

Post-Medieval Earthworks at Pengawse, Llandewi Velfrey, Pembrokeshire

Introduction

In 1985 the Dyfed Archaeological Trust conducted the partial excavation of an enigmatic earthwork at Pengawse, Llandewi Velfrey (SN 176169), the north side of which was to be cut across by the re-routing of the A40 west of Whitland, scheduled to take place in 1986.

The earthwork was first recorded by the Cambridge Air Photography Unit in 1975, and was designated a Scheduled Ancient Monument in 1976, being described as a settlement; possibly the remains of a deserted medieval village, a manor complex, or a precursor of Pengawse farm.

Early in 1985, Mr. K. Murphy undertook a ground survey of the earthworks, and a subsequent air survey by Mr. T. A. James revealed the existence of a complex of redundant features in the surrounding landscape. A trial area was excavated with funding from CADW, Welsh Historic Monuments, in the unscheduled northern corner of the earthwork (trench 1) in an attempt to discover its purpose and date. This proved inconclusive, revealing two clay banks, separated by a ditch, the functions of which could only be guessed at.

Further areas were investigated from July to September 1985, with a workforce provided under the Community Programme, funded by the Manpower Services Commission. These excavations revealed that the earthworks consisted of a complex of low mounds divided by shallow ditches, the whole being enclosed within low clay banks. The earliest finds dated from the late 17th century and as yet no suggestion can be made as to the purpose of the site, apart from the fact that it was probably agricultural.

Topography

The site lies 2km. west of Whitland on a gentle south-east facing slope at a height of 30m. O.D. between the rivers Taf and Marlais. The field (O.S.6400) is under pasture and its lower end is very wet as the bedrock of ordovician shale is covered by a thin shaly clay, which becomes thicker down

slope.

Medieval ridge and furrow are clearly visible in the surrounding fields but are not present in O.S.6400. The hedgerows of the field are 800-900 years old, as evidenced by the number of woody species in them, so it would seem that the medieval field boundaries have been preserved while less durable features have been erased by the post-medieval activities.

Ploughmarks were found crossing the top of the enclosure bank 136 (Trench 2) but it is believed that the field had seldom been ploughed since the earthworks became redundant.

The Earthworks

The earthworks cover an area 85m. north-west to south-east, by 65m. south-west to north-east, and are raised about 0.5m. above the level of the field. Their structure can be seen most clearly from the air - they consist of a number of small regular mounds enclosed by more clearly defined banks, which also divide the enclosure into four roughly rectangular areas. In the middle of these is a large linear depression, 40m. long north-west to south-east, 10m. wide and approximately 0.5m. deep.

There are several breaks in the enclosing banks, some of which are clearly entrances (1,2,6,7,9,10,11) either into the enclosure, or from one part of it to another; but others (3,4,5,8,12,13,14,15) are more ambiguous.

The mounds within the enclosure differ in size and shape from one area to another, perhaps indicating that they serve different purposes. In the north-western part they are small and narrow, and regularly spaced, but south of this they are very irregular. The eastern areas contain larger squarish mounds, whereas those in the extreme south-east, although less distinct, seem to be small and circular.

East of the main group of earthworks are two low parallel banks, rising only 0.1 - 0.2m. above the level of the field. These run northwards a distance of 70m. until the westernmost bank curves eastwards to almost connect with the other.

The earthworks are built up against an existing north-east to south-west field boundary, and a demolished north-west to south-east boundary. The existing hedgebanks enclosing the field have been dated by counting the number of woody species they contain and are all 800 to 900 years old.

There are several other ploughed-out field boundaries in this and the adjoining fields, making a network of small enclosures, some as little as 30m². Although these boundaries may not have been contemporary with each other or the earthwork, such a concentration of features does not occur elsewhere, and it is probable that they all serve a common purpose.

In an area up to 0.5km. each side of Pengawse, further redundant features can be seen. On all sides are the remnants of medieval ridge and furrow; to the north (site B) are the remains of field boundaries and an odd square of banks, and to the east, by the river (site C) is a rectangular enclosure which appears to contain ridge and furrow but which is separated from the nearest hedgebank.

