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# Barn Dance: Suggested Medieval Grain Storage of the Northern European Type On The Manor of Patcham, East Sussex

By ANNA DOHERTY<sup>1</sup> and ANDREW MARGETTS<sup>2</sup>

*WITHIN THE NORTHERN EUROPEAN SYSTEM, barns and ricks for the keeping of sheaves prior to threshing was the favoured method of storing an arable crop. Despite the prevalence of this technique, evidence for medieval barns pre-dating the 13th century is rare. The discovery and excavation of not one, but three possible barns, dating somewhere between the 10th to 13th centuries, marks a significant contribution to our understanding of the British and continental grain storage tradition. The work was undertaken by members of Archaeology South-East based at University College London, Institute of Archaeology (ASE) and the Brighton and Hove Archaeology Society (BHAS) during the summer of 2013. Though the site was found to be rich in structural evidence, artefactual material was scarce. For more information on the meagre finds the reader is directed to the associated grey literature report (ASE 2014).*

Subsumed into the outskirts of Brighton and Hove, Patcham sprawls across the northern periphery of the city and is, on first inspection, simply part of the continuous built-up mass, sandwiched between the busy commuter roads heading to London in the north (A23) and the county town of Lewes in the east (A27). Despite this suburban feel, it is nevertheless possible to discern the historic core of this medieval village, strung along a former droveway climbing steadily up the nearby chalk downland. Apart from the c AD 1100 All Saints church, itself a replacement for an earlier establishment mentioned in Domesday (Morris 1976, 12, 5), nothing of medieval date now stands within the village and no contemporary records are shown on the East Sussex Historic Environment Record (HER).

The site of Patcham's manorial complex is preserved in the location of Patcham Court Farm, an overwhelmingly post-medieval group of buildings built on a courtyard plan straddling the former droveway (now Church Hill). Surviving elements of this farmstead include the farmhouse, flint walls of the farmyard, a dovecote and the now converted barn known as the 'Village Barn' or 'Long Barn' (Fig 1). The barn is reputed locally to have been the longest in Sussex originally measuring c 76 m long and although it and the other farm buildings that make up the complex date to the 17th and 18th centuries, the medieval manor house very likely occupied the same location. The manorial complex of Patcham Court lay astride a piece of roadside waste that effectively forms a small green (Fig 2).

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FIG 1

The 'Village Barn' or 'Long Barn' at Patcham (looking southeast, 1954).  
 Image courtesy of the Regency Society. James Gray Collection: JG\_35\_135.

Patcham comprises one of the earliest medieval villages in this part of Sussex, one of the scattered groups of settlements hugging the Downs that evolved from the principally occupied areas of the South Saxon kingdom. It is first mentioned in Domesday when it was recorded as *Piceham*, a compound of the personal name *Pecc(e)a* and *hām* (Mawer and Stenton 1930, 293–4), meaning Pecca's village, 'manor' or homestead, (see Smith 1956, 226–9). Sussex names from *hām* have been shown to belong to the end of the pagan period but before the formation of the *-ingas*, *-inga-* names (Dodgson 1973). They are often found to lie close to the arterial network of Roman roads; in this case the London to Brighton Way (Dodgson 1973, 16).

During the reign of Edward the Confessor, Patcham was held by Harold Godwinson; at Domesday (AD 1086) it was held by the king. It was a reasonably large manor with 163 villagers, 45 small holders and 82 ploughs (Morris 1976, 12, 15). Much of the medieval ploughland was arranged through the open fields to the south and east of the village. During the later Middle Ages these would have been worked through the Sussex method of sheep-corn husbandry, with animals extensively grazed on the nearby downland and subsequently folded on the nearby arable to maintain the fertility of the soil. This type of convertible husbandry, as well as the advanced rotational techniques and rich soils of the coastal plain, meant that by 12th and 13th centuries this part of Sussex was one of the richest arable areas in England. Locally, the open sheepwalk to the north of Patcham was important from an early date, something which is attested by AD 1086 when there were no fewer than ten shepherds mentioned for the manor (Morris 1976, 12, 5). Following Domesday, the manor of Patcham, afterwards known as Patcham Court, was held in demesne by William de Warenne. It descended with the



FIG 2  
The site's location on historic maps.  
*1842 Patcham Tithe and 1874 Ordnance Survey 1st Edition.*

Rape of Lewes until 1439 when the manor was assigned to Joan, Lady Bergavenny (Salzman 1940, 216).

An opportunity for ASE and volunteers from the BHAS to explore a location close to Patcham Court was provided during the summer of 2013 when a roughly triangular plot of land at 145 Vale Avenue was subject to enhanced watching brief in advance of development. The plough-truncated and in places heavily rooted bedrock geology of the site was chalk. This was recorded sloping gradually from 62.54 m OD at the eastern site boundary to 59.36 m OD to the west. In the north, the site was bounded by Vale Avenue and to the east and south-west by gardens of properties fronting onto Court Close and Church Hill (Fig 3). Archaeological deposits were overlain by a thin topsoil capped by layers associated with the 1960s car park that previously occupied the site.

Following the mechanical stripping of overburden and the cleaning of the site, an initial minimum of 10% of all linear features and of 50% of discrete features were excavated and recorded. All stratigraphic relationships were investigated with sunken-featured buildings and animal burials completely excavated. BHAS members helped to complete full excavation of all structural features (construction trenches and post-holes). Pits were also completely excavated where they were considered likely to contain cultural material, again often with the help of BHAS volunteers. All finds recovered from excavated deposits were retained and the excavation area and spoil heaps were regularly metal detected for artefact recovery. An environmental sampling strategy was employed, following English Heritage guidelines (Campbell et al 2011) (Fig 4).

## ARCHAEOLOGICAL RESULTS

PERIOD 1: MIDDLE ANGLO-SAXON (c AD 600–750/800)

### *Period summary*

Activity dating to the 7th century was encountered at the site probably related to part of the original *hām* settlement. Remains comprised two Anglo-Saxon sunken-feature buildings (SFB1 and SFB2), fragments of fence lines (FL1 and FL2) and a number of pits and tree-throw holes within an open area (OA1). Some of the pits (eg G38) were particularly deep and straight-sided, being somewhat reminiscent of classic Iron-Age grain storage pits (Fig 5).

### *Sunken feature buildings (SFB1; SFB2) and associated activity*

The shallow depth of SFB1 (Tab 1) suggested it may have been severely truncated (Fig 6). There were two deep ‘gable’ postholes at the western end but only one to the east. The eastern posthole contained a possible horseshoe fragment. As well as the gable postholes, there were a number of post- and stakeholes positioned fairly evenly towards the edge, or just outside, of the main building cut. The general fill of the associated features was very likely formed after the building was decommissioned and the presence of a suspended timber floor of the type preserved in one of the SFBs at West Stow (Suffolk) is suggested (West 1985). SFB1’s length (c 4 m) accords with the evidence from Mucking (Essex) which suggests that larger SFBs of this type are a development of the 7th century (Hamerow 1993, 11; Tipper 2004, 66).

The second structure, SFB2 (Tab 1), was recorded in the eastern part of the site. The main cut appeared to be on approximately the same orientation as SFB1, although



FIG 3  
Location of Patcham within county of East Sussex and site within Patcham.

its eastern and northern sides had been truncated by later cuts and a ditch. It was somewhat more rectangular in plan than SFB1 and its basal profile was undulating. It produced one of the largest stratified groups of middle Anglo-Saxon pottery from the site

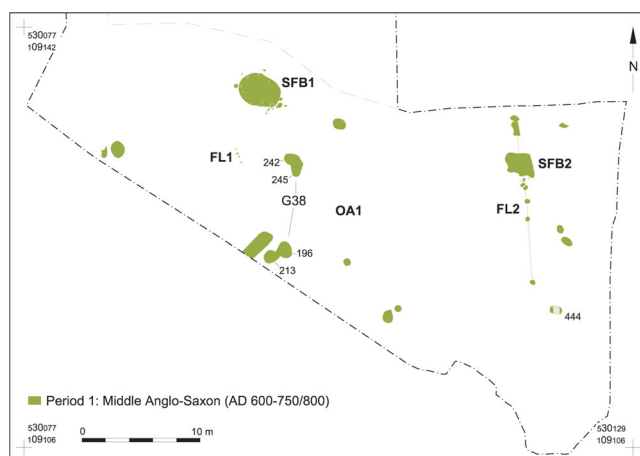


FIG 4

Plan of Period 1 features: including fence lines, sunken feature buildings and pits.

alongside a contemporary loom weight. Again, the fill deposit seemed to relate to the decommissioning/disuse of the structure rather than representing a floor or *in situ* occupation debris. No gable postholes were encountered.

Four deep, straight-sided pits, with flat bases and sharp breaks of slope (G38) were recorded in the area to the south of SFB1. Pit [242] was c 0.9m in depth and intercut with a slightly shallower pit, [245]. There was some evidence that these were back-filled contemporaneously as both contained identical deposits. There were two further intercutting pits of similar type, [196] and [213], just to the south (Fig 5). All four of the pits were relatively rich in finds, particularly animal bone and fired clay. Much of the fired clay was wattle-impressed daub, perhaps deriving from an oven-like structure. It is possible that the abutting pits related to cleaned out corn-drying ovens of the 'keyhole type' (Rickett 2021, Type III), although there was no surviving evidence of burning *in situ*. Pit [196] also produced conjoining loom weight fragments. Rubbish disposal may have been a secondary function of the pits and in profile they are quite reminiscent of classic Iron-Age grain-storage pits, although more vertically-sided than bell-shaped.

Another pit with a shallower, more rounded basal profile, [444], was located to the south of SFB2 and contained a relatively substantial quantity of contemporary pottery (Fig 4). A few other widely dispersed and shallow pits were phased to this period, on the basis of very small quantities of middle Anglo-Saxon pottery (Figs 7, 8).

