervision, and the exposed archaeological features were cleaned by hand and digitally mapped using a Total Station. An appropriate sample of the features was excavated by hand and recording followed procedures laid down in the Unit manual (Wilkinson 1992). The derelict farm buildings were recorded using black and white film and digital photography prior to their demolition.

**Phasing**

The chronological phasing of the archaeological deposits is set out below. It was based on a combination of the recorded stratigraphy, spatial relationships and dating of the finds, principally the pottery.

| | |
|---|---|
| Phase 1 | 11th–12th century |
| Phase 2a | post-medieval undated |
| Phase 2b | 16th century to 19th century |

RESULTS

Overall the excavation revealed two main phases of activity, approximately dated through pottery analysis to the 11th and 12th century and post-medieval period respectively (Fig. 2). The majority of excavated features on the site were ditches, though a group of pits and gullies was present in the southern half of the site. Overall the clarity of the archaeological remains was very diffuse across the excavation area. Most contained clay fills similar to the natural, although in general the fill of the post-medieval ditches was darker. In addition, post-medieval ploughing had truncated many of the features.

The site can be divided into two areas based on the layout and nature of the archaeological features. In general some stratigraphy is apparent in the northern half of the site and the archaeological sequence can largely be reconstructed. However in the southern part of the site these relationships are not so clear and phasing is often only indicated by artefact dates and spatial relationships.

**Phase 1 11th–12th century**

Phase 1 comprised a number of features with stratigraphical relationships suggesting differing stages of activity. However, dating evidence indicates these features all fall within the 11th–12th-century date range; the lack of distinct relationships between some features means it is not possible to distinguish clear sub-phases. As a result the features will be discussed together and temporal relationships highlighted where possible.

The stratigraphically earliest feature on the northern half the site appeared to be a large, irregular

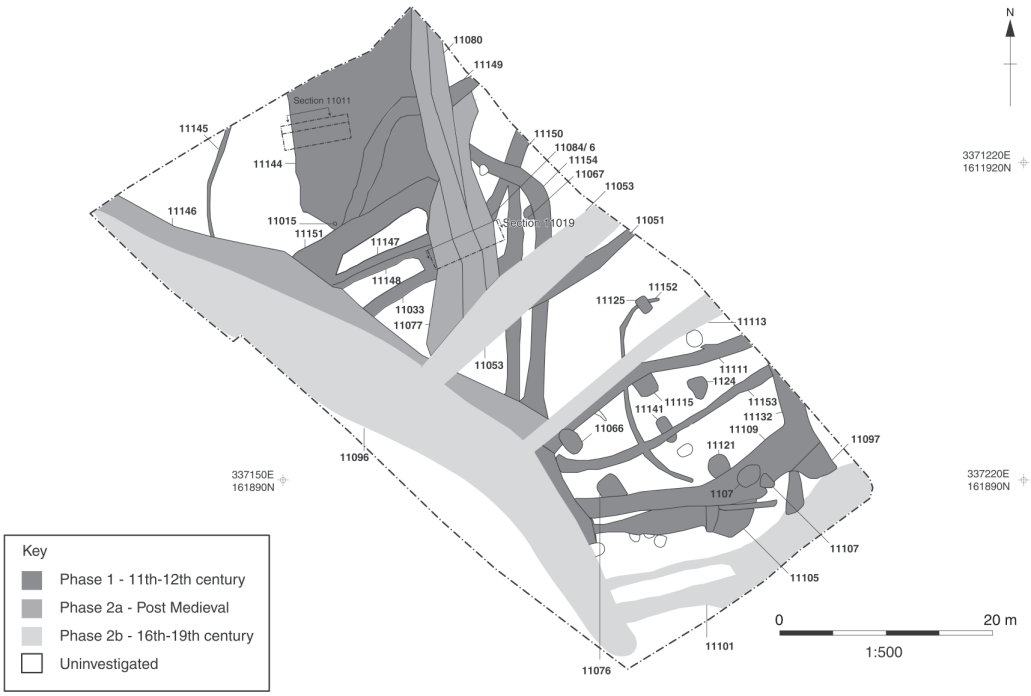


*Fig. 2 Phase plan*

depression (11144) in the north-east corner of the site which was cut by a series of slightly later ditches. The feature was over 17m in width and 1.65m deep (as seen in cut 11043 – Fig. 4), extending beyond the limit of excavation. It did not appear to be natural and was cut through layer 11002, which probably represented a Roman flooding event. The feature had silted up naturally prior to the construction of ditches 11149 and 11151 and was filled with mottled clay and bands of sand but no archaeological material. It is possible that this feature was used as a pond or extraction pit, though the potential evidence of salt working on the site (see below) may indicate that this was used to store brine. A small pit (11015), measuring 0.6m in diameter and 0.11m deep was cut into the fill of this feature. It was filled with dark brown clay silt and was also archaeologically sterile.

The complete lack of artefacts dating before the 11th century across the site indicates it is unlikely that this feature significantly predated the other excavated features. As such the earliest of the linear features in this area (ditches 11033, 11147, 11148 and 11150) may be contemporary with the pond feature. Intercutting ditches 11147 and 11148 and ditch 11033 are parallel, running west–east, and appear to curve northwards to the east, becoming ditch 11150. The complex also appears to branch off to the south-west, though these relationships are uncertain due to truncation by a series of later features. The ditches were all relatively shallow (*c.* 0.5m deep) and narrow (no more than 1.55m wide), generally with a single clay fill. Overall this complex produced small amounts of 11th and early 12th-century pottery.

An insubstantial gully (11145) in the north-west of the site may also be contemporary with the pond feature and appears to be on a similar alignment. The gully was 0.31m wide and 0.12m deep, its dark grey brown clay fill was very similar to the natural and probably represented natural infilling.

Following the silting up of these features ditches 11149, 11032 and 11154 were dug, possibly contemporaneously. Together these ditches formed two elements of similar dimensions aligned south-west–north-east, curving together at the north-east, forming a possible entrance. Ditches 11149 and 11032 had a combined width of 1.6m and ditch 11154 was 1.35m–2m wide and all had gently sloping sides. The ditches depth varied from 0.3m–1.0m. The greater depth of the latter and presence of

three fills in one excavated section may indicate truncation in other areas of this part of the site. The ditches were filled with grey blue or orange brown clays and produced substantial quantities of 11th and 12th-century pottery. Ditch 11154 alone produced 890g of pottery from excavated sections. The alignment of the ditches suggest they formed an enclosure, possibly for animals; the large amount of pottery may indicate domestic settlement nearby.

Ditch 11154 was cut by two small pits, one of which (11067) was excavated. This feature was shallow and contained animal bone and 74g of mid to late 12th-century pottery indicating slightly later activity. A small linear feature (11051) heavily truncated by a post-medieval drainage ditch, may also have cut ditch 11154. The feature was 0.8m deep with a pale grey brown clay fill and produced 11th-century pottery.

At the end of this phase in the northern half of the site a wide U-shaped ditch (11151) was dug (measuring *c.* 2.7m x 0.79m deep), cutting ditches 11149 and 11032. This was in turn truncated by the later ditch system and therefore its length is unknown. Its function is also unknown, although it is most likely a drainage ditch. Four sherds of 11th-century pottery were recovered from the clay fill.

The earliest feature in the southern half of the site appears to be curvilinear gully 11152 which may have been cut by ditches 11153 and 11111, though relationships were not established; the gully was also cut by possible hearth or pit 11125 (Fig. 3). Gully 11152 was *c.* 0.1m deep and 0.45m in width with a single silty clay fill which produced oak and alder/hazel charcoal and a single sherd of 10th-century pottery during the evaluation. The feature may represent a drainage gully.

A number of ditches (11111, 11153, 11132) were aligned approximately north-east–south-west, truncating pits 11115 and 11141; ditch 11111 was itself truncated by pit 11066. Ditches 11111 and 11153 were *c.* 1.4m wide and 0.2m deep. Ditch 11132 which was wider and deeper (up to 0.6m deep), cut ditch 11153 and may have been the same feature as ditch 11109, though this was not possible to establish. All contained grey brown silty clay with charcoal and all produced 11th-century pottery.

A series of pits (11099, 11105, 11107, 11097, 11115), and a small gully (11103) in the vicinity of these ditches and gullies, all contained 11th or early 12th-century pottery in their common fill of mid grey/brown silty clay. The evaluation also uncovered a pit (1124) in this area, measuring 3.34m in diameter

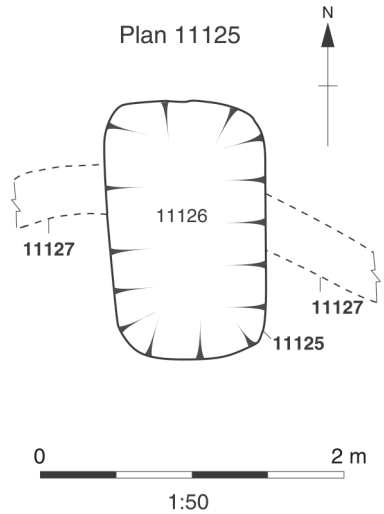


*Fig. 3 Plan of possible hearth 11125*

and 0.95m deep which produced a large quantity of late 12th-century pottery and animal bone. Pit 11107 and adjacent pit 1107 produced presumably intrusive post-medieval pottery during the evaluation.

