CAHERCONNELL, CO. CLARE

Preliminary Archaeological Excavation Report

2022 - Platform and doline



Licence Number 22E0226
Detection device licence 22R0103

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September 2022



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Introduction

This report documents the preliminary results of the excavation of a small mound and doline close to Caherconnell Cashel, Co. Clare (RMP No. CL009-03010). The excavation was undertaken by the staff and students of the Caherconnell Archaeological Field School in June 2022. Excavation within Caherconnell Cashel concluded in 2019 and the current excavation is part of a broader investigation of the landscape surrounding Caherconnell. Seasonal research excavations have been undertaken in the environs of Caherconnell since 2007 forming part of The Caherconnell Archaeology Project. The goal of the project is to develop a cohesive understanding of the numerous elements of the Caherconnell landscape, particularly the cluster of activity located within Caherconnell townland itself. This process will generate an appreciation of the influences that developed over time, which led to Caherconnell becoming a local and regional centre of power.

The project is composed of all aspects of the archaeological toolkit. Desk-based studies and historical research have been allied to field and aerial survey, leading to targeted excavations within the study area. In the years since 2007 the various excavations have been undertaken by volunteers, students and staff of the Caherconnell Archaeology Field School, with elements of the project being additionally supported by the Heritage Council of Ireland and the Royal Irish Academy. Excavations completed to date include Licence No. 08E0535 (Graham Hull) targeting a collection of features located in a doline, a natural sinkhole in the limestone bedrock, Licence No. 10E0119 (Dr Michelle Comber) a sub-square cashel, and Licence No. 10E0087 (Dr Michelle Comber) within Caherconnell Cashel itself.

The target of the two cuttings discussed in this report focus on two features that lie just outside Caherconnell Cashel. The first is a small mound or cairn incorporating some quite large limestone slabs sitting atop a limestone bedrock plinth. The second feature is a small doline located just southeast of the mound/cairn. Prior to excavation neither feature was recorded as an archaeological monument but their morphology, and close association with previously excavated sites, strongly suggested archaeological potential.

Location

The mound and doline features excavated lie 35m apart in the townland of Caherconnell, Kilcorney parish, Burren barony, Co. Clare. Situated at c.120m above Ordnance Datum the location is part of the 'High Burren', a karst limestone landscape, with the land in the immediate vicinity used for grazing. The location lies a short distance west of the R480 road that links Leamaneh and Ballyvaughan, along the path of a long established regional routeway. The two sites are situated along the upper edge of the Kilcorney Valley, in a topographical position similar to numerous archaeological monuments of a variety of ages. There are a number of enclosures, primarily cashels, to be found along the valley slopes, with earlier sites in the form of megalithic tombs and barrows also represented. The iconic monuments of Poulnabrone and Poulawack are each located c.1km to the north and south respectively. Caherconnell Cashel, which gives its name to the townland, is located just 20m west of the mound, and is one of four drystone enclosures in the townland.

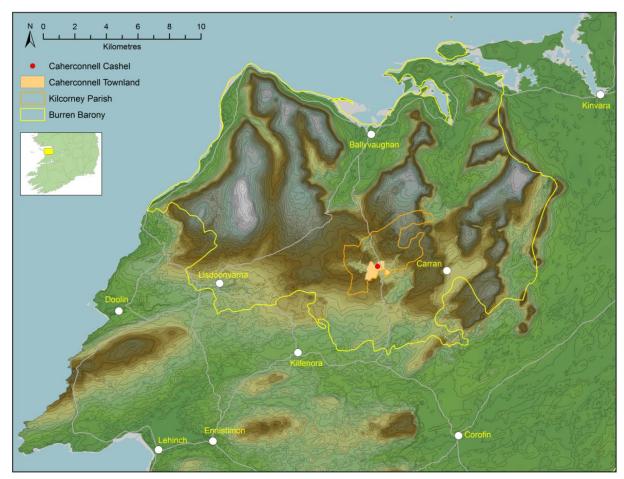


Figure 1 – The location of Caherconnell within the Burren.