#### PERIOD 2 ?LATE SAXON/SAXO-NORMAN (C AD 800–1100/50)

##### *Period summary*

According to the scarce ceramic evidence, activity at the site continued from Period 1 into the 9th and 10th centuries. This broad and somewhat uncertainly dated phase was thought to begin during the late-Saxon period and to continue perhaps into the 12th century. During Period 2, the eastern part of the site was enclosed, probably as part of a manorial type enclosure. Within the enclosure, suggested by boundary ditch D1, a very large timber building was constructed (B3) approached by a fenced routeway (R1). This routeway crossed the enclosure area or yard (OA2). Land beyond the enclosure was devoid of

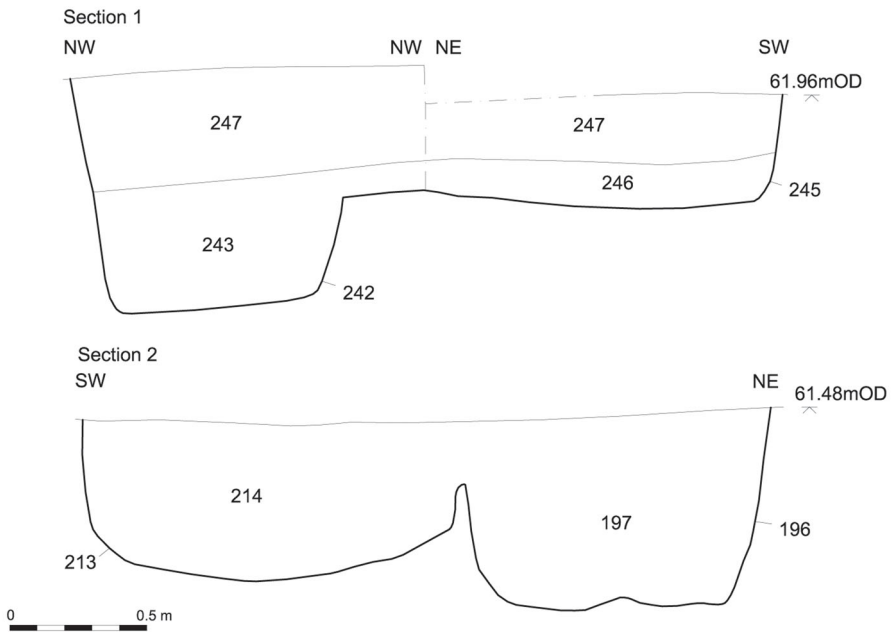


FIG 5

Plan of G38 (pits 196, 213), as well as section and photos and photograph of features during excavation.

contemporary archaeological features, (OA3). A calf burial was thought to represent a foundation deposit for B3 (see Hamerow 2006), but was subsequently proven to be of early 17th-century date (SUERC-93256;  $302 \pm 24$  BP; 1602–1650 cal AD, 95% probability).



TABLE 1  
Buildings of period 1.

Building	Length (m)	Width (m)	Depth (m)	Finds by date. Weight = g
SFB1	4	2.5	0.10	4 sherds ? AD 900–1050 = 9 2 sherds AD 650–800 = 3 Possible horseshoe fragment
SFB2	> 2.4	1.8	0.20	15 sherds AD 600–725 = 360 Loom weight

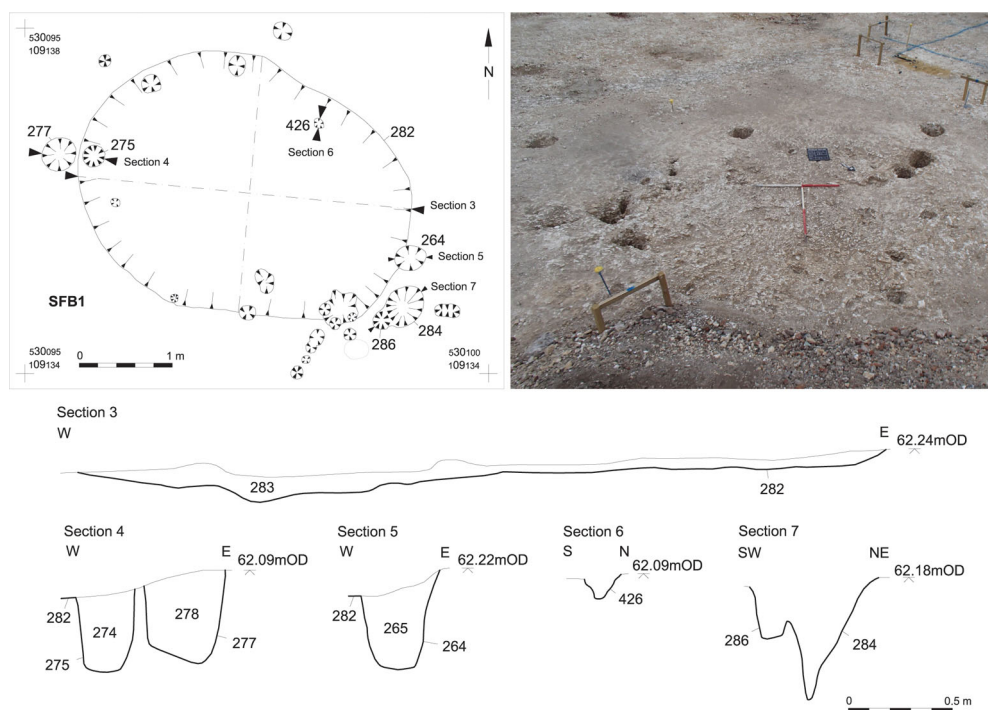


FIG 6

Plan of shallow SFB1, as well as feature sections and post-excavation photograph (looking southwest).

### Enclosure ditch D1

Boundary D1 was a substantial feature with a V-shaped profile. Its lower fills comprised almost 50% chalk fragments either derived from deliberate backfilling with the ditch arisings or an associated bank. The ditch was interpreted as intended for enclosing what would later be recognised as a manorial *curia*, but if proven to be of pre-Conquest origin it is perhaps better referred to as an estate centre, the label ‘manor’ being a wholly Norman introduction (Lewis 2012). The feature produced a single sherd of 7th- to mid-8th-century pottery. D1 may relate to the protected enclosure of a minor thegn, a feature associated with the Anglo-Saxon concept of *burhgeat* mentioned in the early 11th-century *Gēþycðno* (‘Promotion Law’; Hearne 1720).

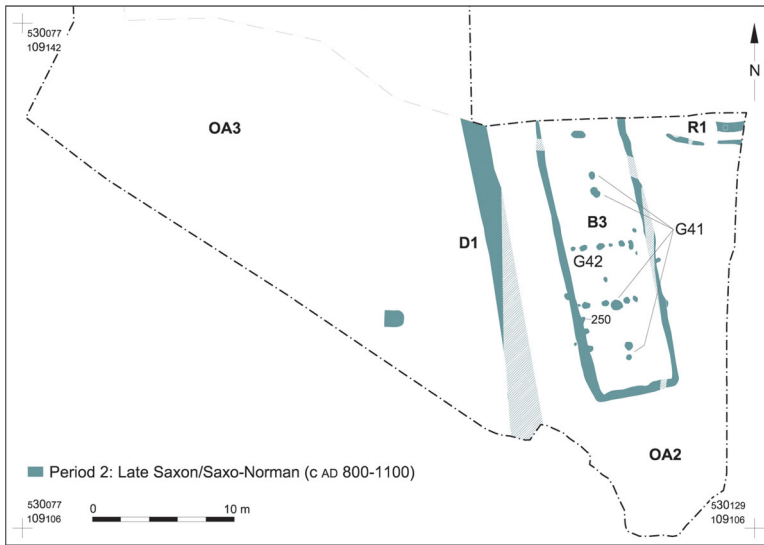


FIG 7

Plan of Period 2 building B3, boundary ditch D1, routeway R1 and open areas OA2 and OA3.



FIG 8

Building B3 during excavation looking southeast. The wall trenches and perpendicular postholes of a possible partition are clearly visible.

*Building 3 (B3) and routeway 1 (R1)*

B3 (Tab 2) stood parallel and adjacent to D1, suggesting that the two were contemporary. Its northern end fell beyond the limit of excavation. The building’s three excavated sides comprised wall trenches surviving at depths of between 0.3 and 0.5 m with generally straight vertical sides and flat bases.

TABLE 2  
Building B3, Period 2.

<b>Building</b>	<b>Length (m)</b>	<b>Width (m)</b>	<b>Max depth (m) (wall trenches)</b>	<b>Finds by date. Weight = g</b>
B3	> 20	6.8	0.50 m	7 sherds AD 650–800 = 120 2 sherds AD 1225–1350 = 6 2 sherds AD 1200–1325 = 8 2 sherds AD 1175–1275 = 3

To the east of B3, a group of three shallow linear features (R1) was interpreted as the remains of a post- and wattle-fenced approach to B3, although the features produced no dating evidence and could have belonged to later activity at the site.

### *B3 construction style*

The depth and profile of the wall trenches is consistent with an upright post-in-trench construction method rather than the use of ground-level sill beams. The trenches were slightly irregular in plan; a trait which suggests that the walls were erected in sections, with a segment of the trench being opened up to receive a short stretch of wall and then extended to accommodate the next portion. The slightly bowed shape of the building, with corners that are marginally narrower than the central part of the building, is also consistent with this style of construction.

It has been suggested that buildings of this type generally bore the main structural weight on the central wall posts of the long axis. The short walls were probably erected as separate panels and either pegged together or left with a narrow gap. This may have meant that corner posts were unnecessary (Gardiner 2013a, 241). The erection of panels is suggested by the remains of the southern wall trench where the corners of the building were notably narrower and shallower, supporting the interpretation that a separate panel was raised and fixed to the long walls rather than earthfast posts.

Despite little evidence for how they were arranged or spaced, it is likely that the construction trenches housed a series of posts. There were no circular depressions within the base of the trench and although attention was paid to the possibility of postpipes within the trench fills, none were obvious. Often construction cuts in buildings of this type have slightly more regular and vertical sides on the inside edge of the cut, indicating that posts were set flush against the inner face (Mark Gardiner pers comm); although this was not generally evident in the wall trenches themselves, a line of postholes along the south-western wall possibly pertains to this technique. The postholes were spaced regularly at about 0.5 m apart but were in the main shallower than the adjacent wall trenches. Other comparable buildings have produced evidence of paired posts spaced at about 1 m intervals (eg Bishopstone structure C, East Sussex; Thomas 2010, fig 4.7). It is suggested that these pairs were linked with a tie beam which supported the rafters (Gardiner 2013a, 241).

One of the most distinctive features of building B3 was a line of five substantial postholes running longitudinally through its centre (G41). The posts were generally slightly deeper than the construction trenches (c 0.5–0.7 m) and must have been load-bearing elements of the structure.

The other notable feature of the building was two parallel lines of shallow postholes found running across the interior of the building's southern end and perpendicular to the line of longitudinal structural posts. A possible explanation for these features is that they relate to internal partitions within the building, however, additional shallow postholes (G42) were also found running collinear with the central line of posts. While it is possible that these relate to partitioning, it is equally likely that G42 and probably some of G41 may represent joist supports for an internal raised floor.

### *Problematic dating of B3*

Dating of building remains where only sub-floor structural features survive is fraught with difficulty. During the medieval period, buildings were generally kept clean with waste deposited in middens away from the immediate settlement zone. When a building was standing, structural elements were unlikely to accumulate dating evidence; with associated features generally only collecting finds during construction/decommissioning phases and later *via* taphonomic processes such as disturbance.

Despite complete excavation of all encountered structural features, B3 contained no material suitable for scientific dating and only a tiny amount of diagnostic pottery. Of the 13 sherds recovered from its postholes or construction trenches, seven were of 7th/8th-century date and came from features which had direct intercutting relationships with Period 1 features, suggesting they represent residual finds. The parallel boundary ditch, D1, also produced a single sherd of this date from an upper fill, however, no pottery was retrieved from the lower deposits. The remaining six pottery sherds from features associated with B3 date to the late 12th to mid-14th century, but suffered from a low average sherd weight of just 3 g.

