This paper provides a preliminary glimpse of a vibrant community who lived and worked in a ringfort in the townland of Ballyvass, Co. Kildare, during the early medieval period. The site at Ballyvass, 2 km north-west of Castledermot, was on a gravel ridge with a southern aspect in an area known as Burrow Hill (Illus. 1). It was surrounded by agricultural land, with a gravel extraction quarry to the north-west. In May 2007 archaeological excavation of this previously unidentified site was undertaken by the author for Headland Archaeology Ltd, on behalf of Kildare County Council and the NRA, as part of archaeological works prior to the construction of the N9/N10 Kilcullen–Waterford Scheme: Kilcullen to Carlow.1

The elevation of the site offered a panoramic view, extending over several kilometres. Monuments within 1 km of the site included a tumulus (Record of Monuments and Places no. KD038-031), a ringfort (KD038-036), a church site (KD038-037) and a rectangular enclosure (KD038-041); all could be seen from the interior of the enclosure. Another known site, classified as a miscellaneous site (KD038-062), was located directly south-east of the Ballyvass ringfort but was not visible on the ground during the excavation.
Ringfort

Excavation revealed approximately 75% of a ditched enclosure located in the north-east corner of the excavation area (Illus. 2). The ditch had a generally V-shaped profile and was on average 3.5 m wide and 2 m deep, with an external diameter of 38 m. Cattle bone from a basal deposit within the ditch returned a radiocarbon date of AD 660–810 (Beta-243988; see Appendix 1 for details of radiocarbon dating results). This date would place the site in the early medieval period, and the enclosure can be classified as a ringfort, of which there are approximately 45,000 known in Ireland (Stout 1997, 53). Two bone pins were recovered from the middle fills of the ditch and sherds of late medieval pottery were identified in the uppermost fills.

No archaeological features were identified in the eastern and north-eastern portions of the enclosure’s interior. To the west and south-west several post-holes and pits were located. A medieval swivel knife and a corroded iron fragment were recovered from an oval pit in this area. The largest and most impressive feature within the interior was a large, rectangular, earth-cut trench that measured 11 m long by 3.5 m wide. It ran in a north-west-south-east direction and was located to the south of the enclosure. The eastern and western sides of this trench were vertical and the base was located at a depth of 3.5 m. A terminal at the northern end was slightly rounded, with three plank-slots that were 0.5 m in depth. The exact length of the feature could not be ascertained as it continued into the adjacent field, outside the boundary of the proposed road (Illus. 3).

At least four phases of activity were identified within this feature. The primary function of the trench is uncertain. It is possible that the initial intention was to create a souterrain,
or underground passage, to provide a refuge or a storage area. A number of earth-cut, timber-built souterrains are known (Clinton 2001) and this appears to be the most likely interpretation of the trench. Although there was no timber remaining, the vertical walls would have been secured by planks. Evidence of this was provided by thin lines of vertical discolouration on a south-facing section wall. There was no evidence for the use of stone within the souterrain, although this cannot be entirely ruled out as it was not uncommon for building materials to be removed and reused.

Cereal-drying kiln

The secondary use of the souterrain provided a great deal of evidence for the way cereal-processing was conducted in early medieval Ireland. At the northern end of the passage were the burnt remains of a timber-built cereal-drying kiln. The structure was built on a sloping ledge or platform near the base (Illus. 4) and it is possible that the original passage was extended slightly at the northern end to create a platform for the kiln, but at present this hypothesis is unproven. The kiln structure was square in plan and may have been a single- or multi-storey structure, with a flue emerging at a lower level. This form of kiln may be of the tobacco-pipe type (Monk & Kelleher 2005). These kiln types were often constructed against ditches and banks to provide shelter from the elements (ibid.); therefore, a kiln built against the side of an existing trench represents a logical reuse of an abandoned or redundant feature. The importance of drying kilns to the local economy during the early
medieval period cannot be underestimated. Until their introduction, drying crops in our
damp, wet climate was extremely difficult. A season’s harvest could rot if the crop was left
in damp conditions for too long, and drying cereal grains as quickly as possible was
therefore an important part of crop-processing, unless the crop was to be malted prior to
beer production. In the latter case the grain was soaked for a few days and then laid out to
dry or placed in a kiln. (For a fuller discussion of cereal-drying kilns see Long, this volume.)