Research context (Dr Michelle Comber)

The various excavations at Caherconnell form part of a larger research project investigating the multiperiod ringfort landscapes of the Burren, Co. Clare. The project commenced in 2005 and examines the cashels and associated remains in a study area extending south from Caherconnell as far as Kilfenora, east to Carran and Cahercommaun, and southeast to Leamaneh. This area incorporates the shifting political boundaries of Corcomruad territory. The first season of survey saw the analysis of data from all relevant monuments within the study area, numbering approximately three hundred extant sites (mostly cashels, raths, enclosures and ecclesiastical remains). This analysis revealed that many of these settlements were deliberately sited to best exploit the most fertile farmland in the area, a not uncommon tendency in the Early Medieval period. It also suggested, however, that perhaps some settlements may have been strategically positioned with regard to communication strategies and territorial politics. Caherconnell is one such site, positioned as it is at one end of a major north-south pass through the Burren mountains (still used today by the two modern roads, the N67 and R480).

Survey season 2 saw the detailed digital survey and mapping of a preserved archaeological landscape located between the large cashel of Ballykinvarga to the southwest of Caherconnell, and Leamaneh castle to the southeast. Extensive field systems and enclosures were recorded in this area, with the area of study expanded through the examination of vertical aerial photographs. Elements from various periods of the past were identified, reflecting the continued use of this zone throughout prehistory, the Early Medieval period, and the Medieval periods. These included at least ten different forms of field wall, individual fields, small enclosures, larger settlement enclosures, tracks and roads, cairns, tombs and castle remains. Most of the extant material, however, appears to date from the Early Medieval period.

Work in season 2 identified several small settlement clusters, each containing at least two cashels in close proximity. Season 3 concentrated on surveying a single such settlement cluster, that located in Caherconnell townland, and incorporating Caherconnell cashel. A number of previously unrecorded features were digitally mapped (in 2d using a Total Station), including two boulder burials, a partially visible drystone chamber (the subject of excavation in 2008 and 2009, Licence no. 08E0535), a small mound, a barrow, a sub-square cashel-like enclosure, and a number of small hut-sites and ancient field walls. The centre of the cluster, Caherconnell cashel and two adjacent drystone enclosures, were also mapped in 3d using GPS (funded by the Burren INSTAR project).

The next, logical step in this project is the acquisition of excavated scientific dating evidence from as many parts of this landscape as possible, from cashels, small enclosures, ancient field walls etc. Only then can the mapped remains be interpreted in any truly meaningful way. This commenced in 2007 with a voluntary excavation of a trial trench within Caherconnell cashel. This trench revealed a sequence of archaeological deposits up to 1m thick, rich in animal bone, charcoal, artefacts etc. The excavation suggested that the cashel might have been built quite late in the generally accepted ringfort chronology, in the tenth or early eleventh century AD. Occupation appears to have continued throughout the medieval period, possibly into the seventeenth century. This trial trench raised a number of questions that could only be addressed by larger scale excavation. When exactly was the cashel built? Was there *in situ*/undisturbed early material elsewhere within the cashel? Did the rectangular structure function as a house? When did occupation end? What was the relationship between Caherconnell cashel and the other elements of its settlement cluster? What can this site tell us about medieval Gaelic settlement?

It was clear from the 2007 excavation that Caherconnell cashel and its environs, with excellent preservation of archaeological material and depth of stratigraphy, could address many important issues. These issues include the identification of different categories of enclosure traditionally covered by the term 'ringfort', the exploration of settlement clusters in the Early Medieval and Medieval periods, the chronology of cashels, and the continuity of native settlement in Gaelic areas.

Previous excavations at Caherconnell (Dr Michelle Comber)

Doline (08E0535)

In 2008/9 excavation was undertaken at a doline, a natural sinkhole, located approximately 20m southeast of Caherconnell Cashel. The earliest activity uncovered was associated with a rectangular house defined by post-holes, with an internal stone-lined hearth. The house is of Early Bronze Age date. Prehistoric artefacts included a fragment of a saddle quern, polished stone balls, and thousands of pieces of worked chert (the local substitute for flint). Also recovered was a small assemblage of Middle Bronze Age pottery that may represent the remains of a cemetery that once existed in the vicinity.

A stone structure, partly visible prior to excavation, comprised a small circular chamber built against two walls of the doline. The chamber's drystone walls (at least 1m thick) probably originally rose gradually into a corbelled stone roof, as evidenced by the quantity of collapsed stone found in the interior of the structure. A wide entrance gap led into a 2m-diameter chamber that contained a pit

filled with semi-articulated animal bones, and some scattered grain. The discovery of a medieval bedding mortar at the base of the wall, in conjunction with a small assemblage of medieval artefacts and some radiocarbon dates, suggest a medieval date for this structure. It may have been built by the adjacent cashel dwellers, perhaps as a food-store.