In terms of form and construction technique, the building is fairly characteristic of the 10th–12th century (Mark Gardiner pers comm), although slightly earlier buildings of the 8th and 9th century share similar attributes, some key features of this period are absent, including individual external wall posts and parallel doorways at the midpoint of the long-axis (Gardiner 2013a, 239).

B3 was found to post-date the 7th-/8th-century SFB2, and clearly belonged to a different phase to later intercutting N/S aligned buildings B4 and B5 which lay to the east. The latter buildings are more certainly of post-Conquest high-medieval date (see below) and conform more readily to the postulated layout of a later manorial *curia* potentially preserved in the orientation of the church and nearby Patcham Court Farm (Fig 9).

The very early (c 1100) 12th-century All Saints Church, located about 100 m to the east of the site, is built on a true E/W axis with boundaries oriented on cardinal points. It therefore seems possible that the differently aligned building, B3, and its associated ditch, D1, represent an earlier, possibly pre-Conquest phase of land use. It must be stressed, however, that this interpretation is based on tentative evidence at best.

The diminutive size of the pottery fragments within B3's ceramic assemblage makes them unreliable dating evidence which should be dismissed. Together with stratigraphy, spatial analysis and morphology they do, however, aid with suggested phasing for the structure. An origin somewhere in the 10th to early 12th century would seem most likely for this building. Though pottery of the 11th to early 12th century appeared to be absent from the site, the small number of post-Conquest sherds recovered in



FIG 9

Patcham structures B3, B4 and B5 in relation to the historic buildings of Patcham Court Farm and All Saints Church.

general (just 15) indicates that this cannot be relied upon as evidence of a hiatus. A narrower pre-Conquest to c AD 1100 origin is tentatively suggested on the basis of the problematic spatial relations. Pre-Conquest origins are therefore proposed but are far from certain. B3 could easily belong to the 12th century (Fig 10).

### PERIOD 3.1 HIGH MEDIEVAL (c AD 1100/50–1200)

#### *Period summary*

During this period there was a significant re-alignment in settlement orientation at the site. It has been postulated above that this was the result of a replanning of a nearby manorial centre following the Conquest, and the construction of the new All Saints Church at the turn of the 12th century. There is some evidence to suggest that building B3 and its associated boundary ditch were rapidly decommissioned rather than fell into disuse. The ditch's fill deposits may indicate partial backfilling, as boundary D1 was re-aligned on a true N/S axis (D2). Some way to the north-west, a perpendicular field boundary forming the southern part of a routeway, R2, probably also originated during this phase.

There was some evidence to suggest that building B3 may have been dismantled as opposed to falling into ruin. For example, although many of the structural features contained large flint nodules, most likely used as packing material, the only possible evidence that these remained *in situ* was at the very base of a single longitudinal posthole. There was also very little evidence of preserved post-pipes either in postholes or in construction trenches, perhaps indicating that before they rotted the timbers were removed for reuse elsewhere. Though the fills of the construction trenches and postholes had

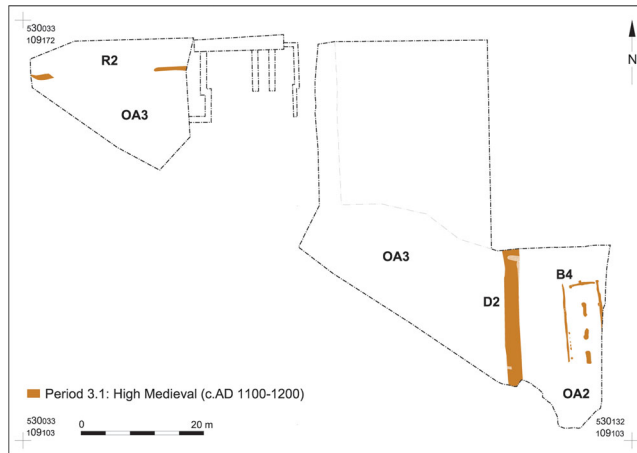


FIG 10  
Plan of Period 3.1 features.

TABLE 3  
Building B4, Period 3.

Building	Length (m)	Width (m)	Max depth (m) (beam slots)	Finds by date. Weight = g
B4	c > 16	c 7	0.15	1 sherd AD 600–750 = 3 1 sherd AD 1225–1375 = 11 1 sherd AD 1450–1550 = 2

more of a soil matrix than the lower ditch fills, they also had a high proportion of chalk inclusions, which is also indicative of backfilling rather than gradual silting.

As well as the re-alignment of D1, there was also evidence for a further large, but poorly dated building (B4) constructed at the site. The building was on the same alignment as the new boundary ditch; however, as with the earlier B3 the associated ceramics proved unreliable dating evidence. This phase of activity has been attributed to the 12th to late 13th century based on stratigraphy, the noted changes in landscape orientation and the continued use of earthfast posts, a construction style that gradually fell from favour in England around the beginning of the 13th century (Dyer 1986, 19, 35). A broader date range does, however, remain possible.

#### *Ditch D2*

Clearly of a stratigraphically later date than D1, D2 was nevertheless remarkably similar to its predecessor in terms of profile and sequence of fill deposits. Loose chalk rubble was present at the base and slightly more soil-rich upper horizons were encountered. Again, this might indicate that the ditch was deliberately backfilled, perhaps with its own arisings previously formed into a bank. A single sherd of pottery, weighing less than 2 g, was retrieved from its upper fill and dated to AD 1250–1350 (Tab 3).

*Building B4 and associated activity*

To the east of D2, evidence for another large rectangular timber building, B4, was uncovered. It was located in an overlapping but slightly more south-easterly position to building B3, with the long axis much closer to a N/S orientation than the Period 2 features. The construction trench for the long wall on the western side had a clear terminus at its northern end but its southern extent was truncated and severely disturbed by vegetation. There was no evidence of a southern side to the building, probably for the same reasons.

*B4 construction style*

Unlike in building B3, the northern wall cut did not seem to run continuously with the remains of the long walls. Instead, at the eastern end, there was a clear terminus with a gap of c 0.1 m between it and the wall lines. Also in contrast to B3, the construction trenches for B4 were much shallower in depth, generally ranging from 0.1–0.2 m. Like most other features on the site, these seem to have been affected by some horizontal truncation but in terms of depth and profile they seem more consistent with the use of horizontal timber sill beams rather than with the use of an upright post-in-trench method of construction. There was, however, evidence for the use of some upright posts set into the ground, between or adjacent to segments of sill beam (Fig 11). The location of these features may indicate a move away from the post-in-trench construction methods of B3 and towards the use of principal posts and bays. The latter construction style was generally adopted at the end of the 12th and the beginning of the 13th century (Gardiner 2014a, 18). Contrary to this technique, however, was a row of internal postholes on the same alignment as the western wall, thought very likely to indicate the continued use of earthfast posts augmenting the loadbearing properties of the long walls, although other interpretations are possible (see *B3, B4 and B5 at Patcham: Medieval Barns?* below).

Also in similarity to B3, B4 had evidence for substantial structural supports running down the centre of the long axis. Three short linear trenches were recorded at c 2–3 m intervals throughout the building. Assuming that the truncated southern wall was located a similar distance from the southernmost trench, this would suggest that the building had an overall length of around 16 m. Upon complete excavation, these features tended to be marginally shallower in the centre with slight depressions at either end, perhaps suggesting that each trench contained two large posts separated by packing material and backfill. In addition to these trenches, a single posthole on the exterior of the centre of the northern wall line continued the longitudinal row of supports. It may have related to a gable post, perhaps helping to support the roof.

*Problematic dating of B4*

In terms of dating material this was again meagre and deemed unreliable. A single fragment of 7th- to mid-8th-century pottery was recovered from the building and is thought to be residual, weighing just 3 g. In contrast, a tiny chip of a Tudor Green cup was thought to be an intrusive find, one suggesting limited activity between c AD 1450 and 1550 at the site. The remaining pottery comprised a single sherd belonging to the 13th or 14th century, weighing 11 g. This came from one of the longitudinal trenches. A 12th-century date is suggested for this building largely on the basis of construction style, stratigraphy and tentative spatial relations (Fig 12).

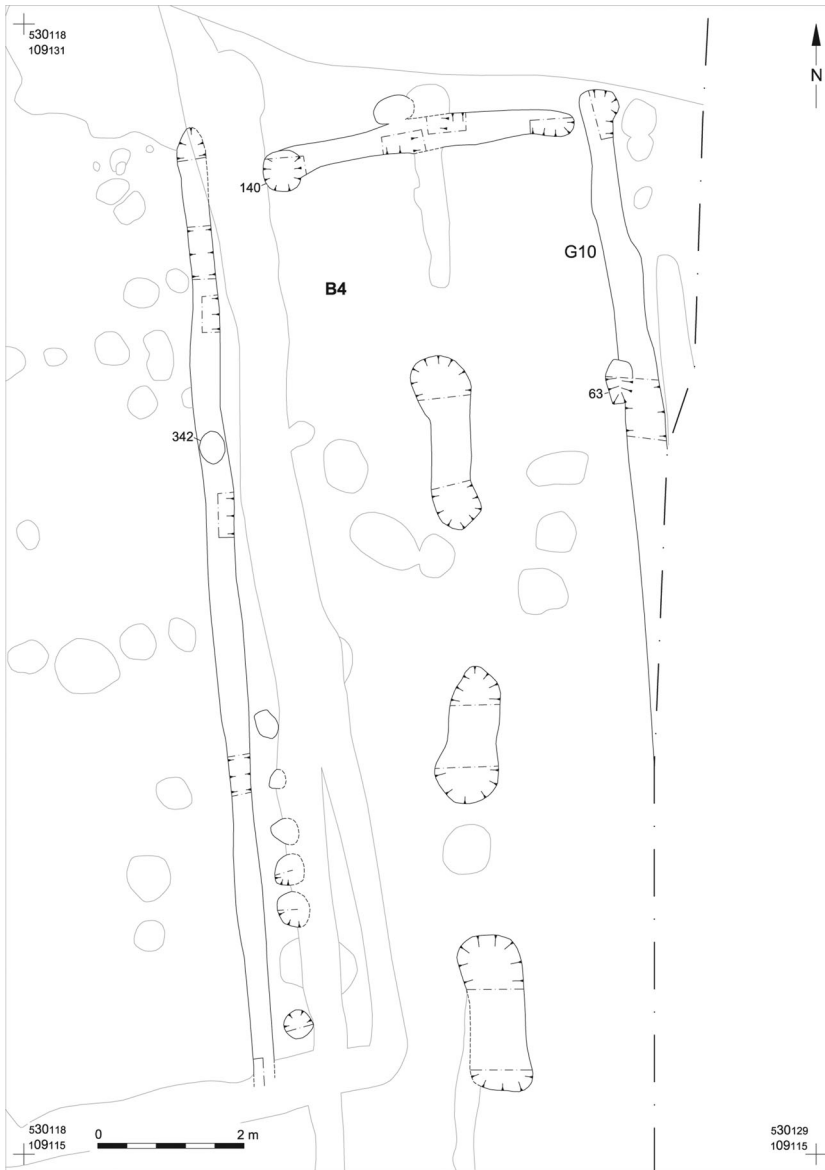


FIG 11  
Plan of Structure B4.

