DEVON ARCHAEOLOGICAL SOCIETY

PROCEEDINGS No. 72 2014

CERAMIC AND PETROGRAPHIC REPORT

By Imogen Wood

The pottery

The ceramic assemblages from Project Dixie (472 sherds; 2497 g) and Hayes Farm Quarry (667 sherds; 2803 g) are predominantly prehistoric (Table 1) and locally made.

	Project Dixie		Hayes Farm Qry	
Period	*No.*	*Wt (g)*	*No.*	*Wt (g)*
Early Neolithic	120	885	115	590
Beaker	-	-	12	15
Middle Bronze Age	89	506	531	2173
Early Iron Age	254	1093	-	-
Middle Iron Age	-	-	6	4
Roman	1	3	2	8
Medieval	3	6	-	-
Post-medieval	2	1	-	-
Undiagnostic	3	3	1	13

Table 1. Quantification of pottery from the site.

The proximity and similarities between these assemblages has enabled their discussion by period with comments on the fabric groups and their provenance. Detailed macroscopic fabric descriptions and the results of the petrological analysis are presented along with a description of the fired clay objects (below). Quantification of the prehistoric pottery by fabric is given in Table 2.

Fabric	Period	Hayes Farm Quarry	Project Dixie
Rock Temper	Early Neolithic	-	31
Gabbro	Early Neolithic	-	42
Vein Quartz	Early Neolithic	590	805
Igneous Rock	Middle Bronze Age	58	16
Volcanic 1	Middle Bronze Age	16	10
Volcanic 2	Early/Middle Bronze Age	2072	480
Volcanic 2	Early Iron Age		189
UGS	Beaker	40	
UGS	Early Iron Age		380
Fine Quartz Sand	Early Iron Age	-	86
Limonitic	Early Iron Age	-	436
Uncertain	Iron Age?	17	12
Roman BB1	Roman	10	10

Table 2. Breakdown of prehistoric and Roman pottery fabric groups by site. Quantity by weight (g).

Condition
The condition has been assessed using Sorensen's method (1996). The levels of abrasion relate to fabric composition more than post-depositional factors, making the recording of abrasion levels by context superfluous. The assemblage displayed mainly level 2/'medium' abrasion (72%) with level 1/'low' (10%) and level 3/'high' (18%).

Early Neolithic
The assemblage is typical of Devon in this period, with south-western style undecorated vessels being the norm (Fig. 14). Simple open bowls (P1) and straight-sided jars (P2) were present at Project Dixie and Hayes Farm Quarry, and carinated bowls (P3, P4 and P5) were also found at Project Dixie. Parallels for these forms have been found at Raddon Hill (Gent and Quinnell 1999a) and (except carinated bowls) at Wayland's, Tiverton, dated to the 4th millennium BC (see discussion in Leverett and Quinnell 2010, 6). The absolute dates associated with the pottery are within the ranges expected for the styles represented: a carinated bowl fragment in a vein quartz fabric from Area B pit 20240 is associated with two radiocarbon determinations, 3788–3661 Cal BC and 3801–3692 Cal BC (SUERC 42263 at 95.4% probability and SUERC 44581 at 88% probability respectively).

The most common fabric from both sites is Vein Quartz, with a smaller number in Rock Temper and Gabbro at Project Dixie (Table 2). Vein quartz makes up 92% of the Early Neolithic assemblage at Project Dixie and 100% at Hayes Farm Quarry. Fabrics with crushed Carboniferous vein quartz added as temper to locally sourced clays are increasingly recognised in Neolithic assemblages in Devon, such as Raddon Hill Neolithic Enclosure representing 81% of the assemblage (Quinnell 1999, 41), Willand Road, Cullompton (Quinnell 2010, 70) and Wayland's, Tiverton (Quinnell and Taylor 2010, 7). Such fabric is readily identifiable due to its abundant angular pieces of crushed vein quartz with few accompanying inclusions. The samples analysed here are most comparable to the vein quartz fabric at Willand Road. The fabrics of this type from both sites are characterised by a moderately hard silty-textured matrix, generally oxidised but with variably reduced examples and very poorly sorted. Petrographic analysis suggests local Clyst Valley clays were utilised at both sites and that the vein quartz was added as temper (see below). Quinnell (1999) has suggested that its distinctive appearance was intentionally aesthetic and may represent a cohesive Neolithic tradition specific to Devon.

The material from Project Dixie and Hayes Farm Quarry constitutes a valuable addition to the range of published forms from similar sites. The carinated bowls (P3) from Project Dixie are a possible early form with links to Continental traditions (Sheridan *et al.* 2008), whose dating furthers our understanding of the Neolithisation of the South West.

