Excavation of Neolithic pits, three ring-ditches palisaded enclosure at Cwm Meudwy, Llandy Ceredigion, 2003

By KENNETH MURPHY and ROBERT T. J. EVANS[1]

with contributions by Jody Deacon,[2] Astrid E. Caseldine and Catherine J. Griff

SUMMARY. Two sites were excavated: Area A, a group of three ring-ditches, and Area enclosure and pits/postholes. No evidence for burials or artefacts was found associated ditches. Radiocarbon dates indicate that the ditches silted in the eighth to fourth centuries and shallow gully defined the pear-shaped palisaded enclosure. It had an entrance consisting of two postholes and a possible entrance to the north-west associated with four Radiocarbon dates of 3970–3785 cal. BC and cal. AD 130–350 were obtained from the p north-east entrance. Two four-post structures were identified, one within the area e palisade and one without. A date of 380 to 170 cal. BC was obtained from a posthole c structure within the enclosure. The enclosure could date from the Neolithic to the I period, although the authors favour an Iron Age/Romano-British date. Numerous c postholes were identified outside and inside the area of the enclosure, but none formed pc structure. An assemblage of 65 sherds of mostly Early Neolithic pottery, with a few Late Bronze Age sherds, was recovered from several of the pits and postholes. Charcoal fr pit/postholes containing pottery returned radiocarbon dates broadly compatible with assemblage—a range of 3970 to 3510 cal. BC. Charcoal from a further pit was da 1870 cal. BC.

INTRODUCTION

The archaeological investigations at Cwm Meudwy, Llandysul, Ceredigion (SN 405419) the north side of the Teifi valley at between 165m and 185m above sea level. The land slo south-west into the heavily wooded Cwm Meudwy itself, through which Nant Merwydd, flows south towards its confluence with the river Teifi. The site lies within the Ceredigion to the south of the Llandysul–New Quay road (A486) at Croesffordd (Fig. 1). The villag 1 kilometre to the north-west and the town of Llandysul about 1.5km to the south-east. a possible Iron Age or Romano-British enclosure lying 600m the east is the only other kn site in the vicinity (Davies and Hogg 1994).

The investigations were undertaken during the early stages of the construction of light and an access road for a new industrial estate under the auspices of the Welsh Develc (WDA). An area in the north-west of the development area (Area A) was identified as be archaeological significance following the identification by contractors of what seemed t ditches after the removal of topsoil and up to 0.2m of subsoil. Most of the topsoil—and ir the subsoil—had been stripped from the development area prior to the discovery of tl

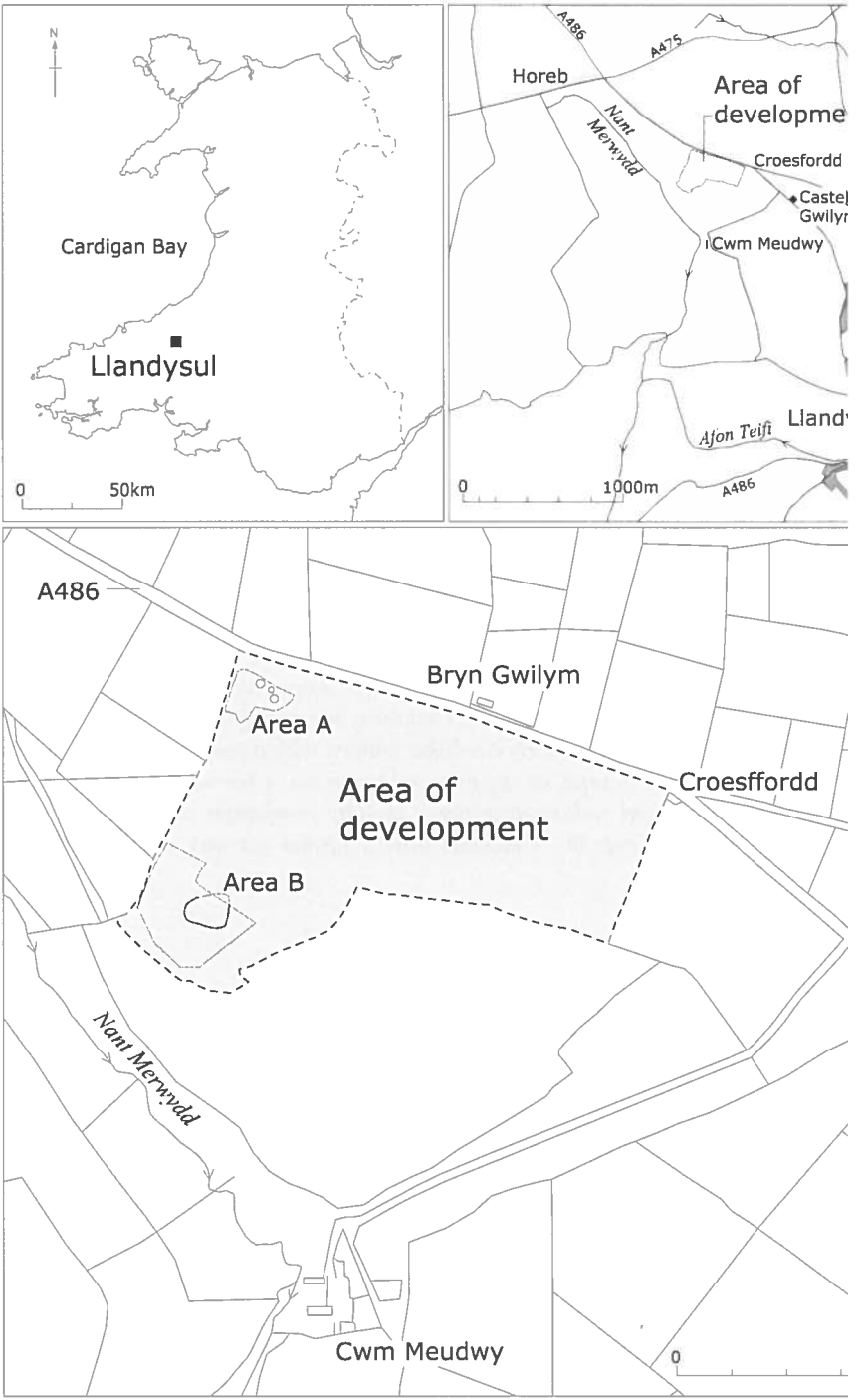

Fig. 1. Location.

However, topsoil remained in one area in the south-west corner of the development (A agreed between the WDA and Cambria Archaeology-Heritage Management (CA-HM) tha topsoil removal should be subject to archaeological monitoring. A probable palisaded numerous pits were revealed during the monitoring, the potential importance of which pro to recommend a full archaeological investigation. The work was undertaken by Cambri Field Section and was funded by the WDA, who also generously set aside five weeks programme for the excavation.

The project brief required the total excavation of the two areas (A and B) including tl and the palisaded enclosure. The excavation took place from 11 August to 12 Septembe team of eleven archaeologists. For the first four weeks the weather was uncommonly war very dry, but during the last week there was some rain. No new features showed up in the as a result of the damper soil conditions.

