Early medieval enclosure at Killickaweeny, Co. Kildare

Fintan Walsh and **John Harrison** describe another interesting excavation revealed by a new section of the M4 motorway

Archaeological excavations in advance of motorway developments continue to reveal interesting and very significant sites in the most unlikely places. One example is the identification of a large, high-status early medieval enclosure, recently excavated in advance of the proposed M4 Kinnegad–Enfield–Kilcock motorway. The site was discovered in the townland of Killickaweeny, approximately 4km west of Kilcock, Co. Kildare. Excavation work was carried out by Irish Archaeological Consultancy on behalf of Westmeath County Council, and was funded by the National Roads Authority.

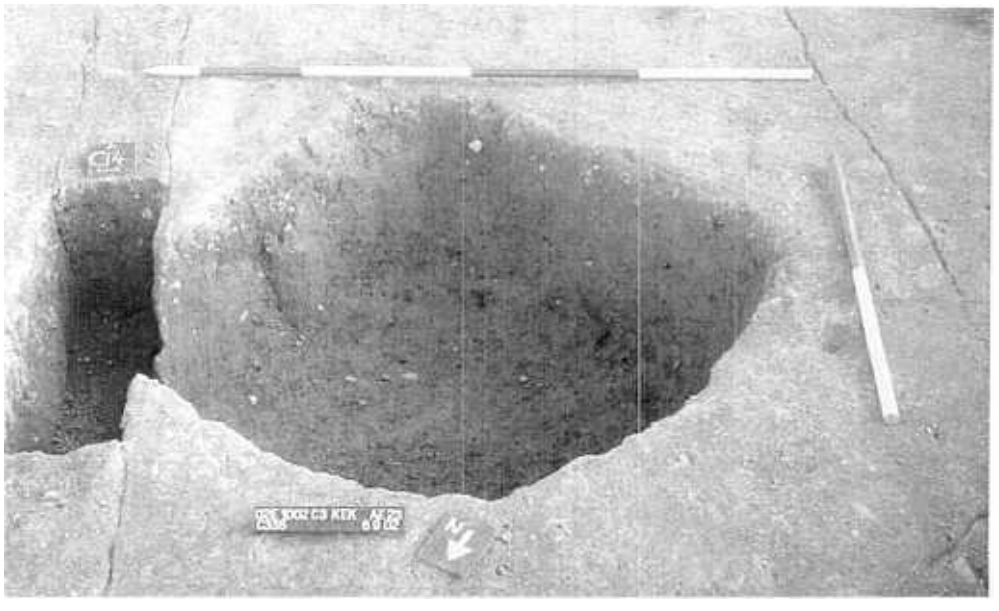
Above: **Aerial view of the site from the north-west (photo: Rupert Flood).**

The townland name Killickaweeny incorporates the Gaelic *cill*, a place-name element often indicative of a church, monastic settlement or foundation. Kilcock itself takes its name from the sixth-century St Coca, who founded a church beside the River Rye. There was a holy well dedicated to St Coca in Kilcock, and her feast is now commemorated on 6 June.

The site was identified through an aerial photography survey along the proposed motorway corridor in May 2001. It was interpreted in the EIS as a crescent-shaped feature approximately 18m in length, along with removed field boundaries. A geophysical survey of the site undertaken by GeoArc Ltd suggested the presence of an enclosure, and archaeological testing undertaken by Shane Delaney of IAC confirmed the presence of extensive archaeological features. Animal bone, metal artefacts, metallurgical waste and a blue glass bead were recovered from test-sections excavated through these features.

As a result a full excavation of the site was initiated in July 2002, with a staff of 25–35 archaeologists. It was clear from the initial topsoil-stripping that this site would surpass all expectations. Extensive archaeological deposits were uncovered throughout the main body of the site and consisted of structures, refuse-pits and metal-working areas. These features were enclosed by a large 'heart-shaped' ditched enclosure.

Many aspects of the site are unusual, not least its location within the landscape—on a relatively sharp incline on a north-facing slope. The natural ridge on which it was situated overlooks a lower-lying area to the north, which was originally considered to be a former wetland area. Later investigation of this idea, with the kind help of Dr Ingelise Stuijts and Dr Christina Fredengren of the Discovery Programme, conclusively ruled out this theory.



The enclosing ditch

The 'heart-shaped' enclosure was of significant size, with an approximate diameter of 60–70m. No trace of a bank was noted, although this is to be expected as the whole site was extensively cultivated throughout the ages. This was evident in the many cultivation furrows regularly cutting natural subsoil across the entire site. No entrance was identified, although one may have existed in the south-east corner where an existing field boundary has disturbed the section of the enclosure at this point. The ditch was fairly regular throughout its length. It was on average 2.5m wide and 1.3m deep, generally U-shaped in profile but V-shaped in its southern sections. In most places the ditch fills suggest that it filled naturally with seasonal deposits. Only in the northernmost section was there evidence of a recut. This was probably a result of its being topographically the lowest part of the enclosure ditch, where all wash material from the rest of the ditch would accumulate. The northern sections also contained most of the ditch's artefactual evidence. Large amounts of metallurgical waste, some antler picks, animal bone (some butchered) and abundant fragments of mollusc shell were recovered from these sections. Two earlier ditches were excavated in the eastern part of the site. The innermost may have been an earlier manifestation of the main ditch which was subsequently abandoned in favour of the larger enclosure. The outer L-shaped ditch may have defined an enclosed area, perhaps for livestock.

