Bronze Age cemetery

On a summer’s day between the years 2000 BC and 1850 BC an adult cremation was placed in a vase urn and inserted in a pit in what we now call Carmanhall townland in south County Dublin. Of the graves found this was probably the earliest, and was followed by an adult, probably female, cremation in two vessels in a second pit and another adult cremation in a stone-lined pit. The site (40m by 15m) was one of many Bronze Age sites excavated during the course of works for the South-Eastern Motorway in 2002 conducted by Valerie J. Keeley Ltd on behalf of Donaghmore-Rathdown County Council. Funding for the project came from EU Cohesion Funds (43.5%) and from the National Development Plan. The funding agency was the NRA.

The site was to the north of Glaicain House on land that was flat to the north and east but which on the south-western side, after a short distance, sloped steeply downwards to a wide stream in a mixed wooded area. This stream fed the artificial lake to the south-east that bordered Leopardstown and Murphysstown. On OS maps the land in this area was divided between the estates of Rockland, Leopardstown and Murphysstown (Glaicain in the 1937 map), with gardens, isolated trees, water features, large tree plantations, avenues and farmland.

Three burial pits and associated vessels were found in the south-eastern sector of the site close to an area of weathered, flat bedrock. Since there was no evidence of a covering cairn, mound or enclosing ditch and barrow, the site can be defined as a flat cemetery. The bedrock may have acted as a marker for the burials, or perhaps ritual activities were carried out on it. The flat rock would have been a good location for a pyre, though no evidence for one was found in the excavated area. Other features on site included five features in the eastern part close to the burials and five features at the western end. One of the features close to the burials was a small corn-drying kiln. The site probably continued into the unexcavated area to the south, outside the area of road construction.

The burial pits
The first burial pit (burial 1) contained an inverted vase urn (O2E0076:8) over a human cremation. The pit was almost circular at its mouth and very slightly angular in plan, measuring 44cm by 39cm. There were six sides to the cut: these were slightly concave and gave the impression that the pit had been cut with a curved spade. The fill surrounding the vessel was soft and black, with lumps of soft oak charcoal and occasional flecks of burnt bone. Carbonised plant stalks, a fragment of a hazel nut shell and a cleaver seed were found in the fill. The preservation of the cleaver seed indicates that the cremation took place between the months of May and September.

The second burial pit (burial 2) contained two inverted vessels (O2E0076:9 and 10), both containing cremated bone. The pit was oval in plan, 55cm by 57cm, with a maximum depth of 24cm. A large, flat, unworn stone, similar in size and shape to a saddle quern, was found over the pit and had caused the larger vessel (9) to crack and slump slightly downwards onto itself. Two fills were found surrounding the vessel; they were very different to the fill around the vessel in burial 1 as they did not contain large amounts of charcoal and were dark to mid-brown in colour. Occasional burnt bone fragments were found in both fills, as well as plant stalk remains, a carbonised hazelnut fragment and a grain of wheat or rye.

Burial 3 did not contain any vessels. The circular pit (50cm by 45cm, with a maximum depth of 16cm) was lined with seven granite stones (measuring between 28cm by 18cm by 8cm and 6cm by 5cm by 3cm). The fill was loose, with inclusions of small pieces of cremated bone and stones. There were some darker patches of charcoal in the fill. A carbonised grass seed, an indeterminate cereal grain, a fragment of an indeterminate legume and a stalk fragment were found in the fill.

The vessels and cremations
During excavation the vessels were wrapped in crêpe bandages and lifted from their pits on thin boards. The cremated remains were subsequently excavated by the conservator in pits under lab conditions. The vessels have been dated by Anna Brindley to c. 2000-1850 BC, or the earlier phase of the Bronze Age; O2E0076:8 and O2E0076:9 are vase urns of trilobate form, and O2E0076:10 is a vase of trilobate form.

The cremations contained in the vessels were clean, with large pieces of bone intact. It is likely that they had been washed after collection from the pyre. Their careful treatment is also indicated by the presence of small finger bones. Since finger bones are often lost in the pyre material, there must have been a degree of diligence in collecting these remains. Animal bones were found in the cremations associated with burial 2 (perhaps a cow and dog)
Bronze Age cemetery

On a summer’s day between the years 2000 BC and 1850 BC an adult cremation was placed in a vase urn and inserted in a pit in what we now call Carmanhall townland in south County Dublin. Of the graves found this was probably the earliest, and was followed by an adult, probably female, cremation in two vessels in a second pit and another adult cremation in a stone-lined pit. The site (40m by 15m) was one of many Bronze Age sites excavated during the course of works for the South-Eastern Motorway in 2002 conducted by Valerie J. Keeler Ltd on behalf of Dún Laoghaire-Rathdown County Council. Funding for the project came from EU Cohesion Funds (43.5%) and from the National Development Plan. The funding agency was the NRA.

