

The excavation of Fan round barrow, near Talsarn, Ceredigion, 2010–11

By DUNCAN SCHLEE¹

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Following the inadvertent removal of all above ground traces of a scheduled Bronze Age round barrow during pasture improvement, excavations have revealed evidence of a sequence of ritual and burial features dating from the fourth millennium BC through to the second millennium BC. A central stone-lined pit contained a cremation burial, a Cup, and several fragments of melted bronze. Close by were four more pits, containing cremation burials, each accompanied by one or two ceramic vessels. These cremation burials all date to between 2050–1740 cal. BC. Pieces of charred wood in a pit have been dated to 2560–2300 cal. BC, and another pit dated to 3600–3525 cal. BC contained a rock crystal bladelet, burnt quartz and several fragments of pottery that may date from the early Neolithic. Another linear feature also dated to the middle Neolithic. Small charcoal-filled pits dated to 1415–1270 cal. BC and 1050–895 cal. BC indicate use of the site later in the Bronze Age. The excavated features and the cremated bone assemblage suggest a small kin group cemetery of Bronze Age date, over which a round barrow was constructed.

INTRODUCTION

Between 1996 and 1998, a scheduled Bronze Age round barrow near Talsarn, Ceredigion (SN 56475870)⁷ was inadvertently levelled during pasture improvement. In 2009, with grant aid from Cadw, the Dyfed Archaeological Trust undertook a geophysical and topographical survey of the site to inform decisions on its future management. This was followed by excavation in 2010 and 2011.

The site occupies a hilltop position at just over 280m above sea level (Figs 1–2) on a small knoll on the crest of a ridge that runs in a south-west/north-east alignment. To the north, the site looks down over the Nant Rhiwafallan valley, but is overlooked by a higher ridge of similarly aligned hills. There are far-reaching views towards the west and east. To the south-east, south and south-west, although there are extensive distant views, a bluff to the south-east effectively blocks close views up and down the Aeron valley. The barrow is thus most visible locally from the north. Until relatively recently, much of land in the area of the barrow was poorly drained unimproved rough pasture. Much of this has now been drained and ploughed. The geology of the site is Silurian Period sandstone and mudstone of the Mynydd Bach Formation.⁸ In the excavated area pockets of silty subsoil overlay these solid geological deposits.

The nearest recorded barrow at a distance of just over 1 kilometre from Fan is the site of Pen-y-Glogau barrow (SN 55455931) at approximately 274m above sea level (Fig. 1), excavated in 1929, which produced a Collared Urn and a Cup (Jones and Davies 1930). The three barrows at Trichrug (SN 5424059900) lie 2.5 kilometres to the north-west at about 340m above sea level (Fig. 1). Prior to its destruction the barrow was recorded as a stony cairn,⁹ although in photographs (Figs 3–4) it appeared as a grass-covered mound.

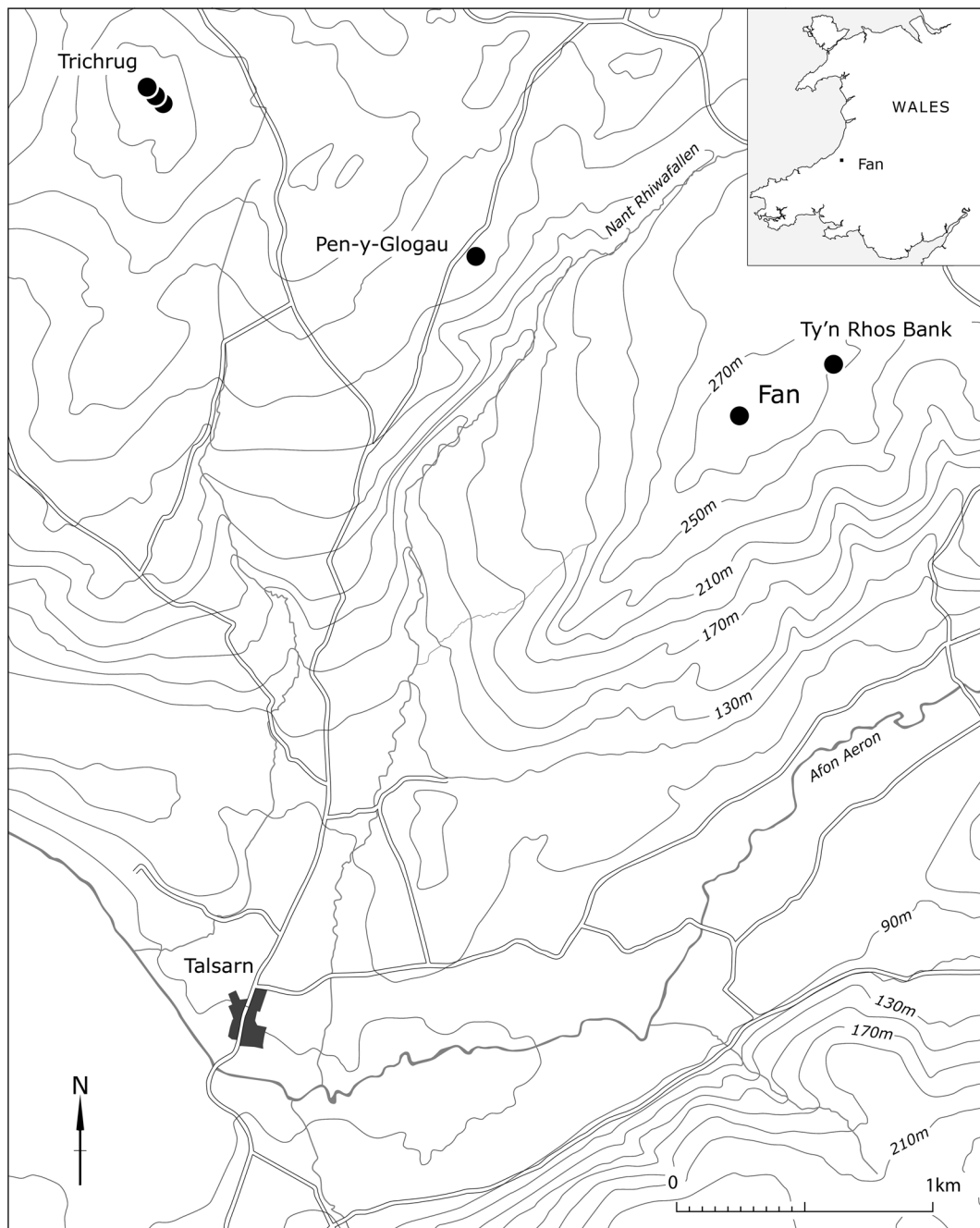


Fig. 1. Location of Fan round barrow, Talsarn and other neighbouring round barrows.

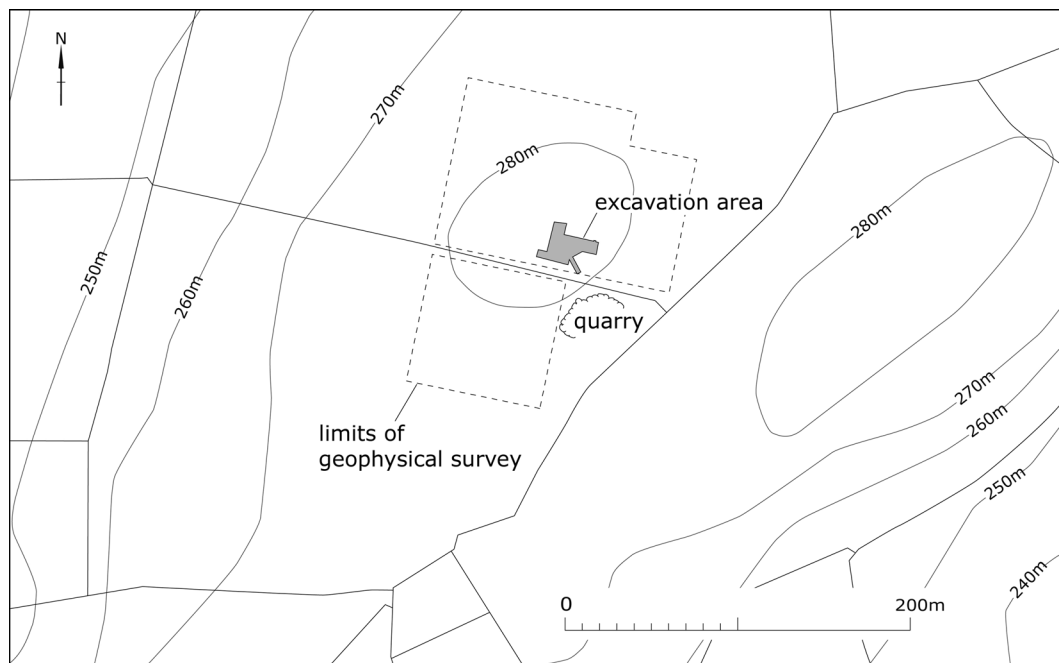


Fig. 2. Plan showing the extent of the geophysical survey and the excavation.

It was c. 20m in diameter and 1.5m high and is described as being irregular in appearance, with an uneven, dished top. The uneven top is probably the result of antiquarian excavation or quarrying for hardcore. By 2004, no trace of the barrow was visible (Cook 2006).

Fan round barrow has probably mistakenly been associated with the discovery of what is known as the Abermeurig or Nantcwnlle Bronze Age Cup. In an article by Barnwell published in *Archaeologia Cambrensis* for 1879 it is reported that the Cup was found in a cairn at Ty'n Rhos Bank near Talsarn. A bronze spearhead is also said to be from the same site (Sainsbury 1930), though Savory (1958, 104) was sceptical that the two objects are associated with the same findspot.¹⁰ During the recent excavation, the Revd Stephen Morgan, a local resident who was raised at Ty'n Rhos Farm, pointed out that Fan round barrow itself is not located on Ty'n Rhos Bank, nor has the land on which the barrow sits ever been part of the Abermeurig Estate. He was able to identify the location on Ty'n Rhos Bank which he understood to be the site from which the Abermeurig or Nantcwnlle Cup was excavated. There is indeed a likely, if considerably mutilated mound at this location (SN 56840 58900). It therefore seems probable that the Cup is from this location rather than from Fan.

EXCAVATION RESULTS

At the start of the excavation the exact location of the former Fan round barrow was uncertain. In photographs (Fig. 3) the barrow clearly lies to the east of the field boundary, while a large irregular anomaly identified in a geophysical survey of the site (Poucher 2010) clearly extends to the west side of the field boundary.



Fig. 3. Aerial photograph of Fan round barrow taken in January 1992.
Photograph: © Dyfed Archaeological Trust.



Fig. 4. Ground photograph of Fan Barrow taken in 1988, looking east.
Photograph: Helen Burnham © Crown copyright, Cadw.

In 2010, a T-shaped trench was opened to locate the remains of the barrow (Fig. 5; Schlee 2010). The thin ploughsoil, merely 0.15m thick, was removed by mechanical excavator but immediately revealed natural subsoil. Although no evidence of the former barrow or the large geophysical anomaly was apparent, several other features corresponding with anomalies in the geophysical survey were identified. In 2011 further excavation was undertaken to record the site (Schlee 2011).

Although some inaccuracy in Ordnance Survey mapping can be expected, it does not appear to be a coincidence that the focal burial, Cremation 7, lies exactly at the centre of the recorded position of the barrow mound. In the absence of physical evidence therefore, the perimeter of the barrow recorded by the Ordnance Survey has been adopted in Figure 5 to indicate the extent of the barrow. Figure 5 also shows the location of the geophysical anomaly in relation to the mapped location of the barrow, the focal burial and the excavated areas.

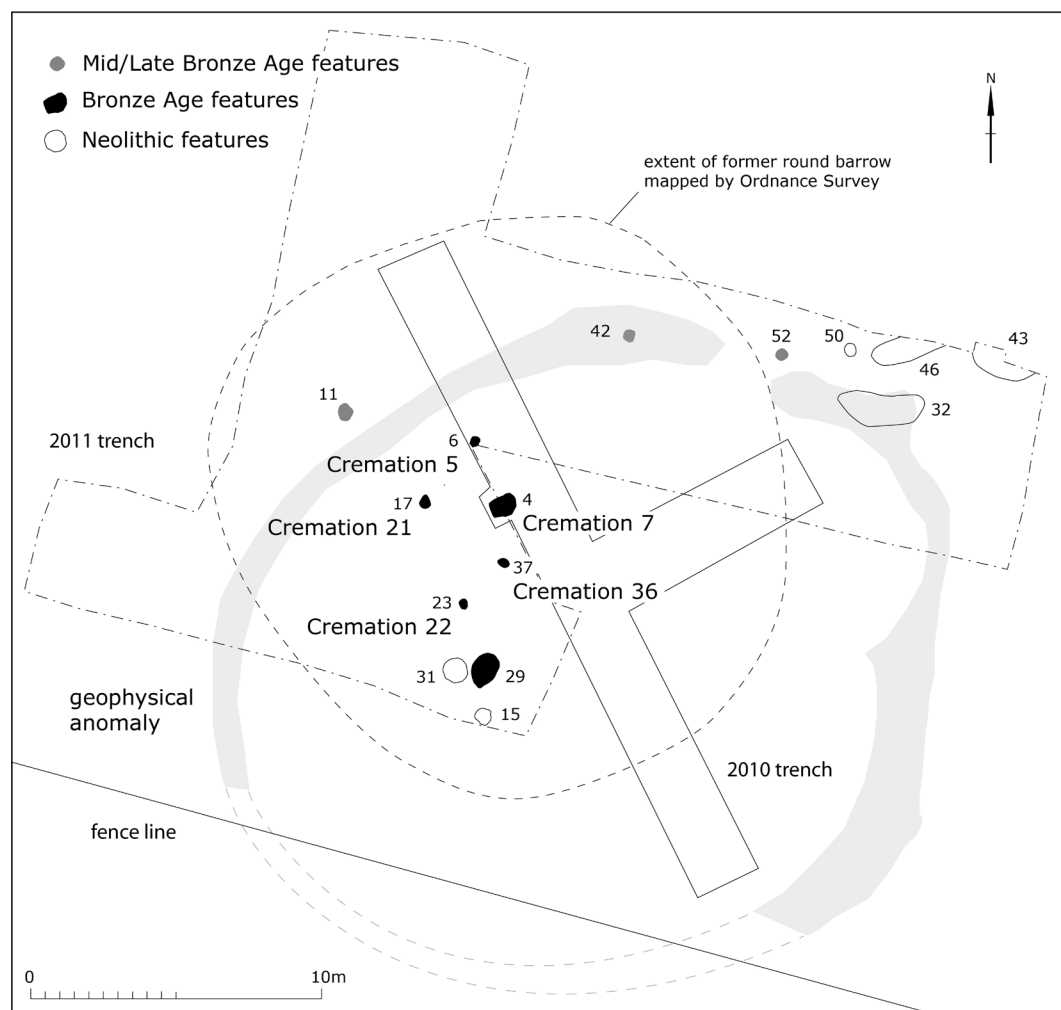


Fig. 5. Plan of the excavated features and location of geophysical anomalies.

