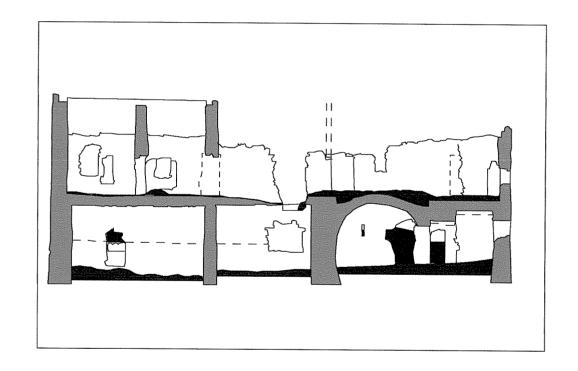


LYDSTEP PALACE, PEMBROKESHIRE

ARCHAEOLOGICAL CLEARANCE AND RECORDING, NOVEMBER 2001-JANUARY 2002



Report No. 2002/60

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CAMBRIA ARCHAEOLOGY

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LYDSTEP PALACE ARCHAEOLOGICAL CLEARANCE AND RECORDING NOVEMBER 2001 - JANUARY 2002

By

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LYDSTEP PALACE

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1.0 SUMMARY

Clearance work was undertaken by Cambria Archaeology within the first floor of Lydstep Palace (Dyfed PRN 4222; Scheduled Ancient Monument Pe 403), in 2001-2. The project formed part of a long-term programme of remedial works to the Palace that has been in progress since 1996, which have all been initiated, and core-funded, by Pembrokeshire County Council through SPARC/PLANED.

Lydstep Palace is a free-standing, rectangular, medieval building of the local Carboniferous Limestone comprising a first floor over a vaulted ground floor, having affinities with the late-medieval hall-house which was once a widespread component of the South Pembrokeshire landscape.

The primary function of the Palace during the medieval period was doubtless residential, but an administrative/judicial role, within a manorial context, has also been proposed. It appears that, during the medieval period, the first floor comprised one large chamber, subdivided into smaller spaces by at least one open arch.

The Palace represents a structure that has undergone considerable and changing use almost continuously since the medieval period. Eight main structural phases have been identified. Medieval work appears to be of a single main phase with some late medieval alterations. There may have been a period of abandonment at the end of the medieval period, before occupation, of a much-diminished status, resumed. The post-medieval alterations included the division of the first floor into three rooms.

This low-status occupation continued into the early 20th century, but was confined to two rooms on the first floor; the third first floor room was ruinous by the mid 19th century. Associated with this late 19th-early 20th century occupation was the establishment of a breadoven in the ruined room, possibly linked to the occupied area by a flagged path. At the same time, soil appears to have been imported and deposited over the ground-floor vaults, possibly as a garden.

No medieval deposits were encountered during the clearance work, or in situ flooring, but it appears that the medieval first floor comprised a suspended timber floor over the vault apices.

A neolithic stone axehead was retrieved from the 19th century soil. It may not be in situ, but imported along with the soil and therefore an accidental deposition. Petrological analysis demonstrates that it is a Group VII stone axe, of north Welsh origin.

2.0 SITE LOCATION, DESCRIPTION AND HISTORY

Lydstep Palace (Dyfed PRN 4222; Scheduled Ancient Monument Pe 403) is situated at NGR SS 0863 9836, approximately 5.5 km SW of the town of Tenby. It lies within the parish of Penally, whose western boundary, shared with Manorbier parish, runs a mere 20m west of the building (Fig. 1).

The site lies approximately 60m above sea level, on a slight south facing slope which forms the east end of a low ridge of Carboniferous Limestone, itself an arm of the general east-west ridge that dominates the South Pembrokeshire peninsula. The ground slopes steeply down to the west to a wide bay, Lydstep Haven, which has cut through an outcrop of softer Millstone Grit.

Lydstep Palace was subject to a detailed building recording project and historical overview in 1996, undertaken on behalf of Pembrokeshire County Council/SPARC. It is not intended here to fully repeat the findings from this work and the reader is referred to the report on the project (Ludlow 1996). However, Section 5.0 includes a detailed summary relative to the 2001-2 results.

In brief, Lydstep Palace is a free-standing, rectangular building of the local Carboniferous Limestone comprising a first floor over a vaulted basement, having affinities with the late-medieval hall-house which was once a widespread component of the South Pembrokeshire landscape. It is large in scale, however, approximately 18m by 6m. It stands alone, with no surviving contemporary ancillary buildings or boundary wall, although later structures lie against both ends of the building. The ground floor comprises three (originally two) vaulted chambers (Rooms 1, 2 and 3); the first floor now comprises three unvaulted chambers (Rooms 4, 5 and 6). The building is substantially intact, though the north and east walls of the upper storey Room 4 have been truncated to first floor level.

The palace represents a structure that has undergone considerable and changing use almost continuously since the medieval period. Eight main structural phases have been identified. Medieval work appears to be of a single main phase with some late medieval alterations. There may have been a period of abandonment at the end of the medieval period, before occupation, of a much-diminished status, resumed. Many of the more superficial features - windows, doors etc - belong to this post-medieval use.

The medieval work is characteristic of the late $14^{th} - 16^{th}$ centuries. The basic form of the building was established from the first. There is no physical evidence for an earlier building on the site. Neither is there structural evidence for any ancillary structures associated with the Palace building. However, it must be stressed that only the above-ground component of the total archaeological resource is visible, and subject to recording.

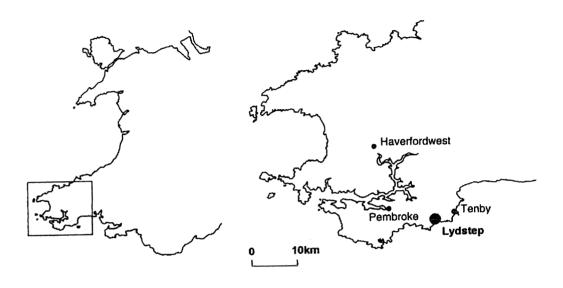
Despite post-medieval alteration, the Palace retains many medieval features, although part of the first floor has now gone. Four ground floor doorways and a number of lights survive, to varying degrees, from this period.