The Excavation

Since only the northern edge of the earthworks was to suffer any damage, work was concentrated here, but other small areas were investigated so as to be able to interpret the site as a whole.

Trench 1

A narrow trench 13m. by 2m. was cut through the enclosure bank and an internal mound in the northern corner of the earthworks.

The bank (21) was 0.15m. high and 1.1m. wide, and consisted of a hard brown clay loam, which lay on a brownish yellow clay, interpreted as the 'B' horizon of the buried soil.

It was flanked on both sides by ditches. The external ditch had silted up and been recut several times, the original ditch (17) cutting 0.3m. into the subsoil and being at least 1m. wide. The subsoil north-east of the ditch was covered by a buried soil although no trace remained of that which had buried it. The internal ditch (8) was also filled with silt, was cut 0.3m.

into the subsoil and was 1.4m. wide.

Just south-west of 8, between the ditch and the internal mound, a pit (19) cut into a flat area of buried soil. It was 0.3m. deep and 0.45m. wide but continued beyond the edge of the trench.

The mound consisted of two layers, the lower (5) being a brown clay loam, and the upper (3) being a dark greyish brown clay loam, containing sherds of post-medieval pottery. It lay on subsoil from which most of the soil had previously been removed, although two patches of buried soil remained, below each edge of 3.

Under the south-west edge of 3, but 1m. distant from the edge of 5, lay a broad shallow ditch (6), which was 1.1m. wide, cut 0.1m. into the subsoil, and had a dark brown silty fill.

A small pit cut into the subsoil below 5, but may have pre-dated the enclosure.

Trench 2

An area 10m. by 13m. was excavated, 6m. south-east of Trench 1, encompassing a T-junction of the enclosure banks (fig. 1) which appeared to be divided into two lengths, the easternmost butting up to the other bank; and including parts of four internal mounds. It was hoped that excavations of a larger area would ensure the discovery of any stratigraphical complexities which might throw light on the construction and function of the structures involved.

The Banks

When excavated, the banks were found to be divided into three lengths (136, 219 and 220) by ditch 133 and the entrance (fig. 2). They were of identical composition, being of a homogenous hard brown, almost stone-free, clay loam, and lay on a turfless buried soil. They were 0.25-0.30m. high and up to 2m. wide, with slightly domed upper surfaces and near vertical sides (sections 8 and 17; fig. 3).

A steep-sided, flat bottomed gully (140) ran along the crest of bank 136. A 3.4m. stretch of this was excavated and found to be 0.75m. wide and cut down to the level of the buried soil beneath the bank. The fill was a mottled, shaly clay loam, which may have been redeposited subsoil, thus indicating that the gully was back-filled.

The ditches

Each bank was flanked on both sides by ditches which were filled with successive layers of silt (clay loams, similar to the banks and mounds from which they derived) and had been recut several times.

The internal ditches (131 and 132) were cut 0.3 - 0.4m. into the subsoil, but appeared to be much deeper due to the height of the banks. They were U-shaped with stepped sides caused by the successive recuts. 131 was slighter than 132, their difference being emphasized by the thickness of mounds 222 and 229 in comparison to 216 and 221, which was probably the result of soil movement down the south-east facing slope, rather than a feature of the construction of the mounds.

The edge of mound 216 overlaid a small ditch (218) which joined 131 at right-angles. A narrow section of 218 was excavated and was found to be steep-sided, flat bottomed, 0.68m. wide, and cut 0.22m. into the subsoil. Its lower fill was indistinguishable from that of 131, but material from mound 216 filled its upper levels. There was no evidence that 218 had been re-cut.

Ditch 224 originally ran uninterrupted along the outside of the enclosure banks and was connected to the internal ditch 132 by ditch 133, thus enabling water to flow out of the enclosure. It had been largely cut away by the later recuts, 134 and 215, whose south-western edges followed the line of the initial cut, but the section remaining was 1.3m. wide and 0.20m. deep. At some stage, when 224 had silted up, it was recut in two sections (134 and 215), leaving a 1m. wide strip of consolidated silt which acted as a causeway leading to the entrance, 110. Subsequent recuts, 119 and 67 at the north-west end, and 147 at the south-east end, preserved this causeway.