PERIOD 3.2 HIGH MEDIEVAL C AD 1200–1350

*Period summary*

The final phase of activity at the site comprised the continued use of boundary ditch D2, the excavation of a new E/W boundary (D3), and the construction of another long building (B5). The sequence of buildings B4 and B5 was difficult to determine but since they substantially overlapped it is impossible that they stood at the same time. The main N/S beam slots of the two buildings only intercut by millimetres and in other



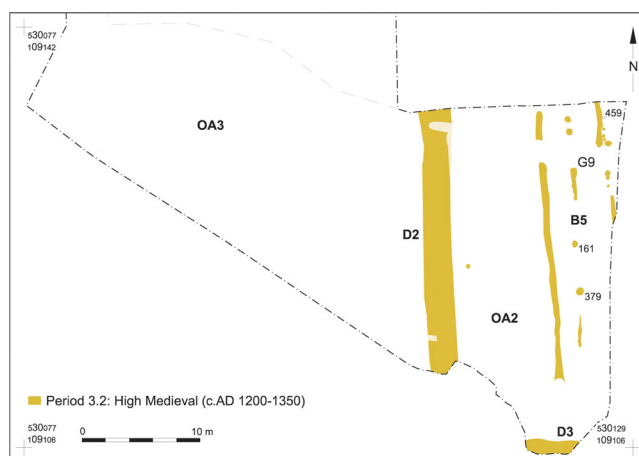


FIG 12  
Plan of Period 3.2 features.

TABLE 4  
Building B5, Period 3.

Building	Length (m)	Width (m)	Max depth (m)	Finds by date. Weight = g
B5	> 23	c 7	0.15	1 sherd AD 600–750 = 3 2 sherds AD 1225–1350 = 11 1 sherd AD 1250–1350 = 12

areas of intersection the stratigraphic relationship could not be clearly established. The very small quantity of medieval pottery from the site generally belonged to c AD 1225–1350 and the style of building B5 using sill-beams is broadly consistent with that date (see *B5 Construction Style* below).

#### *Ditch D3 and associated activity*

In similarity to the other enclosure boundaries D3 had a V-shape profile, although it differed from D2 in that it was slightly shallower in depth. It produced one sherd of AD 1225–1350 pottery as well as small intrusive fragments of post-medieval brick and tile. It should be noted that two terminating linear features were found in this heavily rooted area and also produced a small number of worn medieval sherds, together with small fragments of post-medieval ceramic building materials. Despite the possibility that they relate to drainage of the enclosure, or a small enclosure or pen abutting this southern boundary, the degree of disturbance in this area made any stratigraphic relationships with D3 unclear. The linear terminating features were also found to be slightly off alignment with the N/S axis of Period 3 and as such these features remain unphased. A single isolated pit or ditch dated to Period 3.2 by a reasonably large sherd of pottery was located to the east of D2 (Tab 4).

*Building B5*

The remains of B5 comprise perhaps the longest building encountered at the site, in excess of 23 m. It followed a similar N/S alignment to building B4 and is of a comparable width (c 7 m). The total length of the building is uncertain as its southern end was poorly defined due to disturbance, however it appeared somewhat longer than B4. The western side was formed by a long shallow construction cut. On the eastern side of the building, similar linear features appeared to have a noticeable entrance gap associated with a number of postholes. No clear northern wall foundation was defined and could have been located beyond the limit of excavation.

*B5 construction style*

As in building B4, the linear structural features had a shallow profile of c 0.1–0.15 m in depth, which is suggestive of the use of horizontal timber sill beams. Like the other buildings, B5 possessed a number of structural features running longitudinally along its centre line, but these were found to be much shallower and were less likely to be load-bearing elements. One short narrow linear feature near the northern end (G9), was almost centrally aligned and possibly represents the presence of a short internal sill beam. There was a corresponding feature at the southern end, although this was less well aligned with the building as a whole. It could represent a structural feature or perhaps a truncated drainage gully, indicating at least some livestock-related function.

Positioned between the two linear features were postholes [379] and [161]. Posthole [161] was considerably deeper than most of the features assigned to building B5 and could be part of B4, although it is rather misaligned with that building's other central features. Posthole [379] was in fact better aligned with the building B4 structural trenches but was much shallower. Two further shallow postholes were recorded at the northern end of B5 and were placed equidistant from the long walls.

*Problematic dating of B5*

Again, the lack of material culture—a sherd of middle Anglo-Saxon pottery and just three sherds of 13th- to mid-14th-century pottery, albeit one reasonably large—makes the ceramic evidence unreliable as direct dating evidence for the structure. The suggested dating of other structures at the site, the use of horizontal timber sill beams and a lack of earthfast posts in the wall lines is thought to indicate a 13th-century date for this building (see Dyer 1986; Meeson and Welch 1993; Gardiner 2014a), although that is far from certain.

## THE FINDS

## THE MEDIEVAL POTTERY BY LUKE BARBER

The excavations produced 104 sherds of post-Roman pottery, weighing in excess of 1.1 kg, from 44 individually numbered contexts. The material has been fully quantified by context, fabric and form on pro forma with the resultant data used to create a digital record for the archive. Although a site-specific fabric series was created during the analysis, the early/middle Anglo-Saxon elements have been correlated with provisional codes of the Sussex fabric series though the current site produced two new fabrics not present in the county series. The assemblage is generally composed of unabraded

TABLE 5  
 Characterisation of Period 1–3 pottery assemblage. NB Totals include all residual/intrusive and unstratified material.

Period	No/weight (g)	Average sherd weight (g)	No fabrics (by probable source)	Number of contexts dated to this period based on ceramics (excludes mixed/ambiguous contexts)
<b>Early/Mid Anglo-Saxon</b> c AD 410–850	68/861 (ENV 37)	12.7	Local = 8	18
<b>Late Saxon (?)</b> c AD 850–1050	7/64 (ENV 5)	9.1	Local = 2 Import = 1	3
<b>High Medieval</b> c AD 1050–1350	21/131 (ENV 21)	6.2	Local = 4	14

sherds though a few, most notably the later examples, have some signs of wear. As such, most sherds do not appear to have been subject to extensive reworking and the small/medium sherd size can be seen as a result of the generally low-firing of much of the pottery making it fragile. The assemblage contains pottery from a number of different periods and is chronologically summarised in [Tab 5](#). The exact dating of some of the sherds is a little ambiguous, but [Tab 5](#) offers a reliable general characterisation.

#### *Periods and fabrics*

Early–mid Anglo-Saxon (site Period 1)

The majority of the overall assemblage comprises sherds of this period (Tabs 5 and 6). Ironically, despite being the lowest fired and oldest post-Roman sherds on site, they are the least abraded. The assemblage is characterised by fresh sherds of a reasonable size suggesting the material was not subject to significant reworking. Despite this, stratigraphic analysis clearly shows some of this material is residual in later deposits on the site: 20 sherds (183 g) coming from contexts of late-Saxon to late post-medieval date. There are eight local fabrics represented in the early/middle Anglo-Saxon assemblage ([Tab 6](#)).

There is a notable lack of the sand-tempered fabrics typical of the early Anglo-Saxon period and as such it would appear that activity here did not begin until the 7th century. The fabrics represented include those tempered with quartz and chalk/shell, quartz and flint, flint and iron oxides, solely flint, and flint with organics. The prevalence of flint tempering and absence of purely sand-tempered wares is fairly typical for the period in this central part of Sussex (Bell 1977; Gardiner 1990, 1993; Lyne 2000; Jervis 2010). Despite the fresh condition of most of the material, feature sherds are frustratingly rare and most have been illustrated ([Fig 13](#), P1–P3). Most of these are not closely datable but, taken with the fabrics, are very much in keeping with a 7th- to 8th-century date range. A fairly typical domestic assemblage is present with jars/cooking pots and bowls the only recognisable forms. Unfortunately, context groups are very small, the largest consisting of a mere 15 sherds (from SFB2: [Tab 7](#)). Often, the small size of the context groups makes precise dating difficult, particularly considering the

TABLE 6  
The Early/Middle Anglo-Saxon assemblage.

<b>Fabric code (Sussex code)</b>	<b>Expansion</b>	<b>No/weight (g)</b>	<b>ENV (by form)</b>	<b>Period 1 land uses</b>
CQ1 (F + c/AS2)	Moderate ill-sorted quartz and sparse to moderate chalk with rare flint	2/17	? x 2	OA1 G38
FC1 (F/AS2)	Moderate to common coarse alluvial flint	12/128	? x 8	OA1 G38 and 39. SFB1 G39
FF1 (F/AS4)	Moderate to common fine alluvial flint	35/379	Bowl x 1; jars x 5; ? x 8	OA1 G38 and 39. SFB2 G35
FIO1 (F + io/AS1)	Common fine alluvial flint with moderate red iron oxides to 0.5 mm	6/189	? x 4	SFB2 G35
FO1 (F + o/AS1)	Common fine alluvial flint with rare organic inclusions	1/5	? x 1	OA1 G39
FQ1 (F/AS3)	Common fine alluvial flint with sparse quartz	5/35	Bowls x 2; ? x 3	OA1 G38. SFB2 G35
FQ2 (F/AS6)	Moderate alluvial flint with sparse fine quartz	2/11	?x1	OA1 G39
FS1 (F/AS7)	Moderate alluvial flint with rare/sparse shell	5/97	?x2	SFB2 G35
<b>Totals</b>		<b>68/861</b>	<b>Bowls x 3; jars x 4; ? x 29</b>	

longevity of many of the fabric types. Even with larger assemblages the pottery of this period is difficult to date in Sussex without other dating mediums.

Despite this, the assemblage as a whole is a useful addition to the growing corpus of Anglo-Saxon pottery from the county and the notable presence of the new fabric with iron oxides is of interest.

#### Catalogue

P1) Jar with crude simple everted rim. Dark-grey core, brown/grey exterior and pale-brown interior surfaces. Fabric FF1. Pit [213], fill [214]. G38, OA1.

P2) Bowl with crude simple upright rim. Dark grey/black with dark-brown-grey exterior. Fabric FQ1. Cut [363], fill [364]. G35, SFB2.

P3) Conjoining sherds from a pierced lug, probably from the rim of a bowl. Dark-grey core with dull-orange surfaces. Fabric FF1. Cut [363], fill [364]. G35, SFB2.