The primary function of the Palace during the medieval period was doubtless residential, but an administrative/judicial role, within a manorial context, has been proposed. Above two vaulted cellars lay what appears to have been a single large chamber reached by a number of external stairways, within which rents etc may have been assessed and collected. The building may have succeeded an open-air meeting ground, centering on a standing stone which lies near a hedgebank representing the boundary between Manorbier and Penally parishes (Fig. 1), and possibly surrounded by a large enclosure bank. A similar dual role, both residential and administrative, has been proposed for a number of similar buildings including the 15th century episcopal court house at East Meon, Hampshire (Roberts 1993, 456-481).

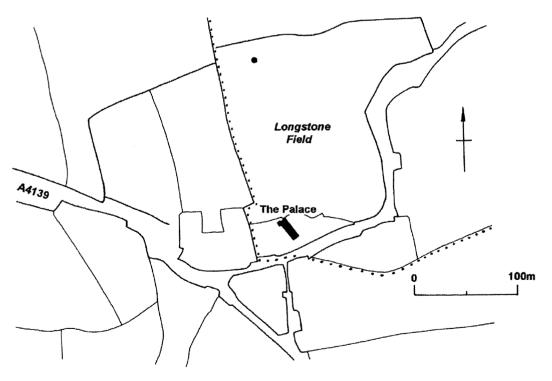
As an administrative centre, the Palace probably went out of use during the 17th century as the jurisdictional power of the manorial court waned. It was re-used as a domestic habitation from at least the mid-19th century and probably earlier, although some stone robbing - particularly from the first floor, half of which could not be re-used - had taken place.

Occupation may have at first been little more than squatting; at any rate in terms of social status it represented a sharp break from the building's medieval use. Post-medieval structural alterations are largely superficial, represented mainly by openings, but have contributed to the collapse of certain elements of the building. Furthermore, entirely new buildings were added to both end walls. The palace was not finally abandoned until the mid 20th century.

Fig. 1: Lydstep Palace - location maps



· · · · · Parish boundary



3.0 AIMS AND OBJECTIVES

The clearance project formed part of a long-term programme of remedial works to the Palace which has been in progress since 1996.

At the beginning of 1996 the building was in poor condition. The south gable wall, with the chimney, were in a highly unstable condition and the upper floor cross walls, with their timber lintels, little better. No door/window frames survived, though the roof timbers were mainly intact if in poor condition and the slates partly missing. The building was substantially covered with ivy, and some young trees. Much of the northern half of the first floor lay beneath a considerable soil build-up in which saplings had become established. As an emergency measure, the superficial vegetation was cleared, the saplings truncated and the openings, many of which were unstable, temporarily blocked with breeze-block.

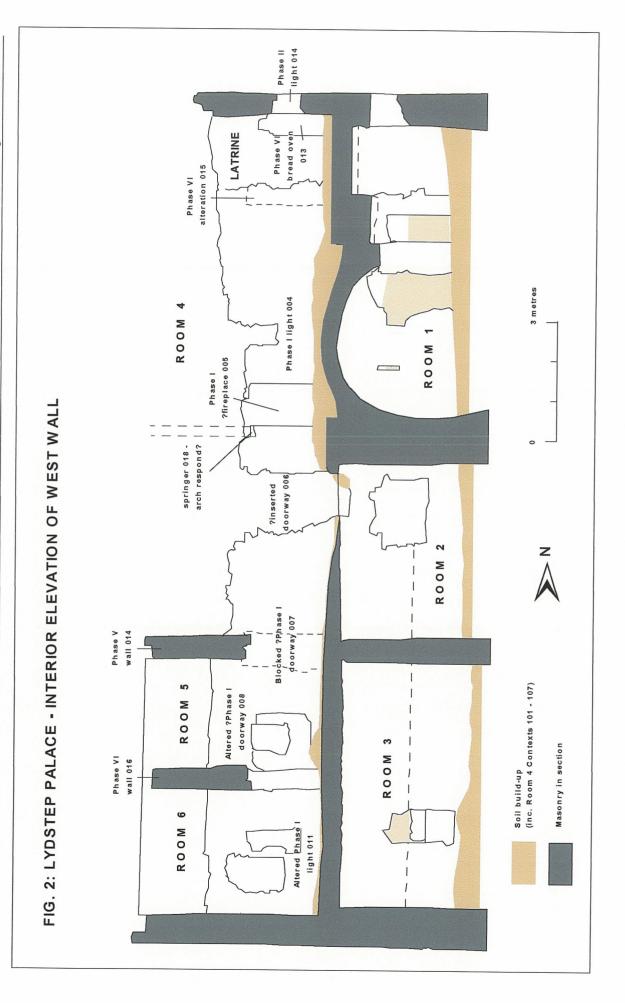
In 2001, much of the northern half of the first floor still lay beneath a considerable soil build-up which was thought to possibly seal archaeological deposits. It was therefore considered appropriate, by Pembrokeshire County Council/PLANED, that this build-up should be removed archaeologically and be accompanied by the appropriate level of archaeological recording. In addition, the two southern first floor rooms, which featured 20th century concrete floors, were cleared of their superficial debris.

The chief objective was to establish whether there was any surviving physical evidence for *in situ* flooring, or evidence for the nature of any former floors.