The topsoil deposits varied from *c.* 0.2–0.5m in depth, and were typical brown eartl Denbigh 1, group (Soil Survey of England and Wales 1980). They covered fluvio-glacial and clays, which in turn overlay Ordovician shale and weathered bedrock of the Llandei Series (British Geological Survey 1994). In both areas differences between bands of san clays were very pronounced and better defined than the archaeology; this was particula Area A, and was probably due to the fact that Area B was topsoil-tripped under archaeologi whereas Area A was stripped to a greater depth, cutting into the upper geological horizon

THE EXCAVATION

Area A

The three ring-ditches were located in Area A, which measured approximately 50m by 4(SN 40284208). This area was on the upper valley slopes, but not at the highest point, w distance to the north (Figs 2 and 3). The western ring-ditch (5) was the least truncated by t overburden. The other two may have lost up to 0.2m of subsoil before archaeologica commenced. In each case the ditches were about 1.0m wide. The westernmost of the ring- 8.2m in diameter, including the ditch, which had a U-shaped profile *c.* 0.4–0.3m deep. Th ditch (4) was 8.15m in diameter. The ditch had a shallow, angled outer edge, and an almos one. The sides had a very sharp break of slope to an almost flat base. It was up to 0.5m de ring-ditch (6) had a diameter of 6.5m. It appeared to have been heavily truncated, survi depth of 0.2–0.3m.

The ditches contained fills ranging from reddish-brown to orangey-brown silt. Slig within some of the fills were noted. In the westernmost ring (5) a lower stony fill may have of erosion into the ditch from a central mound or a possible bank outside the ditch before up. A similar feature was also noted in the central ring-ditch (6). Profiles across the ditch slight falling away of the land surface from west to east and also from north to south. I gradients are very gentle, and suggest that the rings were constructed on the edge o overlooking a slightly steeper slope to the south towards Cwm Meudwy.

Two radiocarbon dates were obtained from charcoal from the basal fills of two ring-dit and 530–390 cal. BC (Beta –185683, 2410±40 BP) from ditch 4, and 800–520 cal. BC 2530±40 BP) from ditch 6. Note that all radiocarbon dates are expressed calibrated to 2 followed in parenthesis by the laboratory number and the radiocarbon age (see table belo

No artefacts were found, nor any bone or other evidence suggestive of burials.

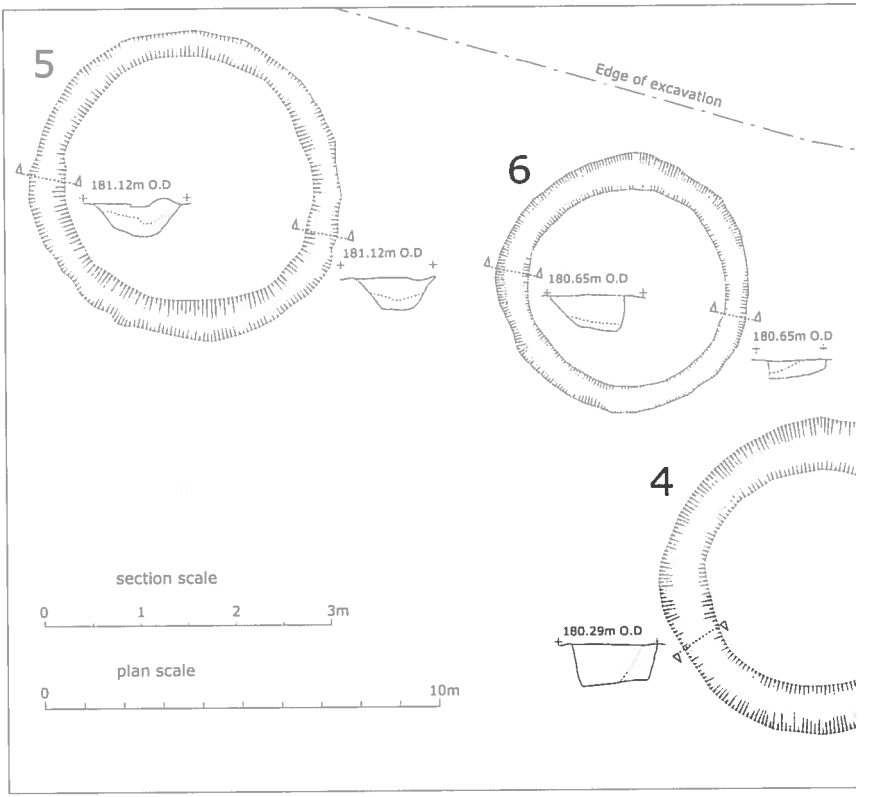

Fig. 2. Plan of Area A. The ring-ditches plan and profiles.

Other features in this part of the site were difficult to identify with any certainty ar appear to have been either glacial deposition of clayey material, or the result of action, including a small amorphous feature containing carbonised hazelnut shells b 6 (not shown on the plan).

The charred plant assemblage from Area A, from samples of the lower parts of th small but provides some slight evidence for cultivation and the general environmen the site. A few oat (*Avena* sp.) grains were recovered from two of the ring-ditches (of chaff means it cannot be certain whether the oat was a cultivated or wild variety.. cereal was also present. A few of the weed seeds, namely orache (*Atripl* (Chenopodiaceae), bromes (*Bromus* spp.) and pale persicaria (*Persicaria lapathif* possible evidence for cultivation but these species are also indicative of waste gr such as grass (Poaceae), ribwort plantain (*Plantago lanceolata*), docks (*Rumex* spp spp.) indicate grassland. The occurrence of sedges (*Carex* spp) and cottongrass (*Eri* damp ground in the vicinity, the latter being generally found in peaty or marshy area bugle (*Ajuga reptans*) also commonly occur in damp habitats and bugle tends to shady places and woodland. Further evidence for woodland or scrub is provid charcoal, which indicates the presence of oak (*Quercus* spp.) and ash (*Fraxinus exce* (*Corylus avellana*). The hazelnuts could have been collected deliberately for food b simply reflect accidental collection along with wood for fuel.

Fig. 3. Ring-ditches from the air taken during a visit by a local primary scho

Area B

Area B measured approximately 90m by 70m (centred on SN 40234188) and was south of Area A (Figs 4, 5, 6 and 7). The site lay on a gently sloping promontory. the excavated area the ground falls away steeply to the west, south-west and sout Merwydd, about 40m below. To the north the land rises gently towards Area A. The feature was a pear-shaped enclosure approximately 45m by 30m, defined by a