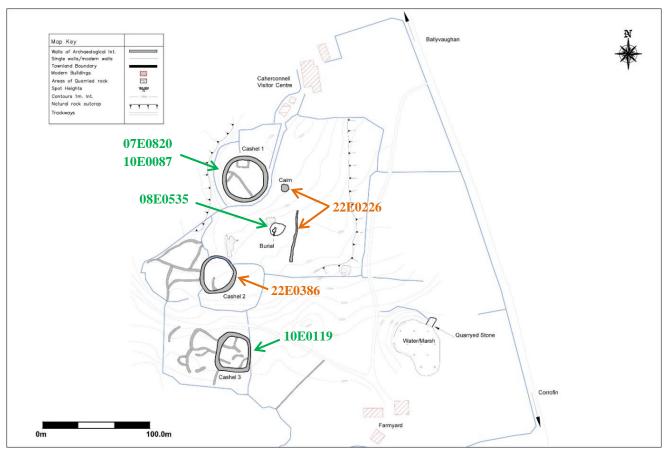


Figure 2 – Previous excavations in Caherconnell townland (green) and 2022 excavations (orange).

The final event within the doline was the placing of 15th/16th-century AD human remains within its partly silted up entrance. It is likely that the remains were accidentally disturbed elsewhere, sometime after the 15th/16th century, and then redeposited in the doline. Perhaps part of an O'Loughlin ancestral cemetery was uncovered by farm or building works at a time when it was no longer marked or known. The disturbed bones may have been gathered together and simply placed in what was then a convenient hole in the ground.

Previous excavations at Caherconnell (Dr Michelle Comber)

Sub-square enclosure (10E0119)

This three-season excavation (2010–2012) was funded by the Royal Irish Academy, directed by Dr Michelle Comber and assisted the applicant. It was staffed by students and graduates of University of

Galway. The site is a sub-square drystone, cashel-like, enclosure approximately 100m south of the main cashel of Caherconnell (though not visible from it). The walls of the enclosure are of limestone, 2.75m wide originally.

Most of the interior was excavated, with the exception of long narrow stretches covered by stone tumbled from the enclosure walls. Features uncovered in the interior included three sub-circular structures, a number of walls sub-dividing the space between the structures, and the enclosure entrance. The entrance comprised an entrance passage flanked by the drystone walls of the enclosure, with its surface roughly paved. Associated deposits were rich in animal bone and many artefacts were also recovered. The artefacts included bronze, bone and iron dress pins, iron knives, a socketed and pronged tool, nails and rivets, buckles, stone and glass beads, fragment of a rotary quernstone, a stone spindle-whorl, whetstones, lignite bracelet fragments, a few pot sherds, flint and chert tools and waste, a stone axe and fragment of a second, and a small assemblage of metalworking slag etc.

Initial analysis based on C14 dates and recovered artefacts, indicates that the enclosure was used during the Early Medieval period (7th to 9th century AD), though the material culture contains a prehistoric element. Reasons for its non-circular shape, relatively large size and south-facing entrance are being explored. It seems likely that people came to this site/place to avail of a specific service. It had to be visually different from its circular neighbours so that travellers could identify it easily.

Previous excavations at Caherconnell (Dr Michelle Comber)

Caherconnell Cashel (10E0087)

Caherconnell Cashel is the largest of the four drystone enclosures in the townland (Comber 2010–19, Comber and Hull 2010). The cashel is circular with a diameter of 42m, defined by drystone walls standing 3m in basal width and 3m in height (though probably higher originally). Its entrance, like that of most ringforts, faces east. The cashel lies at approximately 130m above Ordnance Datum, on the northern slopes of the shallow, but fertile, Kilcorney valley. This location provided the settlement with a commanding view of the surrounding landscape, and easy control of the adjacent routeways. Its agricultural needs were well met by the surrounding pasturelands and fertile valleys, while it's imposing morphology and connection with the past (ancestral burials and activity at the sub-square enclosure) contributed to the statement it made on the landscape.