Another group of pits (11141, 11076, 11121, 11066 and feature 11125) was located in the centre of this part of the site in the vicinity of gully 11152. Oval pit 11141 measured 2.7m by 1.2m but was only 0.32m deep, possibly suggesting some degree of truncation. The pit had straight sides and a flat base. Pit 11076 was similar in dimension, measuring 2.54m by 2m, *c.* 0.5m deep and was sub-circular with straight sides. Both contained fills of silty clay which produced charcoal, animal bone, fired clay and 11th-century pottery.

Pit 11121 was unusual in containing a single fill, though 2.0m in diameter and 0.94m deep. This was particularly waterlogged, producing a large quantity of pottery and domestic rubbish, and may have functioned as a waterhole or unlined well.

Pit 11066 clearly represented a rubbish pit indicating nearby domestic settlement. The pit was oval, measuring 2.6m by 1.6m and was 0.7m deep (Fig. 4). It contained five fills of silty clay (the lowest being notably waterlogged) representing rubbish deposits and dumps of natural material, presumably to seal the deposits. The pit produced 11th and 12th-century pottery, animal bone and a large deposit of fired clay.

Feature 11125 was sub-rectangular and very shallow measuring 1.74m x 1.05m but only 0.06m

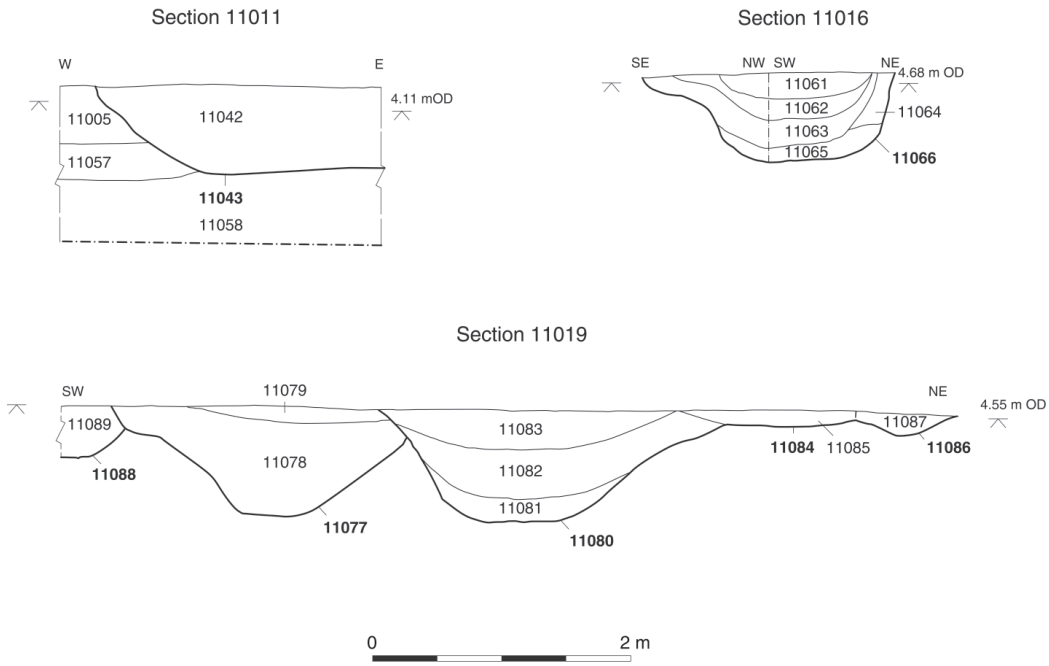


*Fig. 4 Sections*

deep. It was partially excavated in the evaluation and fully investigated during the excavation phase. It is tentatively interpreted as a hearth due to the amount of fired clay and burnt remains retrieved from it (see Poole below). Although it would be unlikely that a hearth would be placed in a depression in a waterlogged environment, it is posited that the depression may have represented the foundations of a larger hearth superstructure. The feature is of a suitable form to have been used for heating of brine in large pans, reinforcing the possibility of salt working on the site (see below). A single sherd of 11th-century pottery was recovered from the fill.

**Phase 2 post-medieval**

Two later phases of activity can be recognised on the site, the second can be clearly dated to the post-medieval period, primarily through pottery analysis. However, the intermediate phase cannot be closely dated. It has been assigned to the post-medieval period on the basis of morphology and spatial relationships. As such this phase can be divided into sub-phases 2a and 2b.

*Phase 2a post-medieval undated*

This stage of activity comprises a ditch and gully complex (Fig. 4, 11077, 11080, 11084 and 11086) aligned roughly north–south, and a substantial ditch (11146) aligned north-west–south-east at the western side of the excavation area.

The earliest component of this complex was ditch 11077, measuring 2.12m wide and 0.84m deep, containing two fills of grey brown silty clay. The ditch appears to have silted up and was recut as ditch 11080 on a slightly different alignment. Ditch 11080 was similar in dimension (2.3m wide and 0.58m deep), and contained three fills of grey brown silty clay indicating it may have been open for a considerable amount of time. The ditch produced a single sherd of 11th-century pottery, thought to be residual. Parallel gullies 11084 and 11086 were cut into ditch 11080. These were shallow in nature and the relationship between them was unclear but they may have been contemporary. The gullies measured 1.4 and 0.78m wide and 0.12 and 0.18m deep respectively and contained single fills of silty clay (Fig. 4).

Ditch 11146 was a substantial feature measuring over 3m wide in places. The ditch was not fully

excavated due to the groundwater level but was considered to be less than 1m deep. The excavated sections contained two fills of dark brown clay and produced animal bone and pottery. The pottery assemblage was mixed, with both early medieval and post-medieval sherds present.

The ditch complex may represent early post-medieval drainage on the site after re-occupation. The gullies 11084 and 11086 may be the remains of hedgerows, defining field boundaries.

*Phase 2b 16th century to 19th century*

The last sub-phase comprised ditches 11053, 11113, 11101 and 11096. Ditches 11053 and 11113 were clearly contemporary and were characterised by their very straight alignment, roughly north-east–south-west, truncating a number of earlier features, including sub-phase 2a features. Ditch 11053 measured 3m wide and 0.6m deep and contained three fills of grey brown silty clay, with charcoal present in the middle fill. Ditch 11113 was not fully excavated but was narrower than ditch 11053, containing similar fills. Pottery recovered from both ditches was dated from the mid 16th to the mid 17th century. These were almost certainly drainage ditches.

Ditch 11101 was different in character, more irregular in shape, appearing to split at its south-western end. The feature was not fully excavated but contained similar fills to the previous ditches and produced late 17th to late 18th-century pottery, indicating it was slightly later. The ditch also contained much building stone and mortar probably related to the demolished farmhouses.

Ditch 11096 was aligned north-west–south-east for over 55m within the excavated area, on the same alignment as ditch 11146, and appeared to continue beyond the limit of excavation in both directions. The ditch was up to 5m in width and over 2m deep, though the bottom was not reached due to waterlogging. The ditch contained four fills of dark silty clay and the excavated section produced a large deposit of pottery dating from the 16th to 19th centuries. The Ordnance Survey map of 1889 shows a large feature running through the site corresponding with ditch 11096 and possibly indicates a substantial drainage channel or boundary in existence at this time. Two areas of demolition rubble overlay ditch 11096, probably associated with the farm buildings nearby.

Overall the dating evidence from this phase indicates that occupation of the site was continuous from the 16th century through to the modern period.

## THE ARTEFACTUAL EVIDENCE

### Pottery

*Paul Blinkhorn*

The pottery assemblage comprised 316 sherds with a total weight of 6677g. The estimated vessel equivalent (EVE) by summation of surviving rimsherd circumference was 1.29. The ceramic assemblage indicates two phases of activity, one dated from the 11th to the later 12th, and the other post-medieval. It is possible that the earliest phase of activity started before the Norman Conquest, and suggests that there are substantial late Saxon or Saxo-Norman remains within the immediate vicinity of these excavations. The post-medieval assemblage comprised mainly utilitarian earthenwares, and suggests that the site largely had an industrial function, or the inhabitants were somewhat poorer than average at that time.

*Fabric*

Where possible, the pottery was classified using the conventions in A.G. Vince's unpublished PhD thesis on the pottery of the Severn Valley, as follows:

F1 Bath Fabric B/D Very similar to Mellor's Cotswolds-type ware (1994), and with a similar chronology: 10th-century examples are known, but common from the 11th–13th centuries. Inclusions of fossiliferous limestone, rounded quartz, oolitic limestone, angular chert, sandstones. 92 sherds, 1,626g.

F2 Bristol A/B ware Well rounded and sorted inclusions of quartz and quartzite, limestone with angular quartz and brown amorphous inclusions, poorly sorted sandstone. Early 11th–12th century. 168 sherds, 2084g.

F3 Proto-Ham Green ware Abundant medium to coarse sand with sandstone fragments, quartz, plagioclase feldspar, coarse-grained, brown chert, siliceous sandstone, opaque iron ore and clay pellets. 12th–13th century. 3 sherds, 91g.

F4 Bristol C Ware. Very hard, grey sandy fabric with lighter surfaces. Glossy, variegated green glaze. Late 11th–12th century. 6 sherds, 176g.

F5 Bristol Redcliffe ware. Pale yellow to pale

pink fabric with grey core. Mid–late 12th–15th century. 1 sherd, 2g.

F6 Ham Green Ware. Pale orange sandy fabric, thicker sherds have a grey core. Predominantly quartz and limestone sand and clay pellets. Glossy green glaze. Late 12th–?early 14th century. 2 sherds, 11g.

F301 Minety-type ware (Mellor 1994). Oolitic shelly limestone, very sparse. Splashes of poor-quality, sage-green glaze. Cotswolds source. Early 12th–15th century. 4 sherds, 104g.