Catalogue of illustrated pottery (Fig. 14)

P1 (Project Dixie Area B, Ring Ditch A) Simple rounded rim of open bowl, gabbroic fabric, oxidised 7.5YR 6/6 reddish yellow, external surface almost burnished, internal diameter 340 mm.

P2 (Project Dixie Area B, Ring Ditch A) Squared rim of vessel with upright wall, vein quartz fabric, reduced 5YR 3/2 dark reddish brown, smooth surfaces, internal diameter 160 mm.

P3 (Project Dixie Area B, pit 20240) Carinated body sherd, vein quartz fabric, reduced 7.5YR 2.5/1 Black, smooth external surface almost burnished

P4 (Project Dixie Area B, tree-throw pit cutting Ring Ditch A) Pointed everted rim from carinated bowl, vein quartz fabric, reduced 7.5YR 3/1 very dark grey, internal diameter 240 mm.

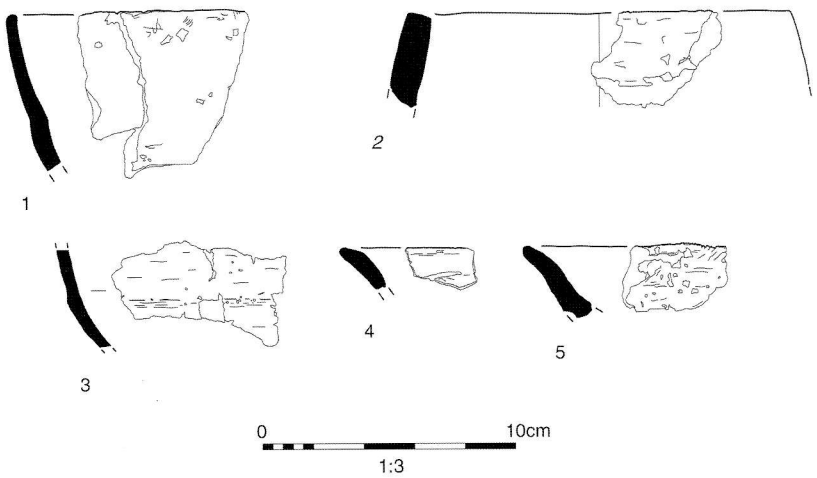

Fig. 14. Prehistoric pottery, Early Neolithic.

P5 (Hayes Farm Quarry, pit 1134) rolled over everted rim of carinated bowl, vein quartz fabric, reduced 5YR 4/6 yellowish red, inclusions protruding poor construction, internal diameter 360 mm

Beaker

Hayes Farm Quarry produced 13 sherds of Domestic Beaker pottery, most of which were residual. One sherd (from pit 1390) had small rounded comb-stamped decoration which is unusual, the only other known example being from Westward Ho! (Quinnell 2003, 5). The fabric for all the Beaker sherds is derived from the clays of the Upper Greensands (UGS; Table 2) on the Blackdown Hills, suggesting transportation over some distance. This is unusual, as most Devon Beakers are made of local clays and contain grog, except one example from Burnt Common, near Honiton, which was found 50 km away from its granitic source (Jones and Quinnell 2008, 39). A Beaker from Broad Down in east Devon does have a similar fabric, but is local to the Upper Greensand clays (Quinnell 2003).

The presumption that Beaker vessels appear mainly in funerary contexts has recently been addressed in Devon, now emphasising the importance of those found in a domestic context and ranging in date between 2500–1800 BC (Quinnell 2003, 1). The closest example, that at Castle Hill, Feniton (Quinnell 2003, 17), is almost 10 miles from Hayes Farm. The domestic Beaker sherds from Hayes Farm Quarry contribute to the known distribution, especially in the lowlands of the region where examples of this 'domestic' category are rare.