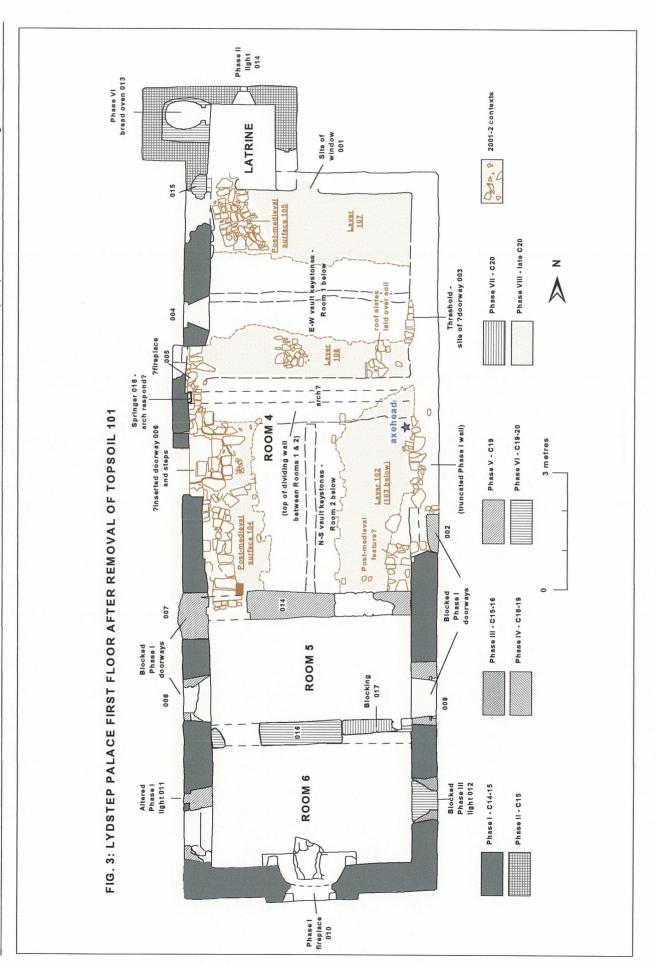
4.0 METHODOLOGIES

The deposits in all three first floor rooms were excavated by hand and the sapling roots in the northern half carefully removed. *In situ* archaeological deposits were then hand-cleaned. All features and deposits were recorded by *pro forma* archaeological context record sheets, scale drawings and photography. All features and deposits were numbered using the openended numbering system in accordance with the Cambria Archaeology Field Operations Recording Manual. All significant deposits were recorded by scale drawing at 1:20 scale. Features containing deposits of environmental or technological significance were sampled. All artefacts, ecofacts and samples were retained and related to the contexts from which they derived. Samples were taken from deposits with potential for palaeoenvironmental material and an initial assessment of the potential of those samples was carried out. Sensitive material is stored in appropriately stable conditions.

CAMBRIA ARCHAEOLOGY Lydstep Palace clearance and recording, Nov. 2001–3002



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5.0 RESULTS

5.1 Overall description (from Ludlow 1996)

Lydstep Palace stands alone with no surviving contemporary ancillary buildings or boundary wall, although later structures lie against both ends of the building - pens to the north, and a cottage to the south. Eight constructional phases have been identified ($Phases\ I-VIII$).

The ground floor survives substantially intact. It comprises three (originally two?) chambers, **Rooms 1**, **2** and **3**, all barrel vaulted, the northernmost chamber with a transverse vault. There are a number of openings through the east face, some of them primary. At the north end is a secondary square projection, also of two storeys produced laterally as an outshut on the west face, which appears to have housed a latrine. A number of secondary features - fireplaces etc - are now present, but in its primary form the accommodation was basic and appears to have been used solely for storage. There is no evidence of any communication between the ground floor and the first floor.

The first floor has survived less well. Much of the east and north faces are now gone. Internal arrangements comprise a large northern chamber (**Room 4**), and two smaller southern chambers (**Rooms 5** and **6**), both secondary in their present form. The southernmost displays a large fireplace and chimney on the south wall. Few of the openings on this floor are original, the chambers having been used as dwellings into the present century, though there is much structural evidence for former openings. The NW outshut displays a vaulted catslide roof; it is now occupied by a modern bread oven but possessed a fireplace and chimney by 1867 (Fig. 3). The slate gable roofs are likewise modern, as are the upstands; the latter, however, were depicted with thatched roofs in 1867.

Although eight constructional phases have been identified, the building in its present form is little unchanged from its condition as described by Barnwell in 1867. Already by 1867 the first floor east wall had gone. Rather more survived of the northern gable and he describes an 'opening in the gable (which) appears to have been a large window; but from the absence of any architectural features, and from its ruined condition, it is impossible to conjecture anything of its character' (Barnwell, 1867, 367). He also suggests, but does not state, that only the northern of the two first floor cross walls was then present. As in 1996, only this southern section of the upper floor - which was then occupied - was roofed. His accounts of 1877 and 1881 add little additional information, likewise that of Laws, 1888.

Smith (1988, 27) suggests the presence of an external stair to the present large breach in the first floor west wall, but the opening appears to be secondary and enlarged through collapse. His plan on the same page also omits two of the internal cross-walls. The Cadw descriptions of 1980 and 1987 are taken from Smith.

5.2 The first floor – the standing structure (from Ludlow 1996)

The first floor is now divided into three spaces, to the north a large rectangular space (**Room 4**) and to the south two smaller, rectangular chambers (**Rooms 5** and **6**) – see Figs. 2 and 3.

The northern end gable wall has substantially gone, along with the northern half of the west wall of this floor. Where they survive the walls, as noted above, are thinner than on the ground floor demonstrating that this floor always lay beneath a timber gabled roof. The walls are not jettied out beyond the ground floor walls, though certain features are corbelled out. Only the southern gable upstand survives to any degree. However, the present internal gables on the dividing walls are, like the roof itself, of recent construction and of a much lower pitch than the original roof. Most of the interior walls lie beneath later plaster, and structural evidence is thus largely confined to the exteriors.

It is the northern space (now **Room 4**) that has been the most damaged, by both time and stone-robbing.

5.2.1 Phase I - 14th-15th century

The structural evidence suggests that in its original form the entire first floor was a single chamber. However, during the 2001-2 clearance work a springer (018) was noticed on the internal face of the west wall, suggesting that **Room 4**, at least, may have been divided by a large, open arch.

