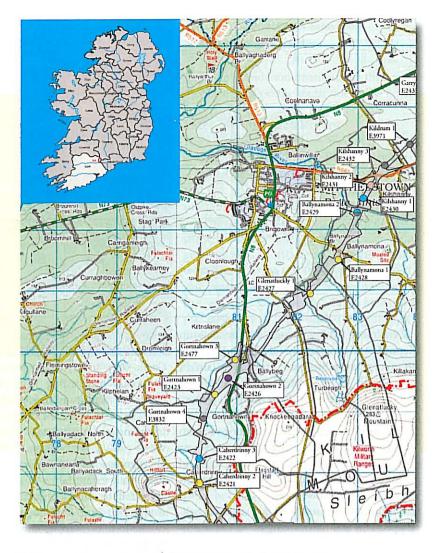
Life and death in the later Neolithic and early Bronze Age at Ballynacarriga, Co. Cork



**John Tierney** of Eachtra Archaeological Projects reports on the discovery of significant prehistoric settlement and funerary evidence in north Cork.



he corrugated landscape of Cork and east Kerry is bounded on the north by the roughly 150km-long Blackwater valley. Between the Nagle and the Ballyhoura hills this valley is almost 15km wide but it narrows to less than 3km at the Kilworth hills, north of Fermoy, Co. Cork. Chief among the tributaries of the Blackwater are the Allow, the Awbeg and the Funshion, and these big rivers are obvious landscape markers, contenders for prehistoric territory centres, boundaries or routeways. In the course of a series of road projects in recent years we have begun to realise that smaller streams and rivulets have a longevity that has influenced prehistoric settlement. In tandem with large-scale road projects, landscape archaeology has come to the fore for many Irish archaeologists. We have been able to sample the landscape using the roads as belt transects-extending the relevance of our

Opposite page, top: Site location.

Below: Site overview, looking south; late Right: Neolithic enclosure in foreground and burials in background.

Right: 3D site landscape setting and adjacent Neolithic sites, looking north.

Below: Site plan.

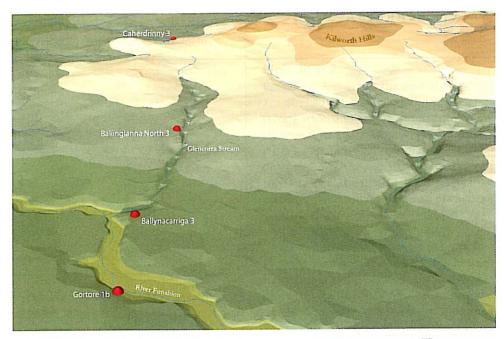
findings beyond the limits of the hard shoulder. This article outlines one of a series of Neolithic sites excavated on the N8 Fermoy to Mitchelstown road project that allow us to consider themes of territoriality and sustainability in the prehistoric period.

The route of the new N8 between Fermoy and Mitchelstown was chosen deliberately to avoid the known archaeological sites in the Kilworth hills. Nonetheless, in a 6km area stretching from the banks of the Funshion in the south, through the confluence of the Funshion and the Glencorra stream, along the upper glen slopes and out into the northern side of the Kilworth hills we found evidence of four Neolithic settlement Ballynacarriga, clusters, at Gortore, Ballinglanna and Caherdrinny, west of the village of Kilworth.

The only enclosed Neolithic settlement in that group was located overlooking the confluence of the Glencorra and the Funshion at Ballynacarriga townland. As its name implies, the townland is, in parts, distinguished by a shallow topsoil over limestone bedrock, almost karstic in nature and favouring ash trees as its mature tree cover.

## Results of excavation

Excavation at Ballynacarriga 3 revealed a multi-period site with several phases of activity, including a large, rectilinear enclosure that surrounded a series of pits and post-holes where the remains of seven possible structures were found. While pottery that dated from the middle Neolithic and the Beaker period was found, the assemblage was dominated by late Neolithic pottery. Outside the enclosure two ring-ditches and associated cists and pit burials were found. Early Bronze Age pottery was associated with the ring-ditches and the burials.