The main enclosure shares many characteristics with phases of the early medieval enclosure excavated by Linda Clarke of ACS in Johnstown, Co. Meath (*Archaeology Ireland* 16, No. 4), approximately 7km due west of Killickaweeny. The sites were similar in size and shape, and produced early medieval finds of similar typology. It is possible that they were contemporary. If this is so, then it is not improbable that there was some kind of routeway between the two for trade purposes. The site at Killickaweeny is adjacent to a nineteenth-century coach road

Top left: **Aerial view of the site from the north-west** (photo: Rupert Flood).

Left: **Pit c335 beside Structure C** (photo: Aaron Johnston).

(possibly the old main Dublin–Galway road), and just south of the existing N4. Could this location have been chosen because of the presence of an ancient east–west road (trade route)? Interestingly, there are a number of standing stones in the general area which seem to be aligned east–west.

Internal features

The internal area of the site produced evidence for a number of structures with associated pits and gullies. Central to this was a large subrectangular house structure (Structure B) measuring 8.5m east–west by 6m north–south. It was defined by an irregular slot-trench with a maximum width of 0.5m and a maximum depth of 0.29m. Finds from the fills of the slot include butchered bone and a whetstone. A small pit which cut the north-west corner of this structure contained two blue glass beads. An entrance was identified at the south-east corner and may have been protected from northern winds by a wind-break or annex, defined by a curvilinear slot-trench running east–west from the entrance feature. Three regularly spaced stone-packed post-holes located just off-centre of the structure may have acted as the basis for roof supports, while a hearth was represented by a shallow area of burnt clay, again just off-centre.

A smaller subrectangular structure (Structure C) was identified immediately north-west of this. Again the entrance was located at the south-east corner, and no internal features were present. It measured roughly 5m east–west by 5m north–south.

A third structure (Structure A) approximately 15m to the south-east was defined by a collection of pits and stone-packed post-holes surrounding a hearth feature. The hearth was associated with a number of stake-holes which may have acted as the basis for a series of spits over the fire.

Each structure was associated with a number of unusual refuse-pits, some of which were quite large. The largest measured 2.5m by 1.6m by 1.1m deep. What is unusual about these pits is that they were mostly perfectly square or rectangular in plan. Each contained large amounts of animal bone and a range of artefacts, including decorated glass beads, bone pins, iron ring-pins, knife blades and spindle-whorls. Three square-ended linear gullies also fall into this category; each contained similar fills and a similar stratigraphic sequence. The function of these features is unclear at this time. A decorated bone comb was recovered from one of them.

Above: **A selection of finds from the site, including bone pins, spindle-whorls, iron ring-pins and iron objects, glass beads and a decorated bone comb** (photo: Fintan Walsh).

The most impressive feature on the site was a large pit or cistern, 2.2m in diameter and 1.8m deep, close to Structures B and C. Even in the driest conditions it was permanently full of water. If the water-table was at all similar to that of today, this pit would have provided a ready supply of water for domestic use. Large amounts of slag, animal bone and organic remains were recovered from this feature, in addition to a beautiful rotary grindstone, a photo of which can be seen in the previous issue (*Archaeology Ireland* **16**, No. 4, p. 27). Most fills from the majority of the features in the enclosure were dry-sieved on site for small finds. This proved to be very beneficial as delicate small animal bones and fragments of metal artefacts were recovered.

On-site consultation with John Bradley (NUI Maynooth), specifically in relation to the finds, leads us to believe that the site dated from the ninth–tenth century.

Metal-working

A number of metal-working areas were identified in the form of possible bowl furnaces and curvilinear gullies containing metallurgical waste. At the eastern side of the site a possible shaft furnace was tentatively identified. It was decided to invite Dr Effie Photos Jones, a specialist in metallurgical waste analysis from Scottish Analytical Services, on site for a consultation. She

Above: **Tuyère (photo: Fintan Walsh).**

helped to devise a research design which divided the site into sectors where specific questions could be posed and samples taken to answer these questions scientifically.

As most of the artefacts recovered were iron-based it was posited that the raw material for their manufacture could have come from the nearby bog in the form of bog iron. Dr Jones believed that this was indeed a possibility, as it appeared that we had recovered unprocessed raw bog iron from some features, although only laboratory analysis will verify this. It is also possible that some of the artefacts found were manufactured on site. The recovery of a possible mould/crucible, furnace bases and a near-perfect tuyère from the site helps to strengthen this argument.

Environmental strategy and sampling

Even as the site was being stripped a sampling strategy was being devised. As this developed, Penny Johnson from MGL Environmental Services was invited to the excavation to advise and to endorse the strategy. Those features exhibiting large amounts of carbonised material were the primary targets. These were sampled for later wet-sieving to recover carbonised plant remains and animal macro-fossils. Those features containing waterlogged or anoxic fills were sampled for later lab analysis and it is hoped that the samples will yield insect remains which will give us a picture of the vegetation at the time the site was in use. From the enclosing ditch large quantities of mollusc shells were recovered; these will be analysed and will also contribute to the local vegetation data. Samples were also taken from the ditch for ostrocod analysis. From this we hope to gain an insight into the degree of water purity at the time the ditch was open and to learn, for example, whether faecal matter or waste was being thrown into it.

All these data, combined with the species identification of the charcoal recovered from the furnace features and charcoal-filled pits, should help to build a comprehensive picture of the environment that existed when the site was inhabited.

Although post-excavation work is in its early stages, it is quite clear that the site at Killickaweeny will prove to be a very valuable addition to our knowledge of early medieval settlement sites. It also offers many avenues of research, especially in terms of the artefactual/environmental information and the overall archaeological landscape of this area. ■

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