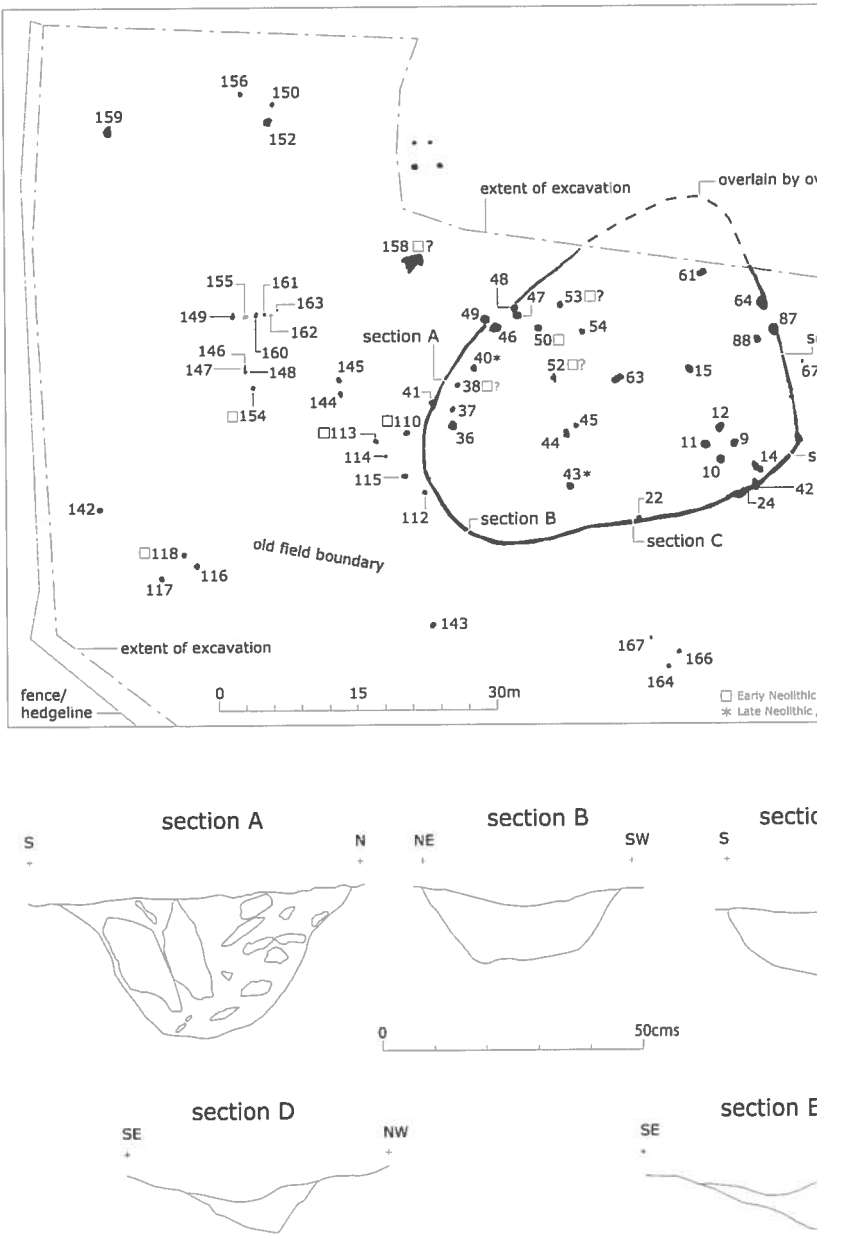

Fig. 4. Plan of Area B. The palisaded enclosure plan and profiles of pal

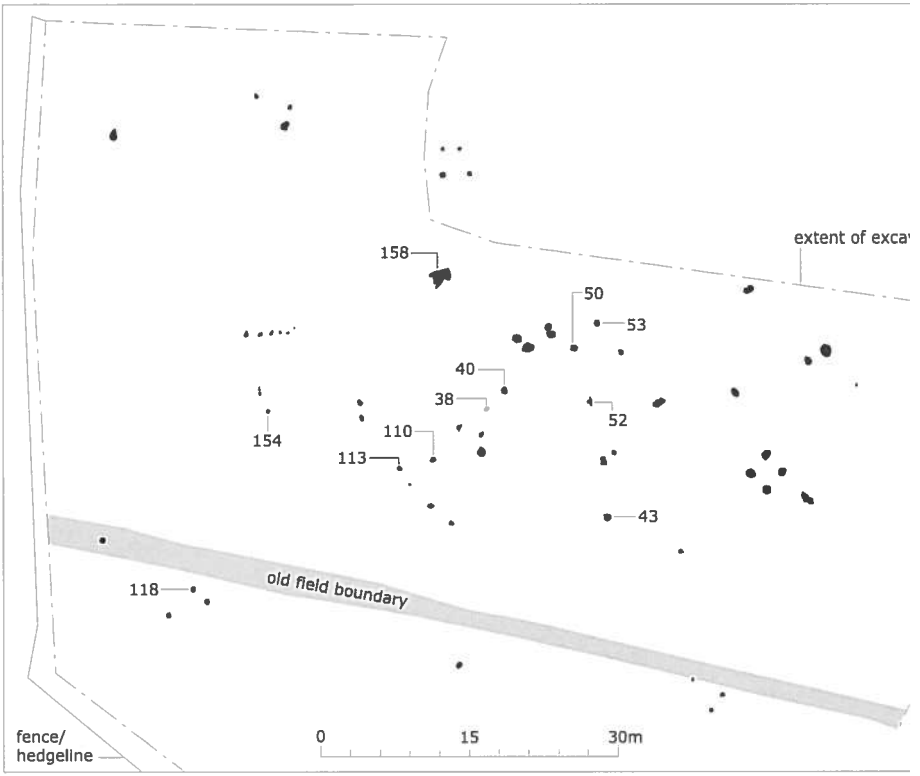

Fig. 5. Plan of Area B with the palisaded enclosure removed. Pits containing pre
pottery are numbered.

palisade gully (13). An old field boundary, probably post-medieval in date, ran a
approximately west-north-west to east-south-east, south of the enclosure. More than three
enclosure was within the area set aside for excavation; part of the northern circuit had
prior to excavation but its course had been plotted during monitoring of the topsoil strip.

The palisade gully

Sections through the fill of this gully were drawn at 5m intervals where this proved possi
of these illustrates the character of the gully (Fig. 4). These show that in many areas the
was heavily plough-truncated, in the south-east corner almost completely. In the north-
gully was up to 0.4m deep over a 3m long stretch, close to posthole 41 (Fig. 8). This v
section of the gully; elsewhere it averaged 0.4m wide and 0.2–0.3m deep. Where there was
evidence of packing stones survived defining former posts or stakes. The packing stone
close to the north-east entrance. However, owing to the shallow nature of the gully and the
of its fill it was not possible to determine the size or spacing of the posts/stakes. Postl
located in the gully, mainly in the south-east corner. Small postholes 22 and 24 were
palisade gully itself, and probably represent a repair. Near posthole 22 an area of pa
the gully is possibly further evidence for the repair of the palisade. The palisade cut pos

Fig. 6. The palisaded enclosure from the air. © *Welsh Development A*

north-west segment of the enclosure. A pit (42) on the south-eastern side of the enc gully. Environmental evidence from the gully was limited to a charred leaf bu distributed carbonised hazelnut shells.

The north-east entrance

This was represented by two postholes, 64 and 87 (respectively 1.2 by 1.0m across 1.2m in diameter and 0.47m deep) flanking a 2.5m wide gap. These entrance posthol stones, clear in 87 but less so in 64, defining post-pipes *c.* 0.2m diameter, both of brown fill (Fig. 9). The location of the postholes suggests that they were conter palisade gully, although no definite stratigraphic relationship was obtained owing t the gully. A radiocarbon date of 3970–3785 cal. BC (Beta-189116, 5080±40 BP posthole 64 and one of cal. AD 130–350 (Beta-189117, 1790±40 BP) from posth loose and collapsed nature of the posthole fills it was impossible to be certain whet for dating were from the post-packing material or the post-pipe. Clearly, the sample posthole 64 is residual or that from 87 is intrusive, or both. Apart from charco evidence was recovered from posthole 64, but a few remains, including wheat chaff, 87. The presence of probable spelt wheat (*Triticum spelta*) glume bases is consiste

Fig. 7. The palisaded enclosure from the west with the four-post entrance in the fo

British radiocarbon date from this posthole. A scoop (88), south-west of posthole 87, may of the entrance structure, but its very shallow nature militates against interpretation.

The north-west entrance

A second possible entrance, with four pits or postholes, 46–49 (respectively 0.94m by 0.' deep, 0.91 by 0.79 and 0.25m deep, 0.98m by 0.70m and 0.27m deep, and 0.9m diameter a lay on the north-west side of the enclosure (Figs 10 and 11). None of these pits/p stratigraphic relationship with the palisade gully, possibly because all the archaeologica very truncated, and none of the four pits or postholes was aligned with the gully. However to be discrete terminals to the gully. Three of the features (46–48) contained what were pr stones, but owing to their collapsed nature it was not possible to obtain dimensions of the 47 and 49 also contained small quantities of burnt bone, although these proved to be fragmentary to be analysed or dated. Features 46 and 49 had complex fills, with 49 the n with dark yellowish brown silty clay and charcoal in its upper and lower levels (A and C abundant charcoal in layer B. Hazelnut fragments from posthole 48 produced a date of BC (Beta-185677, 3570±40 BP). All the pits or postholes contained a quantity of hazeln them (47–49) contained oat, and an indeterminate cereal. Weed seeds were scarce bu (*Rumex acetosella*) was recorded from both 46 and 47 and hemp-nettle (*Galeopsis* sp.) o 48 and 49.