Middle Bronze Age

The assemblages from Hayes Farm Quarry and Project Dixie both contain the same characteristic pottery, representing a hybrid of two styles (Fig. 15). This hybrid has some affinities with the Deverel-Rimbury tradition of Dorset and some with Trevisker Ware found further west in Devon and Cornwall. It is characterised by a general lack of decoration, a preference for fingernail decoration (P10) and plain barrel-shaped forms made in a locally sourced volcanic fabric (P6, P7 and P8). This local hybrid style has been observed at Castle Hill, Feniton (Laidlaw and Mepham 1999, 48) and Rydon Lane, Exeter (Raymond 2012, 78). Four decorated examples from Project Dixie have fingernail decoration (Area B Ditch G); five examples have twisted cord, dimple and fingernail decoration (Hayes Farm Quarry Ditch CC) and three co-joining sherds form a handle with fingernail decoration

(P10 – unstratified). These decorated sherds may represent small drinking vessels similar to Trevisker style 5 and 6A (see Woodward and Cane 1991; Quinnell 2012). Fingernail decoration and a volcanic fabric were evident in the Early Bronze Age pottery from Hayes Farm cropmarks in 1987 (Woodward and Williams 1989). The size range of the undecorated vessels, and the instances of internal charring, strongly suggests their use for food storage and cooking at a settlement.

Permian volcanic fabric (combining Volcanic 1 and Volcanič 2 fabrics) makes up 96% of the Hayes Farm Quarry and 97% of the Project Dixie assemblages (see below and Table 2). This is in contrast to some use of grog-tempered fabrics associated with Middle Bronze Age Trevisker-related ware in Devon (Quinnell 2012, 164). The petrographic analysis of 'grog-tempered' pottery from Hayes Farm cropmarks (Woodward and Williams 1989) identified a volcanic fabric similar to Peacock Group 6 (1969) (see below), and this is also the second most common fabric at Castle Hill (fabric R3; Williams 1999, 419). Raymond (2012, 79) suggests that hybrid Bronze Age vessels in a volcanic fabric from Rydon Lane represent a distinctive repertoire born of an assimilation of ideas. It is apparent that Early and Middle Bronze Age pottery in the Exeter area utilised local Permian clays with distinctive volcanic inclusions, perhaps indicating a move away from the grog-tempered tradition. It has been suggested that the local production of this pottery reflects emerging identities in east Devon in this period (Laidlaw and Mepham 1999; Raymond 2012).

Catalogue of illustrated pottery (Fig. 15)

P6 (Project Dixie Area B, Ditch G) squared rim with internal bevel, Exeter Volcanics 2 fabric, reduced 5YR 4/3 reddish brown, smooth exterior surface, sooting under rim, internal diameter 200 mm

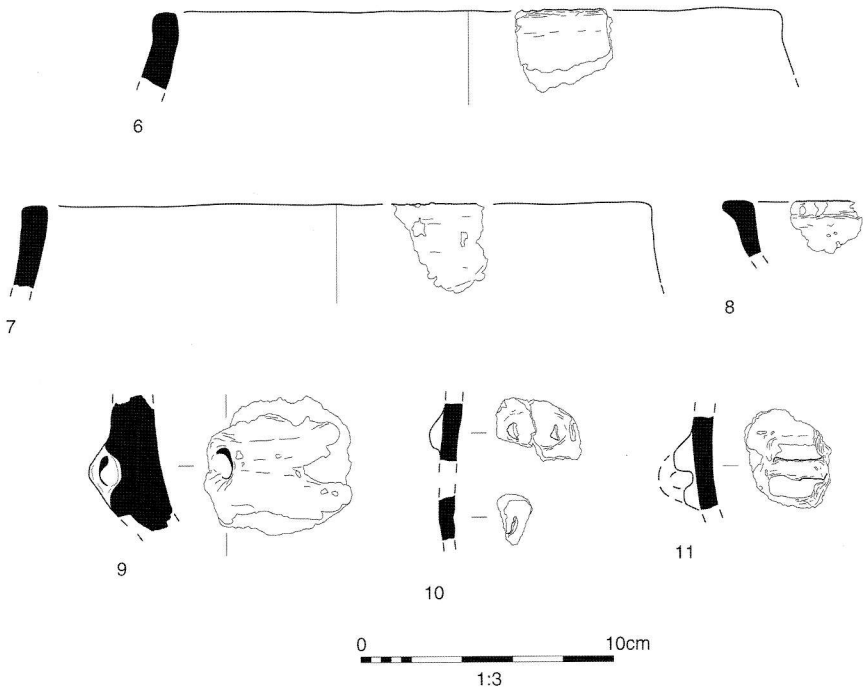

Fig. 15. Prehistoric pottery, Middle Bronze Age.

P7 (Project Dixie Area B, Ditch N) flat topped rim of probable upright vessel, Exeter Volcanics 2 fabric, oxidised 5YR 5/6 yellowish red with reduced core, inclusions protruding roughly smoothed surface, internal diameter 280 mm.