No features are preserved in the truncated north wall of Room 4, but Barnwell interpreted the remains of an opening in the northern gable wall, now gone, as having formerly been a large window (Barnwell, 1867, 367) - a primary feature? The embrasure for this window (001) was revealed during the 2001-2 clearance work. The west end of this wall was later altered when the projecting Latrine chamber was added during Phase II. The east wall has been truncated almost to the level of the top of the vault, which itself is concealed beneath a considerable thickness of spoil. However a short length of the wall survives at the southern end of this space. It features the jamb and the slightly splayed reveal of a ?Phase I entry (002), which was later blocked. Just over five metres to the north, the external face at ground floor level displays projecting stones which may be toothing for an ancillary structure of some kind. possibly associated with an external stair to a second first floor doorway. A possible threshold (003) was revealed during the 2001-2 clearance work. The opposite, west wall has survived more-or-less to its full height, and comprises a number of features. At the north end the joint with the later Latrine can be seen internally, though this has been subject to still later disturbance and alteration. Three metres to the south is a splayed light (004), its head and surround gone by 1867 (Barnwell, 1867, opp. p.367) but probably Phase I. South of this, a 2.5m N-S section of the wall has been corbelled out externally with a corresponding internal recess. Corbelled features such as this are not uncommon in buildings of this nature, and this has the appearance of a fireplace (005). However, Barnwell's view appears to depict an external summit beneath the level of the wall-head (Barnwell, 1867, opp. 367). Whatever its purpose, the feature appears to be primary. The associated arch springer (018) has been noted above. The large breach south of the projection, (006), has always been interpreted as a doorway. However, only corework is exposed in its sides, and two blocked doorways are present not far to the south, making unlikely that an entry would be an original feature here. Steps have been cut into the vault immediately inside the opening, however, demonstrating that it has been used as an entry. It is suggested here that it represents secondary use of an existing breach that may be fairly late.

The two blocked doorways to the south in this west wall have retained their external rubble surrounds, and their sills. The northern of the two (007) has lost its head, while the southern (008) was converted into a window. Neither doorway is then possible to date; one or both of them may be secondary insertions. However, the northern doorway lies directly on the line of the cross wall between **Rooms 4** and **5**, proving that the doorway predates the wall (and therefore that the wall cannot be primary - it also lies above the secondary cross wall on the ground floor). It is possible, then, that at least this doorway is *Phase I*, reached by an external ?timber stair. It may be that the second doorway is also from this phase, the doors representing access to areas of the upper floor divided by a timber partition during *Phase I*. The remaining features of what is now **Room 5** are all later, but a slight difference in build, visible externally beneath the window in the opposite (east) wall (009), appears to define a rectangular area - a further blocked doorway?

The present **Room 6** is defined by a second cross wall (016), of slender nature and poor construction. It too is secondary. However, some features survive from Phase I in this area. In the south wall can be seen the remains of a large fireplace, (010), which must be primary, unless the entire gable wall was rebuilt when the fireplace was established. Internally, indeed, the fireplace is of standard medieval form, with a projecting hood, carried on corbels, that is now largely gone. The massive square stack, however, resembles rather later forms, and is very similar to a chimney dated to the 17th century at Caldey Priory (Ludlow, forthcoming). It may have been later remodelled, but as a type these stacks may be fairly conservative. Externally, it is carried on a two-tier corbel table and is in poor condition. The square window (011) in the west wall of **Room 6** is a later insertion. However, it has been inserted against the southern end of the rather massive limestone surround of a blocked two-centred arched window, visible externally. This window represents the most firmly dateable detail in the entire

building; it is very similar to the original windows at Loveston Church, Pembrokeshire, where they are of undoubted late 14th century date (Ludlow 2000). In this, the window is of somewhat earlier form, in conventional terms, than the ground floor doors, but all are here regarded as contemporary and defining *Phase I* as late 14th century at the earliest. The east wall also displays a blocked window (012) but the nature of its surround suggests that it is secondary. Floors in both **Rooms 5** and **6** are also later.

5.2.2 Phase II - 15th century?

Succeeding phases are all represented by rather minor works, the form of the building having been dictated in *Phase I*. However, at the end of the medieval period (and while the building still fulfilled a high-status role) improvements were apparently thought necessary, resulting in the construction of the **Latrine**, a two-storey projecting block on the NW corner of the building.

Much of the external lime finish appears to be original, being cut by inserted features etc, and may belong to *Phase I* or *Phase II*.

The **Latrine** is constructed from a very similar fabric to the *Phase I* building, the coursing, rough quoining etc being identical. However, that it was a secondary construction is demonstrated by the joints that are visible between it and the *Phase I* work throughout both external and internal walls. It comprises a square projection from the western third of the north wall of the Palace, also of two storeys, and produced laterally on the west face as an outshut with a vaulted catslide roof. It may have replaced an earlier structure (see above).

The structure has undergone later alteration that, superficially, makes its original function difficult to interpret. At ground floor level the structure comprises a square chamber, entered through the *?Phase I* doorway from **Room 1**, with a small, square-headed light of 15th-16th century form at the north end, and a plain, small square recess in the west wall. The west wall does not - and apparently has never - featured a recess to correspond with the lateral outshut here, suggesting that the outshut houses a shaft from a former latrine on the first floor. Externally, the footings are exposed all round the outshut where it was built against an existing bank. However, it may be suggested that the void now present beneath this wall may have formerly featured an exit for the latrine shaft. The area on the first floor which would have housed the latrine itself is now occupied by a bread oven (*013*). The latrine was lit by a simple slit light (*014*) in the north wall.

5.2.3 Phase III - 15th-16th century

Phase III is represented by a single feature, the blocked window (012) visible externally in the east wall of what is now **Room 6**. That the window is an insertion is demonstrated by the rough cut-out for the embrasure, infilled with small rubble around the remains of the surround. The surround now comprises just the jambs, each representing a single roughly cut piece of local Old Red Sandstone. The head has gone but appears to have been a lintel stone. Internally, the window reveals are visible beneath the later plaster finish. The window is difficult to date; in its massive form it is similar to the *Phase I* window 011 on the opposite (west) wall, but nowhere else in the building is Old Red Sandstone represented. A 15th-16th century date for its insertion is suggested.

5.2.4 Phase IV - 18th -/early 19th century

Phase IV appears to represent a period of use of the building, perhaps after a period of abandonment. This appears to have been of a much lower status than in previous phases. Very little building activity can be assigned to this phase. However, some of the minor works of uncertain date may belong here. It is regarded as belonging broadly to the 18th - and early 19th centuries.