Fig. 8. Length of the palisade trench on the west side of the enclosure, with immediately in front of the ranging pole. Scale 1m.

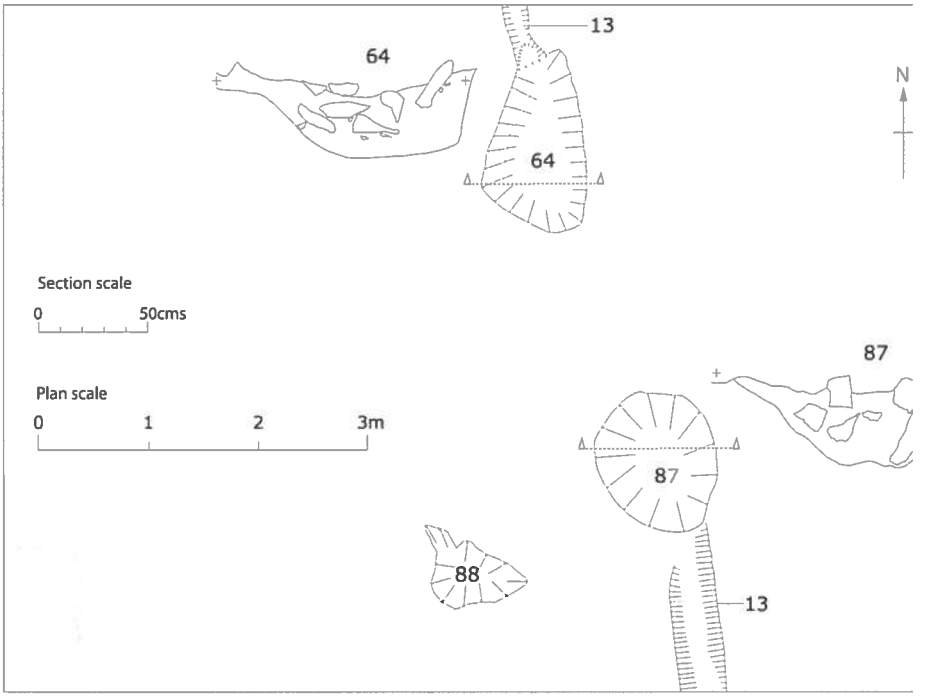

Fig. 9. North-east palisaded enclosure entrance: plan and profiles.

The four-post structure

Within the area of the enclosure, in the south-east corner, were four large postholes diameters ranging from 0.75m to 0.92m, and depths from 0.3m to 0.8m (Fig. 12). All fc charcoal-rich dark brown fill with packing-stones, indicating that they contained post diameter. The postholes clearly appear to have been associated, having a roughly squar approximately 2.2 by 2.2m, centre to centre. Charcoal from posthole 9 produced a ra of 380–170 cal. BC (Beta-185681, 2250±40 BP). Unfortunately, owing to the collapsed n it was impossible to determine whether the sample was from the packing material or the of the postholes (9, 11) produced a few plant remains, including wheat, oat and hazelnut, weed seeds were recovered from 9.

Other features in the area outlined by the palisade gully

A small and shallow pit (50), with a diameter of 0.75m and a depth at its greatest of 0.16 to the east of the north-east entrance (Figs 4 and 5). This pit contained pottery sherds frc vessels of Early Neolithic date. Charcoal from this pit produced a radiocarbon date of 370((Beta-185679, 4840±40 BP). The palaeoenvironmental assemblage was similar to that frc north-west entrance of four postholes in that it comprised oat, hazelnuts and indetermina it also contained a few grains possibly of emmer wheat (*Triticum dicoccum*), a grain of a wheat type, several wheat grains not determinable to species level and a few barley consistent with the radiocarbon date and pottery.

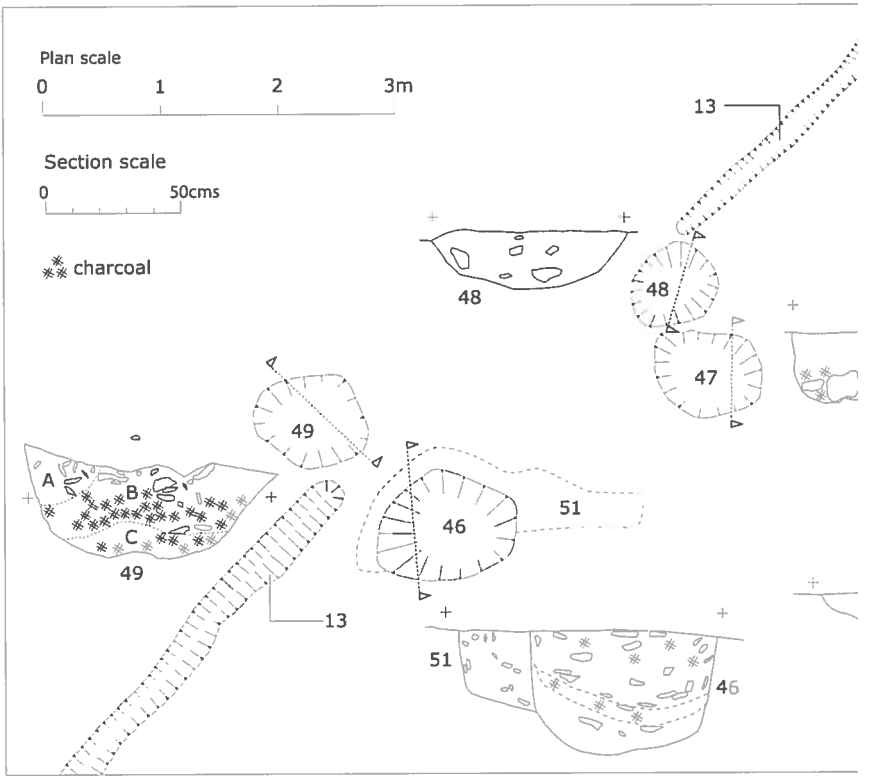

Fig. 10. North-west palisaded enclosure entrance: plan and profil

Several other pits were located within the area defined by the palisade gully, tv contained pottery sherds of probable Early Neolithic date. A sherd of Peterborou grain and hazelnuts were found in a small isolated pit (43). Two postholes (44 anc distance apart (*c.* 2.0m) to be postholes for the doorway of a roundhouse, but th conjecture. Other small pits or postholes (36, 37, 38, 40) were located in a line w enclosure roughly concentric to the palisade gully; two contained pottery sherds (3 largest of the four, being 0.95m by 0.75m with a depth of 0.35m, and contained char pit 38, 0.5m by 0.54m had a depth of 0.21m, and contained a sherd of probable Ea against its west side; and pit 40, 0.73m by 0.78m, with a depth of 0.26m, cont Neolithic/Early Bronze Age pottery in the lower levels of the fill. Three (52, 54, 6 hazelnuts but in addition several possible emmer wheat grains were present in pit 52 in pit 54. In contrast to the evidence from these pits, only one indeterminate cereal from posthole 45. This also contained hazelnuts and several seeds of sheep's sorre (76, not shown on plan). Pits or postholes 36, 37, 38 and 40 yielded no cereal ev hazelnuts were relatively frequent in these, other remains were scarce.