Due to the removal of the barrow mound and the effects of the plough, it was not possible to group, date or phase the features on the evidence of stratigraphy. Radiocarbon dates were therefore obtained from a range of features with the intention of establishing the longevity and formation sequence for the site. Radiocarbon dates are expressed calibrated to 2 sigma (95% probability).

NEOLITHIC FEATURES

Two clusters of Neolithic features were identified, one below the southern side of the barrow and one just to the east of the barrow (Fig. 5).

Pit 15 (Figs 5, 6, 8)

This was a circular, shallow pit 0.20m deep and 0.58m in diameter, with a level base. Set within its backfill (27) was a circular hollow 0.42m in diameter, 0.15m deep and edged with a few slightly heat-affected small stones of local shale, measuring less than 0.05m, and a small number of sherds of probable Neolithic pottery (see report by Gibson). Fills 14 and 20 within this possible cooking pit contained a rock crystal bladelet (see report by Austin) and some burnt quartz fragments. A fragment of indeterminate roundwood charcoal from fill 20 has been dated to 3655–3525 cal. BC (SUERC-42560).

Feature 32 (Figs 5, 7)

This curving, steep-sided and flat-bottomed feature (2.9m long, 0.86m wide and 0.36m deep) contained two fills. The upper fill (33) was primarily composed of stones within a silty matrix containing several fragments of charcoal. The lower fill (034) was a silty clay with occasional charcoal flecks. A carbon date of 3940–3695 cal. BC (SUERC-44714) was obtained from indeterminate ring porous charcoal in fill 33 from this pit.

Feature 43 (Fig. 5)

This stony deposit lay only partially within the excavated area. Its shape and dimensions are therefore unknown. Indeterminate roundwood charcoal from this deposit yielded a carbon date of 3630–3370 cal. BC (SUERC-44712).

Feature 46 (Fig. 5)

This roughly oval cut measuring 0.8m by 0.7m and 0.35m deep was difficult to define, being distinguished from the surrounding natural subsoil solely due to the presence of occasional charcoal flecks. The feature may in fact be several intercutting smaller pits or postholes. *Corylus/Alnus* charcoal from fill 45 has been radiocarbon dated to 3640–3520 cal. BC (SUERC-42557).

Features 31 and 50 (Fig. 5)

Due to similarities in the characteristics of their fills, which, except for occasional charcoal flecks were often difficult to distinguish from the natural subsoil into which they were cut, these undated pits have been grouped with the features dated to the Neolithic period.



Fig. 6. Possible cooking pit 15, facing north. Scale 0.5m.

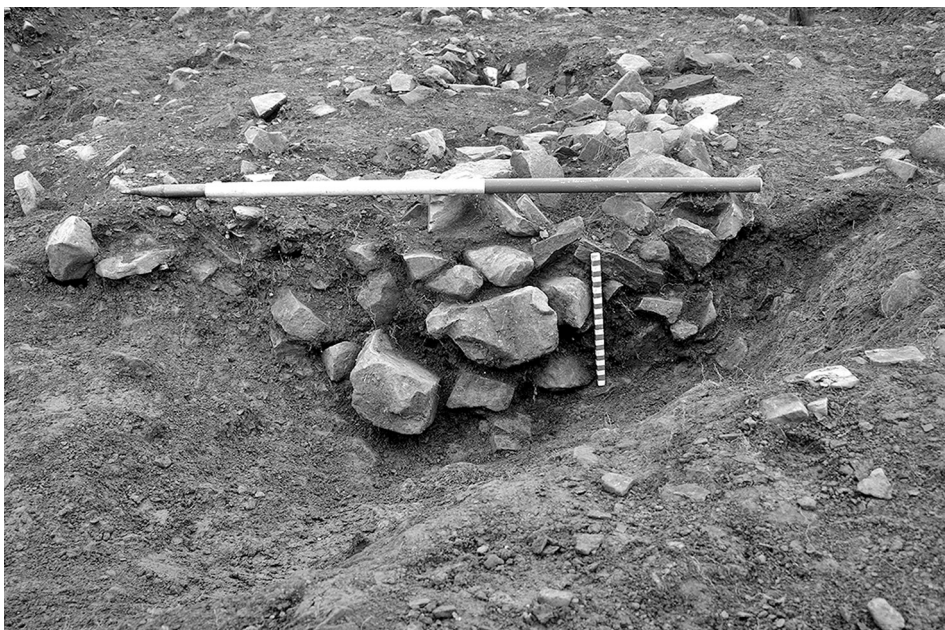


Fig. 7. Section across feature 32, facing east. Scales 1m and 0.2m.

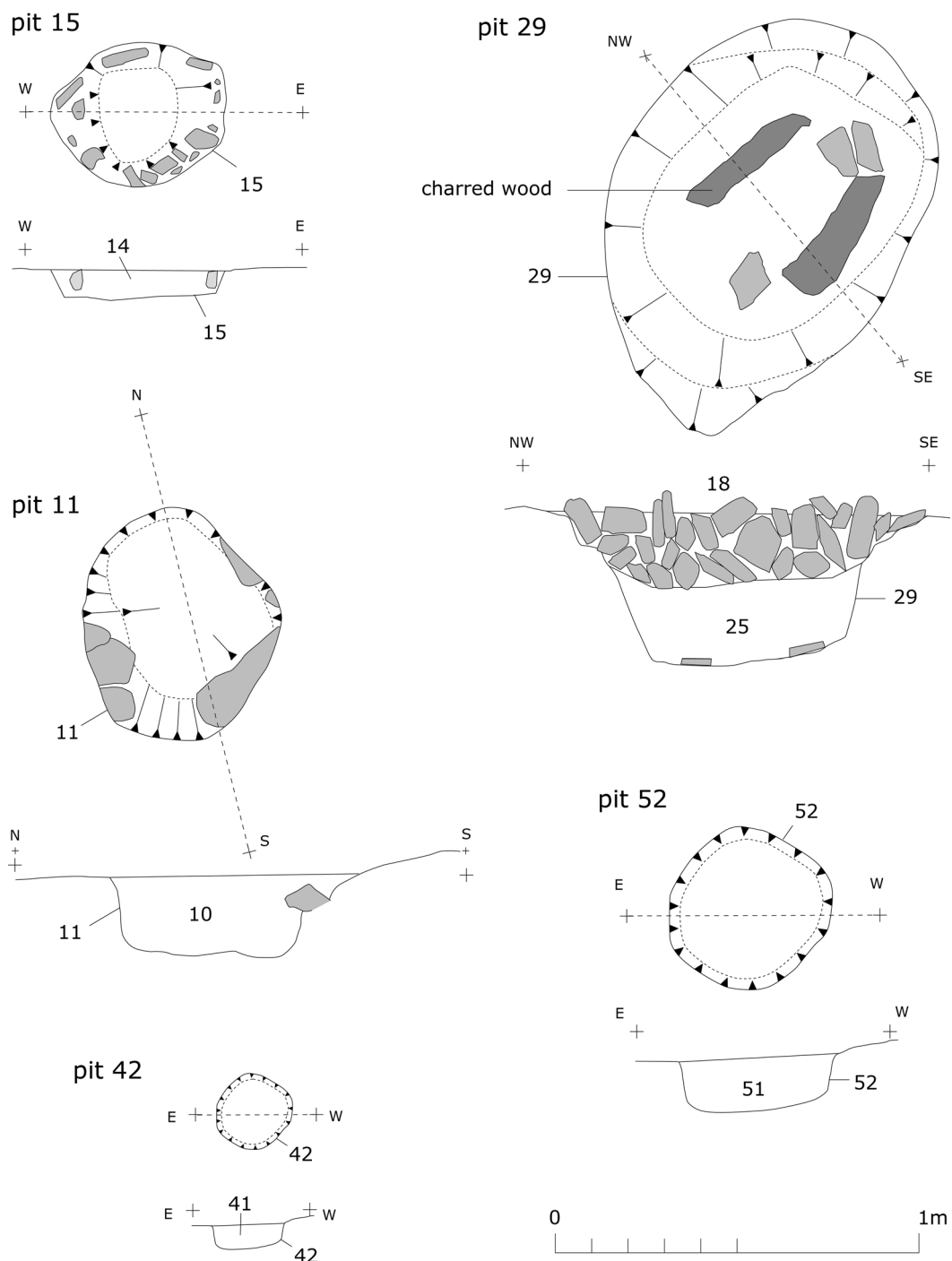


Fig. 8. Plans and sections of Neolithic and Bronze Age features.

BRONZE AGE FEATURES

The following features and cremation burials were identified below or on the margins of the assumed extent of the former barrow (Fig. 5).

Pit 29 (Figs 5, 8)

This oval, steep sided and level based pit, measuring 1.1m by 0.8m and 0.45m deep, and orientated roughly north-south, contained two pieces of unidentified charred wood, each measuring 0.4m by 0.1m laid parallel to each other in the base of the pit along its axis. The pit then appears to have been intentionally backfilled with a uniform, but mixed fill of natural silt from which a single flint blade was recovered (see report by Austin). A charred *Prunus* fruit stone from this fill produced radiocarbon date of 2015–1775 cal. BC (SUERC-42561). The pit fill was overlain by a deposit of tightly packed stones (18) which may originally have formed a small cairn over the pit.

Cremation 7 (Figs 5, 9, 11)

Almost certainly the primary and focal burial at Fan barrow was an excellently preserved cremation of a possible female aged 46+ years. The cremation was placed in a roughly rectangular, stone-lined pit 4, 1.15m by 0.85m and 0.3m deep, on a roughly east-west orientation, with curved corners and a concave base. The stone lining (9) was carefully, but informally constructed from variously sized irregularly shaped flattish slabs of local sandstone rock. The two side-slabs on the north edge of the lining appear to have been placed first, arranged upright, with packing stones behind. The base slabs were butted up against these two stones. The other side stones overlaid the basal slabs. Stones were selected for shape, and placed to minimise gaps between them, some gaps were overlain with other stones. Other gaps were infilled with small packing stones.

Lying directly on top of, and covering most of the stone lined base except at its western end, was a deposit of cremated human bone measuring roughly 0.4m by 0.3m and 0.05m thick. The cremated bones were fragmented, but with some long bone fragments measuring up to 0.1m long. Although centrally placed and localized, there was no convincing evidence that the cremation had been formally arranged or placed within a bag or other container. Bone from the cremation burial has been dated to 2130–1895 cal. BC (SUERC-40799). Parts of the cremation burial were fused together by corroded copper alloy remnants, and other copper alloy fragments were present in the uppermost fill (3, 10) (see analysis by Parkes). What object or objects these may originally have been could not be determined since they appear to have been included in the cremation process and had melted beyond recognition. The cremation was accompanied by the substantially complete, upright, finely decorated Cup 4 (Fig. 14), placed on top of the cremation away from the corner or edge of the pit lining. The rim of the vessel fragmented slightly during excavation.

The cremation was covered with roughly 0.1m of soil fill (8, 10) containing fragments of cremated bone, charcoal and copper alloy droplets, above which was a layer of flat stones capping the burial. The concave nature of the stone backfill, and the presence of soil between the stones and the cremation deposit, suggested to the excavators that the stones, whether barrow material or a small cairn built over the burial, may have settled into the burial cut as biodegradable objects accompanying the cremation had decomposed.

There are suggestions of a shared genetic trait between this burial and Cremation 5 (see report by Holst).



Fig. 9. Cremation 7 with Cup 4 (towards top right of cremation deposit), facing south. Scale 0.5m.

Cremation 5 (Figs 5, 11)

This was a cremation within a circular, flat-bottomed pit (6) measuring 0.4m in diameter and approximately 0.2m deep. Due to the fragility of pottery fragments revealed during initial cleaning, the entire feature was lifted whole and excavated under laboratory conditions. The excavation revealed the moderately well preserved cremation of a possible female, aged 36–45, almost completely contained within Urn 2 (Fig. 13), a Collared Urn, flattened and laid on its side and facing approximately west. This was accompanied by Cup 3, in an upright position on the north eastern side next to the rim of the urn. The cremated bone has been dated to 2030–1780 cal. BC (SUERC-40798).

Gibson (below) notes that the distorted shape of Urn 2 suggests it is a firing waster. A firing spall from Cup 3 (Fig. 15), also present in the pit fill, suggests the Cup was also a firing waster and may well have been fired in the funeral pyre.

There are suggestions of a shared genetic trait between this burial and Cremation 7 (see report by Holst).