The site was to the north of Glencairn House on land that was flat to the north and east but which on the south-western side, after a short distance, sloped steeply downwards to a wide stream in a mixed wooded area. This stream fed the artificial lake to the south-east that bordered Leopardstown and Murphysstown. On OS maps the land in this area was divided between the estates of Rockland, Leopardstown and Murphysstown (Glencairn in the 1937 map), with gardens, isolated trees, water features, large tree plantations, avenues and farmland.

Three burial pits and associated vessels were found in the south-eastern sector of the site close to an area of weathered, flat bedrock. Since there was no evidence of a covering mound, mound or enclosing ditch and banks, the site can be defined as a flat cemetery. The bedrock may have acted as a marker for the burials, or perhaps ritual activities were carried out on it. The flat rock would have been a good location for a pyre, though no evidence for one was found in the excavated area. Other features on site included five features in the eastern part close to the burials and five features at the western end. One of the features close to the burials was a small corn-drying kiln. The site probably continued into the unexcavated area to the south, outside the area of road construction.

The burial pits

The first burial pit (burial 1) contained an inverted vase urn (02E0076:8) over a human cremation. The pit was almost circular at its mouth and very slightly angular in plan, measuring 44cm by 39cm. There were six sides to the cut; these were slightly concave and gave the impression that the pit had been cut with a curved spade. The fill surrounding the vessel was soft and black, with lumps of soft oak charcoal and occasional flecks of burnt bone. Carbonised plant stalks, a fragment of a hazelnut shell and a cleaver seed were found in the fill. The preservation of the cleaver seed indicates that the cremation took place between the months of May and September.

The second burial pit (burial 2) contained two inverted vessels (02E0076:9 and 10), both containing cremated bone. The pit was oval in plan, 55cm by 57cm, with a maximum depth of 24cm. A large, flat, unworked stone, similar in size and shape to a saddle quern, was found over the pit and had caused the larger vessel (9) to crack and slump slightly downwards onto itself. Two fills were found surrounding the vessel; they were very different to the fill around the vessel in burial 1 as they did not contain large amounts of charcoal and were dark to mid-brown in colour. Occasional burnt bone fragments were found in both fills, as well as plant stalk remains, a carbonised hazelnut fragment and a grain of wheat or rye. Burial 3 did not contain any vessels. The circular pit (50cm by 45cm, with a maximum depth of 15cm) was lined with seven granite stones (measuring between 28cm by 18cm by 8cm and 6cm by 5cm by 3cm). The fill was loose, with inclusions of small pieces of cremated bone and stones. There were some darker patches of charcoal in the fill. A carbonised grass seed, an indeterminate cereal grain, a fragment of an indeterminate legume and a stalk fragment were found in the fill.

The vessels and cremations

During excavation the vessels were wrapped in crépe bandages and lifted from their pits on thin boards. The cremated remains were subsequently excavated by the conservator in pits under lab conditions. The vessels have been dated by Anna Brindley to c. 2000-1850 BC, or the earlier phase of the Bronze Age; 02E0076:6 and 02E0076:9 are vase urns of tripartite form, and 02E0076:10 is a vase of tripartite form.

The cremations contained in the vessels were clean, with large pieces of bone intact. It is likely that they had been washed after collection from the pyre. Their careful treatment is also indicated by the presence of small finger bones. Since finger bones are often lost in the pyre material, there must have been a degree of diligence in collecting these remains. Animal bones were found in the cremations associated with burial 2 (perhaps a cow and dog).
and burial 3. They display the same heat-induced modifications as the human bones, suggesting that they had been cremated with the corpses. Animal bones are usually interpreted as being part of the funeral feast, but they may have had totemic associations or have been added to the pyre to aid combustion.

Vessel 8 from burial 1 has been identified by Britland as being slightly earlier than the other two. It can therefore be suggested that burial 1 was the earliest. The vessel was decorated on the inside of the everted rim, on the rim tip and on all parts of the body except the base. The body decoration did not survive well. Parallels for the decoration can be seen on vessels from Fourknocks, Co. Meath, Keenoge, Co. Dublin, and Cloghakiel, Co. Down. This vessel had been inverted over the remains of a single adult. Body parts had been well distributed throughout the vessel; it is therefore likely that the body parts had been gathered and placed into it at random.

Vessels 9 and 10 were found inverted in burial 2. The informal decoration on vessel 9 was on the neck, inside and out (incised), and the body (comb-impressed). Other necked tripod vessels with similar decoration include Grave 10, Grange, Co. Roscommon. The form of the vase 10 has parallels with those from Craighawarren, Curren and others from County Antrim. The decoration on this vessel was similar to that on one found in a cist at Ballintimane, Co. Down.