Features outside the area of the palisaded enclosure

To the west of the enclosure another posthole pair (144 and 145) could also be in postholes for a roundhouse. Pit 110, 0.7m by 0.55m with a depth of 0.23m, conta Early Neolithic vessels. Pit 113, 0.3m by 0.42m with a depth of 0.13m, also cc

Fig. 11. Detail of the four-post entrance from the west. The terminals of the palisade gu on the right and left side of the photograph. Scale 2m.

two Early Neolithic vessels. Charcoal from pit 113 produced a radiocarbon date between BC and 3590–3530 cal. BC (Beta–185680, 4870±50 BP). One oat grain was found in pit emmer, free-threshing wheat and barley cereal grains were recorded from pit 110. Hazelnu in pit/posthole 110 but absent from pit 113.

Near the western edge of the excavation, close to the old, probably post-medieval, fie small pit (142), 0.66m by 0.53m with a depth of 0.16m, contained a very charcoal-rich dep of which produced a radiocarbon date of 3650–3510 cal. BC (Beta-185678, 4800±40 BP) the west of the palisade, 0.64m by 0.6m with a depth of 0.15m, contained a small amount as well as a small sherd of Early Neolithic pottery. To the south of the field boundary, in tl of the site, several pits or postholes were located (116, 117, 118). All of these wer including pit 118, 0.5m by 0.47m and 1.2m deep, that contained a single wheat grain, two Neolithic pottery and large stones. These were isolated features, however, and it is difficul them in the context of the site as a whole. A similar small cluster of pits or postholes (16 the south-eastern part of the site, south of the old field boundary, are similarly difficult 164 contained a single sheep's sorrel seed. It is of interest to note that these two gro presumably for many years, immediately to the south of the old field boundary, visibl photograph (Fig. 4), that would have protected them from ploughing and other agricultur

Fig. 12. The four-post structure from the north-west with the palisade trench in
Scale 2m.

boundary consisted of two parallel, shallow ditches with the position of a boundar
band of un-weathered bedrock between them.

To the north-west, within the area examined and recorded during the watchi
numbered on the plan), evidence for another four-post structure was uncovered. It
approximately 2.3m to the centre of the posts, with the eastern postholes more tr
stripping, having lost up to 0.3m of their depth. There was evidence of post-packin
truncated postholes.

A number of other pits (67, 83, 89, 90, 168) were found to the east. Pits 89 an
hazelnut shells; and 90, a large pit 1.2m by 1.0m with a depth of 0.5m also con
quantity of large stones and charcoal.

Two linear groups of features (149, 155, 161–3 and 146–8) to the west of the
appear to have been stakeholes for a fence. Their sharp-edged profile and loose fill
from other features on the site and suggests a recent date.

There was also much evidence for periglacial activity across the site. Evidence of
boles was also recorded during the excavation. These sometimes proved to be dif
from the archaeology. For example, posthole 46 was cut into a large glacial deposit
large, irregular, natural feature (85, not shown on plan). A clover (*Trifolium* sp.) s
(*Empetrum nigrum*) seed were recovered from this natural feature. Feature 158, *c.* 2.

deep, which appears to have been a tree bole, was probably an open hole at some time dur and was filled in with rocks, possibly from field clearance. Only the upper fill suggested l as amongst the stones several sherds of probable Early Neolithic pottery were found, as possible rowan (*Sorbus aucuparia*) seeds. Most of the area to the north-west of the enclo areas examined under the watching brief, contained no identifiable archaeology.

RADIOCARBON DATES

All dates are AMS dates and were provided by Beta Analytic Radiocarbon Dating Labc Florida. The dates were calibrated by Beta Analytic using Stuiver *et al.* 1998.

Beta-189116
Context: Posthole 64 of north-east entrance to palisaded enclosure
Material: *Prunus* sp. (blackthorn/cherry)
Result: 5080±40 BP
Calibrated date: 3970–3785 cal. BC

Beta –185680
Context: Pit 113
Material: *Corylus avellena* (hazel charcoal)
Result: 4870±50 BP
Calibrated date: 3710–3530 and 3590–3530 cal. BC

Beta-185679
Context: Pit 50 containing Early Neolithic pottery
Material: *Corylus avellena* (hazel charcoal)
Result: 4840±40 BP
Calibrated date: 3700–3630 cal. BC

Beta-185678
Context: 142 Isolated pit with charcoal-rich fill
Material: *Alnus glutinosa* (alder charcoal)
Result: 4800±40 BP
Calibrated date: 3650–3510 cal. BC

Beta-185677
Context: Pit/posthole 48 of north-west entrance to palisaded enclosure
Material: *Corylus avellena* (hazeln
Result: 3570±40 BP
Calibrated date: 2030–1870 cal. B(

Beta-185682
Context: Ring-ditch 6, basal silt de
Material: *Corylus avellena* (hazel f
Result: 2530±40 BP
Calibrated date: 800–520 cal. BC

Beta –185683
Context: Ring-ditch 4, basal silt de
Material: *Corylus avellena* (hazel f
Result: 2410±40 BP
Calibrated date: 740–710 and 530-

Beta-185681
Context: Posthole 9 of four-post str
Material: *Corylus avellena* (hazel c
Result: 2250±40 BP
Calibrated date: 380–170 cal. BC

Beta-189117
Context: Posthole 87 of north-ea palisaded enclosure
Material: *Prunus* sp. (blackthorn/c
Result: 1790±40 BP
Calibrated date: cal. AD 130–350

PREHISTORIC POTTERY
By Jody Deacon

A total of 65 sherds of prehistoric pottery weighing 452.60g were recovered from Area B. The majority of the assemblage can be dated to the Early Neolithic on the g fabric, and by association with radiocarbon dates from two of the pits. Where de limited to shallow tooled lines around the mouths of the vessel that is, in some inst

Two of the pits yielded sherds with fabric and decoration more characteristic of La Bronze pottery, suggesting continuing activity on the site. All sherds were examine ×10 magnification and fabrics categorised according to the Prehistoric Cerami guidelines (1996). Other characteristics such as abrasion, evidence of use-wear, vess surface finish were also recorded to examine variations within the assemblage. Fu with the site archive.

Fabrics

Four fabric groups (A–D) were identified with several small sub-categories recogni However, these small differences probably represent variations between individual potters working within a specific technological framework rather than distinct 'recipe number of diagnostic sherds and low mean sherd weight makes it difficult to inf between these variations and the form, volume or use of particular vessels. With the sherds of vesicular fabric (B) all the Early Neolithic pottery was quartz tempered (A quartzite was found only in the Late Neolithic Peterborough sherd.

A. Quartz tempered

Moderate to common angular or sub-angular crushed quartz inclusions within a laminated clay. Six subgroups were identified:

A.1: common angular quartz <1–3mm
A.2: common angular quartz 1–6mm
A.3: common angular quartz 1–3mm
A.4: moderate angular quartz <1–3mm
A.5: common sub-angular quartz 1–3mm
A.5: moderate sub-angular quartz <1–3mm

B. Vesicular

Common angular and sub-angular voids or vesicles 1–3mm within a matrix of quite Created by the leaching out of the material originally added to the clay, most likely such as calcite, limestone or shell.

C. Quartzite tempered

Moderate, large sub-angular quartzite fragments 6–8mm across within a quit laminating clay matrix.

D. Grog and crushed rock tempered

Sparse rounded grog 1–3mm across and sparse sub-angular crushed rock within a fired clay matrix.