Cremation 21 (Figs 5, 10–11)

A flat-bottomed, sub-circular pit (17) orientated roughly north-south and measuring 0.49m by 0.47m and 0.32m deep, contained this moderately well preserved cremation of an adult of 18+ years of indeterminate sex. A radiocarbon date of 1925–1740 cal. BC (SUERC-40800) has been obtained from the cremated bone. Approximately 10% of the cremation burial was contained within Urn 1 (Fig. 13), a Cordoned Urn, which was laid on its side, facing approximately west, against the southern side of the pit. The urn was misshapen, probably during the firing process and can be regarded as a waster (see report by Gibson).

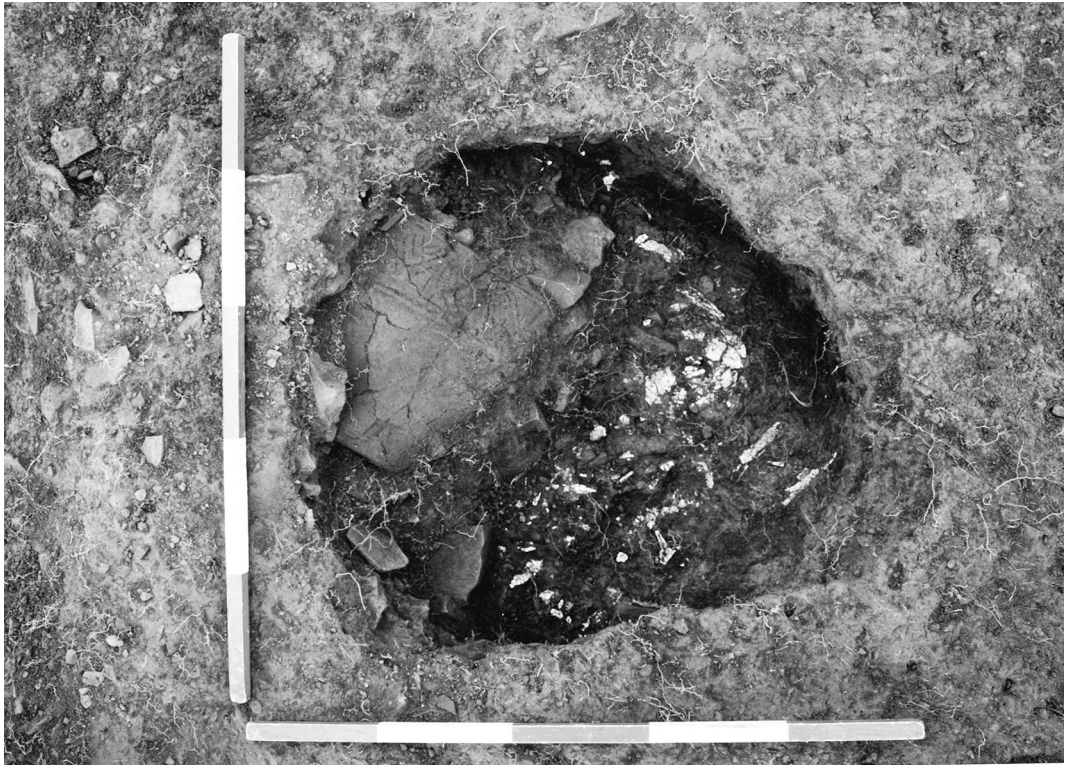


Fig. 10. Cremation 21 during excavation showing Urn 1 (Cup 1 already removed), facing west.
Scales 0.5m.

The bulk of the cremated bone was beneath and to the north of the urn. A small rounded and finely decorated Cup 1 (Fig. 13) was placed upright, at the foot of the urn, on its northern side and on top of the cremation burial. Below the cremation burial the natural subsoil appeared to have been heat affected, perhaps suggesting that the cremation was still very hot when it was deposited, or that something was burnt within the pit prior to the deposition of the cremation.

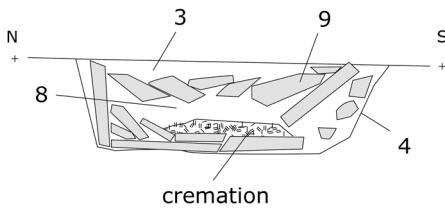
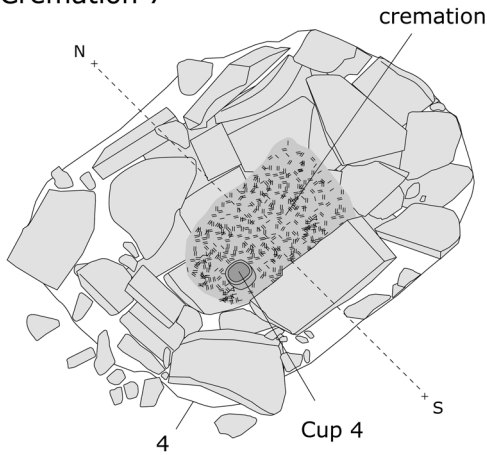
Cremation 22 (Figs 5, 11)

A circular pit (23) measuring 0.35m in diameter and 0.25m deep contained the tightly fitting Urn 3 (Fig. 14), an inverted Collared Urn. The uppermost portion of the vessel, the base, had collapsed into the vessel at some point after its deposition and lay highly fragmented on top of the cremation. The rest of the vessel survived substantially intact. It was clearly an imposing vessel when complete. The urn contained the cremated bones of a female adult aged 18+ years. Due to the large quantity of cremated bone recovered, it is possible that two individuals were represented, although no duplicate bone elements were identified (see report by Holst). A radiocarbon date of 2030–1780 cal. BC (SUERC-40801) was obtained from the cremated bone.

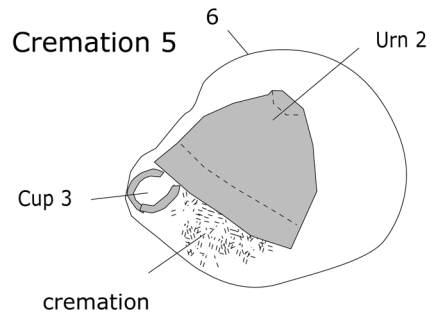
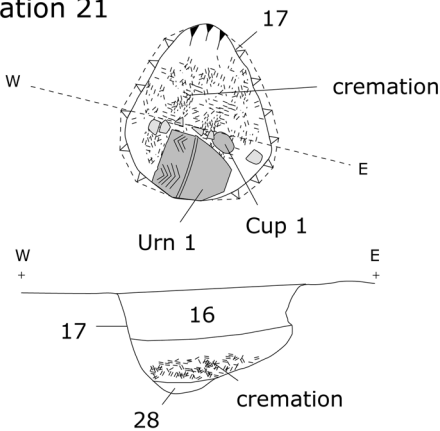
Cremation 36 (Figs 5, 11)

A sub-circular, flat-bottomed pit (37) on a roughly east-west orientation and measuring 0.43m by 0.32m and 0.13m deep, contained a well preserved Cremation 36, beneath which was a 0.03m thick layer of

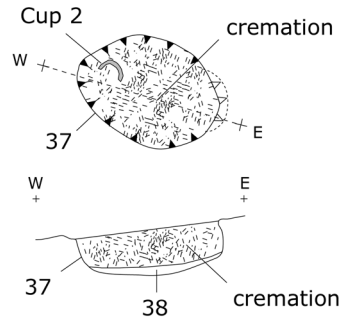
Cremation 7



Cremation 21



Cremation 36



Cremation 22

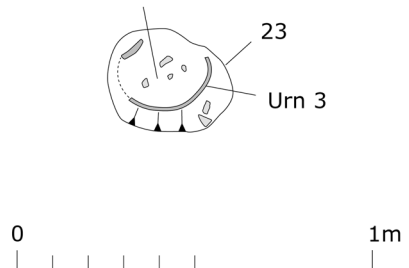


Fig. 11. Plans and sections of cremation burials.

charcoal (38). Both deposits entirely filled the base of the cut. A large quantity of cremated bone was recovered. The analysis of the cremation suggests two individuals are represented, a possible female aged at least 36+ years and an adolescent, aged 14 to 16 and a half years, represented only by finger bones. The bone has been dated to 2125–1890 cal. BC (SUERC-40802). The burial was accompanied

by approximately one third of Cup 2 (Fig. 14), located on its side at the western end of the deposit. The broken edges on the vessel fragment appear old and it would appear that it was a fragment when deposited.

Charcoal-filled pits 11, 42 and 52 (Figs 5, 8)

Three cut features each contained charcoal-rich fills and have been interpreted as a group. All three features appear to approximately follow the arc of the geophysical anomaly, rather than the possible edge of the barrow suggested by mapping evidence. Pit 11 was an oval pit, 0.5m by 0.47m across and 0.27m deep, with vertical sides, slightly concave base. Indeterminate diffuse porous roundwood charcoal from its fill (53) has been dated to 1415–1270 cal. BC (SUERC-42559). Pit 42 was a circular, vertical sided pit, 0.22m in diameter and 0.1m deep, with a flat base. Charcoal from the fill (41) was too small to identify or date. Pit 52 was a circular pit 0.45m in diameter and 0.18m deep with vertical sides and a flat base. A circle of grey silt present within the fill was a vestige of topsoil. Some possible ivy charcoal was identified in the primary fill (51). Charcoal has been radiocarbon dated to 1050–895 cal. BC (SUERC-42558). The Middle and Late Bronze Age dates obtained from pits 11 and 52 are significantly later than the cremation burials. This may suggest that the mound was not constructed until well after the original burials.

RADIOCARBON DATING

Eleven AMS determinations were provided by the Scottish Environmental Research Centre, Glasgow. The calibrated dates are calculated using the OxCal v4.1.7 calibration programme.

SUERC-40798

Sample and context: human bone from Cremation 5

Result BP: 3575±35

Calibrated range at 2 sigma: 2030–1875 and 1845–1815 and 1800–1780 cal. BC

SUERC-40799

Sample and context: human bone from Cremation 7

Result BP: 3630±35

Calibrated range at 2 sigma: 2130–2085 and 2050–1895 cal. BC

SUERC-40800

Sample and context: human bone from Cremation 21

Result BP: 3505±35

Calibrated range at 2 sigma: 1925–1740 cal. BC

SUERC-40801

Sample and context: human bone from Cremation 22

Result BP: 3580±35

Calibrated range at 2 sigma: 2030–1875 and 1835–1820 and 1800–1780 cal. BC

SUERC-40802

Sample and context: human bone from Cremation 36

Result BP: 3620±35

Calibrated range at 2 sigma: 2125–2090 and 2045–1890 cal. BC

SUERC-42557

Sample and context: *Corylus/Alnus* charcoal from fill of pit 46

Result BP: 4779±29

Calibrated range at 2 sigma: 3640–3520 cal. BC

SUERC-42558

Sample and context: indeterminate roundwood charcoal from fill of pit 52

Result BP: 2808±29

Calibrated range at 2 sigma: 1050–895 cal. BC

SUERC-42559

Sample and context: indeterminate roundwood charcoal from fill of pit 11

Result BP: 3071±29

Calibrated range at 2 sigma: 1415–1270 cal. BC

SUERC-42560

Sample and context: indeterminate roundwood charcoal from fill of pit 15

Result BP: 4816±29

Calibrated range at 2 sigma: 3655–3625 and 3600–3525 cal. BC

SUERC-42561

Sample and context: charred *Prunus* fruit stone from fill of pit 29

Result BP: 3562±29

Calibrated range at 2 sigma: 2015–1995 and 1980–1870 and 1845–1810 and 1805–1775 cal. BC

SUERC-44712

Sample and context: indeterminate charcoal from feature 43

Result BP: 4702±35

Calibrated range at 2 sigma: 3630–3560 and 3535–3485 and 3475–3370 cal. BC

SUERC-44714

Sample and context: indeterminate charcoal from fill of pit 32

Result BP: 4998±35

Calibrated range at 2 sigma: 3940–3860 and 3820–3695 cal. BC

WORKED STONE

By Louise Austin

Four pieces of worked stone of Mesolithic/Neolithic date (not illustrated) were recovered from the excavations. Two pieces—a flint scraper and a fragment of an abruptly backed flint bladelet—were unstratified. Two pieces came from pit fills and may be redeposited. The fill of pit 15 included a partially clear rock crystal bladelet (22 × 8 × 3mm), forming a point at the distal end and with three parallel removal scars on dorsal surface. Struck rock crystal is an unusual find within a west Wales Neolithic context, although crystal quartz flakes of probably Early Neolithic origin were found within Mid and Late Neolithic pits at Parc Bryn Cegin, Llandygai near Bangor (Kenney 2008, 47). Pit 29 produced a pale grey/brown flint blade fragment (24 × 15 × 3mm).

COPPER ALLOY

By Phil Parkes

Several fragments of copper alloy derived from an object or objects included in the cremation process and therefore melted beyond recognition of their original form were found mixed with Cremation 7 and other contexts (3, 10) within the fill of the pit (4) which contained it. Analysis of the alloy composition was carried out using a Camscan Maxim 2040 scanning electron microscope with Oxford Inca energy dispersive x-ray analysis. Where possible overlying powdery corrosion was removed in a small area, typically 1–2mm², to reveal a more stable corrosion surface, often metallic in appearance. In one or two cases, due to breaks in the object the core of the sample could be analysed. The samples were analysed for copper, tin, lead, arsenic and antimony as all of these were present on the spectra, with the results being normalised for comparative purposes. Elements such as silica, aluminium and iron were not analysed for as they were deemed to be part of the incorporated soil.

The fragments of copper alloy that were analysed produced a wide range of results in terms of composition (Table 1). Although the figures are presented to 2 decimal places due to the calculations of the analysis software, they should be regarded as an approximation. The wide range in the results can be attributed to the corroded nature of the pieces and the preferential removal of copper from the surface, leaving a tin-rich surface layer. The range of compositions that can be exhibited by a single sample can be seen by looking at the results for Cu9, where copper content ranges from 30–60% as analysis moves from the corrosion surface to the more metallic core, while tin content is reduced from 62–37% from surface to core. Due to the small size of the fragments, even an analysis of the ‘core’ of the object is unlikely to present a true picture of the original composition of the metal alloy as corrosion has taken place throughout the sample.