On the first floor, the only fabric which can with any certainty be assigned to *Phase IV* is in the blocking of doorway 002 in the east wall of what is now **Room 4**. The doorway must have

been blocked prior to the demolition/collapse of the remainder of the east wall at this level, which appears to have taken place prior to the succeeding phase (see below), and features a dark mortar of post-medieval type seen nowhere else in the fabric.

At least some of the internal finishes may belong to this general phase.

5.2.5 Phase V - 19th century

In contrast, much structural evidence for the occupation of the Palace is represented in *Phase V*. The fabric that constitutes this phase can be broadly assigned a 19th century date, and accords more-or-less to the structure of the building as it was when illustrated by Barnwell, 1867, and described as mean tenements. Fabric from *Phase V* occurs in almost all the main elements of the palace.

Barnwell's description makes it clear that **Room 4** was a roofless ruin and that its east wall was already truncated by 1867 (Barnwell, 1867, 367). The north wall stood substantially more intact than today. The **Latrine** outshut appears to have been used as a fireplace, the chimney of which exited through the vault, and indeed was later replaced by bread oven *013* - rather surprising usage in what was effectively now an open yard. He notes the presence of the breached entry and steps at the south end of the east wall.

Barnwell describes **Rooms 5** and **6** together as 'the cottage' and it is not clear whether he had access to their interiors. There is a slight suggestion that the cross wall between the two was not then present. Both Barnwell (1867) and Laws (1888) make it clear that it was a dwelling(s) of utmost poverty. They note that neither the roof over **Rooms 5** and **6**, nor its line, reflect the original and it seems that the present low-pitched configuration already existed. The roof was then thatched; the slate roof and its timbers are later. At least the wall (014) between **Rooms 4** and **5** was standing by 1867, and appears to be from its construction a 19th century feature. It is certainly more solid than the wall (016) between **Rooms 5** and **6**. All *Phase V* work here, however, lies beneath later internal finishes.

A doorway led from **Room 4** into **Room 5** at the west end of the north wall. This had a simple timber lintel that has now rotted out. The opening in the same wall to the east is as a result of collapse. It is suggested that it was during this period that the two *Phase I* doorways through the west wall (007 and 008) were blocked, the southern becoming a window - the mortar bonding in the infill is similar to *Phase V* work on the ground floor. A similar window was inserted through the east wall in the area of the possible blocked doorway 009 (see above). A further window (011) was inserted through the west wall of what is now **Room 6**; all have or had timber lintels and conform to a 19th century pattern. The two western windows are shown by Barnwell with 16-pane timber frames which have now rotted out but their impressions remain. It appears that they remained *in situ* until the building was finally abandoned this century. The *Phase II* window 012, in the east wall of **Room 6**, appears to have been retained during this phase (see below).

5.2.6 Phase VI - late 19th-/early 20th century

Phase VI represents a continuation of Phase V occupation but with fabric that can be assigned to the late 19th-early 20th century, and in this sense constitutes a discrete building period. The nature of the occupation, and of the materials used, remained much the same. A cottage was built against the south gable wall of the Palace, and pens against the north wall; the earliest significant additions for which there is structural evidence. The buff external finish of parts of the east wall can be assigned to this phase.

On the first floor, *Phase V* is represented by a number of minor works. The existing fireplace within the **Latrine** outshut was replaced by a bread oven (013), while an area of internal collapse of the west wall immediately to the south was infilled by (015), a timber lintel carrying the wall top.

Wall 016 between Rooms 5 and 6, with its flimsy construction, may belong to this phase. It displays a doorway with a timber lintel at its west end, over which much of the wall has

collapsed. A further, wider opening with a timber lintel was present at the east end of this wall but was later infilled.

The *Phase III* light (012), in the east wall of **Room 6**, is now blocked by masonry bonded with a similar material to that used as external render, which survives in areas, on the east wall. The render overlies *Phase V* work and with the blocking is assigned to *Phase VI*.

5.2.7 Phase VII - 20th century

Oral sources suggest that the Palace was inhabited until after World War II, a view confirmed by the structural evidence. *Phase VII* represents this last period of occupation.

No large scale building work was undertaken during this phase but the superficial work gave the Palace much of its 1996 appearance. **Rooms 5** and **6** received the present timber 'A'-frame roof, and the slates that were removed in June 1996. The internal pink plaster finishes in the two rooms overlie all other material and belong to this phase. Lying beneath the same finish is the infill (017) of the eastern wide opening through the *Phase VI* cross wall between the two rooms.

Both Rooms 5 and 6 received their present concrete screed floors during Phase VII.

5.2.8 Phase VIII - 20th century

Phase VIII is characterised by minor repair works, not represented on the first floor.

5.3 The deposits

5.3.1 Room 4

Seven contexts were revealed within **Room 4** (Fig. 3). They lay beneath a superficial build-up of debris and vegetable matter, within which tree saplings had become established. Clearance of this build-up revealed –