#### Late Anglo-Saxon (site Period 2)

There are just seven sherds tentatively ascribed to this period. The isolated nature of these makes dating problematic, something accentuated by the complete absence of feature sherds and the longevity of the crude flint-tempered wares. A few of the sherds are clearly residual in their context. Some of the finer flint-tempered sherds of the earlier period are equally 'at home' in this one. There are also a couple of shell-tempered

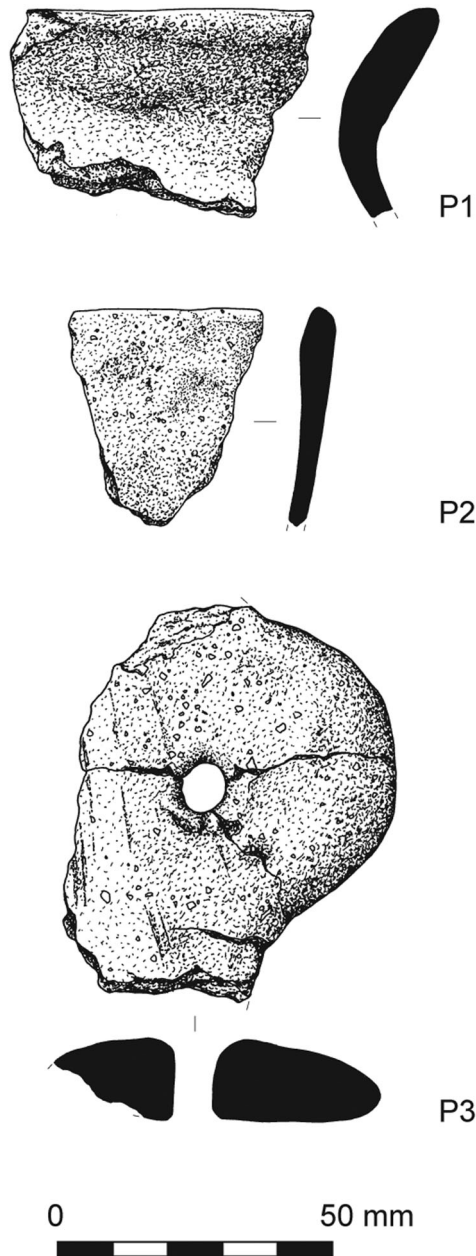


FIG 13

Illustrated early-mid Anglo-Saxon pottery (reproduced at scale of 1:2). P1) Rimsherd from a jar; P2) Rimsherd from a bowl; P3) Conjoining sherds from a pierced lug, probably from the rim of a bowl.

*Illustrations by Lauren Gibson (ASE).*

sherds that could well be of late-Saxon date, though they are isolated pieces. The single fine whiteware sherd (encountered residually) is in association with an undiagnostic shell-tempered body sherd, but is closely paralleled in the Canterbury fabric reference

TABLE 7  
Pottery group from SFB2.

<b>Fabric</b>	<b>No/weight (g)</b>	<b>ENV (by form)</b>	<b>% by sherd count</b>
FF1	6/75	Bowl x 1; ? x 2	40%
FIO1	6/189	? x 4	40%
FQ1	2/22	Bowls x 2	13.3%
FS1	1/74	? x 1	6.7%
<b>Totals</b>	<b>15/360</b>	<b>? x 7</b>	<b>100%</b>

collection with LS12 (likely of northern French source) and probably represents a continental imported pitcher, but more diagnostic sherds are needed to confirm the date and source of these sherds. All contexts produced fewer than five sherds, but the material suggests some limited activity continued on the site into the 9th and 10th centuries.

#### High medieval (site Period 3)

This period produced a small and slightly abraded assemblage of pottery (Tab 5). The earliest post-Conquest pottery can probably be placed in a late 12th- to mid-13th-century date range judging by its sand and sparse/common flint/chalk tempering. Prior to this date range, pottery is dominated by flint-tempered wares which become finer and increase their sand content in this area between c 1150 and 1225. However, the bulk of the high-medieval pottery is purely tempered with fine, medium or coarse sand with no flint or chalk, strongly suggesting most can be placed between 1225/50 and 1350/75; unfortunately, there are no rim sherds at all for the period to refine the dating. Though most sherds probably derive from cooking pots, only a couple of definite examples are present (including a body sherd with applied thumbled strip from wall trench [459] (B5). There is a single sherd from a green glazed jug from posthole [250] (B3) but the assemblage is too small to comment on reliably for functionality. Context groups are notably small, with all deposits containing just one or two sherds apiece.

## DISCUSSION

The site at Patcham clearly holds important additional data regarding rural buildings in the period from the 7th to the 13th centuries. However, the strength of the data and therefore assessment of the likely function of the structures encountered is hampered by the nature of the chronological information and the lack of incontrovertible evidence as to their purpose. That said, the most likely interpretation of the Period 2 and 3 buildings is related to medieval grain storage, despite the absence of conclusive evidence.

Before embarking on this argument, it is important to note the danger in identifying specific functions for buildings as there is potentially some flexibility in a building's role over its cycle of use. The work presented here is intended as a report on these important excavations. The authors have ventured suggestions as to building function

and it is perhaps for others to decide on their validity and where these buildings sit within the corpus of both British and continental medieval buildings evidence.

#### GRAIN STORAGE IN MEDIEVAL EUROPE

Choices in grain-storage mechanisms, whether it be underground, in stacks, ricks, granaries or barns largely depends on temperature, rainfall and local atmospheric conditions. Decisions on what will be stored—whether that be sheaves, ears, fully processed grain, or grain with chaff—is also influenced by these factors, but agricultural cycle, the availability of labour and the ability to process large or small quantities of grain as the need arose may also have been important.

Taking these variations into account, Francois Sigaut (1988) developed a number of convenient (but generalised) regional grain-storage types, which persisted over long periods and became culturally embedded in European populations. Prior to his study little attention had been paid to this aspect of medieval agriculture in Europe (McCloskey and Nash 1984).

Globally, hermetic storage in grain pits, silos or *Fosses à blé* was one of the most widespread methods of maintaining a cereal crop until the 18th century (Sigaut 1988, 10). The use of grain-storage pits was linked to a Mediterranean system whereby the whole crop was threshed and winnowed following harvest. Grain was often but not exclusively stored in underground silos, reaping was done with a sickle and animals were used in the threshing process (Sigaut 1988, 21).

Though present in Britain in the Iron Age, the use of grain-storage pits is thought to have died out by the medieval period in England when the area is thought to have been firmly within Sigaut's North European system (Gardiner 2013b, 23). This system utilised barns and ricks for the storage of sheaves prior to delayed threshing (Sigaut 1988, 23; Gardiner 2013b, 34). In many ways, this system was a product of the increasing 'cerealisation' recognised across northern France, the Low Countries, western Germany, southern Scandinavia and elsewhere from the 10th to the 13th centuries (Astill and Langdon 1997; Comet 1997; Raepsaet 1997).

Since the time of Sigaut's study, medieval settlement research has begun to place emphasis on this growth of 'cerealisation' suggested by increasing evidence for crop surpluses and supported by related infrastructure (eg granaries, barns and mills) and more advanced agricultural regimes (eg advanced crop rotations) over the early to High Middle Ages (see, for example, Astill and Langdon 1997; van der Veen et al 2013; McKerracher 2016a, 2016b). Eagerly awaited new studies such as the 'FeedSax Project' are set to transform understanding of this period of agricultural innovation (Hamerow and McKerracher 2022).

#### MIDDLE ANGLO-SAXON ACTIVITY AT PATCHAM

The presence of 7th–8th century pits of a type reminiscent of the grain silos of the Mediterranean system was noted at Patcham. Pits with such steep-sided profiles are relatively unusual on early and middle-Anglo-Saxon sites, although similar features have been noted locally on the chalk at the largely late-Saxon site at Market Field, Steyning, West Sussex (Gardiner 1993, fig 12) and the mid- to late-Saxon settlement at Bishopstone (Thomas 2010). More generally, it has been commented that there is very

little evidence of grain storage in pits during this period (Tipper 2004, 164; Gardiner 2013b, 23, 34). In fact, the lack of evidence has led to a suggestion that SFBs themselves were associated with this function (Tipper 2004, 164), although it is perhaps more likely that crops were stored in stacks or in granaries at this time (see Gardiner 2013b).

The cereal evidence at mid- to late-Saxon Bishopstone indicated crop processing in the form of oven drying of grain, either for granary storage or to facilitate milling (Ballantyne 2010, 174) and many of the large sub-circular pits were for organised and sequential deposition of waste (Thomas 2010, 67–71). It was noted in the above that, as well as grain silos, the pits also bear a resemblance to corn-drying ovens of the keyhole type and produced daub fragments consistent with oven-like structures, however, there was no evidence for associated burning *in situ*.

The use of these pits for grain storage is thought unlikely. It has been claimed that fire was utilised to cleanse pits prior to reuse (Reynolds 1974; Groenewoudt 2011, 2) which would have resulted in reasonably large quantities of charred grain on sites where silos were the preferred method of storage. Oven drying for granary storage can also contribute large numbers of accidentally charred cereal grains to the archaeological record (as interpreted at Bishopstone, see Ballantyne 2010).

The number of charred grains occurring at Patcham is thought to be below that which would show conclusively that silo or granary storage was in operation. Indeed, the presence of grain within the SFBs may indicate that instances of cereals within the pits were due to deposition among secondary domestic waste rather than related to any primary function. The pits were also shallower than typical Iron-Age grain-storage pits, which on average measure around 2 m in depth (Cunliffe 2005, 411).

#### LATE-SAXON –HIGH-MEDIEVAL BARNS

Nationally, archaeological evidence for early and high-medieval grain storage is rare and this is particularly the case for barns (Hamerow 2011, 145; Gardiner 2013b, 29). Barns are buildings especially designed for the storage of sheaves, often with threshing and winnowing floors within (Siguat 1988, 23). Previous examples have been identified chiefly by association with rich assemblages of grain, or by the presence of an axial line of posts dividing the interior of the building into two aisles (Hamerow 2011, 145; Gardiner 2013b, 29). Continental European scholars of early medieval architecture use the term ‘aisle’ to help categorise buildings by their subdivisions and plan form. This results in buildings designated three-aisled, two-aisled and single-aisle, among others. A three-aisled longhouse, for instance, comprises a building where the roof is supported by two rows of posts running down the length of the building, dividing the space into three long areas. In a single-aisle example, the weight is supported by substantial wall posts allowing an open interior. Though the use of the term ‘aisle’ is debateable, the nomenclature is utilised here in order to facilitate comparison.