F404 Cistercian Ware. Late 15th–17th century (Crossley 1990). Hard, smooth fabric, usually brick-red, but can be paler or browner. Few visible inclusions, except for occasional quartz grains. Range of vessel forms somewhat specialised, and usually very thin-walled (*c*. 2mm). Rare white slip decoration. 1 sherd, 8g.

F425 Red Earthenwares. Fine, sandy earthenware, usually with a brown or green glaze, occurring in a range of utilitarian forms. Such 'country pottery' was first made in the 16th century, and in some areas continued in use until the 19th century. 35 sherds, 2,493g.

F426 North Devon Gravel-tempered ware. Forms and decoration as F425. Moderate to dense quartz. 16th–19th century (McCarthy and Brooks 1988, 467). 1 sherd, 110g.

F416 Staffordshire-type Slipware. AD 1650–1750. Fine cream fabric with white slip and pale yellow lead glaze. Chiefly press-moulded flat wares, although small bowls and mugs etc are known. 1 sherd, 30g.

F430 Staffs Manganese ware, late 17th–early 19th century. Uniform, buff-fired fabric in a moderately sorted matrix. Occasional black ironstone. This ware is characterised by its brown 'tiger striped' manganese glaze. 1 sherd, 2g.

F1000 Miscellaneous 19th and 20th-century wares. 1 sherd, 12g.

*Chronology*

Each context-specific assemblage was given a Ceramic Phase (CP) date based on the ware types present, and then refined with reference to the stratigraphic matrix. The dating scheme and pottery occurrence per phase is shown in Table 1.

The data show that there was fairly intense medieval activity at the site from the 11th later 12th century, but then pottery ceased to be deposited until the early post-medieval period. Pottery deposition was then somewhat erratic, with the notable episodes

TABLE 1: CERAMIC PHASE DATING SCHEME AND POTTERY OCCURRENCE PER PHASE (EXCAVATION)

| CP | Defining wares | Date | No sherds | Wt Sherds | EVE |
|---|---|---|---|---|---|
| CP1 | F1, F2 | 11th C | 172 | 2732 | 0.77 |
| CP2 | F4 | late C11 – early C12 | 37 | 446 | 0.16 |
| CP3 | F3, F301 | early – mid C12 | 20 | 272 | 0 |
| CP4 | F5 | mid – late C12 | 39 | 443 | 0.19 |
| CP5 | F6 | late C12 – late C15 | 0 | 0 | 0 |
| CP6 | F404 | late C15 – mid C16 | 0 | 0 | 0 |
| CP7 | F425, F426 | mid C16 – mid C17 | 38 | 909 | 0.17 |
| CP8 | F416 | mid to late C17 | 0 | 0 | 0 |
| CP9 | F430 | late C17 – late C18 | 4 | 149 | 0 |
| MOD | F1000 | C19 | 6 | 1726 | 0 |
| | Total | | 316 | 6677 | 1.29 |

TABLE 2: POTTERY OCCURRENCE PER CERAMIC PHASE BY FABRIC, EXPRESSED AS A PERCENTAGE OF THE CP ASSEMBLAGE, BY WEIGHT IN GRAMMES (EXCAVATION)

| CP | F1 | F2 | F3 | F4 | F5 | F6 | F301 | F404 | F425 | F426 | F416 | F1000 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CP1 | 47.8 | 52.2 | - | - | - | - | - | - | - | - | - | - | 2732 |
| CP2 | 37.4 | 58.3 | - | 4.3 | - | - | - | - | - | - | - | - | 446 |
| CP3 | 19.5 | 50.7 | 4.0 | 0 | - | - | 25.7 | - | - | - | - | - | 272 |
| CP4 | 10.2 | 52.1 | 1.8 | 35.4 | 0.5 | - | 0 | - | - | - | - | - | 443 |
| CP7 | 6.5 | 3.2 | 0 | 0 | 0 | 1.2 | 3.7 | 0.9 | 72.8 | 12.1 | - | - | 909 |
| CP9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 98.7 | 0 | 0 | - | 149 |
| MOD | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 97.6 | 0 | 1.7 | 0.7 | 1726 |

of activity in the second half of the 16th century and the modern era.

The pottery occurrence per phase by fabric type is shown in Table 2. The data in Table 2 show a generally expected occurrence. The earliest contexts are dominated by early Bath and Bristol Wares (F1 and F2), with only a few sherds of Bristol C ware (F4). Bristol A/B ware continues to be common in CP3, but Bath B/D wares appears to be in decline by this time, with Minety ware (F301) making up slightly more than one-quarter of the group. The data for CP4 are probably distorted by the presence of a large sherd of Bristol C ware jug in context 11070, but despite this, Bristol A/B ware still makes up over half the assemblage, along with Bristol C ware and Bath B/D ware. The rest of the assemblage is made up from small quantities of Proto-Ham Green ware and Bristol Redcliffe ware. The paucity of the latter and also Ham Green Ware (F6) would suggest that medieval activity at the site probably ended around the end of the 12th century, as there is little other medieval pottery other than the Redcliffe ware and two sherds of Ham Green ware which occurred in a mid-16th century context.

The post-medieval assemblage largely comprised utilitarian Red Earthenwares and North Devon Gravel-tempered wares. This made up most of the pottery from CP7, although nearly 15% of the pottery from this phase was residual medieval material, suggesting that some medieval strata had been disturbed by this activity. The vast majority of the CP9 and 19th-century assemblages also consisted of these utilitarian earthenwares, with display pottery and fine tablewares virtually absent, suggesting that the site largely had an industrial use at that time, or the inhabitants were rather poor.

*Pottery from the evaluation*

The pottery assemblage from the evaluation excavations comprised 186 sherds with a total weight of 4850g. The estimated vessel equivalent (EVE) by summation of surviving rimsherd circumference was 1.06. The ceramic assemblage demonstrated a similar chronological pattern, with two phases of activity, one of which can be dated from the 11th to the later 12th century, and the other post-medieval. The range of fabrics was similar, although the following, not noted during the main excavation, were present:

F431 Creamware, *c.* 1740–1880. A cream-coloured earthenware made from the same calcinated flint clay that produced Staffordshire white salt-glazed stonewares (Jennings 1981, 227). However, creamwares were fired at different temperatures with a lead glaze, resulting in a rich cream colour. The general range of forms for this ware include plates and bowls. 1 sherd, 10g.

F436 English Stoneware. White/grey stoneware with a white salt glaze. Made at numerous centres, such as Staffordshire, London and Nottingham, from the later 17th century onwards, in a wide range of utilitarian forms (Crossley 1990). 1 sherd, 14g.

The pottery occurrence by fabric type was as follows:

F1 Bath Fabric B/D ware. 129 sherds, 2192g.
F2 Bristol A/B ware. 8 sherds, 140g.
F3 Proto-Ham Green ware. 1 sherd, 48g.
F6 Ham Green ware. 4 sherds, 120g.
F301 Minety-type ware. 1 sherd, 24g.
F425 Red Earthenwares. 38 sherds, 2,295g.
F430 Staffordshire-type Manganese ware. 1 sherd, 6g.
F431 Creamware. 1 sherd, 10g.
F436 English Stoneware. 1 sherd, 14g.
F1000 Miscellaneous 19th and 20th century wares. 2 sherds, 1g.

TABLE 3: CERAMIC PHASE DATING SCHEME AND POTTERY OCCURRENCE PER PHASE (EVALUATION)

| CP | Defining wares | Date | No sherds | Wt Sherds | EVE |
|---|---|---|---|---|---|
| CP1 | F1, F2 | C11 | 53 | 1044 | 0.69 |
| CP2 | F4 | late C11 – early C12 | 0 | 0 | 0 |
| CP3 | F3, F301 | early – mid C12 | 4 | 38 | 0.04 |
| CP4 | F5 | mid – late C12 | 0 | 0 | 0 |
| CP5 | F6 | late C12 – late C15 | 83 | 1353 | 0.33 |
| CP6 | F404 | late C15 – mid C16 | 0 | 0 | 0 |
| CP7 | F425, F426 | mid C16 – mid C17 | 30 | 2090 | 0 |
| CP8 | F416 | mid – late C17 | 0 | 0 | 0 |
| CP9 | F430 | late C17 – late C18 | 9 | 199 | 0 |
| MOD | F1000 | C19 | 7 | 126 | 0 |
| Total | | | 186 | 4850 | 1.06 |

The occurrence per phase by fabric type is shown in Table 3. It shows a similar pattern for pottery consumption and site chronology to the main excavations.

A large proportion of the medieval pottery dates to around the time of the Norman Conquest, and is well-preserved and in very good condition. It includes the full profile of a Bath B/D jar. Like the main excavation, activity across the whole site probably ended around the end of the 12th century.

The post-medieval material also shows the same chronological pattern. There are episodes of pottery deposition in the second half of the 16th century, and from the 18th century onwards, but once again these are almost entirely limited to utilitarian earthenwares, and reinforce the view that the inhabitants of the site were either very poor or that it was used for mainly industrial activity.

**Fired clay and ceramic building material**
*Cynthia Poole*

A small quantity of fired clay and ceramic building material was recovered from the excavation and evaluation. The fired clay amounted to a total of 141 fragments weighing 350g with a mean fragment weight of 2.5g. Seven fragments of ceramic building material weighing 1562g were recovered, all from the evaluation. The fired clay was found predominately in pits and ditches. The majority of the features date to the 11th–12th century; only a small number of contexts were assigned to the post-medieval phase. The small quantity of fired clay found in the later contexts is likely to be residual.