The majority of drying kilns excavated by archaeologists in Ireland are of the keyhole
shape, L-shape and figure-of-eight or dumb-bell shape (Monk & Kelleher 2005, 80; Long,
this volume). Many are small, shallow features, possibly used once to dry out a single
harvest. The drying process at the kiln at Ballyvass would have started at the flue mouth,
where a fire was lit. The heat from the fire would travel through a flue funnel and enter into
the base of the drying chamber, where the heat would rise into an overhead drying
platform or rack. In recent times damp cereals would often have been placed on a bed of
straw or linen and spread on a rack or hurdle (Evans 1957, 122–3). This was done carefully
to prevent the loss of grain and encourage even drying. Traces of charred linen textile and
straw were mixed with the grain in the Ballyvass kiln (Illus. 5). Access to the drying
chamber was possibly through a removable roof, hatch or small door. Evidence of a possible
roof was indicated by a small clump of charred thatching in the upper contents of the burnt
material. The drying process would require constant supervision by an experienced kiln
operator. If the fire was left to burn unsupervised the kiln could easily catch fire, as might
have happened with this particular kiln at Ballyvass.

A further remarkable discovery was located in part of the flue funnel. This was a shallow,
stone-lined pit, with the remains of an adolescent cat curled up at the base. The domestic

Illus. 4—Charred remains of the kiln structure during excavation (Headland Archaeology Ltd).
Cat was considered economically important to cereal food production in early medieval and medieval Ireland. Cats are recorded in several law-texts of the period and were considered essential to the daily routine of a working kiln or household. Their sole purpose was to keep the grain store or kiln free of mice. The cat of the kiln was said to have the name cruibne or 'little paws', and it was written that a cat was worth three cows if it was able to purr and to guard the barn, mill and cereal-drying kiln against mice (Kelly 2000, 243).

Preliminary analysis of cereal grain recovered from the kiln at Ballyvass identified barley (K Stewart, pers. comm.). In early medieval and medieval Ireland, barley was a commonly grown crop, with six-row barley more abundant than the two- or four-row varieties (Monk 1991, 317). A text produced in the eighth century listed the seven most important cereal grains. The ultimate grain and top of the list was bread wheat, which was reserved for the higher-ranking person. Fourth on the list was two-row barley, with six-row barley trailing at fifth place. Bottom of the list was oat cereal, which was considered suitable for the lower-ranking field labourer (Kelly 2000, 226).

Full analysis of the barley grain recovered from the kiln at Ballyvass has yet to be carried out, and the grain may have been grown for bread-making, animal feed or beer-making. A popular use for barley grain during the medieval period was as the main ingredient for beer production. Beer-drinking crossed all social ranks, and beer was consumed by the whole community at feasts and festivals. It was often given to the sick and young for its nutritional properties and was drunk quite often in the absence of clean water. The first documentary sources concerning European drinking habits originate from observations by Roman historians on Germanic tribes around the first century AD.
‘... to pass the entire day and night drinking disgraces no one. Their quarrels, as might be expected with intoxicated people, are seldom fought out with mere abuse, but commonly with wounds and bloodshed. Yet, it is at their feasts that they generally consult on the reconciliation of enemies, on matrimonial alliances, on their choice of chiefs, finally even on peace and war, for they think that at no other time is the mind more open to simplicity of purpose or more warmed to noble aspirations’ (Tacitus, Germania, XXII; translation from Church & Brodribb 1877).

The social customs of beer-drinking were also well commented on in early Irish sources: a law-text on status stipulated that a lord or king was expected not only to provide beer but also to drink it with his household on Sunday; if beer was not provided he was not considered a fair and generous person (Kelly 2000, 332). The container in which the beer was served was also well considered: alcohol served in a horn was thought to be a mark of status (Ward 2006, 5).

As mentioned above, four phases of activity were identified within the souterrain passage. The third phase occurred directly after the destruction of the kiln. This involved a
process of natural silting, south of the charred kiln structure, and would have taken place over a short period of time.

The fourth and final phase involved the deposition of organic refuse, and this served to raise the open trench to ground level. A number of smaller pits truncated both the refuse layer and the layer of silting beneath. These pits, mostly located to the south of the passage, were filled with further refuse material (Illus. 6). Many artefacts were recovered from the upper phase, including worked and polished bone, bone pins, corroded fragments of metal, a metal arrowhead and the head of a brooch-pin.

**Drinking-horn terminal**

The most significant artefact from the ringfort at Ballyvass was recovered from the organic-rich fill at the base of one of the refuse pits. The artefact is a copper-alloy zoomorphic, or animal-like, drinking-horn terminal mount (Illus. 7). A radiocarbon date of AD 770–980 (Beta-243989) was obtained from charred barley grain surrounding the object.

Dr Carol Neuman de Vegvar of Ohio Wesleyan University is currently compiling a catalogue of multi-period drinking-horn terminal mounts from Ireland and Europe. To date, 14 terminal mounts have been found in Ireland (C Neuman deVegbar, pers. comm.). The mount would have been attached to the tapered point of a relatively small animal horn and a rivet would have held it securely in place. Resin is often found inside the mount and was used as a glue to secure the metal to the horn (ibid.). The Ballyvass mount would have been attached to a short horn similar to that of a cow (Illus. 8). Many examples of drinking-horns from Europe are found with a metal mount attached to the rim and point, and occasionally a smaller metal mount is located midway down the horn. This was used in conjunction with a cord or chain from which to hang the horn when not in use (ibid.).