The results can be used to determine that the copper alloy consists of a mixture of copper and tin, with small amounts of lead, antimony and arsenic also present. In some cases the amounts are small enough to be below detection levels (bd) but may still be present and are recorded. Only in the cases of Cu4 and Cu12 are the antimony levels recorded as zero, due to having negative results in the analyses.

One result that does bear mention is that of samples from the cremation burial itself (7) have an extremely low tin content compared to all of the other samples, suggesting it is a different alloy and more likely to be considered a copper object rather than a bronze object.

Table 1. Analysis of the copper alloy samples from Cremation 7

Sample	Context	Location of analysis	Cu %	As %	Sn %	Sb %	Pb %
Cu1	7	metallic corrosion	60.50	0.93	32.74	3.14	2.69
Cu1	7	metallic corrosion	59.78	b.d	35.87	2.24	2.11
Cu2	7	corroded surface	50.25	1.22	43.19	5.34	bd
Cu2	7	metallic core	89.24	b.d	9.57	1.19	b.d
Cu3	7	metallic corrosion	57.99	0.54	39.51	1.08	0.87
Cu4	7	metallic corrosion	71.53	0.70	26.94	–	0.83
Cu5	7	metallic corrosion	25.35	2.05	69.75	bd	2.85
Cu6	7	blackened surface	56.74	0.66	38.12	1.13	3.36
Cu6	7	grey metallic corrosion	67.70	0.75	29.03	bd	2.51
Cu7	7	metallic corrosion	69.96	0.66	27.26	1.24	0.88
Cu8	3	metallic corrosion	27.62	2.67	67.19	1.49	1.03
Cu9	3	oxidised core	57.08	b.d.	37.39	5.54	bd
Cu9	3	metallic corrosion	45.47	0.97	48.80	4.09	0.67
Cu9	3	corroded surface	30.58	1.46	61.56	3.35	3.05
Cu11	10	corroded surface	70.10	2.44	26.43	bd	1.03
Cu12	10	metallic corrosion	32.74	1.38	64.28	–	1.60
Cu from cremated material	7	corroded surface	60.27	0.64	36.12	0.99	1.98
Cu object	7	metallic corrosion	96.73	0.54	1.04	bd	1.68

bd = below detection levels

PREHISTORIC POTTERY

By Alex Gibson

NEOLITHIC POTTERY

The following sherds of Neolithic pottery were recovered from the fill of pit 15. Assigning sherds nos 1–2 to a specific ceramic tradition is difficult in the absence of decorative or formal traits but the radiocarbon date of 3655–3525 cal. BC (SUERC-42560) suggests a Middle Neolithic date and the fabric is not out of character with quartz-filled fabrics of Welsh Impressed Ware, and especially the Mortlake style (Gibson 1995). The abraded nature of these sherds, however suggests that they may be residual in which case they may probably belong to quartz-filled Developed Bowls of the type found at Clegyr Boia (Williams 1953). Heavy rims similar to no. 3 and also in a quartz-rich fabric have been found at Clegyr Boia (Williams 1953) amongst a Modified Carinated Bowl (Sheridan 2007) assemblage. This sherd may well therefore be early Neolithic in date: approximately 3800–3600 BC. The radiocarbon date from this context again suggests that this sherd may be residual though the date is in keeping for the end of Developed Bowl traditions.

1. Two small sherds (total 4g) in a thin hard fabric averaging 7mm thick with abundant crushed quartz inclusions. The surfaces where they remain are reddish-brown and the core black. Both sherds are undecorated.
2. Single sherd (14g) in a hard and well-fired but slightly friable fabric averaging *c.* 10mm thick. The fabric has light brown surfaces and a black core and contains abundant crushed quartz inclusions. There are no decorative or formal traits.
3. Single large rounded rim fragment (42g) in a hard well-fired fabric with smooth light pink-brown surfaces and abundant crushed quartz inclusions (Fig. 12). The fabric bears comparison with the hard and well-fired quartz-filled Neolithic pottery of the area though the rim form is unusual and difficult to parallel. However, the profile of the rim itself changes over the length of the sherd with one section being far less bulbous than the other.



Fig. 12. Neolithic rim sherd from pit 15. Scale 1:2.

BRONZE AGE POTTERY

One Cordoned Urn, two Collared Urns and four Cups were found in association with cremation burials at Fan.

Urn 1 (Fig. 13)

From Cremation 21 and accompanied by Cup 1. Rim diameter 150mm, base diameter 95mm, height 180mm.

This tripartite Cordoned Urn is misshapen and flattened. This almost certainly happened during the firing and the vessel can therefore be regarded as a firing waster. The fabric is well fired, pink to grey-brown on both surfaces and with a slightly darker core. It contains coarse quartz sand, some of the larger grains visible on the outer surface where it is abraded. The rim is simple with a vertical internal bevel 17mm deep. The bevel is decorated at the top and base by two well-separated encircling twisted cord lines; the intervening space is undecorated. The upper portion of the pot, above the first cordon, is some 70mm deep. It is decorated at the top with two encircling lines of twisted cord impressions. The main zone comprises an opposed filled chevron motif. The outlines of the chevrons are executed in whipped cord while the diagonal lines filling the chevron are in twisted cord. An encircling line of whipped cord forms the lower border of the motif immediately above the cordon. The lower cordon is less well defined and situated some 35mm below the upper. The vessel is undecorated below the upper cordon.

The filled chevron motif on the upper part of the pot finds abundant parallels amongst the Collared Urn class but also in a Cordoned Urn found with a cremation burial at Llanddyfnan on Anglesey (Savory 1980, 218). The twisted cord chevron motif in all its variations is a common motif on Cordoned Urns in Ireland (Kavanagh 1976; Brindley 2007) where links with Collared Urns may be even stronger. Collared Urns in Ireland have a markedly eastern distribution. This is largely shared by Cordoned Urns although they do reach further west into the Irish Midlands, even reaching Connaught and eastern Munster.

Comprehensive dating of Cordoned Urns has not been undertaken in England or Wales but dates from Ireland and Scotland suggest a currency in graves of around 1850–1500 cal. BC (Brindley 2007; Sheridan 2004). Dates from Glanfeinion in Powys, however, may suggest that Cordoned Urns survive longer in a domestic context, perhaps as late as 1100 cal. BC, and may have fulfilled the role that Deverel-Rimbury and Deverel-Rimbury Derivative pottery played in southern England (Britnell *et al.* 1997, 195).

Urn 2 (Fig. 13)

From Cremation 5, accompanied by Cup 3. Rim diameter *c.* 185mm, base diameter 70mm, height 230mm.

Tripartite Collared Urn in a hard and well-fired fabric with finely crushed stone inclusions. The urn is misshapen, the fabric shows the start of sintering and part of the rim is bloated indicating that the firing has been high causing the clay particles to start to melt (see Gibson and Woods 1997, 110 and 248). The misshapen nature of the pot is similar to Urn 1 and it is clear in this example that this is a result of firing. The rim is rounded and has a steep, undecorated internal bevel. The collar carries a single zone of decoration comprising well-executed twisted cord lattice bordered above and below with three encircling twisted cord lines. The neck to the shoulder is decorated with regular vertical interrupted herringbone motif, once again executed in twisted cord.

Urn 2 is a classic tripartite Collared Urn. The collar is straight but well defined and not simply marked by a raised cordon. The shoulder also shows a clear change of direction. The straight collar and internal rim moulding are traits of Longworth's (1984) Primary series Collared Urns however the deep collar and the smooth internal profile are late traits as identified by Burgess (1986), though the neck decoration is amongst Burgess's early traits. The radiocarbon date of 2030–1780 cal. BC (SUERC-40798) from the cremated bone associated with this vessel might suggest that the Urn is early in the sequence (Sheridan 2004; Needham 2005, fig. 13), though the comprehensive radiocarbon dating of Bronze Age pottery is rare outside Scotland.

The lattice decoration, bordered by encircling lines, can be matched on a tripartite Collared Urn from Kilpaison Burrows, Pembrokeshire (Savory 1980, 215, no. 420). Two incomplete Collared Urns, one certainly tripartite, with lattice decoration on the collar were found at Cross Hands Barrow 2, Llanboidy, Carmarthenshire (*ibid.* 216, nos 418.1 and 2). Double twisted cord lattice on both the collar and neck can be seen on a small tripartite Collared Urn from Templeton, Pembrokeshire (*ibid.* 217, no. 415). Finally a

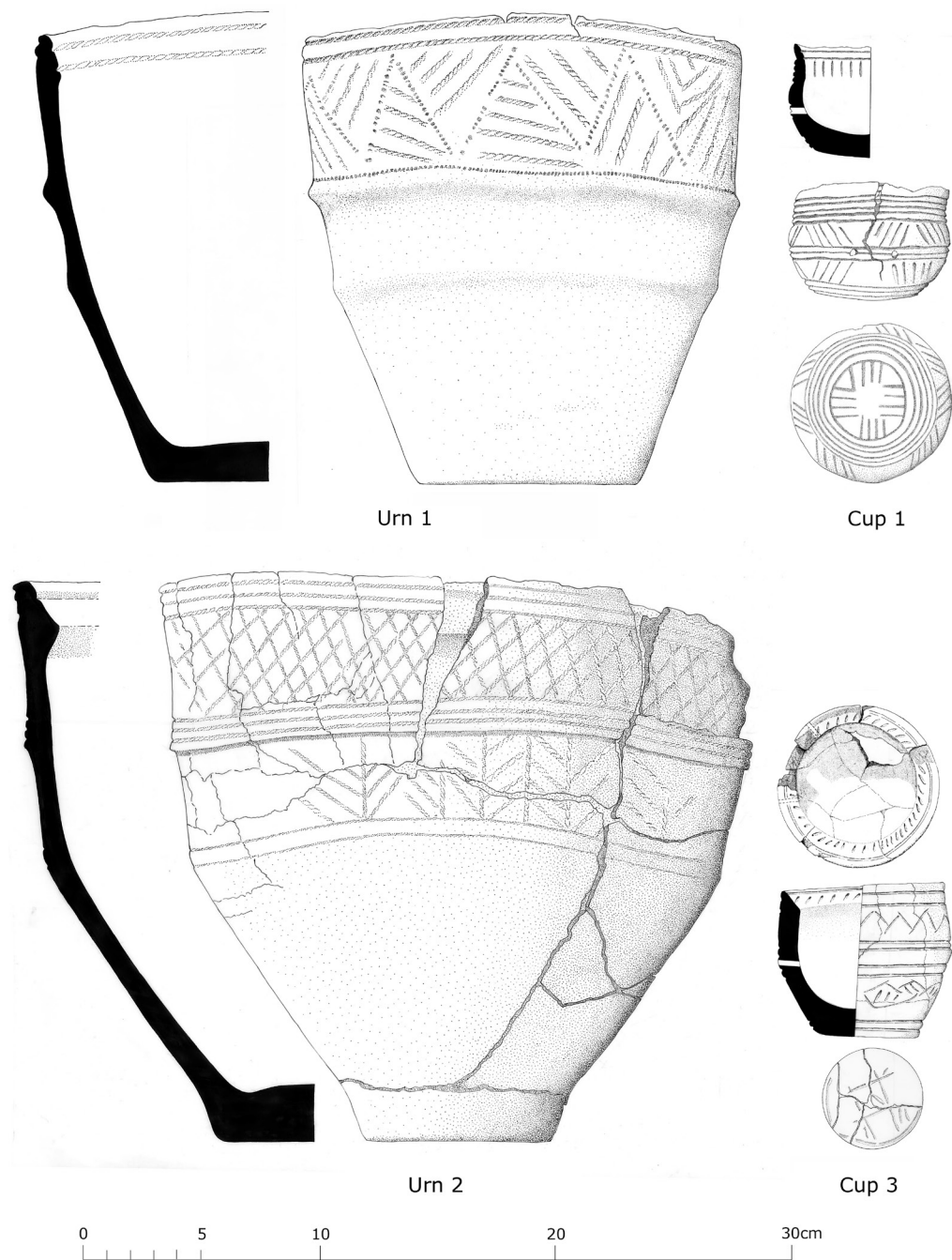


Fig. 13. Urn 1 and Cup 1 (Cremation 21) and Urn 2 and Cup 3 (Cremation 5). Scale 1:3.

tripartite Collared Urn with incised lattice motif in both the neck and on the collar was found at Letterston, Pembrokeshire (ibid. 214, no. 316.1). The lattice, however, is irregularly executed. The propensity of Welsh Collared Urns with lattice motif to come from south-west Wales may be worthy of note.

The interrupted vertical herringbone decoration in the neck is rare on Collared Urns. The motif can be found on the collar of an urn associated with a child cremation from Carneddau, Powys (Gibson 1993, 28). This vessel is also similar in form to Fan Urn 2 but is undecorated below the collar and dates slightly later at 1915–1535 cal. BC (CAR-1286). It is also found on the collars of an Urn from Wimborne St Giles 14, Dorset, and Long Whittenham, Oxfordshire (Longworth 1984, nos 499 and 1375, pl. 149d and c), the latter bordered by three encircling twisted cord lines. The same motif is found on both the collar and the neck of a Collared Urn from Hutton Buscel, North Yorkshire (Longworth 1984, no. 1180, pl. 183c) once again on a rather upright vessel. The Urn from Hutton Buscel was associated with a second and found in fragments in a pit without a burial. The same motif is found as part of a more complex pattern in the neck of a tripartite Urn from Chapel-en-le-Frith, Derbyshire (Longworth 1984, no. 265, pl. 61i). Once again, the upright form of this Urn is comparable to the Fan vessel and the Derbyshire pot bears closer comparison given that the collar is filled with a lattice of twisted cord impressions bordered above and below by two encircling twisted cord lines. The Urn was associated with a cremation deposit, a Cup and a flint knife. Interrupted herringbone is also found in the neck of a Collared Urn from Lancaster (Longworth 1984, no. 825, pl. 84c).