*Fabrics*

FIRED CLAY

A Light brown / buff, light yellowish red, grey often with pinkish purple tinge or mottles at surface. Matrix of fine silty clay, slightly micaceous generally containing little or no fine inclusions such as sand and very rarely coarser inclusions of shell or iron oxide rich clay pellets. A commonly occurring addition in variable quantity was organic temper surviving as voids and impressions of chaff or finely chopped straw. This fabric accounted for almost the entire assemblage of fired clay.

D Yellowish red sandy clay containing scattered shell. Only one fragment was assigned to this fabric and may be merely a slightly sandier variant of fabric A.

CERAMIC BUILDING MATERIAL

B Pale pinkish buff laminated fine silty clay containing red iron oxide clay pellets. Well-sorted medium pink-brown quartz moulding sand was present on the brick surfaces. Used only for post-medieval brick.

C There appears to have been two variants of this, a coarser type used for bricks and a slightly finer type used for roof tile. The coarser fabric was a yellowish red sandy clay containing a high density of sand and grit derived from carboniferous limestone. The finer variety was a red micaceous clay containing a high density of coarse limestone sand and fine limestone grit with fewer coarse grits compared to brick.

*Fired clay*

The material was very uniform in its general characteristics and appears to be roughly finished. In general the larger pieces had one or rarely two moulded surfaces, both flat and curved. None of the fired clay assemblage can be regarded as diagnostic in the sense that any pieces could be assigned with certainty to a specific form. However the general impression is that the fragments could derive from objects, such as small pedestals, props or firebars, small sub-circular discs of irregular lentoidal cross-section or larger flat plates.

Characteristics of the fabric may also be significant in an interpretation of the assemblage, in particular the organic temper and the occurrence of a pale purplish tinge to the colour. When combined these somewhat vague characteristics suggest an interpretation, more than any other, as briquetage, indicative of salt production. Though the white discolouration of briquetage is more frequently recognised, shades of pale purple-mauve and whitish pink also occur (often as a gradation below the white veneer) and the prolific use of fine organic temper is most commonly used for briquetage. Though organic temper is also used in wall daub, this is usually in the form of much coarser straw or hay for the wall core (which in addition usually preserves evidence of wattles or laths) or is much finer (probably incorporated as dung) in wall render. The absence of diagnostic forms is not uncommon with briquetage, possibly reflecting ad hoc arrangements in a seasonal cottage industry.

*Ceramic building material*

This divides into brick and probable roof tile. The flat tile, probably fragments of peg tile, were all fragmentary, and were crudely made in fabric C. The largest piece measured 13–15mm thick and in excess of 135mm long. This and another fragment were heavily sooted and blackened on one surface suggesting reuse in association with an oven or hearth. Alternately these may be deliberately made plates for use in association with the briquetage.

The bricks were made in fabric B and one in fabric C. Dimensions were obtained from only one, which measured 108mm wide by 65mm thick (and also had sooting over part of the top surface). The brick is probably early post-medieval (16th–17th century) in date.

*Discussion*

The fired clay assemblage was found in contexts dated to the 11th–12th centuries. Though most of it was found in secondary situations discarded in ditch or rubbish pit fills, one of the larger groups from pit 11125 (context 11126) may be directly related to this feature. This was interpreted as a hearth base and may have been used for the final stages of processing salt.

Evidence for salt working is better known from the prehistoric and Roman periods in the Somerset Levels beginning with Bronze Age material from Brean Down (Bell 1990) and subsequently in the Iron Age and Roman periods burnt mounds of the sort recorded at East Huntspill (Leech *et al*. 1983) are well known. Recent work on the Somerset levels has uncovered increasingly more Roman salt working sites such as those at Puxton Dolemoor and Banwell Moor (Rippon 2000; 2006). Evidence of medieval salt working sites is less well documented not only in Somerset, but in all coastal production areas in England. Notably, this type of site has been excavated predominantly in Lincolnshire and Sussex (eg McAvoy 1994; Ridgeway 2000). It could be argued that the briquetage is residual Roman, but in the complete absence of other Roman artefacts, especially pottery, this is very unlikely. Elsewhere on the Levels Roman salt production has been associated with large quantities of pottery, which was possibly being produced at the same sites (Leech 1977).

The briquetage found is all likely to derive from the actual hearth structure or associated furniture to support the evaporating pans over the fire. A similar conclusion was reached for material from Bramber, West Sussex (Ridgeway 2000), where the briquetage and fired clay exhibited few diagnostic features. Though briquetage containers were still used for transporting salt, it is perhaps more likely that it was transported in sacks. The character and quantity of the surviving briquetage could easily have led to it being dismissed as insignificant and if this is typical of the area, could account for the apparent absence of recognised medieval salt working sites in the Somerset Levels.

**Iron objects**
*Ian Scott*

A total of five iron objects was recovered from three contexts, all ditch fills. The objects comprised a whittle tang knife (sf 11000) and two sheet or plate fragments from context 11034 (fill of ditch 11033, dated 11th–12th century), a small bar fragment from context 11046 (fill of ditch 11044, 11th–12th century), and a whittle tang knife with integral elongated bolster from context 11114 (fill of ditch 11113, 16th–17th century).

The knife (sf 11000) from context 11034 has a comparatively short broad blade of triangular section. The back of the blade curves down to the point. The edge is straight and has a rounded choil. It is a small knife, with an overall length of 124mm, and is probably of medieval date. By contrast the knife from context 11144 is of post-medieval form, and probably dates to the 16th or early 17th century. The blade is incomplete but was probably originally parallel-sided; it has a dropped edge and rounded choil (extant L 98mm). The integral bolster is elongated and was probably decorated with mouldings, now obscured by corrosion.

## ECOFACTUAL EVIDENCE

**Animal bone**
*Lena Strid*

The animal bone assemblage comprises 336 re-fitted fragments from ditches and pits dated to the 11th–12th centuries. All analysis was undertaken in accordance with OA standard procedures; full details of which can be found in the archive, along with a full record of the bone assemblage.

*The assemblage*

Of the 336 re-fitted fragments, only 50 bones (14.9%) could be determined to species (Table 4). Most bones were in a very good condition, with 97.9% being grade 1 and 1.8% being grade 2 (Lyman 1994, 355). Traces of burning and animal gnawing were found on 71 and 7 bones respectively.

The predominance of domestic animals in the assemblage is typical for most archaeological sites. Due to the small number of identified bones it was not possible to discern any slaughter age pattern and the assemblage contained too few bones to infer animal husbandry practices. Ten bones displayed butchering marks, including three large mammal ribs that had been cut in a manner consistent with portioning and filleting. Butchery marks on one cattle scapula suggested disarticulation at the shoulder. One cattle humerus displayed pathological bone growth, suggesting an active infection.

The large number of bird bones is unusual for assemblages from this period. It is possible that the large bird assemblage at West Wick and at nearby Puxton (Hamilton-Dyer 2006, 245) are related to the two sites' location between two different ecological zones – the mouth of the Severn and the Mendip Hills.

However, since most of the unidentifiable bird bones in West Wick derive from a single context (11063), they may only comprise a few semiarticulate skeletons of goose-sized and fowl-sized birds. This context also contained identifiable bones from a minimum of two ducks and one goose, two of which displayed cut marks indicating removal of the limbs.

TABLE 4: IDENTIFIED BONES/SPECIES AND PHASE

| **Species** | **C11–C12** |
|---|---|
| Cattle | 16 |
| Sheep/goat | 4 |
| Pig | 2 |
| Horse | 1 |
| Dog | 3 |
| Cat | 2 |
| Goose | 3 |
| Duck | 5 |
| Stork | 1 |
| Indeterminate bird | 244 |
| Frog | 1 |
| Toad | 2 |
| Amphibian | 1 |
| Small mammal | 1 |
| Medium mammal | 8 |
| Large mammal | 18 |
| Indeterminate | 23 |
| Total fragment count | 336 |
| Total weight (g) | 1385 |

Twenty-five bones (10.3% of the bird bones) in context (11063) show traces of burning, ranging from slightly charred to white. It would thus seem likely that the bones represent the remains of meals, with the carcasses thrown onto the fire before disposal as domestic refuse.

Stork (*Ciconia* sp.), identified from a femur in early medieval pit fill (11068), is an unusual bird to find in archaeological deposits. They are migratory birds, and a very occasional visitor to modern day Britain (British Trust for Ornithology 2007). The preferred stork habitat is open, wet pastures. It has been found in a few contexts, including the nearby medieval village of Puxton (Hamilton-Dyer 2006, 245), 14th-century Oxford (Wilson 1989, 261) and 12th-century Winchester (Coy in press).

**Fish and other small bone**
*Rebecca Nicholson*

Sample 11000, from context 11072 (ditch 11154), included a significant quantity of tiny fish bones as well as occasional frog bones (*Rana temporaria*), field mouse (*Apodemus sylvaticus*) and vole, probably water vole (*Arvicola terrestris*). A less abundant selection of fish remains and a house mouse (*Mus domesticus*) tooth were recovered from waterlogged pit 11121.

The fish remains from these samples comprised vertebrae and cranial bones from tiny eel (*Anguilla anguilla*) and three-spined stickleback (*Gasterosteus aculeatus*), which probably represent fish living in the ditch or deposited into it by flooding from an adjacent river. Eels are found in all types of fresh water, but elvers (tiny juvenile eels) move into fresh water from the sea during May and June, swimming up-river in shallow water and even moving over wet grass. The three-spined stickleback is the smallest British freshwater fish, and is found in freshwater estuaries and in the sea.