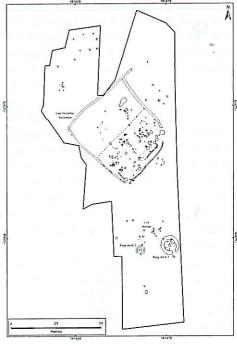
### The Neolithic enclosure

The rectilinear enclosure at Ballynacarriga 3 comprised four ditches; no extant bank was recorded. The ditches were all linear with concave bases and ranged between 19.3m and 43m in length, between 0.55m and 0.9m in width and between 0.29m and 0.63m in depth. They were shallow and narrow but, with an accompanying earthen bank topped by fencing or hedging, could have formed a boundary 1–2m in width and height, thus clearly demarcating and soundly enclosing the settlement. Two gaps in the enclosure were present in the southern corners, perhaps representing a main south-eastern entrance and a smaller south-western entrance.

#### Internal arrangements

Within the enclosure, habitation features were tightly packed into the southern section, while the northern section may have been delimited by a fence. The southern section of the site contained at least six structures of varying morphology and one central, open area

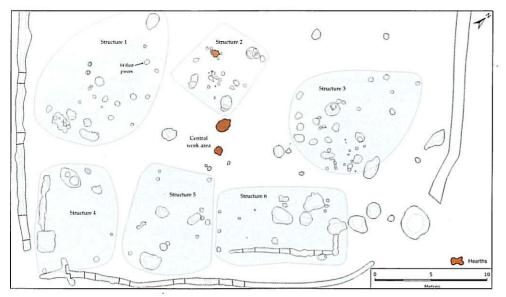
Structure 1 comprised a double arc of post-holes (ten each in the inner and outer rings), 0.16–0.45m in length, 0.14–0.4m in width and 0.09–0.32m in depth. One pit contained fourteen flint pieces, including six scrapers, which were probably used in hideprocessing. The presence of relatively large quantities of flint and some broken pottery may indicate that the area had been covered by a thick carpet of occupation material, surviving only where it became deposited within the negative features that had been dug into the subsoil.

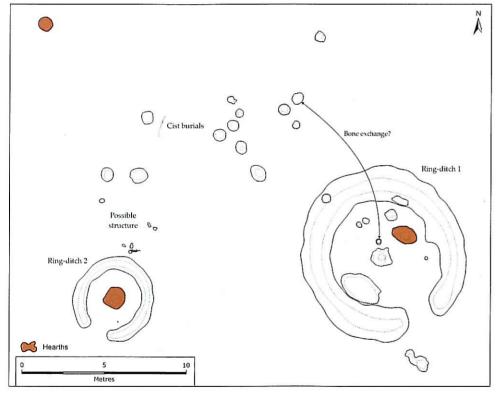


These post-holes originally held upright posts, probably of a small, insubstantial structure that was U-shaped in plan. Alternatively, it is possible that it was a subcircular structure and that some post-holes at the north-west of the building did not survive. It is more likely, however, that it had an open side at the north-west, where there were no post-holes.

Structure 2 was a subrectangular building, approximately 3.8m long by 2.2m wide, formed by seven possible post-holes. These measured on average 0.47m long, 0.36m wide and 0.28m deep, varying in shape between oval, subcircular and subrectangular. The largest of the possible post-holes represented the corner posts of the building.

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Structure 3 consisted of an arc of fourteen possible post-holes forming a possible subcircular/suboval structure that was located approximately 6m to the east of structure 2.

A fourth possible structure, structure 4, comprised a footing trench and six possible post-holes that formed a rectangular shape in plan.

An arc of seven possible post-holes formed a small, semicircular building, structure 5, to the east of structure 4. Pottery from the fills of three post-holes was identified as late Neolithic Grooved Ware. One pot had a perforation just below the rim, which seems to indicate that it was suspended. This modification, along with a build-up of carbonised residue on the interior surface, indicates construction, usage, modification and further usage.

Another possible rectangular structure, structure 6, comprised six possible postholes, pits and two slot-trenches. This structure was aligned south-west to northeast, to the east of structure 5. Seven sherds of pottery were recovered from one of the post-holes and have been identified as the remains of three separate vessels.

Left: Late Neolithic settlement, habitation area.

Below: Early Bronze Age ringditches and cist-like burials.

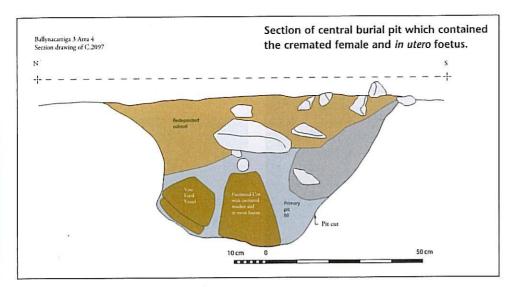
#### Central work area

A number of features were located within the centre of the habitation area, including two substantial hearths, both defined by burnt subsoil and containing flint flakes. One of the hearths contained sherds of Grooved Ware pottery. An adjacent pit also contained Grooved Ware. As all of the structures are situated around the central hearths, it seems likely that this activity area was in use throughout the lifespan of the settlement.