Both the internal and external ditches had been recut three or four times, the later recuts, particularly of 131 and 224, being very shallow. Ditch 133 was kept open for some time (until 67 was cut) but when it was eventually allowed to silt up, an oval pit (105) 0.2m. deep was cut into the top of it and was back-filled with shaly material similar to that in gully 140.

The Entrance

The entrance was reached by a causeway across the external ditch and led into the northern corner of one of the enclosed areas, where the internal ditch 131 had largely silted up. Thus, the entrance was not an original feature of the enclosure. It took the form of a wedge-shaped cut, through the enclosure bank down to subsoil, and was 0.75m. wide internally and 1.9m. wide externally.

A small pit (227) which was 0.06m. deep was associated with the first phase of the entrance, and both were filled with silt derived from the banks on either side.

The entrance was recut once, losing its wedge shape and cutting further into bank 136, and another small pit (228) 0.20m. deep was associated with this. The fill of 228 was similar to the silts filling 131 but also contained some brick dust.

Although, during the period the entrance was in use, ditch 131 was very shallow and almost level with it, the ditch was continually recut - cuts 34, 60 and 87 (sections 8 and 17, fig.) all post-date the first phase of entrance.

The Mounds

Of the four mounds within the trench, 221 was fully excavated, 229 was sectioned, and 216 and 222 untouched. They were clearly very similar, consisting of silty clay loams barely distinguishable on the surface from the clay banks, but on examination containing a higher proportion of loam and domestic debris.

Mound 221 was 0.25m. high and lay directly on top of the subsoil on which only small patches of buried soil remained. Excavation revealed that it consisted of six successive soil layers, (which could not be differentiated in section) changing from a gritty silty clay loam containing fragments of charcoal, coal and burnt bone in its upper levels, to a fairly clean silty clay nearest the bedrock.

The four earliest layers formed a discreet mound (fig. 2) but layer 135 covered these and most of mound 216, including the area between them.

Mound 216 was of similar material to 221 and was 0.25m. high. The gap of 0.9m. between the mounds left a strip of bare subsoil which had many apparently random irregularities in its surface. The only one of these of any size was 230, which was 0.07m. deep, and was filled by layer 135. A similar strip of bare subsoil separated the north-east edge of 216 from ditch 131, and was the result of a linear cut (225) which removed the edge of 216. Although 225 itself must have been secondary, it is possible that it was cut to preserve an original feature.

In the base of 225 was a shallow pit 231, which was 0.05m. deep and filled with material similar to mound 216.

Just north of the gap between 221 and 216 was a small ditch (218) which was partly overlain by 216. Its proximity to the gap suggests that it originally ran between the two mounds (216 having spread southwards) being part of the initial lay-out of the enclosure.

The mounds on the western side of the trench (222 and 229) are presumed to have been constructed in a similar way to 221. The section through 229 showed that it could be divided into two layers (138 and 141) and was 0.32m. high. It lay on subsoil, although a thick patch of buried soil survived at the edge of the mound. The presence of the shallow ditch (6) south-west of the mound in trench 1 suggests that like mound 216 and 221, 222 and 229 were divided by a ditch. Although 6 was not seen in trench 2, it is possible that it was hidden by later soil layers along the edge of the mounds.

Trench 3

A 2m. wide trench was cut across the south-western part of the earthworks, from the redundant field boundary in the south-west, to the north-east edge of the large central hollow. Once the ploughsoil was removed, the bank and mounds could be seen to be very similar to those in trench 2, so the south-western half of the trench was left unexcavated and work was concentrated on the area east of the enclosure bank, 85. (Fig. 1 and section).