Excavation has uncovered several phases of activity within Caherconnell cashel, the two earliest of which pre-date the construction of the enclosure (possibly linked to the early use of the sub-square

site). Evidence of Phase 1: Early Medieval Pre-cashel Activity comprised a low burial mound covering two cists containing the remains of two infants and an elderly woman, all dating from the late 6th/early 7th century AD. Phase 2: Early Medieval pre-cashel Activity is represented by a rock-cut fire-pit. Bone from the pit was radiocarbon-dated to the second half of the 7th century AD. Phase 3: Cashel-Construction followed in the late 10th century, coinciding with two written references to a high-status figure/figures called 'Conghal' (Caherconnell = the cashel of Conall or Conghal) – one an annal entry recording the death of the lord of Corcomruad (Annals of the Four Masters M987.7, O'Donovan 1848-51), the other a brother of the early imposed king Maelsechnaill in an Uí Tairdelbaig/Dal Cais genealogy (Gibson 2012, 289). The former records Conghal as the son of imposed Corcomruad king, Anruadan (died 936), the latter as his cousin. Whether or not the entries refer to two different individuals is uncertain but, either way, a member of the ruling family is possibly indicated in the placename. The cashel wall was built directly on the limestone bedrock, except where some shallow grykes were filled with small stones – to level off the surface. Interestingly, the cashel builders did not remove the earlier burial mound, or build around it, rather they deliberately incorporated it into their new settlement by constructing the cashel wall over the top of it.

Phase 4: Early occupation was marked by the accumulation of a definite occupation layer in the late 10th century. Some charcoal, slag, a considerable quantity of animal bone, and a variety of artefacts were recovered from it. This occupation layer accumulated around the remains of a metalworking area, a cereal-drying kiln, and a central sub-circular house, c.10m in diameter. The start of the next phase of occupation in the late 10th/early 11th century, Phase 5: Middle occupation, was marked by the deliberate laying of a slab surface. This, lower, slab surface was originally relatively well constructed from irregularly shaped limestone slabs, measuring up to 0.8m in maximum dimension. In places of high bedrock, the slabs often run up to it, forming a level surface with the bedrock. Elsewhere they seal the earlier occupation material — always resulting in the formation of a level surface. Several features were associated with this slab-surface — a sub-rectangular house with stone-lined hearth replaced the earlier circular house, an ancillary rectangular structure, occupation deposits, post-holes, and a path. The general occupation layer contained frequent small animal-bone fragments (some burned), charcoal, carbonised hazelnut shell, small pieces of metalworking slag and a range of artefacts.

Phase 6: Late occupation (dated 11th – 14th century) commenced with the laying of a second slab surface on top of the Phase 5 occupation layer. This, too, consisted of local limestone slabs, but appears rougher in construction than its predecessor. It did not extend over the earlier house wall or its

interior, suggesting that the straight-walled house was still in use when the slab surface and associated features were constructed. A third rectangular structure was added during this phase. Built up around all of these was an occupation layer, rich in animal bone. It also contained slag and many finds, including bronze dress pins, iron nails, crucible sherds, and bone comb fragments.

The latest human occupation of the cashel, Phase 7 Final occupation, was marked by the reconstruction of the cashel entrance, construction of a rectangular house inside the north wall of the cashel (and demolition of the earlier house), and a drystone wall dividing the cashel interior in two, in the 15th/16th century. The occupation material that accumulated during this phase contained charcoal, slag, some artefacts (including two English coins and a German jetton from inside the house), and much animal bone. Outside the house remains, this material was greatly disturbed by the later heavy use of the cashel as an animal enclosure, causing much of the layer to be churned up with overlying modern material. The latest radiocarbon date stretches into the start of the 17th century, coinciding with the aforementioned historically documented changes of ownership.

Artefacts are plentiful from most phases. They include fragments of rotary querns, whetstones, fragments of lignite bracelets and finger rings, spindle whorls, inscribed stones, chert and flint lithics, composite bone combs, sewing needles, dress-pins, beads, gaming pieces, a variety of tools, iron nails, ringed-pins, knives/blades, points including arrowheads, miscellaneous tools, items of horse harness, door hinges, rings, a barrel-padlock key, hooks, bronze stick-pins, a decorated stud, buckles, a silver finger ring, a small strip of decorated gold, five coins and a jetton, clay mould fragments and crucible sherds, small pieces of lead including shot, glass beads and bracelet fragments, and quartz and amber beads.