Analysis of the cremated remains suggests that the vessels contained the same individual. The larger vessel contained the larger pieces of bone but the distribution of body parts between and within the vessels was random. Analysis of the bones from both vessels indicates that the individual was a female (tentatively suggested), over 23 years of age, who had suffered trauma and infection. She had suffered a fracture to the coccyx that had healed, had osteoarthritis in the spine and knee, had lost several teeth, had suffered a minor trauma and low-grade inflammation to a long bone that had not begun to heal before death, and had a benign "bone coxa" on her cranium. There was also evidence of a parasitic sinusitis infection that was in the process of healing at the time of death. The occurrence of raised rashes on one of the finger bones suggests intensive use of the hands. The evidence suggests that she was not an individual of high rank but a hard-working, mature woman who had died with a sinus infection and a sore arm or leg.

The cremation in burial 3 was found in a stone-lined pit without an accompanying vessel. It was of an adult 18-25 years old of indeterminate sex. One fragment of bone suggested that an infant may have been included but this was inconclusive. The lack of a vessel may indicate that this burial was later than the others.

The burial rite

The huge variety of burial types in the Bronze Age suggests many funeral rites. The evidence at Carmanhall suggests the following rites. The corpses were laid out on bedstraw on a wooden structure of criss-crossed oak logs. They were cremated while still flesh-covered, with animal parts added to aid combustion or for symbolic reasons. The bones were carefully gathered and washed before being placed in the vessels. If cremation occurred here, the pyres may have been located outside the area of the excavation. If cemeteries were the symbolic depositories for different communities, cremation probably occurred locally, with the cremated bone being transferred to the cemeteries later. The flat weathered bedrock may have acted as a marker for the burials as well as the location for funerary rituals. The flat stone found on top of burial 2 may also have acted as a grave-marker. The grain of wheat or rye in burial 2 suggests that the corn-drying kiln was contemporary with the burials (radiocarbon results pending). This also suggests a feasting element to the deposition ritual. A substantial number of rose-coloured quartz pebbles were found at the base of a linear pit close to the burials. The pit was probably deliberately backfilled soon after it was dug. Quartz has been found at other sites, e.g. at Edmondstown pit burials 11 and 12.

Who were they?

Both inhumations and cremations, the more common rite, were carried out in the early Bronze Age, with cremation eventually replacing the former. It has been suggested that the burial type may reflect status, with higher-ranking individuals being inhumed. Not all members of the community were given formal burials, as is indicated by the cemeteries at Edmondstown and Carrow, where the population is under-represented. Any form of burial can therefore be considered an honour, especially when the amount of work and time necessary for cremations is considered. The addition of animal parts to aid combustion suggests a degree of wealth and therefore status. Charles Mount has suggested that the diversity of burial rites at Keenoge, Co. Meath, and the proliferation of pottery types at this time might indicate the rise of sub-clans within the community, with the display of power shifting away from burial and eventually, in the late Bronze Age, towards the control of metal production. The skeletal evidence from burial 3 suggests that the adult was a hard-working, non-elite female, but the addition of animals suggests wealth. The fact that she had a formal burial indicates that she had social standing or was chosen by the community to represent a section of it. She might even have been a member of one of the new upwardly mobile classes.

Conclusion

The full extent of the site is unknown, so it is possible that other graves and perhaps cists exist to the south. It will be possible to relate features to the site when the radiocarbon dates are returned. The vessels date the burials to c. 2000-1850 BC. This site was part of a broader Bronze Age landscape that included cemeteries such as Edmondstown and Jamestown, a possible flat cemetery at Stillorgan Park, a cist at Beech Park Grove, several burnt mounds and a complex of barrows, cairns, a possible burnt mound and bust sites at Newtown. Several burnt mounds and habitation areas were excavated on the South-Eastern Motorway itself.

Acknowledgements

Thanks to Valerie J. Keeley Ltd; Dun Laoghaire-Ballintimane County Council; the National Roads Authority; Anna Britland, who examined the vessels; Denise Keating, who analysed the cremations; Ellen O’Carroll, who identified the wood species; Penny Johnston, who analysed the plant remains; Alva McGowen for her illustrations; and especially the excavation team.
and burial 3. They display the same heat-induced modifications as the human bones, suggesting that they had been cremated with the corpses. Animal bones are usually interpreted as being part of the funeral feast, but they may have had totemic associations or have been added to the pyre to aid combustion.

Vessel 8 from burial 1 has been identified by Bridgley as being slightly earlier than the other two, if it can therefore be suggested that burial 1 was the earliest. The vessel was decorated on the inside of the everted rim, on the rim tip and on all parts of the body except the base. The body decoration did not survive well. Parallels for the decoration can be seen on vessels from Fourknocks, Co. Meath, Keenogoe, Co. Dublin, and Cloghakiel, Co. Down. This vessel had been inverted over the remains of a single adult. Body parts had been well distributed throughout the vessel; it is therefore likely that the body parts had been gathered and placed into it at random.