Early Neolithic pottery

Nine pits in Area B produced sherds of Early Neolithic pottery. Pit 50 produced three sherds (Fig. 13), one plain (SF7) and two decorated (SF3 and 4), and 12 body sherds with radiocarbon date of 3700–3540 BC. A similar date of 3710–3530 BC was obtained from contained 6 sherds including part of the rim of a shouldered bowl (SF10). The majority are of fabric A, with two of fabric B, and many show evidence of smoothing or burn surfaces. Facets from this process are clearly visible on SF7 (Fig. 13). The remainder of th from seven pits (38, 52, 53, 110, 118, 154 and 158) are mostly of comparable fabric and presumably of similar date.

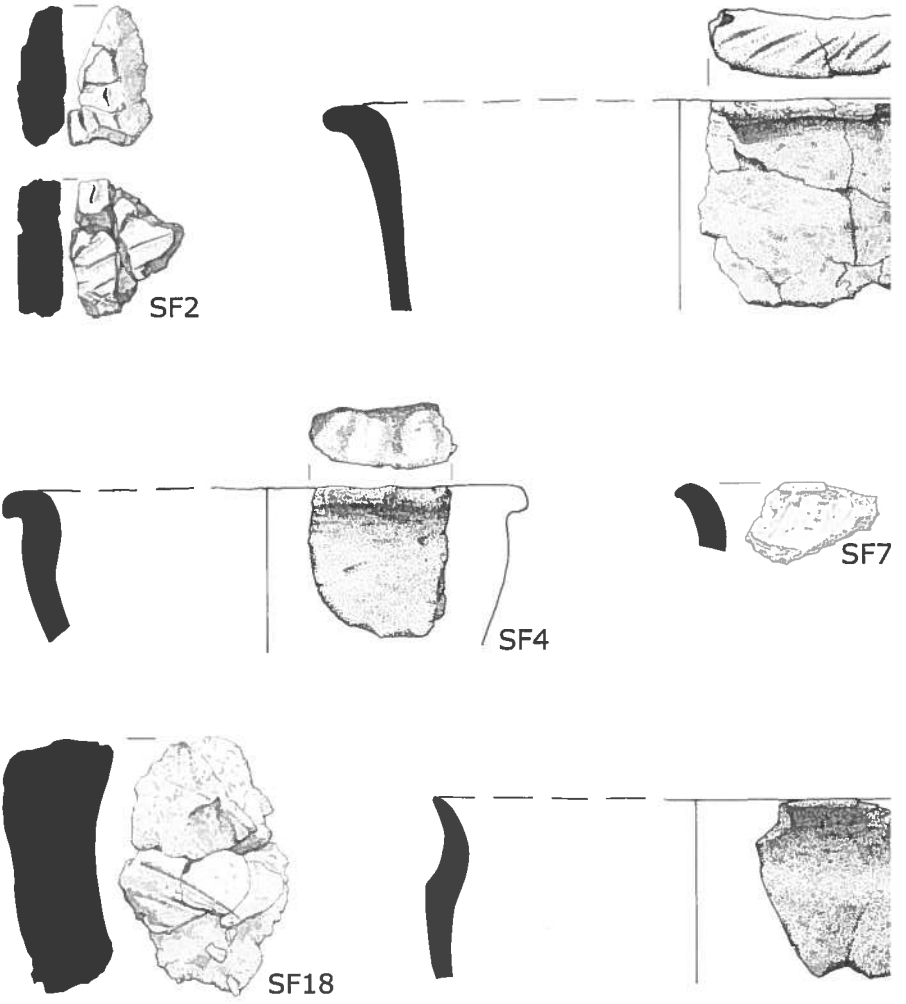

Fig. 13. Prehistoric pottery, scale 1:2.

SF3. Context 50; Fabric A.1. Rim sherd, 7–9mm thick, from an open bowl wit which oblique lines have been impressed, the angle changing slightly aroun has a grey external surface, coarsely burnished, abraded brown internal su a laminating texture. There are no recent breaks and the old edges are quit

SF4. Context 50; Fabric A.3; Early Neolithic. Rim sherd, 6–11mm thick, from everted rim and oblique shallow indentations, probably finger impressions a smoothed buff/grey external surface, and abraded brown to dark grey rc and a soft black core. A small fresh break along the bottom of the sher during excavation and clearly shows the laminating texture of the pottery.

SF7. Context 50; Fabric A.3; Early Neolithic. Rim sherd, 7–8mm thick, with horizontal burnishing on both surfaces. It is an oxidised pale orange/buf The accompanying body sherds share very similar characteristics and ma vessel.

SF10. Context 113; Fabric A.3; Early Neolithic. Rim sherd of a small shouldere with the carination just below the rim. Both surfaces have been burnished tapers to a fine edge. The sherd has dark grey surfaces with a dark grey la only slightly abraded.

Late Neolithic / Early Bronze Age pottery

Two sherds from pits 40 and 43 (Fig. 13, SF2 and SF18) within the enclosure are ma the rest of the assemblage in both fabric and decoration and appear to mark use of th Neolithic or Early Bronze Age.

SF2. Context 40; Fabric D; Late Neolithic / Early Bronze Age. Thick walled thick of quite soft fabric. Oxidised orange external surface with grey/brown core. The decoration consists of incised overlapping lines on some herringbone pattern, and fingernail impressions on others. These techni found combined on Late Neolithic Grooved Ware (Wainwright and Longw equally belong to an Early Bronze Age urn or food vessel. Most sherds joi likely to be from one vessel. Found in the lower fill of the pit.

SF18. Context 43; Fabric C; Peterborough Ware. Extremely thick-walled sh probably from near the base of a large vessel with dark grey/brown surface fabric is quite hard and many of the large inclusions break the surface. The been smoothed and unusually for this part of a vessel it is decorated wit fingernail or twisted-cord impression.

Discussion

Parts of at least three well-made open bowls with everted rims were present in pit been found in Early Neolithic contexts at sites along the north and south coasts of borders, but there are few examples from inland locations and upland areas (Burrow Examples with clearly impressed oblique lines of similar form to SF3 were found a settlement site of Clegyr Boia, Pembrokeshire (Williams 1952, fig. 12, no. 31) an Pembrokeshire (Darvill in Benson 1990, 210–11, fig. 32, no. 56). The latter was con Middle Neolithic but Peterson (2003, 128–9) has suggested an Early Neolithic supported by the radiocarbon date of 3700–3630 BC from pit 50 at Cwm Meudwy

rims displaying regular but faint oblique grooves recovered from Mount Pleasant, Glam 1955, fig. 3, nos 1, 2 and 4) could also be of Early Neolithic date but their prese Peterborough ware and Bronze Age urn fragments make this attribution uncertain.

The careful uniform impressions made along the rim of SF3 contrast markedly w noticeable shallow indentations on the rim of SF4—a vessel similar in fabric and finish from chamber II at Ty-Isaf, Powys (Grimes 1939, fig. 6) which shows comparable decor a different rim form. In other aspects both these vessels are well-finished with smoothe carefully formed rims, and these shallow indentations may represent a required step in th of these bowls rather than conspicuous visual or tactile enhancement.

Carinated bowls with flared rims are known from Early Neolithic contexts across th Vessels of similar form to SF10 pit from pit 113 are known from the pre-cairn phases Powys (Britnell and Savory 1984, 99–100, fig. 38, nos 10–11; fig. 39, nos 12–13) associated radiocarbon date of 4000–3700 cal. BC. These vessels, and other parallels fror Pembrokeshire (Williams 1953, fig. 9, nos 2 and 7; fig. 10, nos 12–14), Dyffryn Arduc (Powell 1973, 24–7 fig. 8, nos 1–3), and Tinkinswood, Glamorgan (Ward 1915, fig. 2, nc vesicular appearance caused by the leaching out of calcareous inclusions such as she characteristic of much Early Neolithic pottery in Wales (see Burrow 2004, 52), and in t quite different from the quartz tempered SF10.