These artefacts reflect something of the activities that took place within the cashel, and the status of its occupants. An assemblage of slag, the whetstones, mould and crucible sherds reflect both ironworking and non-ferrous metalworking within the cashel. It is possible, if not probable, that many of the metal artefacts recovered during excavation were manufactured at Caherconnell. The range of miscellaneous metal and bone tools were undoubtedly employed in a number of craft activities taking place within the enclosure. Woodworking is suggested by the presence of iron nails, possible drawknives/small saws, punch-like implements and other tools. Many, if not all, of the stone objects were probably made locally. The plentiful supply of raw material, a few partially-worked fragments, and a range of finished items suggest that bone- and antler-working occurred at Caherconnell. The bone and stone spindle-

whorls, a probable weaving sword, and the sewing needles reflect textile production/clothes manufacture, while the quern fragments indicate the processing of grain.

Less 'domestic', high-status activities are represented by armour-piercing arrowheads, a bronze harppeg, and gaming pieces. Trade/the use of the adjacent routeways is evident in the presence of coins,
bronze, silver, gold, glass and amber at the site. The local environment also provided occasional fish
and shellfish, hazelnuts, possibly iron and lead ores, hazel, ash, birch and yew wood, and supported
the growing of free-threshing wheat, barley and oats, and the grazing of cattle, sheep, pigs and red
deer.

2022 Excavation

As the excavation of Caherconnell Cashel was completed in 2019 the focus of the project now turns towards developing further understanding of its role, and standing, within the surrounding landscape. Previous survey identified numerous archaeological features within the townland of Caherconnell, three of which were investigated during the 2022 season. The two features discussed in this report were excavated under licence number 22E0226, held by the author. The second target of the 2022 season was the 'middle' of the three cashel cluster at Caherconnell (CL009-030008). This portion of the 2022 excavation season was directed by Dr Michelle Comber under excavation licence 22E0386.



Figure 3 – The locations of the platform and doline in relation to Caherconnell Cashel.

The target features of this excavation are a small mound/cairn and a doline, a natural solution hole, just outside the entrance to Caherconnell Cashel. Prior to these excavations neither feature was currently recorded as an archaeological monument, but both appeared to be of archaeological potential, and fell within the zone of notification for Caherconnell Cashel (CL009-030010), the surrounding field system (CL009-030001) as well as the stone structure and Bronze Age house (CL009-030011 and CL009-030018) uncovered within the previously excavated doline.

Excavation methodology

The 2022 Caherconnell Archaeological Field School season ran for six weeks through the months of June and July, with the excavation of the mound and doline taking place over two weeks in June. The excavations were directed by Noel McCarthy, assisted by field school director Michelle Comber and supervised by Pat Cronin and Joseph Normandy. The excavation team was composed of students from the Caherconnell Archaeological Field School; Domique Johnson, Sarah Kitchen, Connor Konarski, Rebecca Luzack, Megan Myers, Carson Riggs, Genevieve Rust.

The sod, topsoil, tumbled stone and archaeological features and deposits within the two cuttings were hand-excavated, with excavation concluding at the underlying bedrock. A full written, drawn and photographic record was made in accordance with the Caherconnell Archaeological Field School Excavation Guidelines (2017) and the NMI Advice Notes for Excavators (2010). Archaeologically significant contexts were wet-sieved on site to recover small artefacts and ecofacts, with bulk samples also taken for more controlled processing during the post-excavation phase. Due to the training nature of the field school, a metal detector (Detection device Licence No. 22R0103) was employed to check the residual spoil. This process revealed very little, demonstrating the effectiveness of on-site recovery and sieving.

Artefact strategy

All artefacts from each cutting were retained, numbered and recorded in accordance with current National Museum of Ireland guidelines. The locational and contextual data of each artefact has been catalogued and will be assessed by the relevant specialists during the post-excavation phase. A full catalogue will then be produced in publishable form and compatible with the NMI artefact database. All finds will be treated, stored and conserved in accordance with Advice Notes for Excavators (NMI 2010). Post-fieldwork conservation services are provided by a recognised IPCRA conservator (Susannah Kelly, UCD). The artefacts will be temporarily stored at the University of Galway and the Caherconnell Archaeological Field School, and will be deposited with the National Museum of Ireland in due course.

22E0226 excavation results

Site A – Platform

Prior to excavation Site A appeared as a small cairn or mound, located 15m southeast of the entrance to Caherconnell Cashel. It was subcircular in plan measuring 5m E-W and 5.5m N-S with a maximum height approaching 1m. The feature sat atop a plinth of limestone bedrock suggesting the height of the constructed feature may have been as little as 0.5m. The cairn could be seen to be composed of limestone slabs partially overgrown by a thin layer of sod and grass.