Vessels 9 and 10 were found inverted in burial 2. The informal decoration on vessel 9 was on the neck, inside and out (incised), and the body (comb-impressed). Other necked tripod vessels with similar decoration include Grave 10, Grange, Co. Roscommon. The form of the vase 10 has parallels with those from Craigwarren, Curren and others from County Antrim. The decoration on this vessel was similar to that on one found in a cist at Bunnamayne, Co. Donegal.

Analysis of the cremated remains suggests that the vessels contained the same individual. The larger vessel contained the larger pieces of bone but the distribution of body parts between and within the vessels was random. Analysis of the bones from both vessels indicates that the individual was a female (tentatively suggested), over 23 years of age, who had suffered trauma and infection. She had suffered a fracture to the coccyx that had healed, had osteoarthrosis in the spine and knee, had lost several teeth, had suffered a minor trauma and low-grade inflammation to a long bone that had not begun to heal before death, and had a benign "button osteoma" on her cranium. There was also evidence of a parasitic sinus infection that was in the process of healing at the time of death. The occurrence of raised ridges on one of the finger bones suggests intense use of the hands. The evidence suggests that she was not an individual of high rank but a hard-working, mature woman who had died with a sinus infection and a sore arm or leg.

The cremation in burial 3 was found in a stone-lined pit without an accompanying vessel. It was of an adult 18-25 years old of indeterminate sex. One fragment of bone suggested that an infant may have been included but this was inconclusive. The lack of a vessel may indicate that this burial was later than the others.

The burial rite

The huge variety of burial types in the Bronze Age suggests many funeral rites. The evidence at Carman Hall suggests the following rite. The corpses were laid out on bedstraw on a wooden structure of cros-crosed oak logs. They were cremated while still flesh-covered, with animal parts added to aid combustion or for symbolic reasons. The bones were carefully gathered and washed before being placed in the vessels. If cremation occurred here, the pyres may have been located outside the area of the excavation. If cemeteries were the symbolic depositories for different communities, cremation probably occurred locally, with the cremated bone being transferred to the cemeteries later. The flat weathered bedrock may have acted as a marker for the burials as well as the location for funerary rituals. The flat stone found on top of burial 2 may also have acted as a grave-marker. The grain of wheat or rye in burial 2 suggests that the corn-drying kiln was contemporary with the burials (radio carbon results pending). This also suggests a feasting element to the deposition ritual. A substantial number of rose-coloured quartz pebbles were found at the base of a linear pit close to the burials. The pit was probably deliberately backfilled soon after it was dug. Quartz has been found at other sites, e.g. at Edmondstown pit burials 11 and 12.

Who were they?

Both inhumations and cremations, more common rite, were carried out in the early Bronze Age, with cremation eventually replacing the former. It has been suggested that the burial type may reflect status, with higher-ranking individuals being inhumed. Not all members of the community were given formal burials, as is indicated by the cemeteries at Edmondstown and Carrow, where the population is under-represented. Any form of burial can therefore be considered an honour, especially when the amount of work and time necessary for cremations is considered. The addition of animal parts to aid combustion suggests a degree of wealth and therefore status. Charles Mount has suggested that the diversity of burial rites at Keenogoe, Co. Meath, and the proliferation of pottery types at this time might indicate the rise of sub-classes within the community, with the display of power shifting away from burial and eventually, in the late Bronze Age, towards the control of metal production. The skeletal evidence from burial 3 suggests that the adult was a hard-working, non-elite female, but the addition of animals suggests wealth. The fact that she had a formal burial indicates that she had social standing or was chosen by the community to represent a section of it. She might even have been a member of one of the new upwardly mobile classes.

Conclusion

The full extent of the site is unknown, so it is possible that other graves and perhaps cists exist to the south. It will be possible to relate features to the site when the radio carbon dates are returned. The vessels date the burials to c. 2000-1850 BC. This site was part of a broader Bronze Age landscape that included cemeteries such as Edmondstown and Jamestown, a possible flat cemetery at Stillorgan Park, a cist at Beech Park Grove, several burnt mounds and a complex of barrows, cairns, a possible burnt mound and hut sites at Newtown. Several burnt mounds and habitation areas were excavated on the South-Eastern Motorway itself.

Acknowledgements

Thanks to Valerie J. Keeley Ltd; Dun Laoghaire-Batchtown County Council; the National Roads Authority; Anna Bridgley, who examined the vessels; Denise Keating, who analysed the cremations; Ellen O’Carroll, who identified the wood species; Penny Johnston, who analysed the plant remains; Alva McGowen for her illustrations; and especially the excavation team.

The three vessels.

Above: The three vessels.