A sample from gully 11152 included a small number of bones from eel and a small flatfish possibly flounder (*Platythys flesus*), as well as mouse. In this instance, the fish remains are likely to represent food debris. A small amount of avian eggshell was also present.

**Mollusca**
*Elizabeth Stafford and Dan Miller*

Five samples from the fills of early medieval pits and ditches were examined for the preservation of

Mollusca. An estimate of the abundance of each species was made on a sliding scale (+=1–4, ++=5–14, +++=14–50, ++++=51–100 and +++++>100). The results are presented in tabular format (Table 5). Full details of methodology are available in the site archive.

*Results*

Given the large volumes of sediment processed, molluscan preservation may be considered moderate in the bulk samples. Preservation was much better in sample 11005, which derived from only one litre of sediment.

All assemblages were dominated by freshwater species indicating fairly wet conditions within, and in the immediate vicinity of the features. Terrestrial fauna, although present were generally few in number and were dominated by marsh fauna, or those species that can tolerate damp conditions.

The assemblage from sample 11000, from ditch 11154, was dominated by the freshwater slum species *Anisus leucostoma* and *Lymnaea truncatula* suggesting the presence of standing water within the feature, perhaps subject to some seasonal variation. Occasional shells of *Succinea/Oxyloma* sp. may indicate the growth of tall grasses such as reeds or sedges at the margins. *Lymnaea peregra* was also very abundant, which although is more catholic in its habitat requirements, can also withstand seasonal desiccation and will tolerate brackish water (Kerney 1999, 56). Of note was anomolous shell fragments

TABLE 5: MOLLUSCAN ASSEMBLAGES

| **Sample number** | | **11000** | **11002** | **11003** | **11004** | **11005** |
|---|---|---|---|---|---|---|
| **Context number** | | **11172** | **11122** | **11040** | **11063** | **11013** |
| **Phase** | | **1** | **1** | **2a** | **1** | **1** |
| **Feature type** | | **Ditch** | **Pit** | **Gully** | **Pit** | **Ditch** |
| Taxa | Habitat | | | | | |
| *Valvata cristata* (Müller) | F D | | | | + | ++ |
| *Hydrobia* cf. *ventrosa* (Montagu) | B | + | + | | | |
| *Bithynia tentaculata* (Linnaeus) | F Fl | | | | + | +++++ |
| *Ovatella myosotis* (Draparnaud) | B | ++ | + | | | |
| *Aplexa hypnorum* (Linnaeus) | F C | | | | + | |
| *Lymnaea* sp. | F Sl, C | +++ | + | | + | ++ |
| *Lymnaea truncatula* (Müller) | F Sl | +++ | ++ | ++++ | + | + |
| *Lymnaea palustris* (Müller) | F C | | + | | + | |
| *Lymnaea peregra* (Müller) | F C | +++++ | | | +++ | + |
| *Planorbis planorbis* (Linnaeus) | F C | | + | | | + |
| *Anisus leucostoma* (Millet) | F Sl | +++ | ++ | | +++ | +++ |
| *Bathyomphalus contortus* (Linnaeus) | F D | | | | | + |
| *Gyraulus laevis* (Alder) | F C | | | | | + |
| *Gyraulus albus* (Müller) | F C | | | | + | + |
| *Gyraulus crista* (Linnaeus) | F C | +++ | | | ++ | ++ |
| *Planorbarius corneus* (Linnaeus) | F C | | | | | + |
| *Oxyloma/Succinea* sp. | T M | ++ | + | | | + |
| *Vertigo pygmaea* (Draparnaud) | T O (M) | + | | + | | + |
| *Pupilla muscorum* (Linnaeus) | T O | cf. + | | | + | + |
| *Vallonia* sp. | T O | ++++ | ++ | +++ | ++ | +++ |
| *Vallonia costata* (Müller) | T O | | | | + | |
| *Vallonia pulchella* (Müller) | T (M) O | ++ | ++ | ++ | | ++ |
| *Vallonia excentrica* (Sterki) | T O | ++ | | ++ | | ++ |
| Zonitidae indet. | T S | | + | + | | + |
| *Oxychilus* cf. *cellarius* (Müller) | T S | | | | | + |
| Clausiliidae indet. | T S | | | | | ++ |
| *Trichia hispida* (Linnaeus) | T C (M) | + | ++ | ++ | | ++ |
| Helicidae indet. | T C O | | + | | + | |
| *Cepaea/Arianta* sp. | T C | | + | | | + |
| Minimum number of individuals | | 347 | 45 | 94 | 100 | 298 |

Habitat: B= brackish water species, F = freshwater species, T= terrestrial species (Fl = flowing water species, D = ditch species, Sl = slum species M = obligate marsh species, (M) = terrestrial species that can live in wet conditions, O = open-country species, S = shade-demanding species, C=catholic species)
Abundance: + = 1-4, ++=5-14, +++= 14-50, ++++=51-100, +++++>100

of *Ovatella mysotis* and *Hydrobia* cf. *ventrosa*, species that commonly inhabit brackish water environments in estuaries and salt marshes. The latter species occurs in low to moderate salinities, often in drainage ditches on coastal marshes (Kerney 1999, 31). Sample 11102, from pit 11121, produced a similar assemblage although shell was less abundant.

The assemblage from sample 11003, also from ditch 11154, contained a moderate amount of shell, although the composition of the assemblage suggests somewhat drier conditions. The only freshwater species identified was *Lymnaea truncatula*, which, although dominating the assemblage, may be considered the most tolerant of seasonal drying and desiccation. The terrestrial component was more abundant indicating a more open aspect, perhaps representative of the wider environment. *Vallonia* sp., *Vertigo pygmaea* and *Trichia hispida* are consistent with an environment of short-turved grassland or pasture, though the presence of occasional zontids does not suggest this was heavily grazed.

The assemblage from sample 11004, from pit 11066, and sample 11005, from ditch 11146, produced rather mixed assemblages. The freshwater components were similar to sample 11000, although the presence of *Bithynia tentaculata* and *Valvata* and a greater diversity of catholic species are indicative of clean moving water. The fauna of the ditch fill is consistent with a drainage function. The abundance of a flowing water species would not be expected in a 'closed' boundary ditch, although this element of the assemblage may represent in-channel elements deposited through flooding episodes from an adjacent water course. The terrestrial assemblage is consistent with lightly grazed grassland or pasture perhaps with a little scrub. The robust shelled Clausiliidae, noted within the fine residue of sample 1005, and commonly associated with more enclosed environments, were restricted to apical fragments and are likely to be derived elements not specifically indicative of a contemporary or local habitat.

**Charred and waterlogged plant remains**
*Ruth Pelling*

A total of nine samples from the evaluation and excavation were taken from early medieval pits, gullies, a ditch and the pond. Of these, seven samples, all dating to the 11th–12th centuries, produced sufficient charred and dried-out waterlogged plant remains to merit further analysis.

Analysis was undertaken in accordance with OA standard procedures, full details of which can be found in the site archive. As the waterlogged plant remains were dried-out there was potential for loss of certain taxa. In addition, many dried-out seeds had become charged with static electricity. Therefore some seeds quantification of waterlogged remains should be regarded as approximate, while full quantification of highly static seeds such as *Juncus* sp. and *Lemna* sp. was not attempted.

Nomenclature for economic plants follows Zohary and Hopf (2000) and indigenous taxa follows Stace (1997).

*Results*

Table 6 presents the results for all seven fully analysed samples. Charred cereal grains and their associated impurities were present in all these samples, usually in low to moderate levels. The grain tended to be poorly preserved being highly clinkered and honeycombed, consistent with burning at high temperatures or in oxidizing conditions. A sample from pit 11066 produced a significantly larger cereal grain assemblage (N=524). Chaff tended to be very rare in the samples though a slightly higher proportion of chaff was present in evaluation sample 1002 (hearth 11125) which produced 24 chaff items to 53 grain.

Three or possibly four cereal species are represented: *Hordeum vulgare* (barley), *Triticum* sp. (possibly *Triticum aestivum*, bread wheat, and *T. turgidum*, rivet wheat) and *Avena* sp. (oats). Occasional rachis of *Triticum* species confirms that free-threshing varieties are present which is likely to include *Triticum aestivum* (bread wheat) although its identification could not be confirmed. A tetraploid wheat, likely to be *Triticum turgidum* (rivet wheat) on ecological grounds, was identified on the basis of rachis in one sample (hearth 11125).

Free-threshing wheat is typical of medieval period sites and *Triticum aestivum* (bread wheat) tends to be the dominant wheat species. While the introduction of *Triticum turgidum* to the British Isles can not be precisely dated, it appears to be well established by the 11th century, particularly in the Midlands (Moffett 1991). A notable absence in the samples is *Secale cereale* (rye) which is common on sites in many parts of the British Isles by the 11th century. This may represent a local tradition though a single *Secale cereale* rachis was recorded at nearby Bleadon (Smith 2003). *Avena* sp. is poorly represented in the samples and may be of only minor importance.