Excavation revealed a relatively complicated internal structure indicating the feature is best

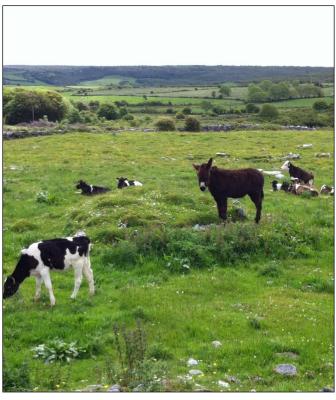


Figure 4 – The platform prior to excavation, from northwest.

described as a platform. In total, sixteen context numbers were assigned during the excavation of Site A; seven related to elements of the platform's construction and four were assigned to later occurrences, primarily involving the degradation and collapse of the structure.



 $Figure \ 5-The \ platform \ prior \ to \ excavation, from \ northeast.$

The earliest element of note is the underlying bedrock (00). Akin to the surrounding region the bedrock in the immediate vicinity of the platform is karst limestone, commonly obscured by a discontinuous thin sod layer. This bedrock would not normally be viewed as anything other than a background natural layer upon which human activity occurred, and archaeological strata developed, or were constructed. The bedrock beneath the platform however is worthy of particular note, as it forms a deliberate base or plinth for the structure constructed upon it. In much of the area around Caherconnell Cashel extensive quarry scars can be identified. These are the result of the exploitation of the limestone bedrock to supply material for the construction of the cashel, as well as its interior structures and surfaces. In a number of instances the scars associated with this quarrying can be seen to extend as much as 60m from the cashel.

The platform lies within this area of exploitation but stands proud in its immediate vicinity by virtue of the underlying bedrock not been quarried away. This aspect of geological false relief is further accentuated by the trend of the natural topography, which drops away to the east and south resulting in the platform originally having a notable profile when approached from the routeway on this eastern side. The bedrock plinth stands between 0.21m and 0.35m above the surrounding bedrock level and is composed of two levels. The lower level is trapezoidal in plan, with a maximum diameter of 4.4m N-S and E-W, while the upper shelf of the plinth is sub-rectangular and located atop the northern portion of the lower level; it has maximum diameters of 3.0m N-S and 3.8m E-W. This upper shelf is best defined on the western and northern sides, but is demarcated by a more subtle step and distinctive E-W aligned gryke on the south. It is upon this upper portion of the plinth that the vast majority of the platform was constructed.

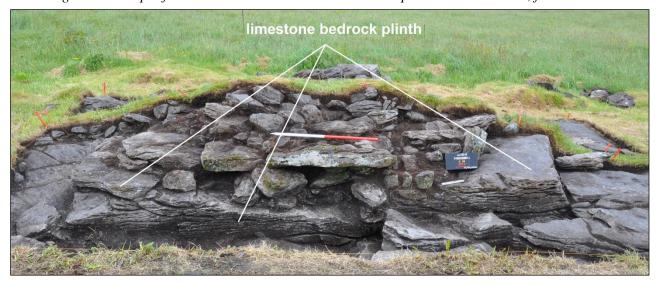


Figure 6 – The platform under excavation with the bedrock plinth visible beneath, from west.

The centre of this upper plinth has a dished appearance with a notable hollow at its base. The form and shape of the dished area is the result of natural erosion, caused by a series of small solution holes that discharge to the southwest of the upper plinth area, and a narrow gryke that serves as a drain. Towards the centre of this dished area lies a distinct, slightly curving hollow. Excavation revealed that this was not a cut feature but a natural formation, resulting from the disturbance of a loose clint of limestone. The hollow was filled by a dark brown clay-silt (15), which also spread across and filled the bottom of the broader dished area atop the bedrock plinth. This material contained a moderate amount of small bone fragments and two artefacts, a bone point broken into two pieces and a chert scraper, which was also broken.

This layer is interpreted as an old ground level that along with the exposed bedrock, formed the surface on which the platform was constructed.



Figure 7 – Bedrock hollow beneath the platform.