The northern half of the enclosure contained fewer archaeological remains but included what could be the remains of a fence separating it from the southern half. One pit in this area did contain Grooved Ware, but the function of the northern half is uncertain: if fenced, it could have held livestock, or vegetable plots, or could have served as an area of communal activity.

A group of four large pits in the south-east corner of the enclosure contained deposits of heat-shattered stone but their date has not yet been determined. Their presence at the main enclosure entrance could indicate that they represent later activity, unrelated to the habitation. A number of features also contained middle Neolithic pottery sherds but these appear to have been redeposited; for example, the basal fill of a pit in structure 4 contained late Neolithic pottery, while middle Neolithic pottery was present in the upper fills. This can be explained by the fact that prehistoric settlements would have had thick, midden-like occupation layers that would generally degrade and erode, becoming archaeologically invisible except where material pooled in hollows or pits.

While the southern half of the enclosure contained most of the archaeological remains, other feature groups were found to the south, east and north-west, beyond the boundary ditches, and appear to represent a range of prehistoric activity. The most interesting was a group of eight possible post-holes that may



represent a late Neolithic/early Bronze Age structure just outside the line of the southern enclosure ditch.

#### **Bronze Age**

An area of early Bronze Age burial activity was identified to the south of the late Neolithic settlement. The burial site comprised four feature groups, including two penannular ring-ditches, one (ring-ditch 1) larger than the other, a possible structure or tripod north of the smaller ring-ditch (ring-ditch 2) and a cluster of cist-like burials immediately to the north of the ring-ditches.

### Ring-ditch 1

Ring-ditch 1 was defined by a large penannular ditch with a circumference of 25.5m. The ditch was 1.81m wide and 0.84m deep and had an internal diameter of c. 6m. There was an opening in the south-east, in contrast to the smaller ring-ditch, which had an entrance at the south-west. No extant mound was found. The ditch was filled with sandy silt that generally contained inclusions of stones and charcoal. It has been calculated that an average cremation pyre would need at least 120kg of fuel, and one of the ditch layers was so rich in charcoal that it would be easy to hypothesise that it represents some kind of cleaning out of pyre debris. One large internal pit had signs of in situ burning. Could the pyre have been set in this pit and cleared out into the ditch?

Nine internal pits were surrounded by the ditch of ring-ditch 1, and a further two pits were cut into the fills of the ring-ditch. The average dimensions of these eleven pits were 0.82m by 0.59m and 0.24m deep. They were all circular or oval in shape, with the exception of the smallest pit, which was square.

The main pit at the centre of the ring-ditch contained two decorated early Bronze Age ceramic vessels: a large Encrusted Urn and a small decorated Vase Food Vessel. Both pots appeared to be primary deposits, as no recuts were evident in the burial pit fills. The inverted urn was in a very friable condition and contained the cremated bones of a young adult female (20–29 years old) accompanied by the remains of a mid-term foetus. The foetus was probably cremated *in utero*; this is one of the few recorded prehistoric examples of cremated *in utero* foetal remains from western Europe, and the only known example in Ireland.

A second, large, pit was located to the north-east of the central cremation burial. It contained eight fills, the lower ones revealing evidence of burning *in situ* in the form of charcoal and red clay at the base. There was also evidence for *in situ* burning in another internal pit.

There was evidence that some of the pits had been reused over a long period of time. One pit just to the north of the central burial pit contained cremated human bone, identified as the remains of two young individuals. The first was one year old or younger, and the second was aged 4-7 years. Two individuals within the same age ranges were also identified from a cist-like pit found to the north, outside ring-ditch 1 (see below). The osteologist conducting the post-excavation analysis argues that the remains from both of these pits may represent the same two individuals, as there was no duplication of bone types for each age range. If this was the case, it suggests that the remains may originally have been interred within the pit inside the ring-ditch. This pit was recut and the bones selectively redeposited within a pit outside ring-ditch 1, 9.5m to the north-west of the internal pit.

## Ring-ditch 2

Ring-ditch 2, *c*. 9m to the west of ring-ditch 1, again had no extant mound. The ditch was 0.76m wide and 0.35m deep, with steep, concave sides and a concave to tapered base. It had four different fills but, unlike ring-ditch 1, none showed signs of burning or pyre rake-out. The ring-ditch had an internal diameter of 3.2m and an external diameter of 4.8m. The entrance was defined by a southwest-facing gap.