TABLE 6: QUANTIFICATION OF PLANT REMAINS

| | **Sample** | **11003** | **11000** | **11002** | **11004** | **1000** | **1001** | **1002** |
|---|---|---|---|---|---|---|---|---|
| | **Context** | **11060** | **11072** | **11122** | **11063** | **1119** | **1125** | **1121** |
| | **Feature** | **gully** | **ditch** | **pit** | **pit** | **gully** | **pit** | **Pit?** |
| | **Phase** | **1** | **1** | **1** | **1** | **1** | **1** | **1** |
| | **Volume (l)** | **40** | **40** | **40** | **40** | | | |
| CEREALS | | | | | | | | |
| *Hordeum vulgare* | Barley, hulled grain | - | - | - | - | 1 | - | - |
| *Hordeum vulgare* | Barley grain | 2 | 4 | - | 19 | 14 | 5 | 5 |
| *Hordeum vulgare/Secale cereale* type | Barley/Rye type rachis node | - | - | - | - | - | 1 | 2 |
| *Triticum* sp. | Wheat, short free-threshing type | 4 | 10 | 2 | 122 | 21 | - | 16 |
| cf. *Triticum* sp. | cf. Wheat grain | - | - | - | - | - | 3 | 3 |
| *Triticum turgidum* | Rivet wheat rachis | - | - | - | - | - | - | 5 |
| *Triticum aestivum/turgidum* | Bread/Rivet Wheat rachis node | 1 | - | - | 9 | 3 | - | 7 |
| *Triticum aestivum/turgidum* | Bread/Rivet Wheat, near terminal rachis | - | - | - | - | - | - | 1 |
| *Triticum* sp. | Wheat rachis node | 1 | - | - | - | - | - | - |
| *Avena* sp. | Oats | - | 3 | 1 | 2 | 1 | 1 | 6 |
| Cerealia indet | Indeterminate grain | 17 | 12 | 3 | 381 | 52 | 24 | 23 |
| Cerealia indet | Indeterminate rachis node | - | - | - | - | - | - | 3 |
| Cerealia indet | Detached embryo | - | - | - | - | - | - | 2 |
| Cerealia size | Large culm node | - | - | - | 1 | 1 | 1 | 6 |
| Cerealia indet | unquantifiable grain fragments | - | - | + | - | - | - | - |
| Total grain | | 23 | 29 | 6 | 524 | 88 | 33 | 53 |
| Total chaff | | 2 | 0 | 0 | 10 | 4 | 2 | 24 |
| PULSES | | | | | | | | |
| *Pisum sativum* | Pea | - | - | - | - | 1 | - | - |
| *Vicia faba/sativa* | Bean/Vetch | - | - | - | - | 3 | - | - |
| *Vicia/Pisum* sp. | Bean/Pea | - | - | 1 | 6 | 15 | 1 | 3 |
| cf. *Vicia* sp. | Large, detached embryos | - | - | - | - | - | - | 3 |
| WEEDS | | | | | | | | |
| *Ranunculus acris/repens/bulbosus* | Buttercup | - | - | - | 1 | - | - | 2 |
| *Brassica/Sinapis* sp. | Mustard/Turnip/Cabbage etc | - | - | - | 1 | - | - | 4 |
| Cruciferae | | - | - | - | - | - | - | 4 |
| *Stallaria graminea* L. | Lesser Stichwort | - | - | - | 1 | - | - | - |
| *Chenopodium album* L. | Fat Hen | - | 1 | - | - | 1 | - | - |
| *Chenopodium* sp. | | - | - | - | - | - | - | - |
| *Atriplex* sp. | Orache | - | 2 | - | 7 | 5 | - | 4 |
| Chenopodiaceae | | - | - | - | - | 9 | 2 | 2 |
| *Vicia/Lathyrus* sp. | Vetch/Vetchling/Tares | - | - | - | 1 | 1 | - | 6 |
| *Lathyrus cf. nissolia* L. | Grass Vetchling | - | - | - | - | 1 | - | - |
| *Medicago/Trifolium/Lotus* type | Medick/Clover/Trefoil | - | - | 1 | 8 | 5 | 4 | 48 |
| *Rubus* sp. | Blackberry/Raspberry etc | - | - | - | - | 1 | - | - |
| *Rumex* sp. | Docks | - | 2 | 1 | 3 | - | 2 | 6 |
| Polygonaceae | | - | - | - | - | - | 1 | 1 |
| cf. Polygonaceae | | - | - | - | - | - | - | 2 |
| *Anagallis arvensis* type | Scarlet Pimpernel | - | - | - | 1 | - | - | 2 |
| *Plantago major* L. | Plantain | - | - | 1 | 1 | - | 1 | - |
| *Galium aparine* L. | Goosegrass, Cleavers | 2 | - | - | - | - | - | - |
| *Anthemis cotula* L. | Stinking mayweed | 3 | - | 1 | 2 | 4 | 5 | 19 |
| *Tripleurospermum inodorum* (L.) Schultz Bip. | Scentless mayweed | - | - | - | - | - | - | 2 |
| *Alisma plantago-aquatica/Sagittaria sp.* | Water-Plantain/Arrow Head | - | - | - | 1 | - | - | - |
| *Eleocharis* sp. | Spikerush | 1 | 1 | 7 | 14 | - | 7 | 14 |
| *Eleocharis sp.* | Spikerush, silica | - | - | - | 24 | - | - | - |
| *Carex sp.* | Sedge, two sided | - | - | - | - | - | - | 4 |
| *Carex sp.* | Sedge, three sided | - | - | - | 1 | - | - | - |
| *Lolium* type | | - | - | - | - | 1 | - | 2 |
| Gramineae | Grass, small seeded | 1 | - | - | - | 2 | - | 4 |
| Gramineae | Grass, large seeded | - | - | - | 31 | 3 | 1 | 8 |
| Gramineae | Grass, root node | - | 1 | - | - | - | - | - |
| Ignota | | 2 | - | 2 | 24 | 4 | - | 30 |
| Ignota | Mineralised indeterminate seed | - | - | 1 | - | - | - | - |
| Total Weeds | | 9 | 7 | 14 | 121 | 37 | 23 | 164 |
| WATERLOGGED | | | | | | | | modern? |
| Cerealia indet | Culm nodes (modern?) | - | - | - | - | - | (5) | (5) |
| *Ranunculus acris/repens/bulbosus* | | - | 2 | 1 | - | - | - | - |
| *Ranunculus sceleratus* L. | Celery-leaved Crowfoot | - | - | 1 | - | - | - | - |
| cf. *Ranunculus scleratus* | | - | - | 1 | - | - | - | - |
| *Ranunculus* subgen *Batrachium* | Crowfoot | - | 118 | 44 | 1 | - | 4 | - |
| *Stellaria media* agg. | Chickweed | - | - | - | - | - | 2 | - |
| *Stellaria graminea* L. | Lesser Stichwort | - | - | - | - | - | 1 | - |
| *Atriplex* sp. | Orache | - | - | - | - | - | - | 1 |
| *Rubus fruticosus* sens. lat. | Blackberry/Bramble | - | - | - | 1 | - | - | 2 |
| *Conium maculatum* L. | Hemlock | - | - | 3 | - | - | - | - |
| *Polygonum aviculare* gp | Knotgrass | - | - | - | - | - | - | 3 |

| | Sample | 11003 | 11000 | 11002 | 11004 | 1000 | 1001 | 1002 |
|---|---|---|---|---|---|---|---|---|
| | Context | 11060 | 11072 | 11122 | 11063 | 1119 | 1125 | 1121 |
| | Feature | gully | ditch | pit | pit | gully | pit | Pit? |
| | Phase | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | Volume (l) | 40 | 40 | 40 | 40 | | | |
| *Rumex* cf. *conglomeratus* Murray | Sharpl Dock | - | - | - | - | - | - | (1) |
| *Rumex* sp. | Docks | - | - | - | 1 | - | 2 | - |
| *Urtica dioica* L. | Common, Stinging Nettle | - | - | 3 | 22 | - | 2 | 2 |
| Labiatae | Small seeded | - | 1 | 11 | - | - | - | - |
| *Stachys* sp. | Woundwort | - | - | 1 | 1 | - | - | - |
| cf. *Stachys* sp. | Woundwort | - | 2 | - | - | - | - | - |
| *Plantago major* L. | Plantain | - | - | - | - | - | 2 | - |
| *Sambucus nigra* L. | Elder | - | - | - | 2 | - | 15 | - |
| *Carduus/Cirsium* sp. | Thistle | - | - | - | - | - | 2 | 1 |
| *Alisma plantago-aquatica/Sagittaria sp.* | Water-Plantain/Arrow Head | - | - | 4 | - | - | - | - |
| *Juncus* sp. | Rushes | - | + | 100+ | + | - | + | - |
| *Lemna* sp. | Duckweed seed coats | - | ++++ | ++ | ++ | - | + | ++ |
| *Eleocharis* sp. | Spikerush | - | - | 51 | - | - | 5 | - |
| cf *Eleocharis A2*sp. | Spikerush | - | 6 | - | - | - | - | - |
| *Carex* sp. | Sedge, two sided | - | - | - | - | - | - | - |
| *Carex* sp. | Sedge, three sided | - | - | 2 | - | - | - | - |
| Cyperaceae | | - | - | 18 | - | - | - | - |
| Gramineae | Grass, small seeded | - | - | - | - | - | (2) | 2 |
| Gramineae | Large grass seed, lemma | - | - | - | - | - | - | (1) |
| Gramineae | Large grass seed, glume | - | - | - | - | - | - | (1) |
| Rosaceae type | Thorn | - | - | - | - | - | 1 | - |
| Indet | | - | 2 | 1 | - | - | 1 | - |
| Chiara/Nitella sp. | Muskwort/Stonewort | - | - | 1 | - | - | - | - |
| OTHER | | | | | | | | |
| Modern chaff/straw | | - | - | - | - | - | ++ | - |

Occasional pulses and a possible brassica crop were present in five samples including *Pisum sativum* (pea) and large, but fragmentary, pulses more typical of *Vicia faba* var *minor* (horse/broad bean) or *V. sativa* (cultivated vetch). In addition three detached hila which were consistent with a *Vicia* species (vetch/broad bean), were tentatively identified. Seeds of a *Brassica/Sinapis* species (cabbage, mustard etc) were present in two samples and may represent a cultivated variety, although given the poor preservation it is not possible to rule out a wild species, several of which commonly occur as arable/ruderal weeds.