The fairly homogenous nature of the Early Neolithic pottery fabric at Cwm Meudwy wi of quartz to the exclusion of other materials contrasts with other assemblages such as Stackpole Warren, Gwernvale and Ty-Isaf, which have far more variation in their fabri within the open bowl forms. The similarity throughout the assemblage could suggest produced within a limited timescale by potters using a particular 'recipe' focused on the u an added component.

There is also relative uniformity in the surface finish of the Early Neolithic potte Meudwy with care having been taken to smooth the external surface on nearly all sherds burnishing is less common. Facets from smoothing can also be seen along to top of SF7 b continue onto the internal surface of the vessel, which, in common with most of the sher texture with numerous quartz inclusions breaking the surface. In contrast, the carinated l produced from clay of comparable fabric, has been highly finished (possibly burnished surfaces surviving. This could suggest either different priorities at work within its mani utilisation of the vessel in a different way.

It is plausible that vessels with abraded internal surfaces have been subject to a mechani process which did not affect the outside of the pot. It seems unlikely that this could be differential conditions within the burial environment or exposure in some way prior to c majority of the sherds within the assemblage show little evidence for use as cooking po sooting and few residues—and it seems unlikely that the soft and laminating texture of th stand up well to prolonged heating (Elaine Morris pers. com.). One interpretation of this is tha used as containers for a liquid which caused a breakdown in the soft ceramic surface, exp resistant quartz inclusions. However, this seems unlikely as the abraded surfaces continue t rim on all the open bowls, which would require the vessels to be impractically filled right up a liquid had caused this effect a distinct change in surface would be expected lower down surface. It therefore appears that this difference demonstrates a convention in the manuf bowls requiring the outside and rim of the pots to be finished well while the inside was left

The single sherd discovered in pit 43 is of the coarse, dark fabric containing large qu that characterises the majority of Peterborough Ware in Wales, particularly Mortlake v

1995, 24–29). Parallels for the fingernail impressions forming pseudo-cord decorati Cwm Meudwy can be found amongst the assemblage from Upper Ninepence, Powy 51, P6 and P8), while sherd P11, which also has fingernail decorations, shows simi date has not been obtained for material from the pit, but dated Peterborough as suggest a date after 3400 BC (Gibson 1995).

Later use of the site is also suggested by SF2 which displays an altogether differe decoration. The addition of grog to the clay has been identified in Late Neolithic G and in the beakers, urns and food vessels of the Early Bronze Age. A similar claim combination of incised lines and fingernail decoration, making any identification o sherd tentative.

THE CHARRED PLANT REMAINS

By Astrid E. Caseldine and Catherine J. Griffiths

A summary of the results has been incorporated into the main text, with the full r plant remains, including tables, deposited with the site archive.

The plant macrofossil evidence from the site is scarce but the results are to a large with the radiocarbon dating and pottery evidence, albeit the possibility of some r residual or intrusive must be borne in mind. Charcoal was frequent in all features fr charred plant remains were relatively scarce, apart from hazelnuts which occurred ir which contained any remains at all. A number of samples produced no eviden occurred in several samples but much of it was indeterminate and diagnostic ele which might give some indication of the date of the plant remains and hence the fe However, samples from within some groups of features do show similarities, provid the suggested groupings. Weed seeds were generally rare.

The presence of probable emmer wheat, although there were no identifiable glu forks to confirm this, and absence of spelt suggests an early prehistoric date for se Overall, the evidence appears to suggest early Neolithic activity at the site and tha engaged in small-scale cultivation. This is consistent with the pollen and plant macr elsewhere in Wales (Caseldine 1990; Moore-Colyer 1998), although plant macrofos Neolithic cultivation is generally very rare (Caseldine 1990, in prep.). A charred plant from a shallow pit at Plas Gogerddan was dated to 3640–3340 cal. BC (Caseldine 1 that from the shallow pit 50 at Cwm Meudwy. However, the assemblage from Plas richer and contained large quantities of emmer wheat, a small amount of barley and of hazelnut and apple (*Malus sylvestris*). Emmer wheat, along with hazelnuts, was a buried soil associated with the timber structure beneath the long cairn at Gwernvale in Britnell and Savory 1984; Caseldine in prep.). However, emmer is found on late the paucity of remains is also a feature not only confined to early prehistoric sites b prehistoric sites in Wales, such as Moel y Gerddi and Erw-wen (Kelly 1988).

The occurrence of spelt wheat glume bases in posthole 87, dated to cal. AD 130 evidence from defended enclosures of late Iron Age and Romano-British date in we Llawhaden (Caseldine and Holden 1998), where spelt is generally frequent.

The charcoal assemblage indicates that mainly hazel and oak and small amoun species were being used. The charcoal from posthole 87 suggests that cherry/black were being exploited as well as oak and hazel by cal. AD 130–350.

DISCUSSION

Area A

As each ring-ditch was a complete circle with a smooth, deep profile, there is no evidence they were drainage ditches around roundhouses. There was, however, no evidence for bu outside the ring-ditches. Nevertheless, they seem likely to have been funerary monument without burials are not uncommon, especially those of a similar small diameter. Parallels c Springfield, Essex (Buckley *et al.* 2001), where a *c.* 8m ring-ditch, probably dated to the Age on the basis of pottery, and at Plas Gogerddan, Ceredigion, where two of the three e ditches did not have a central burial (Murphy 1992). Construction of the ring-ditches at P was dated to the first millennium BC; they were later used for Iron Age burials. A ce generally assumed for ring-ditches, and at Plas Gogerddan the excavator suggested that bur been incorporated within central mounds only to be dispersed as the mounds eroded. At suggestions of silt lines within the ring-ditch fills indicate that there might have been a sma the ditches, but this could be due to erosion of the ditch sides themselves. Allowing for loss topsoil the ditches may originally have been up to 1m deep; this would allow for a reasonabl mound. As samples for the two radiocarbon dates were obtained from the basal fills below and therefore intrusive contamination is unlikely, a date between 800 and 390 cal. BC is ir silting of the ditches. If the ditches silted rapidly, this date range may indicate the construc these monuments. This is outside the generally accepted range for funerary monuments of as noted above, can be paralleled at Plas Gogerddan. It is possible that some of these small western Wales date to the first millennium, rather than the earlier Bronze Age.

Area B

Few of the archaeological features in Area B had a direct relationship with each othe phasing of the site extremely difficult, and therefore greater reliance has been placed on sc methods, environmental material and the relative dating based on the pottery analys satisfactory, as Early Neolithic to Early Bronze Age pottery was found in just eleven pits, the seven radiocarbon dates are from discrete, dispersed features and range from the Ear the Roman Period.

A prehistoric pottery assemblage from any period is unusual for Wales: an assem Neolithic pottery is even more unusual. The few examples known are mostly from me although pottery of this date has been recognised at settlement sites, such as Clegyr Boia, P and in several caves on Caldey Island, also in Pembrokeshire (Burrow 2003, 52–60). At the pottery was found mostly in pits and postholes, but none from the palisade gully features directly connected with it such as entrance postholes. Several of the pits/posthol pottery and radiocarbon dates were obtained from lie in a line (38, 40, 50, 53, 110 and 113 with other pits and postholes (Fig. 5) form a rectangle. However, given the disparate cha features it would be unwise to pursue this analysis.

The issue of the three later radiocarbon dates from the site needs to be addressed. The B from a posthole from the western entrance is an isolated date, but it is broadly compatibl sherds of Late Neolithic/Early Bronze Age pottery from pits 40 and 43. Together, this indi site beyond the Early Neolithic. The Iron Age date from the four-post structure and the R date from the north-east entrance also signal later activity.