P8 (Hayes Farm Quarry, Ditch CC) expanded rim of vessel, Exeter Volcanics 2 fabric, oxidised 5YR 5/6 yellowish red, smoothed exterior surface, internal diameter tentatively 280 mm.

P9 (Hayes Farm Quarry, Ditch CC) horizontally imperforated lug 4.5 mm wide, Exeter Volcanics 2 fabric, oxidised 5YR 5/6 yellowish red with reduced core, surface abraded.

P10 (unstratified) rectangular horizontal lug, with horizontal finger nail decoration running parallel, reduced 7.5YR 2.5/1 black, smooth exterior surface.

P11 (Hayes Farm Quarry, Ditch CC) horizontal perforated lug springing 1.9 mm wide missing handle, highly abraded, Exeter Volcanics 2 fabric, oxidised exterior 5YR 5/6 yellowish red with reduced interior and core.

Early Iron Age

The radiocarbon date of 422–362 Cal BC (86.3% probability; SUERC 44582) from the residue on one of the sherds of pottery from Area B Ring Ditch B confirms that this assemblage (Fig. 16) is the first of this period to be found in the immediate Exeter area, although it is comparable to examples from Blackbury Castle hillfort (Young and Richardson 1954–55). There are many undecorated plain-shouldered jars (P12 and P13) and bowls (Area B pit 20257) of a kind distinct to Devon (Gent and Quinnell, 1999a, 52). A rim sherd from a plain necked jar P14 (also from pit 20257) has shallow finger-impressions under the rim comparable to examples at Blackbury Castle (Young and Richardson 1954–55, fig 8).

Three of the fabrics (Limonite 40%, Fine Quartz Sand 8% and EV2 18%; see below) are locally sourced and have been found among the Middle Bronze Age pottery at Castle Hill (Williams 1999, 419) and Hayes Farm cropmarks (Woodward and Williams 1989). The fourth fabric, UGS 34%, is derived from the Upper Greensands on the East Devon border. The use of local clays is consistent with pottery from hillforts of this period (for example, Woodbury and Blackbury; Quinnell and Taylor 1999, 52). The Blackbury Castle pottery was predominantly UGS, but the site is local to the source (Taylor, *unpublished notes*), whereas Hayes Farm is not. The fabric and finger impressions suggest that the two necked bowls and plain-necked jar P14 (all from fill 20255 of Area B pit 20257) may have been transported, possibly from the Blackbury Castle area.

Catalogue of illustrated pottery

P12 (Project Dixie Area B, Ring Ditch B) Everted rim of plain jar, Limonitic fabric, reduced 7.5YR 2.5/1 black, smooth partially burnished surfaces, internal diameter 200 mm.

P13 (Project Dixie Area B, Ring Ditch B) sf 2000 Everted rim of plain shouldered jar Limonitic fabric, oxidised interior 2.5YR4/6 red and exterior with reduced core, smooth dark burnished exterior surface, internal diameter 140 mm.

P14 (Project Dixie Area B, pit 20257) Everted rim of shallow concave necked jar with slightly carinated shoulder, UGS fabric, oxidised interior 2.5YR 5/3 reddish brown reduced exterior, uneven surface with finger impressions under rim, internal diameter 140 mm.

Middle Iron Age

The nine sherds from Hayes Farm Quarry are typical of those found in Devon, with one distinctive South West Decorated Ware sherd with 'standard type' decoration dating to the 3rd to 1st centuries BC (Quinnell 2011). The fabric is of indeterminate source, due to lack of inclusions.

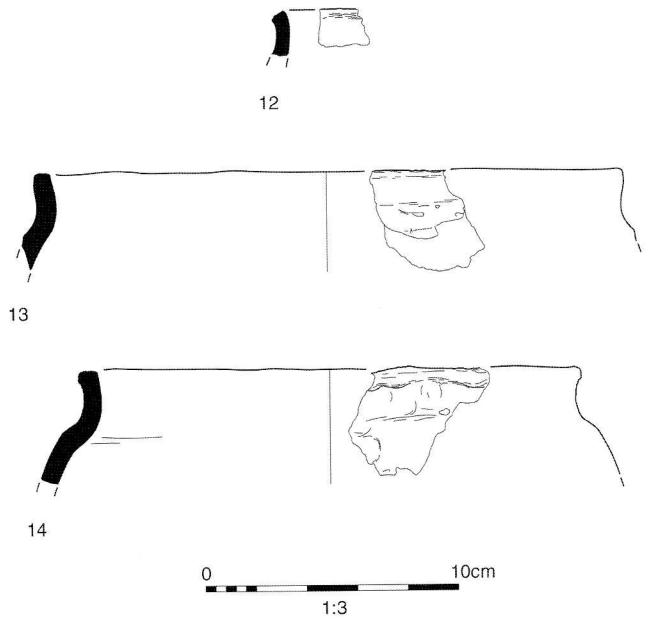

Fig. 16. Prehistoric pottery, Early Iron Age.