No evidence for horn mount fragments was identified among the other artefacts recovered in similar deposits on the Ballyvass site.

The most famous Irish drinking-horn is the Kavanagh ‘Charter’ Horn, a ceremonial drinking-horn of elephant ivory dating from the early 12th century, with brass mountings added in the 15th century. It was owned by the MacMorrough Kavanagh kings of Leinster for centuries, and at present resides in the National Museum of Ireland (Ó Floinn 1991).

The customs surrounding the drinking-horn in Ireland are mostly speculative, fragmented stories surviving through folklore and texts, including stories like ‘The three drinking horns of Cormac úa Cuinn’ (Gwynn 1905). Images of feasting and of drinking from a horn are found in works of art like the Bayeaux Tapestry in France or the stone and metal sculptures of the drinking-horn bearers of the so-called ‘valkyrie amulets’ from Scandinavia (Ward 2006, 9), where drinking-horn customs are also well documented. One common ceremony, known as *simbel*, involved the formal presentation of a horn or cup to the king or lord of the hall by the highest-ranking woman present. This token would confirm the king’s dominance and rulership among the gathering. The horn would then be passed round amongst the rest of the participants in order of rank. The sharing of the cup helped to establish a bond between all ranking men, forming a tribal band of brothers. The one holding the horn or cup would make a toast, an oath or a boast, and on occasion might sing a song or recite a poem before passing the cup along.
Illus. 7 — The Ballyvass drinking-horn terminal mount (John Sunderland).

Illus. 8 (below) — Artistic impression of a drinking-horn, illustrating where the Ballyvass terminal mount was attached to the horn (Sara Nylund).
The zoomorphic image on the Ballyvass terminal mount represents a simplistic recognisable image of a dog or hound (Illus. 9). Animal imagery was commonly used in northern European art of the early medieval period (Edwards 1990, 133). Often the image represented a bird, ox or mythical beast. It is not surprising that an image of a dog was used on a terminal mount to decorate an Irish drinking-horn. Irish common laws of the Early Christian period show that the dog was revered as an important member of a household and performed specific tasks like guarding, hunting or herding. The most revered dog of all was the guard dog, often referred to as a ‘slaughter hound’ or ‘a dog of four doors’. The owners of these fierce dogs were considered to be the élite among society. The four doors are a reference to the master’s house, the sheepfold and the byres of the calves and oxen. Anyone who killed such a guard dog was to give 10 cows to the owner and replace the dead animal with a dog of the same breed (Kelly 2000, 114–16). The superior breeding and training afforded to Irish dogs were noted on the Continent, where a story praises the skill of an Irish dog that was able to divide a mixed herd of cattle into two groups on the basis of their markings. The dog, Vigi, had been given by its Irish owner to a Norse king (Monsen 1932, 139).

**Conclusion**

The excavations carried out in advance of this new section of the N9/N10 resulted in a wealth of information regarding the everyday existence of people living and working in the area during the early medieval period. The presence of a cereal-drying kiln indicates that cereal-processing was taking place at the Ballyvass ringfort. Barley was the grain identified within the kiln and its uses are documented in the law-texts and annals of the time.
Although beer production may not have been the only use made of the dried barley grain, the chances are that some of it would have been fermented to drink on special occasions like feasts or festivals. This theory is also supported by the recovery of the drinking-horn terminal mount, discarded or lost among the refuse from a nearby homestead.

We can only speculate about the importance placed on the drinking-horn and the customs involved at such gatherings. Documentary sources from the Continent enlighten us as to the attitude to drink and the customs involved. It is not unreasonable to suggest that similar customs may have been practised on some scale on this island. The image of the hound used on the drinking-horn terminal mount supports the documentary evidence for dogs having played a significant role in Irish society at the time, such that it warranted being immortalised on an object of great social importance. The evidence from this excavation shows that cats and dogs made valued contributions to the early medieval community of Ballyvass.

The archaeological evidence indicates that a vibrant agricultural community once thrived in the area. There is no evidence to suggest that a farmstead existed within the excavated part of the ringfort at Ballyvass, although it is possible that additional evidence may exist in the unexcavated portion or at the ringfort (KD038-036) located 350 m to the east. What we can be certain of is that crop-processing, and possibly the activities deriving from it, was familiar to the people living and working in the immediate area of Ballyvass.

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**Note**

1. NGR 276870, 187816; height 96–8 m O D; excavation reg. no. E2996; ministerial direction no. A021.