The two four-post structures are the only clearly defined buildings at Cwm Meuc structures are generally considered to be raised-floor storage buildings with a date range

Bronze Age through to the Late Iron Age (Gent 1983, 245), although examples are a Middle Bronze Age and Roman Period. In south-west Wales they are exclusively fou defended settlements, as at Llawhaden, Pembrokeshire (Williams and Mytum 1' Carmarthenshire (Murphy 1985). However, finding four-posters that are not conten of a site is not unknown. At the Atlantic Trading Estate, Barry, Glamorgan, a four-po Iron Age due to the discovery of 'a rim and a basal angle of a vessel of Iron Age d although the rest of the site was interpreted as Bronze Age from evidence derived fr small finds. The radiocarbon date of 380–170 cal. BC from Cwm Meudwy is therefi would have expected from this structure, and its location within an enclosure is c examples across Britain where, according to Gent (1983, 253), only 10 per cent of s in open settlements (i.e. not within defensible or non-defensible enclosures). The fou north-west of the enclosure is clearly part of the 10 per cent. However, given concentrated on enclosed settlements, with less on unenclosed settlements, perhap unsurprising. It is possible, therefore, that the palisaded enclosure with the four-p pairs representing possible entrances to roundhouses, such as 44 and 45, are Iron A material culture of this period is not a problem in south-west Wales: only very s pottery, dating to the later Iron Age or early Romano-British period, are found on c of defended enclosures (Williams and Mytum 1998; Murphy 1985). The Ro radiocarbon date from a posthole of the north-east entrance may indicate continued period, may be from intrusive material, or, indeed, may date the construction of the

On the basis of the above information it would seem that there are two possible site chronology:

1. Most of the remains, including the palisaded enclosure, are Neolithic. There is possibly including the four-post structures. However, the charcoal samples fr pits/postholes (48 and 87) that provided Bronze Age and Romano-British dates contamination (root action/animals); an entirely feasible possibility given that t dating weighed less than 0.5g and the analysis of the charred plant remains indic what appeared to be natural features.
2. There is a strong Neolithic element to the site represented by a group of pits c most of the structural remains, including the palisaded enclosure, are Iron Age

Early Neolithic settlement sites in Wales are rare. A well-preserved site was ex hilltop of Clegyr Boia, Pembrokeshire, where a rectangular hut was found, one of houses on the site (Williams 1952; Lynch *et al.* 2000). A later prehistoric stone second house, which had been burnt down. In the case of Llandegai, Gwynedd, whe representing a Neolithic building were found, preservation was probably due to prot bank of a henge (Lynch and Musson 2004, 27–32). At Gwernvale, Powys, evidence Neolithic building was found in the form of bedding-trenches and separate postho plan to the Early Neolithic buildings at Llandegai, and possibly those at Clegyr B under a later Severn-Cotswold style long cairn (Britnell and Savory 1984, 139). Fishguard, Pembrokeshire, huts of sub-rectangular plan were dated to the Neolithic the identification of probable Neolithic Peterborough Ware pottery, and from en although the structures themselves were either lightly constructed (Lewis 1974) seems that in many cases the ability to identify Neolithic domestic structures depended upon their being protected from damage by later prehistoric constructio

other earthworks. The absence of such protection may help to explain why the Neolithic ev Meudwy is so hard to interpret, despite such good dating evidence, as the site was heavily to excavation. The spatial analysis of the pits and postholes reveals very little. There w could be interpreted as a sub-rectangular or other shaped building. Indeed, in commo recently recognised prehistoric site, that at Llanilar, Ceredigion (Briggs 1997, 16–23), Neolithic pottery is difficult to characterise owing to plough-truncation. However, r Neolithic pottery are starting to provide an indication of more widespread and complex h in west Wales than has been previously recognised.

No radiocarbon dates were obtained from material from the palisade gully, and the rac from the entrance postholes conflict with each other. The enclosure could be of any Neolithic to the Romano-British period, and, indeed, beyond. However, the pottery from and evidence from other sites suggests a Neolithic or Iron Age date, and it is these two c considered here in more detail. Most Neolithic palisades, and certainly those identified ir shown to be much larger, and of quite different character to the one at Cwm Meudwy overall corpus of later Neolithic palisade enclosures is a small one (Gibson 2002, 15), C\ not characteristic of any of them. The radiocarbon date of 3970–3785 cal. BC obtained fr may therefore be residual, and the date of cal. AD 130–350 obtained from the other entrar may more closely indicate the date of the enclosure. This date, however, as described ab have been obtained from intrusive material.

In support of a later date, the enclosure at Cwm Meudwy bears a number of simil enclosure at Moel y Gerddi, near Harlech, Gwynedd, which was excavated in 1980 and 19 101–51). Whilst the enclosure at this site approximated to a circle compared with Cwm shape, in many other ways the two were remarkably similar. The enclosure had two although they were opposite each other, west–east, and there was a single four-post struc the lee of the palisade. Clear evidence for a single central roundhouse with a ring of suppo found at Moel y Gerddi, and it is possible that the truncated remains of postholes 44 a Meudwy were once part of a similar structure. The palisade posts at Moel y Gerddi were gap between stones and slabs laid edge-on along the sides of the trench' (Kelly 1988, similar to the evidence found in the less truncated parts of the palisade gully at Cwm Me the enclosure were hewn out of the bedrock at both sites as well. As at Cwm Meudwy ther from the gully. Radiocarbon dates were also inconsistent, with a date of 3656–3370 ca palisade gully, and the fill of one of the two postholes flanking the east gap returned a c BC – cal. AD 0. Nevertheless the excavators attributed an Iron Age date to the enclosure. of the site having been occupied in the Neolithic period. This interpretation of an Iron A enclosure, especially since late dates were obtained from the entrance posthole 87 and posthole 9, seems most likely to be appropriate at Cwm Meudwy as well. Enclosure A Common, West Yorkshire, is a second Iron Age parallel for Cwm Meudwy (Howell 2001, pl. 4). Here, a D-shaped enclosure was made up of 163 closely spaced postholes. The severely plough-truncated and virtually no internal features survived, but radiocarbon dat two sigma of 790–400 cal. BC, 758–261 cal. BC and 397–167 cal. BC from three c postholes are broadly comparable, if a little earlier, with the Iron Age date from Cwm M

Palisades pre-dating defences constructed of substantial banks and ditches are characteristic of the Iron Age, with examples in south-west Wales at Drim Camp (Willia 1998, 53) and Castell Henllys (H. Mytum pers. com.). It is possible to argue that Cwm similar settlement, but for which no substantial defences were later provided. If the palis at Cwm Meudwy is indeed Iron Age in date then it is of great significance as our knc

period in south-west Wales is dominated by evidence from hillforts and defended e 900 such sites recorded on the regional Historic Environment Record. In co undefended settlements is limited to two sites from Stackpole Warren (Benson *et a* groups and field systems on Skomer Island, Pembrokeshire (Evans 1990) and Berna Pembrokeshire, although the date of the two latter sites, other than broadly prehi established.

In summary, the authors' preferred interpretation is for Early Neolithic activity at the site in the later Neolithic/Early Bronze Age. The duration and nature of this activ Iron Age or Romano British period an enclosure surrounded by a palisade was co post structures suggesting domestic/agricultural use. At Area A three round barro eighth to fourth centuries BC.

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NOTES

1. Both of Cambria Archaeology, The Shire Hall, Carmarthen Street, Llande SA19 6AF.
2. National Museum Wales, Cathays Park, Cardiff CF10 3NP.
3. Both of the Department of Archaeology and Anthropology, University Ceredigion SA48 7ED.

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