The old ground material was subsequently overlaid by an almost horizontal surface of limestone slabs (14). This surface was well set, with a number of the slabs positioned edge-to-edge in a quite complimentary fashion. These slabs varied in size, ranging from 0.36m to 0.67m in width with thicknesses ranging from 0.09m 0.20m. Notwithstanding these variations, the slabs were placed so as to create a relatively level surface that filled the aforementioned dished area. In concert with the adjacent bedrock this created a composite level surface measuring 2.1m N-S and 3.1m E-W. The style of construction and size of the slabs used are reminiscent of the slab surfaces uncovered within Caherconnell Cashel. Radiocarbon dating of piece of cattle bone recovered from beneath this surface (context 15) may help to indicate a construction date for the platform.

This level surface was bounded on the north and south by two parallel E-W aligned rows of mid-sized slabs (16), some of which composed short lengths of drystone coursing. The slabs that formed these alignments were local limestone and sat upon the bedrock. They had diameters ranging from 0.34m to 0.72m but were arranged so that the long axes of the larger pieces were aligned along the length of the row, giving each row a uniform width along its length. These rows were not the bases of drystone structures but appear to have been revetments or facings for the platform they abounded.

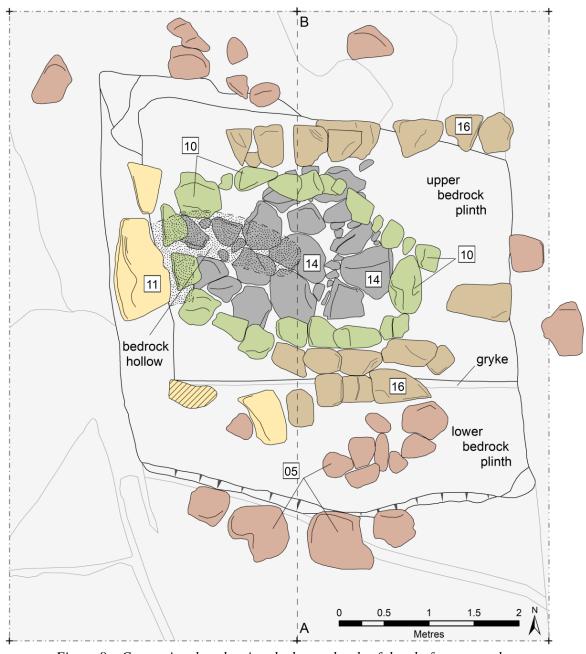


Figure 8 – Composite plan showing the lowest levels of the platform, atop the bedrock plinth.

The platform had been substantially destroyed on its eastern side but one isolated large slab, positioned along the edge of the bedrock plinth, may also be part of a facing on this eastern side. The southern row of facing stones had a second row of stones positioned adjacent to the north, and although it is also situated on the bedrock, its relationship to the outer row is uncertain as no similar feature exists alongside the northern row. Interestingly, both outer rows move off the upper bedrock shelf at their eastern ends, which serves to keep them straight and parallel but is somewhat of a

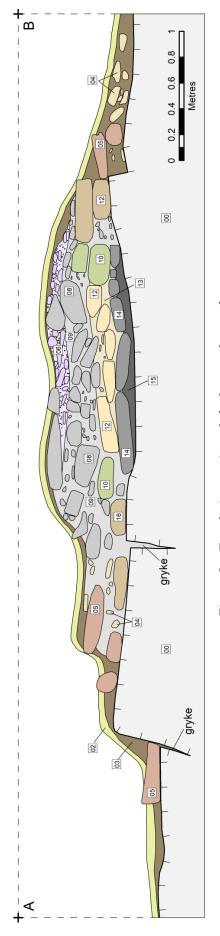


Figure 9 – East facing section of platform and mound.

structural difficulty, as the bedrock step had to be traversed. This would suggest that creating a straight-sided rectangular shape was primary concern during the construction of the platform. The outer facings and other external elements of platform indicate and original rectangular shape in plan, that measured 3.1m N-S and 4.0m E-W.



Figure 10 – Layer of slabs (14) at base of platform.

The space between these parallel rows of facing was occupied by a sub-oval arrangement of limestone slabs that extended 3.0m E-W and 1.8m N-S. This arrangement was composed of two elements; an outer 'ring' (10) and interior surface (12), both of which were constructed using mid-sized limestones slabs. On average those that formed the outer 'ring' were slightly larger (0.4m – 0.6m diameter) than those that formed the inner surface (0.3m – 0.56m diameter). This oval arrangement/surface was constructed atop the bedrock on its eastern side and the lower slab layer (14) on its north. The stones of these upper (10 & 12) and lower (14) levels were in contact with each other indicating very little, if any, chronological gap between their construction. The matrix (13) around the slabs was a dark brown clayey silt, which was very similar to the matrix (09) of the immediately overlying layer, and was most likely the base of that matrix layer. This matrix (13) contained fragments of animal bone and a single small piece of iron slag.