The interrupted herringbone motif is, however, also found on Cups and given the association of the two types at Fan, it may be worth mentioning the occurrence of the motif on a Cup from a ruined cairn at Llanelltyd, Merioneth (Savory 1980, 219, no. 472) and on another from Wester Buckleyvie, Fife which has also been identified as a firing waster (Gibson 2004, fig. 98.1).

Urn 3 (Fig. 14)

From Cremation 22. Rim diameter 260mm, base diameter *c.* 150mm.

Badly crushed remains of a tripartite Collared Urn in a hard, well-fired fabric with crushed rock inclusions. The surfaces are light brown and the fabric black. There are traces of carbonaceous encrustations on the outer surface. The rim is slightly flattened, has an internal thinning giving the appearance of an internal bevel which is decorated with three to four encircling rows of twisted cord impressions. The collar is decorated with a broad zone of twisted cord lattice motif bordered above and below by a single encircling twisted cord line. Shallow oval impressions form rough diagonal rows in the neck and a single row of these near vertical impressions decorate the shoulder of the Urn. The collar has clearly been applied to the neck forming a point of weakness and collapse. There are three perforations on the collar. These have been drilled after firing causing slight break-through damage to the inner surface. Two of the perforations form a pair and are placed on either side of a substantial crack. This may suggest that they are repair holes. A third hole appears to be on its own but has also been drilled after firing.

Urn 3 is partially crushed but has clearly been an imposing vessel. With a rim diameter of some 260mm it probably had a height in excess of 300mm and this is well into the upper half of Urn dimensions (Longworth 1984). Like Urn 2, the deep and well-defined collar and the smooth internal profile put this in Burgess's late phase though the date of 1925–1740 cal. BC (SUERC-40800) obtained from the cremated remains associated with this vessel place it firmly in the middle of Collared Urn chronology. Whilst not in itself a rare motif, it is interesting to note that, like Urn 3 Urn 2 also has a bordered lattice motif on the collar.

The decoration on the neck is difficult to match in Wales. The neck stabs on a vessel from a barrow on Penmaenmawr in Caernarfonshire are rather deeper and more irregular than the present vessel's ovals (Savory 1980, 212, no. 455.1). Similar ovals decorate the collar but not the neck of the unusual and elaborate

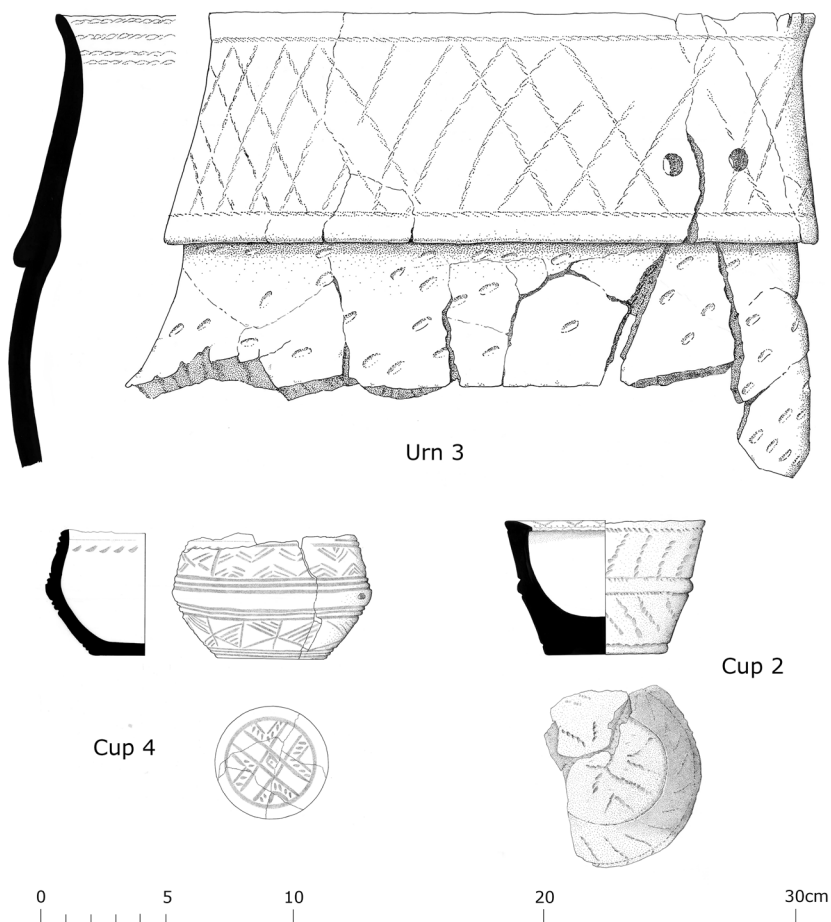


Fig. 14. Urn 3 (Cremation 22), Cup 4 (Cremation 7), and Cup 2 (Cremation 36). Scale 1:3.

Collared Urn from Templeton in Pembrokeshire to which we have already referred (*ibid.* 217, no. 414.1). Urns with stabbed neck decoration are not unusual (e.g. Longworth 1984, pls 177–178) but an interesting example found with a cremation on Acklam Wold, North Yorkshire, also associated with a small Cup, combines the neck impressions with bordered twisted cord lattice on the collar and internal encircling cord lines. It forms perhaps the closest parallel to the present vessel in Longworth's corpus (1984, pl. 176d).

Cup 1 (Fig. 13)

From Cremation 21, accompanying Urn 1. Rim diameter 60–66mm, base diameter 45mm, height 45mm.

The pink fabric, averaging some 5–7mm thick, has a black core visible in the breaks and some finely crushed grog inclusions visible on both surfaces. The surfaces are crazed and the base is slightly rounded. There is a pair of perforations, 15mm apart, at the shoulder on one side. The perforations have caused slight scarring on the inner surface suggesting that they were bored from the outside when the clay was either fired or leather hard. There is some slight wear around the outer edges of the perforations. The rim is slightly everted. The decoration is incised and comprises close-set vertical incisions on the inside

of the neck with two encircling lines above. The rim itself is rounded and undecorated. Externally, the decoration is zoned. At the top are five incised lines occupying a space of 10mm. Below is a zone, also 10mm deep, of alternating groups of four oblique lines (five in one case). This is bordered below by three incised lines, a second zone of alternating groups of four oblique lines and finally a lower border of three incised lines above the base. The base itself is decorated similarly. Three encircling incised lines act as a border for four groups each consisting of four incised lines arranged in the shape of a cross with undecorated centre. There are traces of possible white inlay in some of the incisions.

The form of the Cup is a miniature Bowl Food Vessel. It bears remarkable similarity in decoration and form to an unprovenanced pot, possibly from Ceredigion (Savory 1980, 219, no. 471). This vessel combines not just the two main decorative zones of the Fan vessel, but also the out-turned thinned lip, the slightly rounded base, the multiple incised lines on the base and the vertical incised lines inside the rim. Internal decoration is rare on Cups other than on rim bevels and in this respect at least these two cups are remarkable. The decoration on the Fan vessel comprises groups of opposed diagonal lines, that on the Ceredigion vessel comprises zones of filled chevrons. The difference is interesting but probably academic and it may be that these two Cups, from the similarity of their form and unusual decoration, have been made by the same potter. It is a pity that the context of the Ceredigion vessel is not documented. A Cup from Templeton in Pembrokeshire (associated with a rather unusual Collared Urn with encircling incised lines on the belly) is also worthy of discussion, though once again the details of the discovery are not known (*ibid.* 219, no. 414.2). Although bipartite in shape and lacking the sinuous profile of the Fan Cup 1, the decoration is nevertheless similar, with groups of opposed oblique lines arranged in two zones. The zones are defined by encircling incised lines, the Cup has a pair of perforations at the belly and again internal decoration comprises multiple vertical to oblique incised lines the rarity of which decoration has already been mentioned. This vessel also shares the basal motif with the Ceredigion and Fan vessels. This may bring the known output of this potter to at least three Cups.

Cup 2 (Fig. 14)

From Cremation 36. Rim diameter 80mm, base diameter 45mm, height 50mm.

The vessel represents approximately one third of a splayed wall vessel. The fabric is pink internally, pink-brown externally and has a dark grey core. The fabric contains coarse sand inclusions and possibly some grog. The breaks appear old and it would appear that the vessel was fragmentary when deposited. The base of the vessel is unusually thick at 15mm. The Cup is in the form of a bipartite vase. The rim has an internal bevel and slight internal lip. It is decorated with faint traces of whipped cord zigzags. The neck is decorated externally with oblique lines of twisted cord impressions (sloping top right to bottom left) and there are traces of a twisted cord line above this and below the rim though it does not appear to have completely encircled the vessel. The shoulder is accentuated above and below by an encircling line of whipped cord impressions. Like the neck, the belly of the vessel is decorated with oblique twisted cord lines (sloping top left to bottom right) with an encircling twisted cord line below. The base has been decorated with radiating lines of twisted cord impressions.

Cup 2 is a miniature bipartite Vase Food Vessel. It lacks a pair of perforations though these may well have been on the missing portion of the pot. The form of the pot, the thickened rim, and the main decorative motif can be paralleled on a small Cup from Llanfihangel Cwm-du, Brecknock (Savory 1980, 219, no. 474) though this pot has twisted cord decoration on the rim and lacks the decorated base of the Fan vessel. A similar vessel from Tregaron, Cardiganshire is more rounded in profile than the Fan Cup, is decorated on the rim bevel with radial twisted cord lines, is undecorated on the base, but has the same twisted cord motif on the body (Savory 1958, fig. 5.7). Once again the circumstances of the find are not known.

The unusual combination of whipped and twisted cord on Cup 2 link it clearly to Urn 1.

Cup 3 (Fig. 13)

From Cremation 5, accompanying Urn 2. Rim diameter 66mm, base diameter 40mm, height 60–70mm.

The fabric is hard and well-fired with pink-brown to grey-brown surfaces and a grey core. The fabric is speckled in appearance with sand and white calcareous inclusions. Some of the latter have leached out leaving small pits within the fabric and the surfaces. The fabric has been heated to the degree that it has also started to sinter (Gibson and Woods 1997, 248). The Cup is of bipartite form and has been perforated at the shoulder. Two perforations survive, one either side of a missing fragment. It is not possible to ascertain whether there was a single pair or two close-set pairs. One perforation has been made whilst the clay was still wet but the other is too damaged to be certain. The rim has a slight internal bevel. This is decorated with a single incised line towards the top and a series of oblique short incisions below. The decoration on the outer surface is similarly incised, sometimes lightly and often haphazardly with overlaps in the short incised lengths clearly visible. The upper zone, above the shoulder, comprises a zone of incised single running chevrons bordered above and below by two encircling lines. Below the shoulder is a zone of lozenges filled with oblique lines again bordered above and below by two encircling lines. The base is decorated with the abraded traces of an incised nine-square lattice pattern bordered by an outer encircling line. The outside four corners of the lattice pattern appear to have been filled with oblique incisions. There is also a possible trace of a single oblique incision in the central square. There is a classic large firing spall (Gibson 2002, 48–9) on the lower part of the vessel (Fig. 15). This spall is catastrophic in that it has resulted in a hole through the vessel wall but the spalled sherd is present suggesting that the time from firing to deposition was short (Gibson 2004).

The bipartite form of this vessel finds abundant parallels amongst Welsh Bronze Age Cups but the decoration is much more difficult to match. The incised chevrons on the upper half represent a common



Fig. 15. Cup 3 from Cremation 5, shown at about actual size (the vessel is 60–70mm high). The detached spall is at the bottom right.

motif, however the filled lozenges on the lower half seem unmatched in Wales. Incised lozenges are found on a small pinched Cup from Carneddau, Powys (Gibson 1993) but they are open and not filled. Lozenge-shaped perforations occur on Cups from Llanbeblig, Caernarfonshire and from Meini Gwyr, Pembrokeshire (Longworth 1983), but this may be taking the hunt for analogies too far. The filled and open grid squares on the base similarly appear unique in the Welsh corpus although Cup 4 in the present assemblage bears comparison. A small round-based handled Cup from Denzell Downs, Cornwall has dot-filled lozenges as the main motif (Abercromby 1912, fig. 301).

Cup 4 (Fig. 14)

From Cremation 7. Rim diameter *c.* 63mm, base diameter 40mm, height 48mm.

Hard, well-fired fabric with a black core and slight traces of the start of sintering—the initial stages of vitrification (Gibson and Woods 1997, 241). The fabric is speckled with sand and finely crushed calcareous inclusions. The rim is badly abraded and no top surface survives. The vessel is bipartite with traces of two perforations on the shoulder. The first measures 2mm in diameter at the outer surface. The second falls at a damaged part of the vessel and is only visible on the inner surface where its presence marked by some dislodged clay suggesting that the perforation was made when the clay was still wet. That the vessel was coil-built is ascertainable from the breaks near the rim. The decoration inside the rim comprises a row of small crescent-shaped stabs. The upper zone of external decoration is bordered above and below by traces of two encircling incised lines. Within this border, opposed chevrons each comprised of three nested sets of incised lines form a zone of running reserved chevron. Below the shoulder, the decorative zone is also bordered above and below with three incised encircling lines. The zone is divided by incised lines into rectangular panels, each divided into six triangular panels. Alternating panels are filled with oblique incised lines. The base is also decorated with incisions. A nine-sectioned lattice is framed in an encircling line. The central part of the lattice has a roughly concentric square within it and with a small stab in the centre. The outer four corner squares of the lattice have incisions parallel to their inner sides and the resulting angles are filled with short stabs similar to those inside the rim.