The bank ran from north-west to south-east, separating an area of mounds to the west from the central hollow, and then turned south-westwards to meet the field boundary. Like those in trench 2, the bank was composed of a hard homogenous brown clay loam which was 0.2m. thick and overlaid the 'B' horizon of the buried soil, but along its crest was a line of three large sub-rectangular blocks of limestone (62) whose north-east faces were aligned. These lay on the surface of the bank and were surrounded by a shallow strip of loamy material, which was covered by a 1m. wide band of crushed shale and gravel (24). Although 62 may have been an original feature of the bank, 24 was a later addition as it covered the latest silt layer filling the ditch (90) north-east of it. The trench was extended south-eastwards, uncovering the top of the bank, but no further traces of 24 or 62 were found. Below the buried soil under the bank was a small circular pit (114) which was 0.24m. in diameter and 0.11m. deep with a fill of brown silty clay loam.

The north-east edge of the bank was flanked by a steep-sided flat-bottomed ditch (90) which was 1m. wide and cut 0.4m. into the subsoil. This had filled with silt and was periodically recut; the first recut (84) directly overlying 90; the next two (77 and 78) being much narrower gullies; and the fourth (51) being wide and shallow, cutting into the subsoil to the north-east of the original ditch.

The central hollow (126) was 6m. wide, narrower than it had appeared on the ground surface as it was divided from ditch 90 by a 2.5m. wide strip of

untouched subsoil. It was cut 0.4m. into the subsoil and had a level base with many minor irregularities. A narrow section was cut north-westwards in the centre of the hollow to check whether it became any deeper, but it remained level. When the hollow had silted up to some extent, two shallow ditches (64 and 69) were cut along each side of it.

North-east of the hollow were a series of fine gravel surfaces below which a buried turf was preserved. The earliest of these (50) consisted of small pieces of sandstone, and had only survived in a strip lying in a shallow depression. The three subsequent layers (49; not distinguished in section) were of crushed slate and shale, mixed with some charcoal and burnt bone.

There were a number of large blocks of limestone scattered over the gravel layers, which had obviously been disturbed but there was no concrete evidence as to their original position. A very shallow linear feature (235) which varied from 0.25 - 0.5m. in width and was up to 0.06m. deep, cut into the gravel at the north-east end of the trench, and may have been the seating for the stones.

The southern stretch of bank 85 was poorly defined so two lengths of it were uncovered with the intention of defining its edge, and its relationship to the redundant field boundary. However, no distinction could be made between the bank and the fills of the exterior ditch without lengthy careful excavation, so instead two narrow sections were cut through them. These proved to be particularly difficult to interpret as the wetness of this lower part of the field had contributed to the homogeneity of the soils, so the stratigraphical relationships shown in sections 12 and 13 cannot be completely relied upon.

Section 12

The section cut through the enclosure bank and the edge of the external ditch. The soils were all hard, almost pure, silty clays, changing in colour from a dark yellowish brown in the upper levels, to an olive brown close to the subsoil. The bank lay on the 'B' horizon of the buried soil and the lower

part of it was slightly gleyed so that it appeared to be divided into two layers; the north-west end containing a small amount of charcoal. A vertical-sided, flat-bottomed trench (151) cut through the centre of the bank into the buried soil, and its fill could be divided into three layers, the uppermost containing some charcoal. The external ditch (154) was steep-sided and flat-bottomed, with two fills.

Section 13

As in section 12, the layers in this section were all hard brown silty clays. The enclosure bank had been divided into three parts by later features. It was similar to that in section 12 in that its inner northern side contained some charcoal, and its central section appeared to be divided into two layers, the lower being slightly gleyed. The external ditch (177) had been recut (171), giving it a stepped edge, the recut being the same depth as 154 in section 12. The bank was cut by three other features; 161 was a vertical-sided trench, with a single fill, and a rounded base that cut into the buried soil; 163 was a small bowl-shaped feature which overlaid a depression in the buried soil, with which it appeared to be unrelated; and 166 was a steep-sided, flat-bottomed trench, which cut 0.3m. into the subsoil and had been recut once. Of these, 161 was the most likely to be a continuation of 151 from trench 12, and 166 may have been a recut of the external ditch.