In the UK, just a few excavated medieval barns pre-date the surviving standing examples of the 13th/14th century. In the main, these are all somewhat earlier than the suggested dates for the buildings at Patcham. The 8th-century barns at Higham Ferrers, Northamptonshire, had axial post lines of varying depth. The buildings were generally close to, and aligned with, the enclosure ditches, and examples 2666 and 7023 were on a N/E to S/W alignment (Hardy et al 2007, 32–45; Gardiner 2013b, 29). Building 3348 at Yarnton, Oxfordshire, was also identified as a barn on the basis of a single line



of axial posts and the deposition of large quantities of charred grain in the adjacent ditch (Hey 2004, 148–9, 361). Locally, at Bishopstone, Structure A (probably 9th or 10th century) had a central line of postholes and was close to a pit containing a quantity of charred seed (Thomas 2010, 36, 170). The use, morphology and construction techniques for these buildings were discussed by Mark Gardiner (2013, 29–30; Fig 14), however, since then a building ascribed a near contemporary Saxo-Norman date with that of B3 at Patcham has been published from the site of ‘*La Grava*’ or Grove Priory, Bedfordshire (Baker 2013).

Here, S10 was uncertainly ascribed a barn function. It was separate from the other buildings of the complex and was aligned roughly north-west to south-east, perpendicular to the rest of the settlement’s layout. It measured 27 m in length and had a central line of posts dividing the interior into two aisles. There was a central partition and stakeholes dividing part of the eastern aisle into narrow compartments. A door was recognised in the eastern wall (Baker 2013, 63; Fig 15). Also uncertainly ascribed a barn function, was the probable late 10th- or 11th-century B17 at Broadbridge Heath, West Sussex (Margetts 2018, 153, 155; Fig 16). This was largely based on an association with a large quantity of charred grain. The building remains were fragmented, although the surviving internal elements possibly suggest a line of load-bearing timbers.

As well as these English examples, B3 from Patcham also shows similarities to early medieval grain storage buildings from the Continent. The similarities in the early medieval barn traditions of the Netherlands with the meagre evidence found within the UK has been observed by both Helena Hamerow (2011, 145) and Gardiner (2013, 29). At the Dutch site of Odoorn, Drenthe, the two-aisled barns nearly all adjoined an enclosure fence and some were orientated N/S (Waterbolk 1973). Within the same region, the 9th-century barns at Gasselte were N/S aligned and were situated on the borders of plots. The oldest type of large barn corresponded with the ‘type E’ building in Odoorn. They were narrow and two-aisled, not usually exceeding 20 m in length and usually between 3 m and 3.8 m in width. The walls were almost always approximately parallel (Waterbolk and Harsema 1979, 241).

During the Middle Ages, two different types of barns were in use in the Netherlands: the two-aisle building discussed above, but also buildings *without* a central line of earthfast posts (one aisled) (Bert Groenewoudt pers comm). These resemble the ‘boat-shaped’ houses in the Odoorn- and especially, the Gasselte traditions. At Gasselte, a second phase of barn building comprising massive single-aisle structures could be divided into two sub-types, Gasselte C1 and Gasselte C2 (Fig 17). In the C1 tradition the walls are more or less parallel, but in C2 they curve outwards (Waterbolk and Harsema 1979, 241).

At Kootwijk in the Veluwe, the 6th- to 10th/early 11th-century phases of settlement included structures interpreted as barns that were small and single aisled. They accompanied the byre-houses of the settlement from which they could be distinguished by their lack of hearth, straight as opposed to curved walls, and generally smaller size (Heidinga 1987, 17–28). At the nearby 11th- to 13th-century settlement of Horst, the ‘boat-shaped’ byre-houses were accompanied by curved-wall barns that were again single aisled and overlapped in size with the dwellings (Heidinga 1987, 39–42). The function of the ‘barns’ on both settlements is slightly unclear and it should be noted that structures interpreted as granaries also existed, as well as possible storage lofts within the houses.

Further north, the so-called ‘magnate farms’ of Denmark and Sweden have also produced evidence of long buildings interpreted as barns. The AD 900–1050 settlement

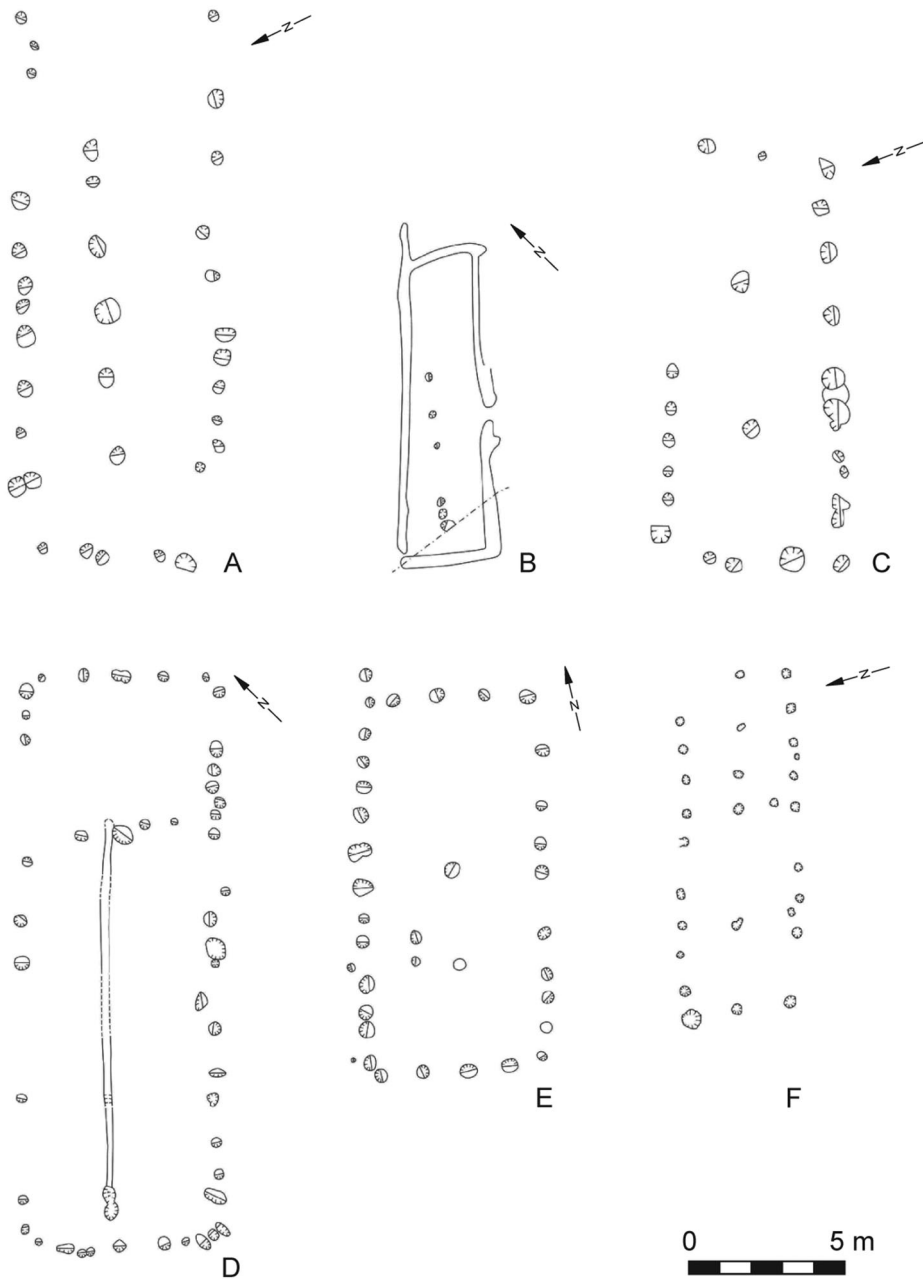


FIG 14

Excavated examples of early and high-medieval barns.

(A) Higham Ferrers 2664; (B) Higham Ferrers 2666; (C) Higham Ferrers 2665; (D) Higham Ferrers 7023; (E) Yarnton 3348; (F) Bishopstone Structure A. From Gardiner 2013b, fig 2.5.

at Västervång (Sweden) included a 20 m long, single-aisled building set at right angles to, and adjoining, the long-house. It has been postulated that its building was part of a new-found emphasis on grain production at the site (Carlie 2008, 113). The 13th-

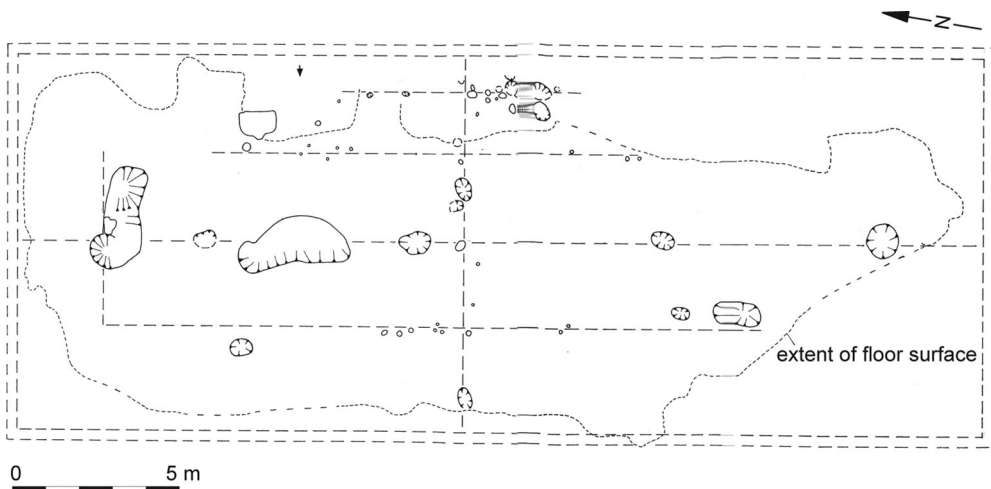


FIG 15  
Plan of structure S10 from La Grava, Bedfordshire.  
*From Baker 2013b, fig 3.17.*

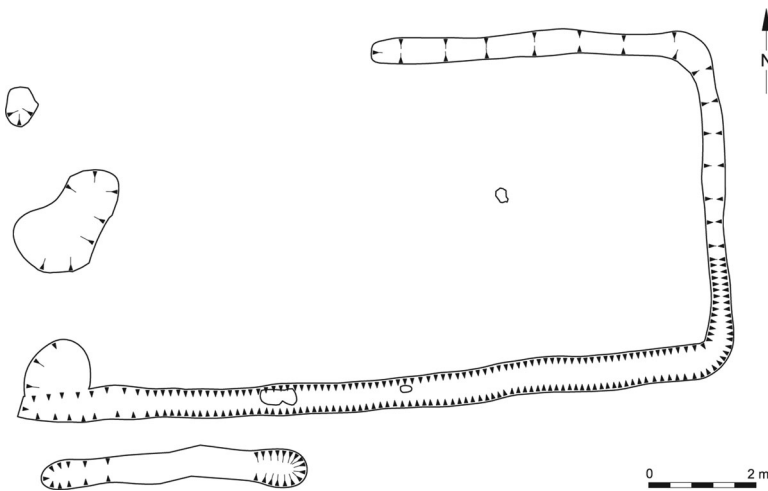


FIG 16  
Plan, section and photo of B17 from Wickhurst Green, Broadbridge Heath, West Sussex.  
*From Margetts 2018, fig 7.8.*

century Building K at the Bishop of Ribe's property in Lustrup (Denmark) consisted of a long (54 m), single-aisled, slightly bow-sided building, marked by two parallel rows of posts. There were no traces of openings in the walls nor interior divisions or fixtures (Søvsø 2012, 18).