Weed seeds were numerous in samples 11004 and 1002, each producing over 100 seeds. The weed species are dominated by ruderal species such as *Chenopodium album* (fat hen), *Anagallis arvensis* type (scarlet pimpernel), *Plantago major* (plantain) and *Galium aparine* (goosegrass/cleavers) all of which have fairly catholic habitat requirements but are common on disturbed and particularly cultivated ground. More specific cornfield weeds were limited, represented by *Anthemis cotula* (stinking mayweed) and *Tripleurospermum inodorum* (scentless mayweed). Several species may derive from grassland, including damp meadows, such as *Vicia/ Lathyrus* sp. (vetch/vetchling) and *Medicago/ Trifolium/Lotus* sp. (medick/trefoil/clover etc) or wet or marshy ground, including *Eleocharis* sp. (spikerush) and *Carex* sp. (sedge). All these species could however derive from arable fields, particularly where they spread onto damp ground.

No cultivated plants were recovered in the dried-out waterlogged assemblage. Blackberry/ bramble (*Rubus* section *Glandulosus*), common nettle (*Urtica dioica*) and elder (*Sambucus nigra*) all are potentially useful plants which can be collected from the wild, but also can occur naturally. A small quantity of wild plants such as meadow/creeping/bulbous buttercups (*Ranunculus acris/ repens/ bulbosus*), orache (*Atriplex* sp.), chickweed (*Stellaria media* agg.), dock (*Rumex* spp.), lesser stitchwort (*Stellaria graminea* L.), knotgrass (*Polygonum aviculare*), and thistle (*Carduus* spp./ Cirsium spp.) can all occur in grassland. The possible recovery of clustered dock (*Rumex* cf. *conglomeratus*), a plant which typically grows by ponds or rivers, does suggest that many of these dry-land plants may be from the immediate environment at West Wick, occurring in and around the ditches, gullies or pond. Certainly, those samples with dried-out waterlogged taxa all contained taxa typical of damp to wet conditions, such as, arrowhead/water-plantain (*Sagittaria* spp./ *Alisma plantago-aquatica*), duckweed (*Lemna* spp.), hemlock (*Conium maculatum*), rush (*Jucus* spp.), sedge (*Carex* spp.) and spike-rush (*Eleocharus* spp.).

*Conclusions*

The charred samples are generally dominated by

grain with rare chaff and more frequent weed seeds. This composition is consistent with grain which has entered the site in a processed state with occasional impurities remaining. The paucity of chaff in the samples is in keeping with free-threshing cereals where the bulk of the chaff is usually processed in the field or threshing barns, the processed grain entering the habitation site with only limited weeds and chaff. The density of remains is typical of background scatters of material some of which may have been brushed or thrown into fires during final processing stages or scattered around the site after burning.

The waterlogged plant remains largely reflect those represented in the charred assemblage, suggesting a similar source for many of them. The aquatic or semi-aquatic species including *Ranunculus* sugen *Batrachium* (crowfoot), *R. sceleratus* (celery-leaved crowfoot), *Alisma plantago-aquatica/Sagittaria* sp. (water-plantain/ arrow head) and *Lemna* sp. (duckweed) are indicative of shallow, slow flowing or stagnant water with a muddy sub-strata such as might be expected in the bottom of open ditches and gullies where they were constantly wet, or at or below the water-table. The hard seed coats of *Lemna* sp. (duckweed) were numerous, particularly in sample 11000 (ditch context 11072). *Lemna* sp, only sets seeds during very hot summers but its seeds are not unusual in deposits which accumulate under stagnant water (Mark Robinson pers. comm.).

Few archaeobotanical reports from contemporary sites in the immediate area have been published. However, four sites from Somerset have comparable medieval charred remains: Bleadon (6 miles to the south-west of Weston-Super-Mare – Smith 2003), at Eckweek, North Somerset (formerly in Avon, 27 miles east of West Wick – Carruthers 1995), at Priory Barn, Taunton (30 miles to the south-west of West Wick – Greig and Osborne 1984) and at Shapwick (located *c*. 20 miles south of West Wick – Shapwick House moat by Smith and Campbell 2007 and Shapwick Church Field by Straker *et al*. 2007). All of these assemblages have also produced mixtures of cereal grain, cereal chaff and accompanying weeds of crop, with remains of free-threshing wheat dominant. At Bleadon, Eckweek and Shapwick free-threshing wheat (*Triticum* sp.) is the most dominant cereal grain recovered, but smaller quantities of barley (*Hordeum vulgare*) and rye (*Secale cereale*) were recovered. Fairly even mixtures of charred barley, rye and free-threshing type wheat were recovered from samples at Priory Barn, Taunton. The general dominance of free-threshing wheat seems to be typical for medieval sites in this region of south-west England. In addition, the weed flora recovered from these sites is broadly consistent with the West Wick assemblage, with many taxa typical of grassland, waste places and/or arable fields identified.

Overall, the plant remains from West Wick are typical of habitation sites in the medieval period. The density of remains is typical of low level scatters of grain lost through processing or casually discarded onto fires, and does not indicate any large-scale grain-processing activity. The range of weed seeds is fairly limited, including damp ground and grassland species, ruderal weeds and cornfield weeds. All the weeds present could have been growing on the edges of arable fields, although the higher proportion of possible grassland flora in sample 1002 suggests some deliberate collection of grass or hay may have been taking place. The waterlogged plant remains are consistent with the charred weeds, indicating a presence of damp grassland and ruderal habitats within the site and suggesting that the bottoms of ditches and pits were permanently wet and muddy.

## DISCUSSION

### Phase 1 - 11th century to 12th century

*Settlement*

Excavated settlement evidence in the Somerset Levels is rare for the period in question, although documentary descriptions include the Domesday Book and various charters. The earliest map containing such information is dated 1573. However, place names and references are difficult to apply with certainty (Aston 1988, 69). Archaeologically, identified settlements dating from the 5th century up to the 12th century are rare and generally unexcavated, although excavation at sites including Puxton, in the wetlands, *c.* 3.5km to the north-east (Rippon 2006) and the dryland site at Bickley, Cleeve, *c.* 8.5km to the north-east (Ponsford 2002) have begun to expand our knowledge. Therefore the presence of a possible settlement site dating to the 11th and 12th centuries is especially significant. Settlement patterns in North Somerset varied in the medieval period, mainly due to wider economic and cultural factors (Rippon 2004; 2006). Settlement on the Levels was, however, predominantly dispersed

with significant nucleation in some places (ibid., 8). Significantly, in an area dominated by large ecclesiastical estates, differing settlement patterns indicate that local communities were managing their own environments, rather than following centralised estate management policies (Rippon 2006, 146). In effect, the bishops of Bath and Wells took a relatively 'hands off' approach to land management (ibid., 279).

Following the period of increased flooding after the Romano-British era, recolonisation of the Levels is thought to have begun around the 10th century (Rippon 2006, 81) and there is evidence for considerable expansion in the area from this time until the late 13th century. As mentioned above the church was an important landowner in this period and overall owned up to two thirds of the Somerset Levels, playing a significant role in their reclamation (Bersey 1988, 63), sometimes part of a wider policy of improving the productivity of newly acquired estates (Rippon 2004, 93). In the Norman period reclamation generally took the form of an infield/outfield system, where low embankments were constructed to protect areas of meadow or crops from unseasonably high summer tides, though not during the winter, as proven by palaeo-environmental evidence from Puxton (Rippon 2004, 98; 2006). A common feature of reclaimed marshes at this time were oval-shaped enclosures (Rippon 2006, 97), the nearest known example of which is at St Georges. The excavations at West Wick provided no physical evidence for this infield system, although the environmental evidence does reflect land use in an environment which at least regularly flooded. Many of the ditches may have had a drainage function, indicating small scale reclamation.

Somerset was predominantly pastoral throughout the medieval period, with stock raising (chiefly sheep and cattle) in the west and dairying in the east (Rippon 2004, 126). While environmental evidence illustrated the presence of grain on the site, this was generally processed before entering the site (Pelling this report) and it is probable that the site would have been devoted to seasonal pastoralism in the 11th and 12th centuries. Of note is a possible animal enclosure formed by ditches 11149, 11032 and 11154. Direct structural settlement evidence is lacking for this earlier period, though domestic rubbish seems to be represented by finds from the features, particularly pit 11066 and ditch 11154. This may indicate that a settlement existed close to the excavation site or possibly that such potentially ephemeral evidence has been removed by ploughing.

Expansion of settlement in the 11th and 12th centuries is also seen at Puxton and Bickley where the pottery assemblages are notably similar in range, and at St Georges. Features excavated at Puxton and Bickley include a similar range of hollows, ditches, pits and gullies, although the environmental evidence indicates, in contrast, that Puxton at least was a crop cultivation site (Rippon 2006). Structural evidence generally indicated the presence of timber earth-fast buildings at Bickley and buildings with post-pad foundations at Puxton, ephemeral evidence which may have been lost at West Wick. Both these sites were more artefact rich than West Wick, although Bickley was posited as a 'peasant site' (Ponsford 2002, 106). Therefore West Wick may also have been low in status.