Section 14

A narrow section was also cut across the redundant north-west to south-east field boundary, which consisted of a low bank, 2m. wide and 0.25m. high, flanked on each side by ditches. The bank (188) was of a hard brown, slightly gleyed silty clay, but did not have the homogeneity of colour of the enclosure banks. The southern ditch (187) was 1.4m. wide and 0.3m. deep and had been recut once; and the northern ditch (182) was 0.8m. wide and 0.3m. deep, with no recuts.

Trench 4

A narrow trench, 20m. long and 1m. wide was cut across the two parallel banks (232 and 233) north-east of the main earthworks.

The eastern bank (232) was 0.26m. high and 2.2m. wide, and consisted of a dark greyish brown loam, covered by a gravelly layer. It lay on a buried turf below which no 'B' horizon could be detected.

The east side of the bank was cut by a steep-sided, U-shaped ditch (190), which was 1.1m. wide, 0.6m. deep, and had a gravelly fill with patches of brown or yellow clay. The fill was similar to the subsoil which suggests that 190 was backfilled; this would account for the preservation of its steep sides (even though they were cut through soft deposits) and the fact that it had not been recut. On its east side, 190 cut through a 0.14m. thick layer of dark greyish brown loam (191) which lay on the subsoil.

Bank 233 was of similar composition to 232, although not covered with gravel, and lay on a buried turf. This however had been partly cut away by a pre-bank feature (234) which was only 0.06m. deep and had a very dark stone-free fill.

The bank was flanked on both sides by broad shallow ditches. Ditch 210, west of the bank was 1.1m. wide and 0.12m. deep filled with an olive brown slightly gleyed clay loam, and covered by a similar layer (208) which was 0.2m. thick. East of the bank, ditch 207 had been recut once, but its fills were identical to that of 210. The initial cut had been 0.5m. wide and 0.12m. deep, and the recut was 1.6m. wide and 0.16m. deep.

The area between the banks was covered by a layer (199) of dark greyish brown loam, 0.2m. thick, which lay on the subsoil, covering the fills of ditch 207, and lying against the sides of both banks.

Close to bank 232, 199 was cut by a small gully (200) which was 0.5m. wide and 0.16m. deep, filled with a mixture of fine gravel and loam, and covered by a small patch of gravel (197).

Between the banks and below 199 were two shallow depressions in the subsoil (202 and 204) with fills distinctly different from 199. 202 lay 2m.

west of bank 232, was 0.8m. wide and 0.12m. deep, and was filled with a hard olive brown silty clay; and 204 lay 4.6m. west of 232, and 6.2m. east of 233, was 2m. wide, and 0.1m. deep, and had a stone-free fill of very dark brown loam.

Trench 5

A possible entrance into the north-west side of the enclosure was identified from the aerial photographs, and investigated by means of a small trench. On the ground the banks appeared to be continuous, the westernmost (94) being the higher, but excavation revealed that this was indeed an entrance.

Between the end of bank 92 and the edge of 94 was a gap of 3.5m. through which ran a cobbled path (57) flanked on either side of the shallow ditches (58 and 59).

The banks were of a homogenous hard brown clay loam, and lay on the 'B' horizon of the buried soil. Bank 94 was 0.4m. high, and 92 only 0.15m. high but layer 74 (a yellowish brown clay) had been added to it later on, increasing its height to 0.26m.

The path lay on bedrock from which most of the soil had been removed, and was roughly cobbled with flat pieces of limestone, varying in length from 0.04m. to 0.36m. These lay in a brown silty clay loam which contained a large amount of domestic debris, including charcoal, burnt bone, and pottery fragments. The cobbles did not make a distinct surface but seemed to have been deposited from time to time onto what appears to have been a very muddy surface.

The ditches were cut 0.25m. into the bedrock and had filled with silt indistinguishable from that covering the path, except that they contained no stones. They had been recut twice, the first recuts filling with silt, and the second recuts being soon backfilled with a mottled yellowish brown clay loam, (56) which formed a low bank, joining 92 to 94, and thus sealing off the entrance.