- Context 101 'Topsoil' material, very humic, containing much vegetable matter and the roots of the tree saplings which had become established. All finds were post-medieval modern and were discarded. Removal of 101 revealed, towards the centre of Room 4, the arched tops of the two vaults on the ground floor, the northern of which, over Room 1, lay E-W and the southern of which, over Room 2, lay N-S, and the top of the dividing wall between the two ground floor rooms (Fig. 2). Either side of the summits of the vaults lay further contexts -
- Context 102 In the SE quarter of Room 4, context 101 overlay a layer of mortary soil, with small stones, slate fragments and plaster inclusions, which was more-or-less coterminous with context 101 in this area and filled the eastern vault soffit of Room 2. An area of 102 appeared to be cut by a square feature (see Fig. 3) but this proved inconclusive upon excavation. No finds were recovered from 102.
- Context 103 Again in the SE quarter of Room 4, context 102 overlay a layer of mid-brown clay loam, also more-or-less coterminous with context 101 in this area. It appears to represent imported soil. Fourteen sherds of pottery, and a clay pipe bowl, were recovered from context 103, with a date range from the 17th century to the late 19th-early 20th century. In addition, a Neolithic stone axehead was recovered from this context.
- Context 104 In the SW quarter of Room 4, topsoil 101 overlay an area of large, flat limestone flags, deliberately laid and seeming to form a level surface, filling the western vault soffit of Room 2. The surface ran N-S, alongside the west wall, between the doorway in the Phase V dividing wall, 014, and ?fireplace 005. The flags lay in a matrix of mixed, dark, ashy soil of post-medieval nature. It also lay below the level of the top of the medieval vaults. No finds were recovered from 104.
- Context 105 In the NW quarter of Room 4 and the Latrine, topsoil 101 overlay a second area of large, flat limestone flags, again deliberately laid and seeming to form a level surface. The surface similarly ran N-S, alongside the west wall. The flags lay in a matrix of mixed, dark, ashy soil of post-medieval nature. It also lay below the level of the top of the medieval vaults. No finds were recovered from 105.
- Context 106 In the central area of Room 4, context 104 appears to have overlain a layer of mortary soil, with small stones, slate fragments and plaster inclusions, which was very similar, and probably contemporary to 107. It filled the southern vault soffit of Room 1. It contained a discrete area of roofing slates which appeared to from a line. However, the layer was unexcavated and the nature of the feature was not established.
- Context 107 Context 105 appears to have partly overlain a further layer of mortary soil, with small stones, slate fragments and plaster inclusions, very similar, and probably contemporary to 106. It similarly filled the northern vault soffit of Room 1. The context was not fully excavated.

5.3.2 Rooms 5 and 6

Deposits in both Rooms 5 and 6 comprised 20^{th} century superficial soil and debris over the *Phase VII* concrete screed floors. This debris was also removed.



Fig. 4: Lydstep Palace - Room 4 after removal of topsoil 101, looking south



Fig. 5: Lydstep Palace - Room 4, surface 104, looking southwest



Fig. 6: Lydstep Palace – Room 4 during removal of topsoil 101, looking north



Fig. 7: Lydstep Palace - surface 105 running into latrine, looking north

6.0 THE FINDS

6.1 The Neolithic axehead (by Richard Bevins)

6.1.1 Introduction

This report details the petrology and likely provenance of the Neolithic axehead from Lydstep Palace. The artefact was submitted to the National Museums & Galleries of Wales (NMGW) for petrological investigation. The report is based on observations made on the artefact utilising standard stereobinocular microscopy, combined with examination utilising transmitted polarised light microscopy of a thin section prepared from the artefact. The report also comments on the likely provenance of the raw material from which the artefact was worked.

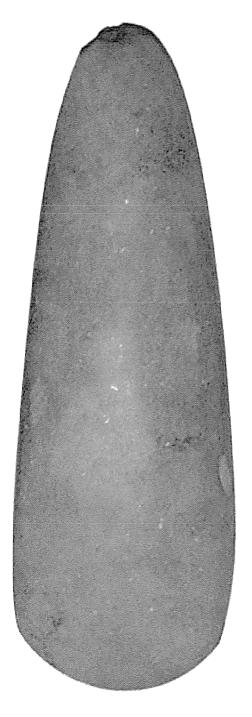


Fig. 8: The Neolithic axehead from context 103

6.1.2 Sample studied

The axehead was recovered during clearance work in the open first floor of Lydstep Palace from context 103, a layer of ?early post-medieval debris in the southeast corner of **Room 4**. It measures 243 mm (length) x 81 mm (width) x 40 mm (thickness). It weighs 1165.9g (after removal of a small slice for sectioning). It shows slight recent damage to the butt, but the blade is complete with the exception of one minor chip. The axehead shows evidence of having been ground and then subsequently polished (Figs. 8 and 9).

6.1.3 Methodology

The artefact was observed initially using a standard x10 hand lens and subsequently using a Leica MZ8 stereobinocular microscope. Finally a thin section was made by cutting a thin (ca. 15 mm x 5 mm x 2 mm) slice from the axehead, which was then mounted onto a glass slide and ground down to 30 μ m thickness using a Logitech LP30 lapping machine. The thin slice was then covered with a glass slip prior to petrological investigation. The artefact was subsequently restored by the Conservation Section, Department of Archaeology & Numismatics, NMGW, with back-filling of the extracted slice.

Petrological studies were undertaken in transmitted light utilising a Leitz Ortholux PolBK polarizing microscope in both plane and crossed polarizing light. Comparisons were made with thin sections from NMGW's petrological collections and also from sections from the Welsh Collection of Implement Petrology Slides, which is currently held in the Department of Geology, NMGW.

6.1.4 Petrological description

The axehead shows a greyish-green colour on its polished surfaces, while fractured areas reveal a darker, grey colouration to fresh surfaces. The rock is fine-grained, showing scattered, white, generally tabular microphenocrysts of plagioclase feldspar which reach up to 4 mm in length. Darker, ovoid inclusions up to 9 mm in diameter are also discernible, but their composition cannot be determined by hand specimen examination.

In thin section, the rock can be seen to be a fine-grained, porphyritic microdiorite. The grain size of the groundmass is typically in the range 0.02-0.05 mm and is composed essentially of plagioclase and augitic clinopyroxene while phenocrysts reach up to 4 mm. These are principally euhedral, tabular plagioclase crystals which are usually turbid, the original calcic plagioclase being replaced by indeterminate secondary products and albite. Smaller, euhedral, equant phenocrysts (up to 0.5 mm) of augitic clinopyroxene also occur scattered throughout the groundmass, sometimes occurring in glomeroporphyritic clusters. Euhedral, tabular phenocrysts, most probably originally orthopyroxene, also occur but have been replaced by chlorite and actinolite. Scattered crystals of an opaque mineral occur throughout the groundmass; these are probably ilmenite or magnetite, and are partially altered to form leucoxene granules. In places, the groundmass shows the presence of irregular patches of free quartz. The ovoid patches are seen to be pyroxene-rich areas and are probable autholiths. Finally, the secondary Ca-Al silicate mineral pumpellyite occurs sporadically in the groundmass, characterised by its strong green-to-colourless pleochroism and 1st order anomalous interference colours.