The separation of activities into different buildings appears to have been part of a wider movement in southern Scandinavia: away from the longhouse equipped with a byre and towards separate structures that performed distinct functions. In Sweden, this occurred around the turn of the 11th century when a typical farm would include the main dwelling house; a threshing barn where the harvest was stored, and a cattle shed

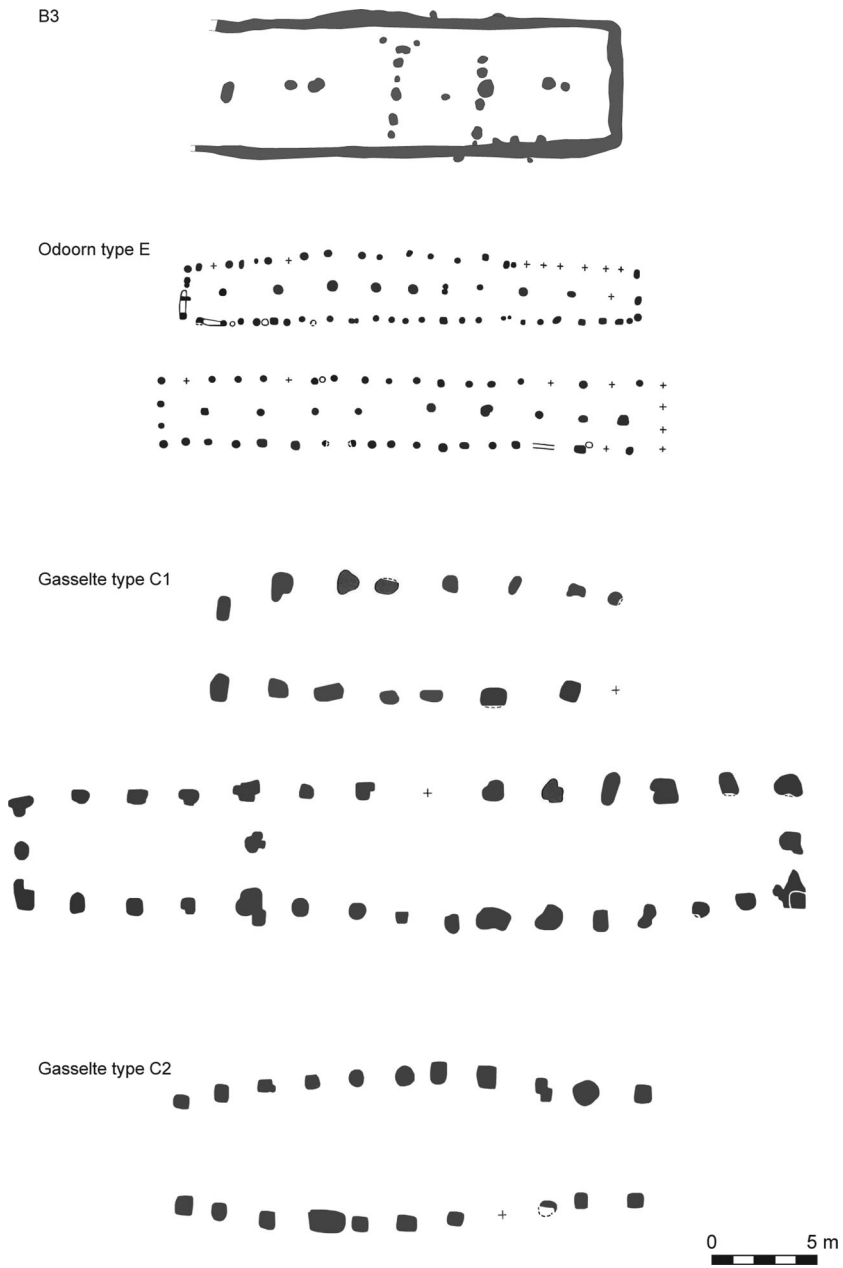


FIG 17  
Barns of Odoorn type E, Gasselte type C1 and Gasselte type C2 compared to B3 from Patcham.  
*From Waterbolk and Harsema 1979, figs 18 and 20.*

(Myrdal 2011, 91). The move away from longhouses with byres to separate buildings was completed slightly earlier (end of the 9th century) at the classic Viking settlement of Vorbasse in Jutland, Denmark (Hvass 1980, 1983).



FIG 18

Barn 104 from Peelo-Derkinge, Netherlands, compared to structures B4 and B5 from Patcham.  
*Illustration taken from Waterbolck and Harsema 1979, fig 38.*

*B3, B4 and B5 at Patcham: medieval barns?*

It is of course possible that the buildings encountered at Patcham performed an alternative function to that of grain storage. They bear a resemblance to many rectangular domestic buildings of the early to high-medieval period from both the British Isles and the near Continent (such as medieval halls and longhouses or byre-houses). A number of important elements of these building types are, however, absent or uncertainly represented at Patcham.

A particular feature of longhouses or byre-houses in both Britain and the Continent is the provision of living quarters at one end of the building and room for livestock at the other. Archaeological features that indicate this ground plan include evidence of stalling and drains to remove animal waste. Evidence of stalling, comprising rows of evenly spaced postholes, is often a feature of byres and byre-houses in near contemporary examples on the Continent, such as at 9th- to 11th-century Vorbasse (Denmark; Hvass 1983). It is possible that the additional line of postholes alongside the

western walls of both B3 and B4 indicates similar stalling for animals, although this is thought unlikely due to a number of factors. The buildings at Patcham appear, on the whole, to have been standing earlier than the generally accepted period of adoption of the byre-house in Britain in the 13th century (Gardiner 2014b). The house-type was also never embraced in south-eastern England, where open halls with separate ancillary buildings was the norm (Gardiner 2014b). Byre partitions also often include linear structural elements to accommodate stall side panels, a feature absent in the buildings excavated at Patcham. Though a possible drain existed in B5, there was no associated evidence of stalling within the structure.

Another notable aspect of the Patcham buildings is the lack of evidence for open hearths, a key feature of medieval halls. Though these could have been positioned on an upper floor, or removed by later truncation, the former explanation is unlikely and it is quite striking how infrequently charcoal occurred at the site in general and in Period 2 features in particular. This dearth of evidence is perhaps at odds with domestic buildings where sustained fuel use and day-to-day activity would have contributed charcoal and ash to the archaeological record. Contemporary material culture was also all but absent, despite the implementation of a comprehensive sampling strategy (see Introduction) and the good preservation conditions.

While structural features may have accumulated finds only during the construction or decommissioning phases of the building, we would certainly have expected to find deposition of domestic waste within nearby boundary ditches (D1 and D2). Conversely, a relatively small assemblage of pottery was recovered from the site and no material belonging to the 11th or earlier 12th century was encountered. Animal bone was also noticeably scarce with just two sheep bones, a fish bone and an unidentifiable fragment collected from Period 2 features. Though domestic areas were kept clean during the Middle Ages, with most waste deposited in middens away from the immediate settlement zone, an alternative function for the buildings to that of habitation would also accommodate the noted deficiency in charcoal and other waste.

Large quantities of charred grain are often used to support identification of barns elsewhere. There was, however, a distinct lack of associated macro-botanical evidence at Patcham. Nevertheless, this may not be decisive evidence against cereal storage as grain is usually only preserved when it has been charred. This occurs as a result of processes like drying, malting or toasting, but is unlikely to affect stored unprocessed grain in the sheaf, except in cases of accidental fire (McKerracher 2016b, 64), or deliberate destruction of spoiled crops. The use of fire in close proximity to a large cereal barn would obviously have been strongly discouraged.

As well as the absence of hearths, only B3 incorporated postholes likely to represent internal partitions. Little else survived among the building evidence to indicate functional separation between structural elements, as would possibly be expected with domestic buildings of the period, such as high-medieval halls of the tripartite plan. Nor was there anything to suggest the elaborate complexity seen in some aristocratic medieval hall ranges of the Saxo-Norman era (see for instance Blair 2018, 354–70). This said, it must be remembered that the ground plans of the Patcham buildings are incomplete and it remains possible that further elements such as services, latrines, chambers and byres existed beyond the limits of excavation.

The buildings at Patcham were all of significant length, being in excess of 16 m. This in itself is not proof of barn status, although as Hamerow (2002, 37) notes barns

were frequently longer than domestic buildings and often characterised by a central line of roof-supporting posts. The use of these substantial central posts is an unusual feature in domestic buildings of this period, although two-aisled longhouses dating to the Viking Age are known to exist in Scandinavia (Skov 2001; Fransson 2019) as well as parts of the British Isles that were influenced by Viking activity, eg the round-ended building at Chigborough Farm, Heybridge, Essex (Blair 2018, fig 135).

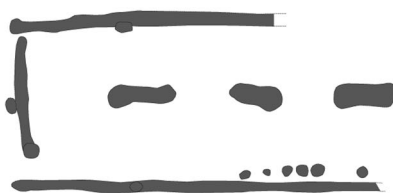
Though a complete plan of B3 was not revealed, the building was characterised by both deep and shallow axial posts, together with perpendicular lines of similarly filled postholes. Citing the diagonal line of postholes at building 2664, Higham Ferrers (Hardy et al 2007, 32–5), Gardiner (2013, 29) suggests that the axial line of posts is doubtful as remains of a roof support, the features being more likely related to a raised floor, keeping crops away from damp. This was something also hypothesised by Frédéric Epaud for two-aisled buildings with axial posts found in Lorraine, Normandy, Ile-de-France and Poitou-Charentes (Peytreman 2012, 218). Locally, Gardiner identified Structure A at Bishopstone as a possible example of the two-aisled type (Thomas 2010, fig 4.3; Gardiner 2013b, 29).

The authors believe that the shallow axial postholes of B3 were intended for holding joist supports for a raised floor and that the deeper posts may have been used to help support the roof, resulting in a two-aisled building. Despite a lack of evidence, it can be speculated that some clever jointing of the roof supports may have meant they could become dual purpose, augmenting the shallower postholes of the raised floor. Though building B4 had some clear structural differences to B3, probably linked to wider chronological changes in building styles, it is quite striking that it retained the element of deep structural supports along its centre. This lends some weight to the idea that this was also a grain-storage building, again with a raised floor. It is also worth noting the possible evidence that B3 was dismantled and its associated features backfilled during decommissioning. This could suggest that building B4 directly replaced B3 and performed the same function, perhaps even reusing the same timbers.