There was no evidence to indicate that this ring-ditch surrounded a burial, but there was a hearth and a solitary stake-hole at the centre of the monument. The hearth was subcircular with a flat base and measured 1.15m in length, 1.15m in width and 0.25m in depth. The absence of a burial within ring-ditch 2 suggests that it played a different role in the burial rites practised at this site. It is not implausible that the two ring-ditches and the cists are temporally and functionally related.

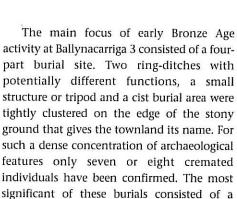
# Cist-like pits

A group of ten cist-like pits were situated approximately 5m to the north of the ring-ditches, ranging from simple earth-cut pits to stone-lined pits associated with some pottery sherds. They varied from rectilinear to circular and subcircular in shape and generally had concave or flat bases. They measured 0.49–1m in length, 0.37–0.9m in width and 0.18–0.62m in depth.

Eight of the cists were stone-lined. In most of these the stones were arranged in a more or less rectangular shape, with a flat stone at the base; in one cist, however, the stones were arranged in a subcircular fashion, and another cist was only partly lined. Only one of the cists had a capstone.

Three of the cists contained remnants of early Bronze Age pottery vessels, including the remains of Food Vessels in the Vase Tradition and an Encrusted Urn. Cremated bone was recovered from four of the cists, representing the remains of a total of seven individuals. One cist-like pit contained cremated bone on top of a large stone at its base. The bone survived as a neat pile, as if it had formerly been in an organic container of some sort. The cremated remains included two young individuals, possibly the same individuals as those exhumed from a pit within ring-ditch 1. The first was aged 3–7 years old and skull, long bones, ribs and





female in her mid- to late twenties and an in

The excavation director at Ballynacarriga 3

Left: Overview of early Bronze Age

Below: Late Neolithic enclosure ditch.

burials, looking south.



Acknowledgements

utero foetus.

was John Lehane, the senior archaeologist was John Tierney and the NRA project archaeologist was Ken Hanley. The excavations were funded by the NRA through Cork County Council. Post-excavation works are nearing completion and the postexcavation team includes John Tierney, Jacinta Kiely, Penny Johnston, Sara Camplese (finds), Maurizio Toscano (GIS and illustration), Enda O'Mahony and external specialists Ian Magee (human skeletal remains), Helen Roche and Eoin Grogan (pottery), Susannah Kelly (conservation), Farina Sternke (lithics), Tim Young (metallurgy) and John Sunderland (photography).

vertebrae were represented. The second individual was aged one year or younger and, once again, skull, long bones, ribs and vertebrae were represented. A single adult bone was also recovered from this deposit. The gender of these individuals could not be identified from the extant remains.

## Conclusions

Before the N8 Fermoy–Mitchelstown road project the clustering of archaeological sites in the Kilworth foothills and along the River Funshion was well known. Following the road project, we now know that there was also Mesolithic activity in the area, followed by intensive early Neolithic occupation overlooking the River Funshion and the Glencorra Stream and out into the north Cork lowlands, with three settlements found 3–6km apart.

Ballynacarriga 3 was then occupied in the middle or later Neolithic period, with an enclosure, spatially organised with habitation at the southern end, organised around a central work area, and less dense remains in the northern enclosure area,

which may have been fenced off from the habitations. Six or seven structures were excavated, most being houses, and at least one probably functioned as a food preparation area.

The later Neolithic settlement was followed by Beaker activity in the south of the enclosure. We are still in the process of deducing whether or not the settlement was still in use, or whether traces would have been evident to the Beaker period occupants.

#### Clarification

The last issue of *Archaeology Ireland* (Autumn 2009) included an article entitled 'Preservation by destruction'. This made reference to an excavation report entitled 'Bronze Age burial at Ballynacarriga 3', which appeared in Issue 3 of *Seanda* (the NRA archaeology magazine). Our article stated that '... the authors of the report, unfortunately including an osteoarchaeologist, were presumably present at the destruction and will no doubt stand over their decision to dismantle the pot'.

It has since been clarified by one of the *Seanda* report's authors, Ian Magee, that he was not an osteoarchaeologist at the time of the excavation of the Bronze Age burial at Ballynacarriga 3, that he was not present at the excavation and that he had absolutely nothing to do with any decision on the technique employed to excavate the pot.

We are happy to publish this clarification.