Roman

Black Burnished ware (BB1) was represented at both sites by two abraded sherds, both residual. It is commonly found in the South West and examples from Exeter are dated to the mid-1st to 4th centuries AD (Holbrook and Bidwell 1991).

Baked clay objects from Area B, pit 20240

By Imogen Wood, *with comments from* Linda Hurcombe

In total, 16 fired clay objects, six of which were complete, were recorded from Area B pit 20240 (Fig. 17). These enigmatic objects were part of a structured deposition and were associated with radiocarbon dates of 3788–3661 Cal BC and 3801–3692 Cal BC (respectively, SUERC 42263 at 95.4% probability and SUERC 44581 at 88% probability: Table 15) which complement the Early Neolithic pottery from the same pit. Examination of the objects suggests that two hand-made production techniques are present, each represented by a different fabric. Despite their fragile nature, they were not abraded prior to deposition or in the post-depositional environment and there is no obvious evidence of use-wear, strongly suggesting that they were unused.

The objects are ovoid with flattened fronts and backs and one example has a flattened end. The weight of the consolidated complete examples ranges from 1000 g to 1500 g and they are all *c.* 200 mm long, 140–160 mm wide and 100–130 mm thick, suggesting that size was related to their function. They were made using clay from a relatively poor source which accidentally incorporated podzols soils (white leached soil deposits on the clay/soil interface which result from waterlogged heathland conditions). This podzol material runs through the fabric in swirls and ribbons, suggesting that the clay received little processing prior to shaping. Grass impressions on the backs of the objects suggest that they were laid on grass to dry, and that this burnt out during firing. One example (Fig. 17, 2) has six linear cylindrical impressions on its back with vertical striations, perhaps suggesting

another organic material was used. The fronts and sides of the objects were smoothed to form a finer surface. The level of oxidisation, with differential black reduced patches on the surfaces, suggests bonfire firing. Some display secondary burning suggestive of burning after firing which caused the surfaces to spall and become more fragile.

The objects have holes pierced prior to firing as indicated by conical impressions on the fronts and bulges of clay at the backs. Eleven have one hole and two have two holes from the same side that haphazardly join together in the interior and exit through one hole. One object (Ra. 2017) has two separate holes that exit separately and one dead-end hole in each side; this example was slightly misshaped and heavily burnt and may not be representative. The holes are generally located off-centre, suggesting the orientation if hung, and vary in shape, orientation, size and internal form. It is likely that they were made with a straight cylindrical tool such as a wooden dowel, although no diagnostic impressions were identified to confirm this. Some holes entered and exited vertically. Internally, the trajectory was random and in one case had diverted around a pebble inside, suggesting the form of the hole was not critical in its performance.

The side from which the objects were pierced corresponds to their fabric: the objects in Dawlish Sandy fabric (see Petrographic Microscopic Analysis, below) were pierced from the back upwards and the objects in Dawlish silty fabric from the front downwards and this suggest that two separate craftsmen and/or production events are represented: Group 1 Dawlish sandy fabric (Ra. 7, 8, 2014, 2015, 2017, 2018, 2019, 2021 and 2023) and Group 2 Dawlish silty fabric (Ra. 10, 13, 2009, 2011, 2012, 2016 and 2022). The source of both clays was most likely heathland, as indicated by the podzol inclusions, and thin-section analysis suggests a source within the humus-iron podzols associated with the Permian Aeolian sandstones of the Crannymoor Series underlying the Dog Village area, 3 km north of Hayes Farm (Clayden 1971). Ceramic studies indicate that clay is generally utilised close to its source, so these objects were probably made on the heathland, perhaps (given the impressions on their backs) on the grass itself.