6.1.5 Provenance

The petrology of this axehead shows a marked similarity to the Group VII axeheads detailed in the Stone Axe Studies Volume (Clough & Cummins, 1979). This group of axeheads comes from the Graig Lwyd axe factory in north Wales. Details of the Graig Lwyd petrology have been presented by Tremlett (1977) and Ball & Merriman (1989), and also in a masters thesis currently being compiled by John Durham, at the Open University. The Graig Lwyd lithology has been considered a marginal facies of the Penmaenmawr Intrusion, with a fine grain size as a result of rapid cooling. Geochemical analyses presented in the above contributions, however, reveal that the Graig Lwyd microdiorite is markedly more siliceous than the rest of the Penmaenmawr Intrusion petrological types, with a ca. 62-65% SiO_z. It is this relatively

high silica content, combined with the fine grain size, that makes the Graig Lwyd rock type suitable for axehead manufacture. Comparisons with three thin sections of Group VII axeheads, namely AN 9, from Rhosybol, Anglesey, CA1 from Pencraig-ddu, Melindwr, in Cardiganshire, and a non-localised section labelled A, from the Welsh Collection of Implement Petrology slides confirmed the marked similarity between the Lydstep Palace axehead and the Group VII petrological types.

6.1.6 Other Group VII axeheads from south Wales

Review of the Implement Petrology reference cards associated with the Welsh Collection mentioned above reveals that many of the Group VII axeheads found in Wales come from north Wales, especially Anglesey and Caernarvonshire, with a few also from Denbighshire and Flintshire. However, in the Stone Axe Studies Volume (Clough & Cummins, 1979), Group VII axeheads have also been recorded from –

Pencraig-ddu, Melindwr, Ceredigion	PRN 6239
Pistyll gwyn, Llanboidy, Carmarthenshire	PRN 11101
Parcau, Henllanfallteg, Carmarthenshire	PRN 11102
Mynyddcerrig, Llanddarog, Carmarthenshire	PRN 9952

Several are also recorded from Glamorganshire and even two in Monmouthshire.

Only two other Group VII axeheads have been recorded within Pembrokeshire -

- PRN 9033 An axehead from near Hoaten Farm, St Ishmaels (SN 82 09), now in Haverfordwest Museum (Acc. No. PM A 79 14), was identified by Chris Houlder as being derived from 'the fine-grained margin of one of the Group VII intrusions' (CBA Implement Petrology Record Card, P 92).
- PRN 11140 An axehead retrieved from a cupboard in St Davids School, also now in Haverfordwest Museum (Acc. No. PM A 80 L 3), was regarded by Houlder as 'very close to type specimens of Group VII' (CBA Implement Petrology Record Card, P 93). Another four have been found in the neighbouring counties of Carmarthenshire and Ceredigion.

It is understood that the client will deposit the axehead with Tenby Museum and Art Gallery.

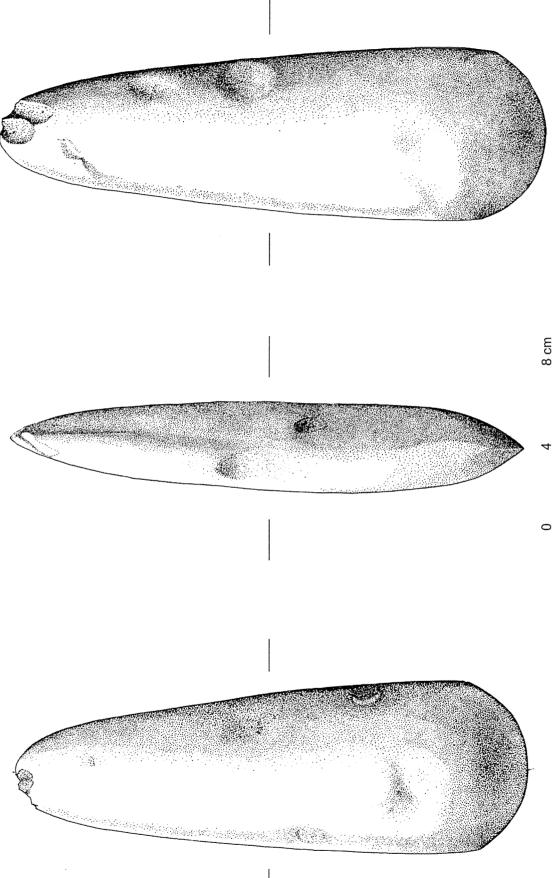


Fig. 9: Three views of the Neolithic axehead

Fourteen sherds of pottery were recovered from the excavation within **Room 4.** All were contained within context *103*, in the southeast corner of the room, the earliest context excavated. The assemblage has a date range from the 17th century to the late 19th-early 20th century. The catalogue is given below -

No. sherds: 1 body. Form: Indeterminate.

Fabric: North Devon gravel-tempered ware. **Surface treatment:** Brown interior glaze.

Decoration: None. **Source:** North Devon.

Date: Post-medieval, 17th/18th century.

No. sherds: 1 rim. Form: Small jar.

Fabric: North Devon plain slip ware.

Surfaace treatment: Clear glaze, appearing yellow over white slip on rim and interior

surface.

Decoration: None. **Source:** North Devon.

Date: Post-medieval, 17th/18th century.

No. sherds: 1 rim.

Form: Bowl.

Fabric: Red earthenware, hard-fired with few visible inclusions.

Surface treatment: Clear glaze appearing creamy-yellow over white slip.

Decoration: Brown slip decoration.

Source: Unsourced.

Date: Post-medieval, late 18th or 19th century.

No. sherds: 1 body. Form: Indeterminate. Fabric: Red earthenware.

Surface treatment: Brown interior glaze.

Decoration: None. **Source:** Unsourced.

Date: Post-medieval, a 19th century date is likely.

No. sherds: 1 body.

Form: Indeterminate hollow ware, possible jug or teapot.

Fabric: Cream-bodied earthenware. **Surface treatment:** Double brown glaze.