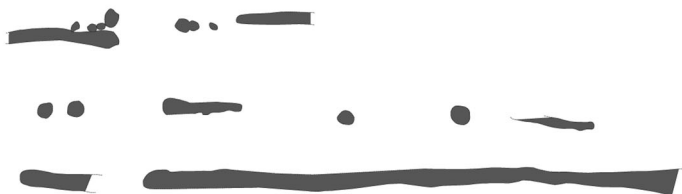
Though building B5 had central structural supports, these were generally much shallower than those in buildings B3 and B4, and in places slightly misaligned with the long walls. The features are thought to solely relate to joist supports for a raised floor rather than load-bearing elements, or a possible mixture of the two as seen in the other buildings. The postholes near the entrance gap are thought to relate to a sheltering hood or midstrey (a term used in Southern England to describe a type of projecting porch on a barn) for a wagon door.

An aspect of building B3 which is somewhat at odds with a crop-related interpretation is the possible use of internal partitions, which Hamerow (2002, 37) suggests is fairly atypical of barns. The perpendicular postholes evident in B3 may have served to create a raised floor, although they are thought more likely to be the remains of partitions. In later barns, low partitions often separated the threshing floor from storage bays and the thinner partially truncated wall trenches close to these postholes in the eastern wall of B3 may mark the location of an entrance to the building. It is noticeable that there is no such opening on the opposing western side, and if this was indeed the location of a threshing floor, winnowing would have likely been undertaken outside due to a lack of airflow. As well as crop storage, barns could perform a variety of functions including hay storage and the housing of animals. It may be that the partitions were

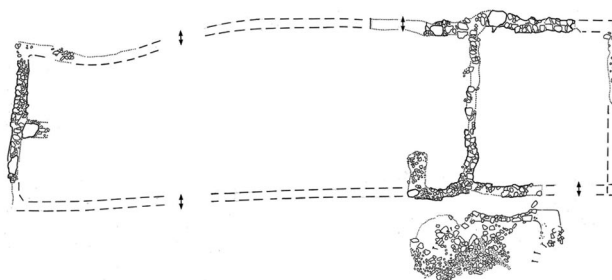
B4



B5



S37



S40

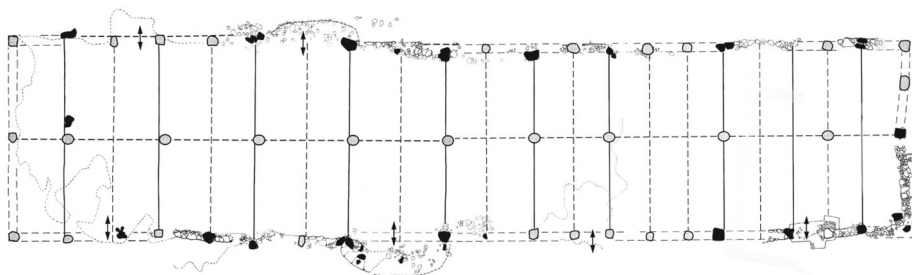


FIG 19

The barns and granary from Grove Priory compared to B4 and B5 from Patcham.  
*Taken from Baker 2013, figs 10.06, 10.07; Albion Archaeology 2013, fig 22.12.*



used in this way, however, this is thought less likely due to the close spacing of the individual posts and the lack of an associated drainage gully.

By the 12th and 13th century, two-aisled rectangular barns were apparently largely replaced by one-aisled 'boat-shaped' barns in the Netherlands, but not completely so. Late specimens were excavated at Peelo-Hovinge and Peelo-Derkinge in the province of Drenthe (Bert Groenewoudt pers comm). Building 104, explored at Peelo-Derkinge, dated somewhere between AD 1100 and 1400. It measured 26.4 m in length and between 4 and 4.7 m in width. It had a central line of three shallow postholes and had clearly been extended (Kooi 1995, 105, 204; Fig 18). From the evidence encountered at Patcham and elsewhere it seems that two-aisled barns potentially persisted into the 12th and 13th century in England. B4 was dated to the 12th century on spatial grounds and a transitional construction style that included both new and old load-bearing techniques. B5 on the other hand survived to a much greater length and had far less evidence for the use of load-bearing earthfast posts in its long walls as compared to its predecessors.

At Grove Priory, similarly dated barns belonging to the early to mid-13th century were excavated. Barn S37 lacked axial postholes, although it possessed a padstone in the central part of the gable end-wall indicating a ridged roof (Baker 2013, 131, fig 22.12). Barn S40 on the other hand measured 38 by 8.5 m externally and was built using dwarf walls of carstone blocks and rubble. It was divided into nine bays marked by an axial line of padstones and had padstones centrally placed within either end wall. These indicated a ridged roof (Baker 2013, 129, figs 10.06, 10.07; Fig 19). As well as this barn, other contemporary buildings from Grove Priory also had two aisles indicated by central lines of post-pads. These included a kitchen and possible dairy (S43) and a granary (S36) (Baker 2013, 125–6; 130). Interestingly, the granary had a masonry spine wall, similar perhaps to timber beam-slot G9 of B5. The spine wall showed possible evidence that loose material such as grains had been shovelled against it (Baker 2013, 130). G9's location near the entrance of B5 would have easily served this function of moving large amounts of threshed and winnowed grain. Such buildings help reinforce the notion that not all two-aisled buildings were barns and that not all 9th- to early 13th-century barns were aisled.

## CONCLUSIONS

We are gradually gaining an insight into earlier medieval barns as an aspect of the Northern European system of cereal storage. There is a growing body of evidence for structures that pre-date the time of later-medieval timber framing, of which there are surviving standing buildings. The identification and dating of medieval grain storage barns can be fraught with difficulty, but with an increasing dataset, trends may be discerned; both within this aspect of medieval architecture and related farming traditions.

The buildings at Patcham share similarities with barns from both Britain and the near Continent and present an insight into changing construction techniques from the Early to High Middle Ages. Not only do the style and form of the buildings show similarities, but also their siting within a settlement and their preferred orientation. The vast majority of early barns encountered in England and the Netherlands show placement on the fringes of settlement enclosures, often close to boundary features. Generally, barns of the Northern European style appear to show a N/S orientation, perhaps to

ensure good ventilation and an even amount of sun throughout the day. By distancing them from other buildings, such as dwellings or kitchens, the risks of fire are reduced.

Grain storage barns of the size of the buildings encountered at Patcham may imply some central organisation in the harvesting and storage of grain. The site's location close to the church, and probably the manor house, is therefore significant. Whether the buildings represent tithe barns is debatable. Though the manor remained as demesne, the Patcham church, its tithes and the land belonging to it were granted by William II de Warenne to Lewes Priory in the 1090s (Salzman 1940). It is possible that B3 was directly replaced by B4 in the 12th century, and may have been standing well after the tithe ceased to be collected by the local church. Gardiner (2013b, 34) suggests that it was often individuals who leased manors from the local lord who invested in agricultural infrastructure. They often paid rents wholly or partly in agricultural produce and had an interest in minimising waste which might result from a lack of adequate storage space. Though the ascription of a grain storage function is not certain, as possible barns that may have belonged to an early medieval estate centre and later manor, those at Patcham may be typical of many that existed in England during the late-Saxon and Norman period whether or not they were held in demesne.

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#### DISCLOSURE STATEMENT

No potential conflict of interest was reported by the authors.

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### Résumé

### **Granges médiévales : suggestion de stockage médiéval du grain de type nord-européen au manoir de Patcham, dans l'East Sussex par Anna Doherty et Andrew Margetts**

Au sein du système nord-européen, la méthode préférée pour le stockage de cultures arables était de former des gerbes qu'on conservait dans des granges et des meules avant le battage. En dépit de la prévalence de cette technique, les traces de granges médiévales antérieures au treizième siècle sont rares. La découverte et les fouilles non

seulement d'une, mais de trois granges possibles, datées entre le 10<sup>e</sup> et le 13<sup>e</sup> siècle, contribuent significativement à ce que nous savons de la tradition de stockage du grain en Grande-Bretagne et sur le continent. Le travail a été réalisé par des membres du groupe Archaeology South-East, basé à University College London, Institute of Archaeology (ASE) et de la Brighton and Hove Archaeology Society (BHAS) pendant l'été 2013. Bien que le site se soit révélé riche en vestiges de structure, les artefacts étaient peu nombreux. Pour plus d'informations sur les modestes découvertes, le lecteur est invité à parcourir le compte-rendu technique associé (ASE 2014).

*Zusammenfassung***Scheunentanz: Vermutete mittelalterliche Getreidespeicher des nordeuropäischen Typs auf dem Lehnsgut Patcham, East Sussex von Anna Doherty und Andrew Margetts**

Im nordeuropäischen System waren Scheunen und Getreideschober zur Aufbewahrung von Garben die bevorzugte Methode, Ackerfrüchte vor dem Dreschen zu lagern. Trotz der weiten Verbreitung dieser Technik gibt es nur seltene Hinweise auf mittelalterliche Scheunen aus der Zeit vor dem dreizehnten Jahrhundert. Die Entdeckung und Ausgrabung von nicht nur einer, sondern von drei vermutlichen Scheunen, die auf die Zeit zwischen dem 10. und 13. Jahrhundert datiert werden, stellt einen bedeutenden Beitrag zu unserem Verständnis der britischen und kontinentalen Tradition der Getreidelagerung dar. Die Arbeiten wurden im Sommer 2013 von Mitgliedern der Gruppe „Archaeology South-East“ mit Sitz am Institute of Archaeology (ASE), University College London, und der Brighton and Hove Archaeology Society (BHAS) durchgeführt. Die Stätte war zwar reich an baulichen Zeugnissen, es gab aber nur wenig artefaktisches Material. Für weitere Informationen zu den spärlichen Funden werden die Leser:innen auf den zugehörigen Bericht über graue Literatur verwiesen (ASE 2014).

*Riassunto***Eureka! Presso la grande dimora di Patcham, East Sussex, si individuano edifici medievali per conservare le granaglie secondo la tipologia nordeuropea, di Anna Doherty e Andrew Margetts**

Secondo il sistema nordeuropeo, il metodo preferito per conservare i covoni prima della trebbiatura consisteva nell'utilizzare granai e fienili per i cereali. Malgrado questa fosse la tecnica prevalente, la documentazione relativa ai granai medievali prima del tredicesimo secolo è rara. La scoperta, seguita dagli scavi non di uno, ma di ben tre possibili granai risalenti a un periodo tra il X e il XIII secolo, costituisce un contributo significativo alla nostra comprensione della tradizione britannica e continentale relativa all'immagazzinaggio dei cereali. I lavori furono intrapresi da membri dell'*Archaeology South-East* basati presso l'*Institute of Archaeology (ASE)* dell'università UCL (*University College London*) e dalla *Brighton and Hove Archaeology Society (BHAS)* durante l'estate del 2013. Malgrado il sito fosse ricco di evidenze strutturali, i manufatti erano pochi. Per maggiori informazioni sugli scarsi ritrovamenti, si suggerisce al lettore di consultare il resoconto sulla letteratura grigia relativa in *Association for Science Education* (ASE 2014).