As to their function, the poor fabric produced very fragile objects, precluding prolonged or vigorous use and suggesting instead one specific task not involving movement. The rough grass-marked backs and smoothed fronts and sides suggest that they were made to be seen from one angle or that appearance was unrelated to function. The secondary burning on Ra. 2024 could indicate use as kiln furniture as Woodward (2012, 297) has suggested for a cylindrical loom weight group from Middle Bronze Age contexts at Bestwall Quarry; but this is unlikely for the current assemblage since only one example was burnt. The holes suggest suspension, and the addition of secondary holes that join together inside the objects suggests multiple cords feeding into one. Only one of the objects had a flat end enabling it to stand and the rest were clearly intended for hanging. Overall, use as loom weights seems most likely. The suspension systems could have been direct or indirect and the pattern of multiple holes deserves further investigation. Evidence for Neolithic weaving suggests that plant fibres were more commonly used than sheep wool, possibly since early breeds did not produce the quantity and quality of wool yielded by Bronze Age breeds (Jenkins 2002, 55), and the use of plant fibres is reflected in the weight of each object which is two to three times greater than north-western European Bronze Age loom weights. Evidence of Neolithic textile production in Britain has only been suggested previously by the recovery of a comparable loom weight from a Neolithic longhouse at Easington, County Durham (Mackey 2001, 2006). The discovery of a set of loom weights is rare for early prehistory in this part of Europe (Gleba and Mannering 2012) and the Easington and Hayes Farm weights now form the only known groups from Early Neolithic Britain. The Hayes Farm loom weights, if that is what they are, are of international significance, with potential to provide insights into early textiles in Europe.

The Neolithic clay weights (all Project Dixie Area B, pit 20240) (Fig. 17)
1. Ra.7 Fabric Group 1 (Dawlish sandy). With perforations meeting internally.
2. Ra. 10 Fabric Group 2 (Dawlish silty). Dowel impressions and partial perforations.
3. Ra. 2011 Fabric Group 2 (Dawlish silty). Piercing prior to firing.
4. Ra. 2021 Fabric Group 1 (Dawlish sandy). Flattened 'base' for standing.

Petrographic Analysis

Macroscopic analysis of 12 initially-identified fabric groups of the pottery and loom weights was carried out to establish the nature of the clays used, of which six were examined microscopically in thin-section under a polarizing microscope, along with four thin-sections of the Neolithic loom weights.