Once again the bipartite form of the Cup is a common type but the decoration is difficult to parallel in Wales. The zone of bordered nested chevrons finds parallel in a bipartite Cup from Llanarth, Cardiganshire, which was found in a barrow but otherwise in unrecorded circumstances (Savory 1980, 219, no. 475). A similar motif but also comprising chevrons consisting of single incised lines is found on the lower part of a bipartite Cup from Llanfihangel-y-Creuddyn, Cardiganshire (*ibid.* 219, no. 469) but again does not match the present vessel exactly. The split lozenge motif on the lower part of the vessel is again unmatched in Wales or indeed on any other Cup known to the present writer. It is, however, reminiscent of the interrupted lozenges encountered on Aldbourne Cups such as that from Wimbourne St Giles G8 (Annable and Simpson 1964, 114, no. 33).

Discussion of the Bronze Age pottery

The pottery is important for a number of reasons. Firstly, it adds to the growing corpus of dates for Bronze Age pottery and burials in the Principality confirming that they are contemporary with their English, Scottish and Irish counterparts (where radiocarbon dating has been much more systematically and/or extensively undertaken). Secondly, the finding of four Cups in the same barrow is noteworthy. Thirdly it is also of considerable interest that a number of the pots appear to be firing wasters.

The dates for the Collared Urns and Cordoned Urn from Fan are in keeping with the currency of these vessels elsewhere, broadly datable to *c.* 2000–1500 cal. BC and 1900–1400 cal. BC respectively (Sheridan 2003; 2004; Brindley 2007). They form part of the increased variety of ceramic styles and burial practices entering the sepulchral record after the initial appearance of Beakers and coinciding

with Needham's Fission Horizon when ceramics based on earlier middle Neolithic forms predominate (Needham 2005). The difficulty of finding exact parallels for the Urns is not restricted to this class of pottery and it is noteworthy that despite the restricted nature of the decorative techniques employed and indeed the limited range of motifs used, the combinations of technique and motif appear to be almost limitless. Certain features of the Fan pottery suggest that we might be able to identify a potter. This is especially so when considering the comparatively rare combination of whipped and twisted cord on Urn 1 and Cup 2. Further afield, the almost identical form and decoration of Cup 1 and the vessel probably from Ceredigion (Savory 1980, no. 471) and that from Templeton, Pembrokeshire (*ibid.* no. 414.2) again suggest the works of a single individual.

The recognition of the work of specific individuals in prehistory is largely dependent on the detailed analysis of local corpora and emphasises the continued importance of corpora in archaeology. Four Handled Food Vessels, potentially by the same maker have been identified from Caythorpe in Lincolnshire (Manby 2004, 225 and fig. 75). Meanwhile, in north Northumberland two distinctively and unusually decorated Food Vessels and a Food Vessel Urn were found at Lowick, Beanley and Bamborough respectively. These find spots fall within a radius of about 10 kilometres. However, a fourth vessel, a second Food Vessel Urn from Ryton in Tyne and Wear, also exhibits some of the decorative elements and ingenuity of the others. Its attribution to the same potter is less certain, but if the identification is correct, this extends the work of the same individual over some 70 kilometres (Gibson 2002, 66–7). Other examples will doubtless come to light as the corpora become more widely studied and as archaeological illustration improves. Such identifications will also doubtless be important in refining absolute chronologies given that they must all date to a single generation.

The four Cups from Fan Barrow bring the corpus of known or suspected Welsh Cups known to the writer to 67, of which 25 come from south-west Wales. Most of Longworth's types (Longworth 1984) are represented in the area. Dates for Cups are relatively few but coincide exactly with the currency of Collared Urns (Fig. 16). Clearly more dates for Cups are required nationwide to test if the various types have their own distinct chronologies.

One of the most interesting aspects of this assemblage is the fact that some of the vessels are clearly firing wasters. Urns 1 and 2 are flattened and misshapen suggesting that both have been fired on their sides (or have fallen over during the firing) and that the temperature of the firing has been such that the clay particles have started to melt and the pots have lost their original shape. Cup 4 also has a hard and brittle fabric and it would appear that sintering has also started here. Urn 2 in particular shows that the fabric is sintered indicative of the early stages of vitrification. There are also traces of bloating near the rim of the vessel. This is related to sintering and is caused when gases, resulting from the combustion of organic material in the clay, cannot escape through the fabric of the pot but are instead trapped by the sintering clay particles which form an impermeable barrier (Gibson and Woods 1997, 106). This is also indicative of high and a rapid rise in firing temperatures. Cup 3 from the same context is also a firing waster. In this case the Cup has a catastrophic spall on the outer surface. Spalls are roughly circular flakes of clay that have exploded from the surface of the vessel during firing. This also usually indicates that the rise in firing temperature has been too rapid and that either the water of plasticity or the water of chemical composition in the clay has been converted rapidly to steam. Steam expands and, if there are insufficient escape routes through the fabric of the pottery, spalls can be blown from either or both surfaces. In this case the spall has been catastrophic in that both surfaces have been affected by the same spall and therefore the Cup could not have acted as a container.

Firing wasters have been noted in other Cups. Notably there are a number of Cups in Scotland that show both normal and catastrophic spalling (Gibson 2004). That some of the spalls have been recovered from these wasters suggests that the Cups were specifically made for the burial and may even have been fired

OxCal v4.2.4 Bronk Ramsey (2013); r:5 IntCal13 atmospheric curve (Reimer et al 2013)

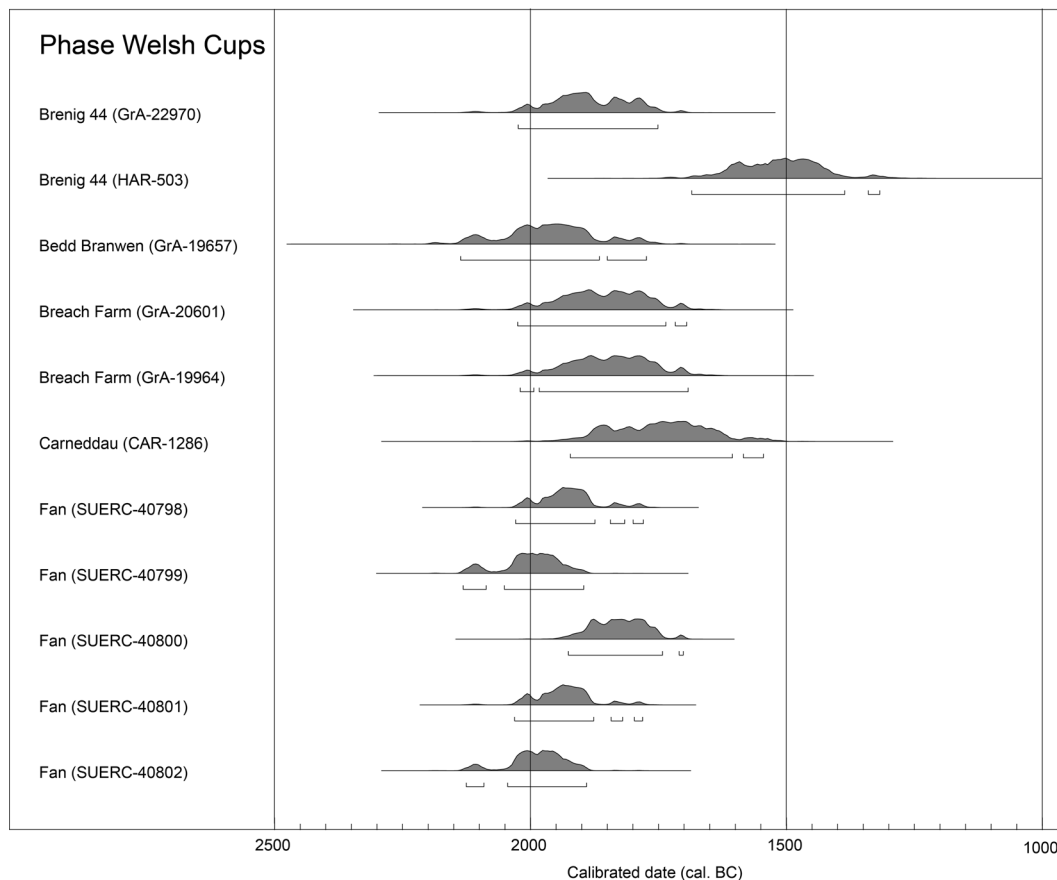


Fig. 16. Radiocarbon dates for Welsh Cups.

in the funeral pyre: this may account for why the spalls were gathered (along with the cremated bone) and why the firing temperature was rapid and high. As well as Scotland, firing wasters have been recognised by the present writer on a Fenestrated Wall Cup from Dowsby in Lincolnshire (Allen and Hopkins 2000, fig. 2). Insufficient work has been done on other corpora of sepulchral vessels to judge how common this phenomenon is but it does suggest that at least some funerary pottery may have been fired with the cremation of the deceased.

HUMAN BONE

By Malin Holst

Five cremation deposits were recovered during excavation, representing six individuals. A summary of the identifiable skeletal fragments is given in the site archive. No animal bone was present in any of the cremations.

Cremation 7

Mature adult, possibly female, aged 46+ years. Bone colour white. Excellent state of preservation. Weight of bone 1906.6g, above the expected average size, suggesting that most of the bone from the cremation pyre had been interred.

Cremation 5

An old to middle aged adult, possibly female, aged 36–45 years. Bone colour white. Moderate state of preservation. Weight of bone 662.6g, representing less than half (41%) of the expected mean quantity of bone from a cremation.

Cremation 21

Adult of undetermined sex, aged 18+ years. Bone colour white. Moderate state of preservation. Weight of bone 3321g, representing only contained a fifth (20%) of the expected mean quantity of bone from a cremation.

Cremation 22

Adult, female, aged 18+ years. Bone colour white. State of preservation good. Weight of bone 2,068.3g. This is a substantial quantity of bone but since no bones are duplicated it is uncertain whether it represents more than a single individual.

Cremation 36

An old, middle aged or mature adult, possibly female, and an adolescent aged 14 to 16.5 years, of unknown sex. Bone colour light grey. State of preservation good. Weight of bone 1,718.0g.

Preservation

All five of the cremated bone assemblages were very well burnt leading to loss of the organic portion of the bone, suggesting that the cremation process had been proficiently completed. Bone preservation varied from moderate to excellent condition. Moderate warping and bone cracking, was evident in all of the burials. It was possible to identify between 36–61% of the skeletal elements in all five cremation burials, with an average of 50% of bone being identifiable. The percentage of identifiable bone was related closely to the degree of fragmentation of the bone, so although Cremation 22 contained the most bone, the smallest percentage of bone was identifiable because of the greater fragmentation in this assemblage. It is possible that the greater fragmentation was due to disturbance of the pyre while the bone was still hot. The quantity of cremated bone recovered per burial varied from 332g to 2,068g. Cremations 7, 22 and 36 yielded the expected quantity of bone weight produced by modern crematoria (McKinley 1993). Cremations 5 and 21 produced 41% and 20% of the expected mean quantity of bone respectively. The quantity of bone was very large in Cremation 22, but no duplicated bones were found and as such, it is impossible to be certain whether this was a double burial or not. However, the number of tooth root fragments represented in this burial was very large, suggesting that either almost all the teeth were represented or that this represented a double burial.

Age determination

Age was determined using standard ageing techniques, as specified in Scheuer and Black (2000a; 2000b) and Cox (2000). For Cremation 7 it was possible to determine age using the auricular surface

(joint between the sacrum and pelvis) for ageing, which suggested an age of at least 46 years old or older, which meant that this was a mature adult. Cremation 5 was also aged using the auricular surface, indicating that this individual was aged between 36 and 45 years old. Cremation 36 contained mostly adult bones, but also a small number of hand phalanges (fingers) that belonged to an adolescent between fourteen and sixteen and a half years old. The presence of a degenerative joint disease in the adult in Cremation 36 implies that this individual was aged at least 36 years old, but could have been older. Age could not be accurately determined in Cremations 21 and 22, because the ageing criteria, which are normally used, did not survive in these two assemblages. As a result, ageing was solely based on tooth root formation and fusion, indicating that both assemblages contained adults aged 18 years old or older.

Sex determination

Sex determination was carried out using standard osteological techniques, such as those described by Mays and Cox (2000). It was possible to estimate sex in four of the five cremation burials, actually representing six people, all of whom were considered to be possible or probable females. In most instances, sex was based on the sharpness of the eye orbits and the lack of supraorbital ridges. However, in Cremation 5 there was a slight supraorbital ridge and this, coupled with the fact that cranial sexing is not very accurate as young males can appear female and it was not possible to determine age accurately in this individual, means that the sex estimate is very tentative. In Cremation 36, sex was merely based on the very gracile nature of the bones and as this was clearly an older adult, the lack of robusticity was clearly not as a result of the individual still growing. However, robusticity is not an accurate indicator of sex and as a result, sex must also to be considered tentative in this individual.

Non-metric traits

Since cremated bone shrinks at an inconsistent rate it was not possible to measure any of the bones from these burials. A number of non-metric traits were identified, including parietal foramen (small holes in the top of the skull) in Cremations 7 and 5. Bridging of the supraorbital notch (a bony bridge on the eye orbit) and a lambdoid ossicle (an additional little bone in one of the cranial sutures) was identified in Cremation 5. Bennett (1965) has suggested that the formation of ossicles in these sutures may be related to stresses placed on the growing cranium during foetal life and early infancy. Spinal degenerative joint disease was observed in the two older burials (Cremations 7 and 36). Severe osteophytes and porosity were noted in three cervical vertebral bodies of Cremation 7 and mild lesions were noted in a lumbar vertebral body fragment of Cremation 36.