Decoration: Moulded relief decoration on exterior surface.

Source: Staffordshire potteries.

Date: Post-medieval, a late 19th century date is likely.

No. sherds: 9 assorted rim, body and base sherds.

Form: Tablewares.

Fabric: White-bodied earthenware (developed whiteware).

Surface treatment: All are double-glazed.

Decoration: Includes transfer-printed and painted designs.

Source: Staffordshire.

Date: Post-medieval, late 19th/early 20th century.

6.3 Clay pipe (by Dee Brennan)

Also from context 103, in the southeast corner of **Room 4** - one damaged clay pipe bowl, mould-decorated of 'Turks head' type. Made to celebrate the Russian-Turkish war of 1853-56 (Evans 1996, 87; *cf.* p.90, fig. 30, nos. 212-213).

7.0 DISCUSSION

7.1 The deposits

The artefactual evidence demonstrates that contexts 101 - 103 belong to the late 19^{th} century at the earliest. All pottery was contained within context 103, in the southeast corner of the first floor **Room 4**, the earliest context excavated. The assemblage has a date range from the 17^{th} century to the late 19^{th} - early 20^{th} century, and therefore demonstrates that all deposits are from the late 19^{th} - early 20^{th} century at the earliest. They therefore correspond with *Phase VI*.

During this period, Room 4 was open and roofless. However, Rooms 5 and 6 were still inhabited during this phase and bread oven 013 was established within the former Latrine. Context 102 contained building debris, including roofing slate, and superficially appeared to represent debris derived from the walls and roof of Room 4. However, Room 4 had lost its roof by the preceding Phase V, at least, while the underlying context 103 appeared to represent imported soil. It is therefore likely that 102 also represents imported soil rather than in situ debris.

Context 104, the flagged surface alongside the west wall, lacked any direct relationship with the dateable context 103 but lay directly beneath topsoil 101. The flags lay in a matrix of mixed, dark, ashy soil of markedly post-medieval nature, below the level of the top of the medieval vaults. The context may then represent a 19th century surface. It may be more-orless contemporary with, and part of, the similar surface 105 with which it may represent a path established between **Room 5** and bread oven 013 during *Phase VI*. If so, it may be suggested that the contemporary 102 and 103 were deliberately laid down as preparation for the deposition of topsoil 101 as a garden soil. Surface 104 appears to have respected the adjacent entry 006, and steps, which may be earlier but cannot at present be dated.

Contexts 106 and 107, which lay beneath 104/105, filled the vault soffits of **Room 1** at a lower level than the top of the medieval vaults. They comprised mortary soil, with small stones, slate fragments and plaster inclusions. The contexts were not excavated and not fully characterised, but appear to represent deliberate post-medieval deposition/make-up in the vault soffits, perhaps also in preparation for contexts the suggested path 104/105 and garden soil 101.

No evidence was encountered for any earlier deposits or earlier *in situ* flooring. However, the presence of late deposits 106 and 107 over the soffits of the medieval vaults suggests that the medieval first floor comprised a suspended timber floor over the vault apices.

The Neolithic axehead may have been brought into the building during the 17th-18th century when the superstitious use of such artefacts to ward off evil spirits, lightning etc., was widespread. However, its presence within 19th century context *103* is secondary and purely incidental.

7.2 Built features

The 2001-2 clearance work revealed several features relating to the built fabric which were not observed in 1996.

The springer *018* on the west wall may have supported an archway that effectively divided **Room 4** into two spaces during *Phase I*. Further arch(es) may have existed further south, bur are now concealed beneath later dividing walls. Such open arches, which may have contained moveable timber partitions, are not unknown within medieval hall-houses and are classically represented by the 13th century work in the hall-keep at Chepstow Castle, Monmouthshire (Perks 1967), and at the late 13th century great hall at Conwy Castle, Gwynedd (Taylor 1957). Here the arches were structural supporting a mezzanine, and the roof, respectively. Other notable examples include the sequence of three such arches at the 14th century archbishop's palace at Mayfield, Sussex (Wood 1981, 308-9).

A first floor entry into **Room 4**, through the east wall, was suspected during 1996. The evidence was provided by projecting stones in the external face of the wall, at ground floor level, which were interpreted as toothing for an external stair to the first floor doorway. Confirmation appeared to be provided during 2001-2 when an area of flat stones, (003), was revealed in the adjacent area of wall, apparently finished off at floor level and presumably representing a threshold.

In 1867, Barnwell observed the remains of an opening in the north gable wall of **Room 4**, which has now gone, and interpreted them as having formerly been a large window (Barnwell, 1867, 367). The embrasure for this window, (001) — which may possibly belong to *Phase I* – was revealed during the 2001-2 clearance work.

8.0 ACKNOWLEDGEMENTS

The 2001-2 project was undertaken by Pete Crane and Duncan Schlee, and managed by Neil Ludlow, all of Cambria Archaeology. This report was written and researched by Neil Ludlow. The project was commissioned by Richard Tree of PLANED. The stone axe was reported on by Richard Bevins of the National Museums and Galleries of Wales, and the pottery by Dee Brennan of Lampeter University. Thanks to colleagues at Cambria Archaeology for suggestions and assistance, particularly Nigel Page for additional information on Group VII axeheads, and Hubert Wilson for his illustration of the axehead.

9.0 ARCHIVE DEPOSITION

The archive, which will be indexed according to the National Monuments Record (NMR) material categories, is held by Cambria Archaeology, Llandeilo, and contains the following:-

- A. Copy of the final report and disk
- B. Context forms and field notes
- C. Copies of planning specifications and site drawings
- D. BW photographs
- E. List of finds
- G. List of references
- J. Final drawings
- L. General administrative notes
- M. Project correspondence

There is no material for classes F, H, I, K and N.

10.0 REFERENCES

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REPORT NUMBER 200260

JULY 2002

This report has been prepared by Neil Ludlow

Position Project Manager

Signature Date 17/1/2002

This report has been checked and approved by Gwilym Hughes on behalf of Cambria Archaeology, Dyfed Archaeological Trust Ltd.

Position Director

Signature Date (7/7/02)

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