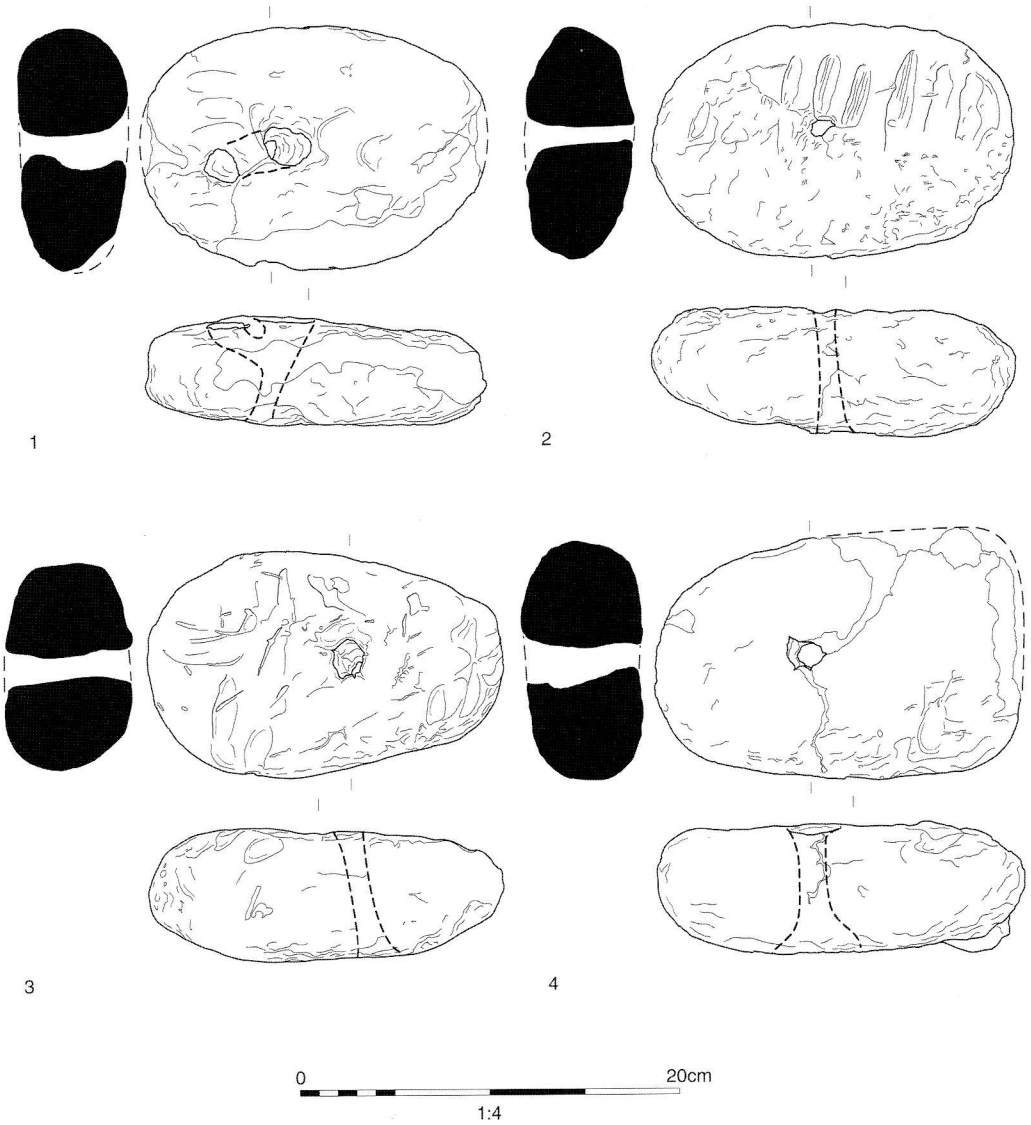

Fig. 17. Early Neolithic ceramic 'loom weights'.

Macroscopic Analysis
All sherds were examined under a binocular microscope: full details are within the site archive.

Rock Temper: buff/grey interior and exterior, reduced dark brown core, poorly sorted; inclusions 25% of the smooth fine clay matrix. Abundant pieces of sub-angular to angular sandstone (5.0–1.0 mm) composed of translucent/opaque quartz. Also rounded sparse slate/shale pieces (2.5 mm) and a scatter of sub-rounded Limonitic pieces (1.5–1.0 mm).

Gabbro: buff/red interior/exterior and light buff/grey core; inclusions 25–30% of the smooth clay matrix. Abundant plagioclase feldspar pieces, sub-angular (3.5–1.0 mm) with rare rounded limonitic pieces (1.0–0.5 mm). This fabric derives from the Lizard Head complex in Cornwall (Peacock 1969; Taylor 2011).

With Sand, With Sand 2 and Rock inclusions (UGS): these fabrics are essentially the same, characterised by abundant well-rounded quartz grains (1.0–0.5 mm) with rare well-rounded Chert (1 mm), a scatter of well-rounded tourmaline (0.5 mm) and cylindrical silicified shell (brachiopod) fragments (5 mm). This is typical of Upper Greensand-derived clay associated with the geology of the Blackdown facies in west Somerset (Allan *et al.* 2010).

Igneous Rock: dark red oxidised interior/exterior and black reduced core; coarse texture inclusions 35% of the smooth micaceous silty clay matrix. Common sub-angular igneous rock fragments (10.0–2.0 mm) and sparse sub-angular grey limestone fragments (5.0–2.0 mm). Abundant sub-rounded to rounded translucent/opaque quartz (1 mm>), a scatter of well-rounded quartz (2.0–1.0 mm), limonite (2.5–1.0 mm) and feldspar (1 mm), suggestive of weathered sands. Possibly derived from the lower Jurassic and Cretaceous geology of the East Devon border.

Uncertain: this fabric is reduced throughout, dark brown, poorly sorted and soft-fired with a soapy texture; inclusions make up only 5% of the smooth clay matrix. The abundant angular translucent quartz (2.0 mm) and rock fragments (1.0 mm) make a definitive provenance problematic.

Petrographic Microscopic Analysis
All thin-sections were examined under a polarizing microscope: detailed descriptions are within the site archive.

Vein Quartz (sherd 1: Hayes Farm Quarry pit 1134; sherd 2: Project Dixie Ring Ditch A): thin-sections of sherds 1 and 2 contain the characteristically abundant angular to sub-angular vein quartz. However, they differ in their clay matrix and associated minerals. Sherd 1 has equal quantities of angular vein quartz (2.0–0.5 mm) and well-rounded ferrous opaque grains (0.5–0.2 mm), suggesting a poor quality river clay. Sherd 2 has common pieces of sub-angular vein quartz (3.5–0.4 mm), well-rounded Limonite with sparse sub-angular plagioclase feldspar (0.1 mm) and rare altered feldspar (1 mm). Rare well-rounded quartz grains (0.3 mm) and muscovite suggest a better quality clay. The clay source for sherds 1 and 2 is Clyst Valley alluvium.