Pathological and dental analysis

The analysis of skeletal and dental manifestations of disease can provide a vital insight into the health and diet of past populations, as well as their living conditions and occupations. Spinal degenerative joint disease was observed in the two older burials, Cremations 7 and 36. Severe osteophytes and porosity were noted in three cervical vertebral bodies of Cremation 7 and mild lesions were noted in a lumbar vertebral body fragment of Cremation 36. Spinal degenerative joint disease was not uncommon in the Bronze Age, with a crude prevalence rate of 14.1% (Roberts and Cox 2003, 78). Analysis of the teeth from archaeological populations can provide vital clues about health, diet and oral hygiene, as well as information about environmental and congenital conditions. A total of 73 root fragments and 26 crown fragment were recovered from the burials. However, because the crowns of the teeth shatter into small fragments during the cremation process, no dental pathology could be observed.

CHARRED PLANT REMAINS

By Alison Foster, Lindsey Foster, Angela Walker and John Carrott

Samples were examined from the Neolithic pits, the Bronze Age cremation burials and the Mid/Late Bronze Age pits. The samples were processed for the recovery of plant, invertebrate and vertebrate remains, broadly following the techniques of Kenward *et al.* (1980). Plant macrofossil remains were compared with modern reference material (where possible) and published works (e.g. Cappers *et al.* 2006 and for cereal remains Jacomet 2006), and identified to the lowest taxon possible or necessary to achieve the aims of the project. Nomenclature for wild plant taxa follows Stace (1997), whereas cereals follow Jacomet (2006) in which nomenclature follows van Zeist (1984). Basic charcoal identifications were made by comparison with modern reference material where possible, and with reference to published works (principally Hather 2000 and Schoch *et al.* 2004).

Results

Ancient plant remains recovered from the sediment samples were largely restricted to charcoal, which was recorded from all of the samples but preservation was almost always poor and much of the material was in the form of very small (<2 mm) fragments with few of those examined more closely proving to be identifiable (see summary of the results presented in Table 2). Identifications that were possible were predominantly only partial and mostly of hazel/alder (*Corylus/Alnus*); certainly hazel appears to have been a locally available resource as small quantities of hazelnut shell were recovered from several of the samples, including one Neolithic pit (31) and from deposits associated with several of the Bronze Age cremations (21, 22, 36). Other trees/shrubs represented within the identified charcoal assemblage were few but included traces of oak (*Quercus*) in Neolithic pit 46 and Bronze Age Cremation 5 and possibly 7. Tentatively identified charred heather (*Calluna*) root/rhizome fragments also came from Cremations 5 and 7. Cereal remains were identified from Neolithic pit 15 and Bronze Age Cremation 22, and a single fragment of plum/cherry/sloe (*Prunus*) fruitstone was identified from Bronze Age pit 29.

POLLEN EVIDENCE

By Astrid E. Caseldine

Samples were taken from various contexts associated with each of the burial deposits with the principal aim of determining whether there was any evidence for plants being used in ritual activity associated with the cremations. Some of the samples were taken during the field excavation and some were taken during micro-excavation of the pots. A subset of the samples was selected for analysis to assess their potential. Subsamples were prepared using standard procedures (Moore *et al.* 1991) including treatment with hydrofluoric acid to remove silica and acetolysis to remove cellulose. Identification was by comparison with slides of modern type material and reference to identification atlases (e.g. Moore *et al.* 1991). The pollen count was based on 100 *Lycopodium* spores if pollen was scarce or, where pollen was more plentiful, on 300 total land pollen (TLP), including indeterminate pollen but excluding spores. Raw counts are presented in Table 3. Nomenclature is modified from Moore *et al.* (1991), based on Bennett *et al.* (1994).

Results from the samples examined were as follows:

Cremation 5

Sample A: close to edge of Cup 3 near base of pit 6.

Pollen was extremely scarce but included *Corylus avellana* type, Poaceae, *Calluna* and Rubiaceae.

Table 2. Summary of charred plant remains

Neolithic pits and other features

- Pit 15** Context 14, pit fill: heavily silted charcoal (up to 13mm) including some hazel/alder (*Corylus/Alnus*); 1 charred Polygonaceae achene.
Context 20, pit fill: charcoal (up to 18mm); charred grains, including 1 glume wheat, possibly ?emmer (cf. *Triticum dicoccum* Schübl.), the remainder were small and indeterminate, possibly grass (Poaceae).
- Pit 31** Context 30, pit fill: silted charcoal (up to 14mm); 4 fragments of charred hazelnut shell.
- Feature 32** Context 33, fill: silted charcoal (to 29 mm). One indeterminate charred ‘seed’.
- Pit 46** Context 45, pit fill: charcoal, including frequent pieces of oak (*Quercus* sp.) and 1 fragment of hazel (*Corylus/Alnus*) charcoal; 1 charred *Carex* sp.

Early Bronze Age pits and cremation burials

- Pit 29** Context 18, upper fill of pit: very silted charcoal (up to 12mm).
Context 25, lower fill of pit: very silted and decayed charcoal (up to 15mm); 2 indeterminate charred cereal grains/seeds, together with a fragment of a fruit stone (*Prunus* sp.), a small legume (Fabaceae) and two unidentified seeds, one of which possibly ?*Rubus* sp.
- Cremation 5** Cremation 5, fill of burial pit 6: indeterminate charcoal (up to 8mm) but including some oak (*Quercus* sp.) and occasional charred ?heather (cf. *Calluna vulgaris* L. Hull) root/rhizome; a few charred herbaceous stems (?grass); pale grey, vesicular silica ash ‘slag’ (up to 5 mm); lumps of ?peat ash/cinder; 1 indeterminate ?chaff fragment; 1 <1mm charred grass seed (Poaceae); fragment of charred culm node, small, possibly grass (Poaceae).
Contents of Urn 2: fine charcoal.
- Cremation 7** Context 3, upper fill of burial pit 4: silted charcoal (up to 20mm).
Context 8, stone backfill: indeterminate vitrified charcoal with some ?oak (*Quercus* sp.).
Cremation 7: indeterminate charcoal (up to 20mm) including some possible oak (*Quercus* sp.) and ?heather (cf. *Calluna*) root/rhizome; some charred herbaceous/grass stems.
- Cremation 21** Context 16, fill of burial pit 17: silted charcoal (up to 25mm), including hazel/alder (*Corylus/Alnus*) charcoal; 1 charred *Plantago* sp. seed.
Cremation 21, in burial pit 17: silted charcoal (up to 28mm) including hazel/alder (*Corylus/Alnus*); very poorly preserved indeterminate seed.
Context 28, fill of burial pit 17: silted charcoal (up to 18mm); 1 fragment of charred hazelnut shell (6mm).
- Cremation 22** Context 22, contents of Urn 3: charcoal (up to 15mm); 2 indeterminate charred cereal grains and 1 charred wheat grain (*Triticum* sp.); 6 fragments of hazelnut shell (up to 5mm); 1 charred small seeded legume (*Trifolium* sp.); 1 piece of charred root.
- Cremation 36** Cremation, in burial pit 37: well-preserved charcoal (up to 13mm); 1 small charred ?grass seed; 1 charred hazelnut shell fragment.
Context 38, fill of burial pit 37: well-preserved unidentified charcoal, but possibly ?ivy (cf. *Hedera helix* L.) (up to 10mm); 2 pieces of hazelnut shell (up to 7mm).

Mid/Late Bronze Age pits

- Pit 11** Context 53, pit fill: charcoal (up to 25mm).
- Pit 42** Context 41, pit fill: a trace of fine charcoal (up to 3mm).
- Pit 52** Context 51, pit fill: charcoal (up to 30mm).
-

Sample B: from mid height of Urn 2, against lower body, in pit 6

Pollen was abundant and was dominated by herbaceous pollen, namely Poaceae pollen and weed taxa such as *Plantago lanceolata*, Rubiaceae and Lactuceae. *Corylus avellana* type pollen was relatively frequent. *Quercus* and *Alnus* were present in small amounts whilst *Calluna* was slightly more frequent. Of the spores, *Polypodium* was the most frequent. Indeterminate pollen was quite frequent.

Cremation 7

Sample C: from fill of pit 4 above the cremation deposit

The sample was dominated by indeterminate pollen, making up nearly 50% of the total assemblage. Of the identifiable pollen, *Corylus avellana* type pollen and Poaceae pollen were most frequent and present in approximately equal amounts, followed by *Alnus* and *Calluna*. *Plantago lanceolata* was the most frequent of the weed taxa. *Polypodium* dominated the spore assemblage.

Sample D: from fill of pit 4, below cremation deposit

Poaceae and indeterminate pollen dominated the assemblage from this sample. Weed taxa were relatively frequent, notably *Plantago lanceolata*, Rubiaceae, Lactuceae and *Rumex* spp. *Corylus avellana* type was the most strongly represented of the tree and shrub taxa with only small amounts of *Quercus* and *Alnus*. *Calluna* was present in similar amounts to *Corylus avellana* type. *Polypodium* was the most frequent of the spores.

Sample E: from fill of Cup 4

Pollen was extremely scarce but *Polypodium* spores were more frequent and dominated the assemblage. Indeterminate pollen was present in an equivalent amount to identifiable pollen. *Corylus avellana* type, Poaceae, *Calluna* and *Ulmus* were present.

Cremation 21

Sample F: from context 16 below Urn 1, in pit 17

Pollen was scarce. *Polypodium* spores and Poaceae pollen dominated the assemblage. Other taxa were extremely scarce but included *Alnus*, *Corylus avellana* type, *Calluna*, *Succisa* and Pteropsida (monoletes) indeterminate. Indeterminate pollen was slightly more frequent.

Sample G: from base of Urn 1, just below cremation, in pit 17

Pollen extremely scarce and comprised Poaceae, *Alnus* and indeterminate pollen and *Polypodium* spores.

Sample H: from inside collar of Urn 1, adhering to vessel, in pit 17

Pollen relatively abundant but more than 40% of the assemblage was indeterminate. Of the identified taxa, *Polypodium* spores were most abundant followed by *Corylus avellana* type pollen. Poaceae and *Alnus* pollen values were relatively low and *Calluna* and *Quercus* present only in small amounts. *Plantago lanceolata* and Lactuceae pollen dominated the weed assemblage.

Cremation 22

Sample I: from fill of collapsed Urn 3 in pit 23

Pollen was scarce. The assemblage was dominated by herbaceous taxa, namely Poaceae pollen with occasional grains of weed taxa including *Plantago lanceolata*, Rubiaceae and *Rumex acetosella*. *Alnus*, *Corylus avellana* type and *Calluna* were also represented and *Polypodium* spores and indeterminate pollen present in small amounts.

Cremation 36

Sample J: from context 38 in pit 37 containing cremated bone and Cup 2

Pollen was very scarce and comprised small quantities of Poaceae, *Calluna* and indeterminate pollen and *Polypodium* spores.

Discussion of the pollen evidence

The samples fall into two groups. In the first group (samples A, E, F, G, I, J) pollen is scarce and there was also nothing to suggest ritually placed plant material. In the second group (samples B, C, D, H) pollen is plentiful but generally includes a large amount of poorly preserved indeterminate pollen. Of the identified taxa, in two of the samples (samples B and D) Poaceae (grass) pollen dominated, while in the other two samples (D and H), *Corylus avellana* type (probably hazel but this type also includes bog myrtle) was dominant, although only marginally so in the second of these. As a percentage of total land pollen, as opposed to the total assemblage, tree taxa were also more strongly represented in the latter two samples than the former two. *Polypodium* (polypody) spores were also more frequent in the latter two samples. Polypody can be epiphytic on tree-trunks as well as being common on banks and rocks. However, the differences between the samples may be a result of the high numbers of indeterminate grains, probably largely herbaceous/Poaceae pollen, in the latter two samples, reflecting differences in preservation rather than differences in the vegetation.

Overall, the pollen evidence in these samples suggests grassland with weed taxa, including ribwort plantain (*Plantago lanceolata*), bedstraw (Rubiaceae), docks (*Rumex* spp.), sheep's sorrel (*R. acetosella*), devil's bit scabious (*Succisa*) and dandelion type (Lactuceae), as well as heather (*Calluna vulgaris*) communities in the area. In the wider area there is some evidence for hazel woodland as well as oak (*Quercus* spp.) and alder (*Alnus glutinosa*). Again, there is nothing to suggest any plant material deliberately placed with the cremations, such as at Fan Foel and Pant y Butler (Caseldine and Griffiths 2013; Caseldine 2013) where *Filipendula* (meadowsweet) pollen may reflect a floral tribute. The pollen may reflect the environment contemporary with the cremations but it is equally possible that much of the pollen is more recent in origin. Indeed, there is evidence of recent intrusive material from the macrofossil evidence, which supports the latter view, but there is also some agreement between the pollen and charred plant remains and charcoal evidence respectively. Again, the results suggest hazel and oak woodland and, possibly, the presence of alder, as well as grassland and heather. In addition cereal, including wheat, is represented in the plant macrofossil record.

The pollen evidence from Fan is consistent with pollen evidence from Blaen yr Esgair (Moore and Chater 1969), Tregaron (Cors Caron) (Turner 1964) and Bryniau Pica (Buckley and Walker 2001) in the wider region. This suggests oak woodland with a hazel understorey, as well as hazel and birch woodland in the uplands, and alder woodland in wetter areas. Relatively small-scale clearance activity is indicated during the Neolithic and earlier Bronze Age and evidence for cereal cultivation is slight. More extensive clearance commenced during the middle-later Bronze Age in the uplands, although from the 'elm decline' onwards there is evidence for the spread of vegetation communities dominated by grasses, sedges and heather. In the lowlands the evidence suggests more extensive clearance occurred during the early Iron Age or later.