*Salt working*

An intriguing element of the archaeology in this phase is the apparent presence of briquetage, found in many of the excavated features dating to this phase and particularly associated with possible hearth 11125. It is suggested by Poole (above) that this evidence may indicate the presence of salt working. In the light of this it is possible that other excavated features on the site may have been related to the process of salt making, as drainage or boundary channels or as storage pits.

Salt was a vital commodity in the medieval economy, used in the absence of refrigeration for the preservation of meat and fish (Steane 1985, 246), both of which were consumed in large quantities in the medieval household. According to Aelfric's Colloquy salt was important as it flavoured food and without it butter and cheese would perish (Keen 1988, 134). Salt was also used for 'heaviness of mind' and toothache, as a charm, for curing leather, for soldering joints and notably extensively for ecclesiastical purposes (ibid.). Early references to Droitwich from the Roman period through to the medieval period emphasise that its importance was due entirely to its saltworks (Berry 1975, 76).

While salt production on the Somerset Level was common in the prehistoric and Roman periods (see Rippon 1994; 2000; 2004; 2007) the only historical evidence of medieval salt working in Somerset is a reference to a grant of 737 by King Aethelheard, confirming a grant by Queen Frithugyth to the church of St Peter and Paul at Winchester of 'three mansae at Cearn' (the location of which within Somerset is unknown) given 'ad salinara constuenda' (referenced in Keen 1988). Whilst the Domesday Survey

recorded in excess of 1200 saltworks in every county with a coastline from Lincolnshire round to Cornwall, no saltworks were recorded in Somerset and no archaeological sites have previously been identified as such within the county. In reality very little is known about the true nature and workings of the salt industry (Thomas and Fletcher 2001, 218). Typically all that is recovered is a buried land surface, charcoal and briquetage (ibid.), so, as pointed out by Poole (this report) such sites could easily have been missed. The type of remains which have been excavated, particularly in the areas of Lincolnshire and Sussex indicate that various methods were employed in the salt industry at different times and locations (Hilary Healey 1977, 4).

A major change in methods of salt production is known to have occurred in the Roman and Anglo-Saxon periods. Early salt production employed a method in which estuarine or seawater was collected in large, shallow pools and concentrated by the sun and wind, the resulting brine was then heated in clay containers to refine it. The use of such furniture results in the creation of the distinctive briquetage which readily identifies saltworks. By the medieval period a process known as 'sandwashing' had superseded this method. This process was based on the collection of salt-impregnated sand or silt after spring tides which would then be filtered to separate the brine from the silt, and subsequently heated in lead or iron pans to produce salt.

Both methods raise questions in relation to the current site. The former had effectively been abandoned by the period in question as inefficient. However, an 18th-century experiment proved that this method could be successful in southern Britain and post-medieval references to such methods mention sites at Lymington, Hampshire and Appledram, Sussex (Brownrigg 1748 and Dallaway 1815, referenced in Holden 1967). The period considered in Phase 1 also falls into the Early Medieval Warm Epoch and the presence of duckweed on the site may indicate long, hot summers (Pelling, this report) conducive to small-scale secondary salt production. Leech (1981, 42) suggests that this method continued in Somerset into the later Roman period by which time it had ceased in other parts of the country and attributes this to the isolation of the area and a conservative attitude to new ideas. In addition, this type of industry is inexpensive and seasonal, often carried out by agricultural or pastoral communities during the summer, significantly fitting the economy of the area.

In the light of this historical and technological background there are some elements of the revealed archaeology worth consideration. While the pond feature may resemble an evaporating pan it is probably too deep to have been used as such but may have functioned as a collection tank or settling pond. Such features are known from medieval saltworks at Millfields caravan park in Sussex (Ridgeway 2000, 143), and Hullbridge and Tolleshunt Darcy in Essex (Holden and Hudson 1981), all of which were identified as sandwashing sites.

The sandwashing method, however, produced large mounds of silt or sand waste from the extraction process, from which medieval salterns are easily recognised. These mounds were often the basis of settlement in marshy areas, forming more stable platforms over long periods of time. Additionally lead offcuts, the remains of boiling pans, are often characteristic of such sites. Neither feature was obviously in existence at West Wick.

The absence of lead offcuts could be explained by the use of alternative material, such as briquetage containers, particularly given the potential conservatism and isolation of the area. Rippon has pointed out that late Iron Age and Roman salt production in the North Somerset Levels was curiously different to that of the Mendip Hills and Brue Valley (2006, 268). In relation to Roman salt working sites at Puxton, Banwell and St Georges he surmises that although no lead was recovered the 'possibility that lead pans were used cannot be ruled out [but] it is possible that wooden vessels or hollowed out tree trunks were used' (ibid., 46). This cannot be ignored with reference to West Wick. The absence of mounds is less easy to explain though in other parts of the country they are known to have been destroyed by flooding and ploughing. Considering the known truncation of the site by ploughing this could explain their absence.

In reality medieval salt works in this area probably employed a hybrid of methods. The pond feature 11144 may have been used for collection and storage, the salt workers possibly taking advantage of long, hot summers to evaporate salt using the solar method. Many of the pits in the southern half of the site could also have been used for storage or evaporation, before becoming rubbish dumps. The natural presence of clay eliminated the need to line these features. Little is known about salt working hearths, although the hearth feature 11125 is similar to others found on salt working sites. McAvoy commented upon the example from Wainfleet St Mary in

Lincolnshire that it 'conforms to a shape one might expect if it were being used to boil rectangular lead pans' (1994, 146) and the same statement can be applied to the example at West Wick. Additionally a number of the gullies and ditches dating to this phase of activity may be related to the salt works as drainage or collection channels, particularly those whose relationship with the pond feature are unknown such as gully 11145 and ditches 11147, 11148, 11033 and 11150. Curving gullies such as 11152 are often found surrounding salt working mounds, possibly as drainage or boundary features.

In conclusion, the strongest support for the salt working hypothesis comes from the briquetage and the form of the possible hearth. Other features can be seen as associated with a salt working process, but it is accepted that on its own the evidence from this site is far from conclusive. Nevertheless future ephemeral discoveries on other sites of similar date and character may invite a re-evaluation of our current understanding of medieval salt-working in this area. As Poole suggests (above) this type of ephemeral evidence can all too often be overlooked.

*The regional context*

The presence of a salt working site at West Wick may be reinforced by the fact that the land was owned by the church. Many early grants for salt production are for ecclesiastical or monastic houses (Keen 1988). For example the subjugation of Cumbria after the Norman Conquest was enabled with the help of the church who in return were given among their earliest gifts the right to build salt works (Martin 1975, 71). Glastonbury Abbey held land at Lymington in Dorset for the purpose of procuring salt and were unlikely to have been involved in small-scale industry such as this. However the smaller episcopal centre at Banwell may have taken advantage of the good location of the land. Pastoral communities working the land may have been able to take advantage of the high water levels and hot summers.

*Abandonment*

Following the first phase of activity the site at West Wick appears to have been completely abandoned for a period of four centuries. Notably this also occurs at Church Field, Puxton and Bickley, where occupation certainly ceased by the 14th century (Ponsford 2001; Rippon 2006). There is no obvious explanation for this phenomenon. Later medieval disruptions such as the Black Death, known to have sharply reduced the population on a number of manors in Somerset, and a succession of poor harvests and plagues cannot be convincingly blamed.

The move away from labour rents and towards large scale sheep farming in medieval Somerset had a considerable impact on the countryside (Aston and Lewis 1994, 8). Additionally, in the 12th century there was a general decline in ecclesiastical authorities over their estates and much land was alienated. These two factors may have been of great significance to the small settlement of West Wick.

The environment also changed considerably, with a notable deterioration of climate after 1300. This incorporated a marked increase in storminess and flooding, making maintenance of sea defences and drainage difficult. In the later medieval period there appears to be little new reclamation and less maintenance of existing works (Rippon 1994, 248). Problems in this area are demonstrated by construction of the 'Wowwall' in the early 15th century between Banwell and manors such as Weston to stop flooding of fields. While no clear flood events were discovered during the excavation this type of situation would have greatly affected the marginal nature of the probable pastoral settlement. Both pastoralism and small-scale salt working required little investment so could disappear under relatively slight economic or social stress.

**Phase 2 - post-medieval**

Activity in the post-medieval period clearly represents successive attempts at drainage, and ultimately construction of at least two farmhouses. The Somerset Levels remained predominantly pastoral into this period (Rippon 2006, 113) and historical information confirms that from the early 16th century onwards individual parishes assumed increased responsibility for drainage matters (Rippon 1994, 249). With increase of population land would also have become more in demand. Activity on the site continued until the modern period, as represented by the extant buildings demolished prior to development, although the small size of the settlement and apparent poverty of its inhabitants means that little historical information remains.

*Acknowledgements*

Oxford Archaeology is grateful to Persimmon Homes (South West) who funded the archaeological

excavations, analysis and publication and facilitated access. Also to CGMS who commissioned the work and designed the project brief, and particularly to Greg Pugh. Ruth Pelling would like to thank Mark Robinson of the Oxford University Museum of Natural History for the identification of *Lemna* sp; also Denise Druce, Dawn Irving and Dana Challinor of Oxford Archaeology for initial assessment of the environmental samples. Katrina Anker supervised the work and Melanie Pomeroy-Killinger managed the excavations. Alan Hardy oversaw the post-excavation phase of the work and edited the final report. Rebecca Nicholson oversaw the environmental processing. Julia Moxham prepared the illustrations. The text has benefited greatly from comments by Stephen Rippon though it should be noted that the salt-working interpretation is a subject of disagreement.

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