The difference in the source of the base clay prior to the addition of crushed vein quartz could be interpreted either as more experienced potters at Project Dixie than Hayes Farm Quarry, or that production was dictated by the least effort required in sourcing clay and necessitated the addition of vein quartz to improve it. The latter is most likely, suggesting the addition of vein quartz was to improve its technical properties which may also have offered an aesthetic quality. Carboniferous vein quartz is commonly found throughout Devon.

Volcanic Fabrics (sherd 3: Hayes Farm Quarry posthole 1077; sherd 4: Hayes Farm Quarry Ditch CC): this fabric (combining EV1 and EV2). Volcanic rock fragments in sherds 3

and 4 confirm their relatively local production. Petrographic analysis of sherd 4 identified abundant sub-angular to sub-rounded volcanic rock fragments (4.0–0.5 mm) with common quartz grains (0.7 mm>) abundant in the groundmass, comparable with Peacock's group 6 Volcanic fabric (1969, 51). Sherd 3 differs with the presence of well-rounded common sandstone inclusions (0.5 mm) and a scatter of well-rounded feldspar and smaller quartz grains (0.2 mm>) abundant in the groundmass, but is most comparable to Peacock's group 5 fabric (1969, 50). Both groups are firmly established as deriving from the Permian geology of the Exeter Area.

Fine Quartz Sand (sherd 5: Project Dixie Ring Ditch B): this fabric makes up 4% of the Project Dixie assemblage and does not appear at Hayes Farm Quarry. The fine quartz sand fabric is comparable to the sandy fabric Q10 identified by Williams at Blackhorse (1999, 419). It has a hard, moderately sorted fine sandy texture in a reduced fabric, characterised by its shimmering quartz grains and occasional mudstone pieces. In thin-section the majority of the non-plastic inclusions are common rounded quartz grains (1.0 mm>), sandstone (2.5 mm>), siltstone pieces and muscovite mica. This fabric derives from the local Permian formations which have produced a fine potting clay.

Limonitic (sherd 6: Dixie Ring Ditch B): this fabric makes up 21% of the Project Dixie assemblage and does not appear at Hayes Farm Quarry. This fabric group combines 'with Limonite' and 'few inclusions' which on analysis proved to be the same fabric. It is buff/red to brown/black, with poorly sorted inclusions 10% of the fine clay and has a soapy feel. The abundant soft reddish-brown ferrous or Limonitic grains (3.5–1 mm) and abundant shimmering fine quartz make this a very distinctive fabric. In thin-section abundant fine angular quartz (0.2–0.1 mm) dominates over larger (2.3 mm>) common well-rounded limonitic grains. The scatter of well-rounded vein quartz grains (1.0 mm) and sandstone (0.6 mm) suggests a typical locally derived Permian clay. The size and quantity of limonitic grains suggests a deep clay source from the riverine alluvial deposits of the Clyst Valley, as indicated by the gleyed brown warp soils of the area (Clayden 1971, 40).

Dawlish Sandy (sherds 8 and 9); nine clay objects: Dawlish Sandy is a soft, oxidised, dark red, sorted fabric with a fine sandy texture. Non-plastic inclusions make up 50% of the matrix and are dominated by abundant well-rounded translucent quartz and sandstone pieces, with white flecks of feldspar. In thin-section the size of the abundant well-rounded quartz grains (0.2–0.1 mm) supports an aeolian sand, derived from the larger sandstone pieces (0.8–0.2 mm).

Dawlish Silty (sherds 10 and 11); seven clay objects: Dawlish Silty is also a soft, oxidised fabric, with some reduced patches, and has a soft, powdery/soapy texture with fewer non-plastic inclusions (25% of the matrix). The common rounded vein quartz grains, white feldspar flecks and dark ferrous piece make it visually distinct. In thin-section the common sub to well-rounded vein quartz grains (0.2–0.1 mm) and a scatter of well-rounded Limonite (0.5–0.2 mm) overwhelm the rare, larger rounded sandstone/siltstone pieces (0.7 mm). Once again the size and rounding of the inclusions suggests an aeolian-derived clay source.

THE WORKED FLINT AND CHERT
By Jacky Sommerville

In total, 398 worked and burnt lithic pieces were recovered. Of these, 44 (11%) were burnt, eight of which were otherwise unmodified (Table 3). The majority of the assemblage (241 pieces; 61%) was hand-collected from archaeological deposits with a further 76 pieces (19%) from soil samples and the remaining portion unstratified. On the whole the assemblage utilised good quality mid to dark grey flint: 69% (261 pieces) featured coarser inclusions. Where it remains, the cortex on most pieces is relatively thick and coarse,