Although cereal pollen is absent from the pollen record, the presence of charred cereal at Fan barrow confirms that cereal cultivation was taking place in the area during the early Bronze Age. In general charred cereal evidence is quite widespread in Wales for the Bronze Age, but in most instances the evidence tends to be quite limited. The scarcity of charred cereal in deposits associated with the cremations at Fan is, therefore, similar to that found at other early Bronze Age sites in Wales, for example Llanilar (Caseldine 1997), Pantymenyn (Caseldine 2000a), Yr Allor (Caseldine 2000b) and Parc Maen (Nesbitt 1992). More

Table 3. Pollen evidence from cremation burials at Fan

Cremation Context Sample	5 pit 6 A	5 pit 6 B	7 pit 4 C	7 pit 4 D	7 pit 4 E	21 pit 17 F	21 pit 17 G	21 pit 17 H	22 pit 23 I	36 pit 37 J
Trees										
<i>Betula</i>	–	1	–	–	–	–	–	–	–	–
<i>Ulmus</i>	–	–	–	–	1	–	–	–	–	–
<i>Quercus</i>	–	16	3	6	–	–	–	10	–	–
<i>Tilia</i>	–	1	–	–	–	–	–	–	–	–
<i>Alnus</i>	–	9	19	8	–	1	1	24	1	–
Total trees	–	27	22	14	1	1	1	34	1	–
Shrubs										
<i>Corylus avellana</i> type	2	67	35	35	5	1	–	50	1	–
<i>Salix</i>	–	–	–	1	–	–	–	–	–	–
<i>Lonicera</i>	–	–	1	–	–	–	–	–	–	–
Total shrubs	2	67	36	36	5	1	–	50	1	–
Heaths										
<i>Calluna</i>	1	41	18	26	1	1	–	12	1	3
<i>Erica</i> type	–	1	–	–	–	–	–	–	–	–
Total heaths	1	42	18	26	1	1	–	12	1	3
Herbs										
Poaceae	4	134	33	97	1	11	3	29	13	7
Cyperaceae	–	1	–	–	–	–	–	–	–	–
<i>Aster</i> type	–	–	–	1	–	–	–	–	–	–
Lactuceae	–	4	1	4	–	–	–	6	–	–
Caryophyllaceae	–	1	2	3	–	–	–	1	–	–
Chenopodiaceae	–	–	1	–	–	–	–	–	–	–
Lamiaceae	–	1	–	–	–	–	–	–	–	–
Fabaceae	–	1	–	1	–	–	–	–	–	–
<i>Plantago lanceolata</i>	–	17	–	15	–	1	–	8	2	–
<i>Filipendula</i>	–	1	–	–	–	–	–	–	–	–
<i>Potentilla</i>	–	–	–	1	–	–	–	–	–	–
Ranunculaceae	–	2	–	1	–	–	–	–	–	–
Rubiaceae	1	5	–	4	–	1	–	–	2	–
<i>Rumex acetosa</i>	–	1	–	1	–	–	–	–	–	–
<i>Rumex acetosella</i>	–	–	–	2	–	–	–	–	2	–
<i>Rumex</i>	–	–	–	1	–	–	–	–	–	–
<i>Succisa</i>	–	4	2	1	–	1	–	4	–	–
Total herbs	5	172	45	132	1	14	3	48	19	7
Spores										
<i>Polypodium</i>	1	26	65	14	34	14	4	66	4	2
<i>Pteridium</i>	–	2	1	1	–	–	–	4	–	–
Pteropsida (monolete) indeterminate	–	1	–	4	–	1	–	7	–	–
<i>Sphagnum</i>	–	2	–	–	–	–	–	–	–	–
Total spores	1	31	66	19	34	15	4	77	4	2
Indeterminable	–	55	182	95	8	5	3	159	4	2
Total	9	394	369	322	50	37	11	380	30	14

common are the occurrence of frequent charred grass remains and the presence of charred hazelnut shells at these and other sites. The cereal, and perhaps the hazelnuts and *Prunus* fruit stone, at Fan may indicate food offerings and ritual activity but could also simply reflect material used to make the funeral pyre.

DISCUSSION

The excavations at Fan have revealed a variety of features and artefacts of different dates which hint at the development of the site over time. Radiocarbon dates indicate phases of Neolithic, Early Bronze Age and Middle/Late Bronze Age activity (Fig. 17). The Neolithic activity is indicated by a group of pits and other features below and on the eastern side of the barrow with radiocarbon dates from four contexts spanning the period 3940–3695 cal. BC and 3630–3370 cal. BC, which is up to about 1500 years earlier than the dates associated with the Bronze Age burials. Evidence for Neolithic activity may be coincidental but it is interesting to note that similar evidence of Neolithic activity has recently been identified at Pant y Butler, Ceredigion (Murphy and Murphy 2013), pre-dating one of the round barrows by about a millennium.

During the Early Bronze Age the location became the focus of a small cremation cemetery over which a mound was subsequently constructed. Despite the absence of surviving physical evidence it is clear that the geophysical anomaly and the Fan barrow mound were not the same feature. Although it is intriguingly circular, there is no evidence that the geophysical anomaly represents an archaeological feature, however, and it may have been caused by the presence of subsoil mixed into the thin ploughsoil on the crest of the hill. Since no evidence of a perimeter ditch was apparent it is assumed that Fan barrow was ditchless, similar to the nearby barrow at Pen-y-Glogau (Jones and Davies 1930) and the barrows at Pant y Butler (Murphy and Murphy 2013).

Despite the destruction of the extant parts of the barrow, the range of excavated features makes a significant contribution to understanding the character and complexity of Bronze Age burial practices in the region. The five cremation burials, representing a minimum of six individuals, are associated with

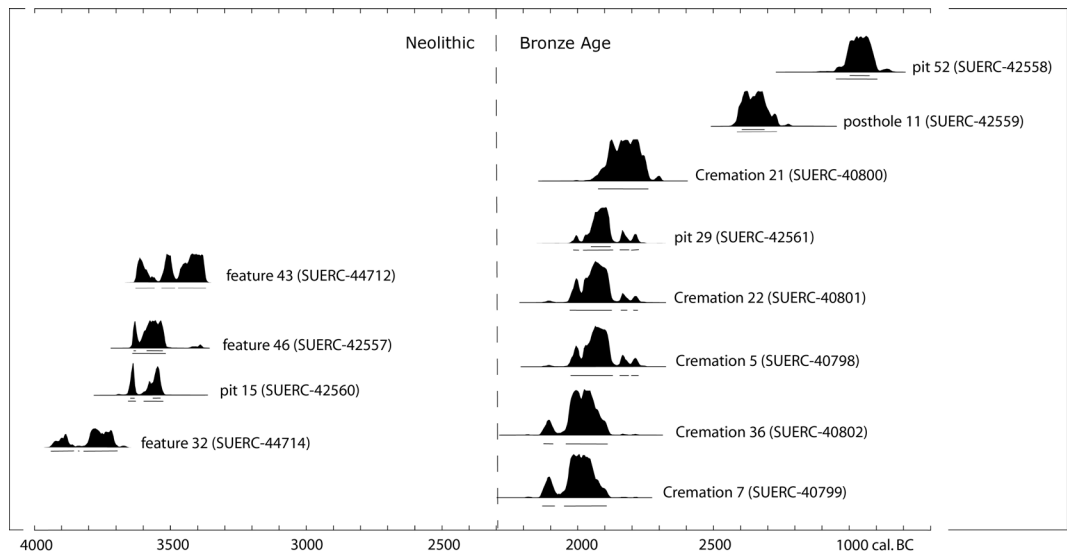


Fig. 17. Graphical illustration of the Fan round barrow radiocarbon dates.

radiocarbon dates between 2130–1895 cal. BC and 1925–1740 cal. BC. The varying proportions of cremated bone within each burial may suggest different funeral processes such as ‘double’ cremations or the post-cremation mixing of individuals. Smaller bone quantities may represent the partial collection of the cremation, or the post-cremation subdivision of the remains (Jones 2012, 181).

Similar groups of cremations in barrows in Wales often appear to have been deposited in a single phase (although subsequent burials may also occur) emphasizing the significance of group or family bonds over individual status (Lynch 1980, 235). It is interesting to note that skeletal analysis by Malin Holst suggests evidence of a shared genetic trait between at least two of the burials (Cremations 5 and 7) which suggest that the burials may represent a small kin group buried over a relatively short period of time. Close similarities in the shapes of the calibration curve plots for some of the radiocarbon dates from the burials might suggest they represent a sequence of funerary events. The earliest dated burial is Cremation 7 which appears to have been a focal burial at the centre of the former round barrow. Nearby Cremation 36 produced a very similar date. Cremations 5 and 22, although different to each other in style also have very similar dates. Cremation 21 appears to have a slightly more recent date than the other two groups. However, although the different characteristics of each of the burials may suggest separate funerary events, the dates are in fact statistically indistinguishable from one another and could in theory represent a single funerary event (Gordon Cook, SUERC, pers. comm.).

The ceramic assemblage from Fan, which includes four Cups makes a significant contribution to the corpus of Cups found in west Wales and within Wales generally and it is noteworthy that the three neighbouring round barrows at Fan, Pen-y-Glogau (Jones and Davies 1930) and Ty’n Rhos (the Abermeurig or Nantcwnlle Cup)—all within just over a kilometre of each other (Fig. 1)—have now all produced Cups. Although there are potential shared traits between some of the ceramics at Fan, there do not appear to be obvious shared traits between the Cups from the three sites. As noted by Alex Gibson, the distorted shapes of Urns 1 and 2 suggest they are firing wasters.¹² A firing spall from Cup 3, from Cremation 5 suggests that it might have been fired in the funeral pyre. The cup fragment in Cremation 36 may also suggest the cup was broken as a consequence of having been included in the cremation process.

The different vessel types, combinations of vessels and their positions (inverted upright or on their sides) within burials, along with the other possible details of ritual suggested by some of the excavated evidence, may have had significance in the Bronze Age, though pollen analysis by Astrid Caseldine has shown that there is no evidence to suggest any plant material deliberately placed with the cremations, as recently identified at Fan Foel and Pant y Butler. It is difficult to make any inferences about status, sex or age of cremated individuals from the surviving excavated evidence but it is interesting to note that a high proportion of the cremations have been identified as probable females, with no definite males identified.

Cremation 7 and pit 29 both had a stone ‘capping’. This stone may be mound material that has settled into the underlying pits after the mound was built, and which was lost from the tops of the other cut features when the barrow was removed. The way in which the stones appeared to have been deposited, however, may suggest they are the remnants of small cairns built over the pits. Potentially similar small cairns have been excavated at Chilcompton, Somerset (Lewis and Mullin 2012, 203, fig. 7).

The two lengths of charred wood laid in parallel in the base of pit 29 are an unusual feature. A radiocarbon date obtained from one of the pieces of charred wood produced a date several hundred years earlier than the date obtained from the fill of the pit. The earlier date presumably represents the felling or death date of old wood. Direct parallels for 29 from other sites have not been identified, but evidence of charred wooden structures, charred planks and pits containing no artefacts other than charcoal have been found in association with burial monuments elsewhere in Wales such as the Brenig Valley (Lynch *et al.* 1973; Lynch 1980, 239). Such features may be broad parallels with pit 29 and features 11, 42 and 52. Recent excavations of two Early Bronze Age barrows at Pant y Butler also encountered much larger,

apparently intentionally aligned charred wooden planks beneath and within one of the mounds (Murphy and Murphy 2013). Charred planks have been discovered at Chilcompton in Somerset (Lewis and Mullin 2012, 201). The possible symbolic significance of trees in the Neolithic and Bronze Age is explored by Noble (2007). The ritual treatment of charred wood in the Bronze Age may be an example of continuity between Neolithic and Bronze Age ritual traditions in Wales.

If there were secondary burials within mound of the round barrow, the evidence has been lost. Two charcoal-filled pits, pits 11 and 42, lie below the assumed extent of the round barrow. Pit 42 is undated but pit 11 has a date of 1415–1270 cal. BC, indicating a Midde Bronze Age date. The features may be evidence of later use of the barrow, but they seem too small to have been dug through the mound. Alternatively, they might indicate that the barrow mound was not constructed until several hundred years after the deposition of the cremation burials, possibly as an act of ‘closure’ of the cemetery. Charcoal-filled pit 52, which lies beyond the assumed periphery of the barrow mound, is dated to 1050–895 cal. BC, suggesting continued activity in the vicinity of the Fan round barrow into the Late Bronze Age.

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NOTES

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2. School of Archaeology, History & Anthropology, University of Wales Trinity St David, Lampeter, Ceredigion, SA48 7ED.
3. Division of Archaeological, Geographical & Environmental Sciences, University of Bradford West Yorkshire BD7 1DP.
4. York Osteoarchaeology Ltd, Ivy Cottage, 75 Main Street, Bishop Wilton, York YO42 1SR.
5. School of History, Archaeology, & Religion, Cardiff University, CF10 3EU.
6. Palaeoecology Research Services, Unit 4, National Industrial Estate, Bontoft Avenue, Kingston upon Hull, HU5 4HF.
7. Scheduled Ancient Monument no. CD078. Dyfed Archaeological Trust (DAT) Historic Environment Record (HER) 4788.
8. British Geological Survey, <www.bgs.ac.uk>.
9. Cadw AM107 Field Monument Warden reports for CD078, in 1983 and 1999.
10. The spearhead and Cup are illustrated in Savory 1980, fig. 27, no. 337.2 and fig. 71, no. 337.1.
11. Now recorded as DAT HER 102838.
12. An alternative suggestion (Phil Parkes, Cardiff University, pers. comm.) that the urns became distorted as the result of them reabsorbing water and becoming flattened due to pressure after burial is unlikely as they are over-fired to the extent that they have become brittle and any weight would have shattered them rather than have squashed them.

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