Prior to excavation a number of large slabs could be identified around, and upon, the mound. These were notable as they constituted ideal building stone and matched the material that was used to construct the cashel. Their visibility, accessibility and location just metres from the cashel raised questions as to the relationship of the mound and cashel, and if extant at the time, why the mound material was not utilised to construct the cashel. Two of these slabs were incorporated within material that had slipped from the mound to the south (05), while the most striking example was a large slab (11) projecting from the western side of the mound. This slab of limestone (L. 1.10m, W. 0.64, Th. 0.20) lay horizontally on the bedrock, though excavation uncovered a recess in the mound material,

and conciliatory positioning of the stones forming the internal stone 'ring' (10), that indicated this slab once stood upright on its long edge. This suggests that the western side of the platform, facing Caherconnell Cashel, had a façade of upright slabs concealing the internal structure of the platform. As so very little of the original structure survived on the eastern side of the platform, it is not possible to reliably indicate if there was a similar façade on this eastern side.

The existence of a façade of upright slabs on the western side of the platform is supported by a second smaller fallen slab immediately adjacent to the north of that previously mentioned (11), which had a similar void behind, which again would allow for it to be positioned upright. A surviving upright stone was located 0.85m to the south of the largest slab (11). This stone was not as large as the others identified and its axis was on an E-W alignment, perpendicular to the façade. It was very well set on the edge of an underlying gryke and would likely have acted as an end stone for the façade, as well as a stable south-west corner stone for the platform. A notable void on the north-west corner of the platform may once have been the location of a complimentary end/corner stone at this end of the façade.

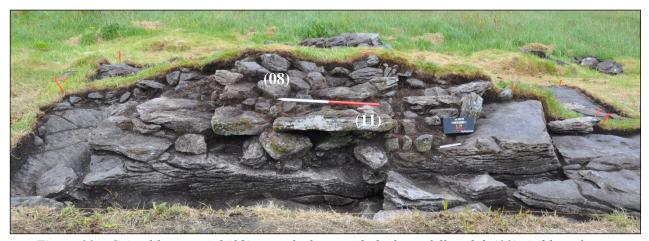


Figure 11 – Cairn-like material (08) atop platform, with the large fallen slab (11) visible to front.

The constructed elements of the platform were overlain by a 0.20m – 0.35m deep layer of what is best described as cairn material. This was composed of a jumble of stones (08) that varied greatly in size from 0.10m to 0.70m within a dark brown clay-silt matrix (09). This cairn was not deliberately constructed, and appears to be the result of a combination of localised field clearance and the replacement of platform stones onto the mound. Prior to the current archaeological research and excavation, the mound had long been recognised as an ancient feature. It is likely that superstition discouraged the removal of collapsed or slipped stones, with material occasionally being thrown back



Figure 12 – Large slabs (05) slipped to the south of the mound, from south (left) and east (right). Coloured scale graduations 0.5m.

up on top of the mound, thus creating a jumbled cairn appearance. Indeed, many of the larger stones within this cairn material would be a very good fit for some of the gaps in the lower constructed strata of the platform.

The matrix (09) of the cairn material contained animal bone, a broken chert scraper and some shale flakes. The only diagnostic artefact discovered within this layer was the scraper, which is Early Bronze Age in origin, and pending the result of radiocarbon dating of samples from beneath the platform, appears to predate the construction and use of the platform.

The uppermost layer within the mound was an irregular spread (06) of quite loose gravel and small limestone fragments. This layer is the result of the exposure and weathering of the upper stones of the cairn/mound. This weathering is the combination of environmental erosion and physical damage caused by livestock that commonly occupy the field in which the site lies. This layer was quite intact, and though irregular in plan, was spread across much of the top of the mound, suggesting the mound had not seen substantial interference in the recent past. The quantity of artefacts recovered from this layer were again quite limited and comprised some pieces of chert debitage, a broken chert scraper and an interesting stone 'tablet'. This 'tablet' is a deliberately shaped piece of shale or mudstone without any markings that may



Figure 13 – Stone 'tablet'.



Figure 14 – The mound after sod removal with the upper 'cairn' material (04 and 06) exposed.

Scale graduations 0.5m.

indicate its purpose, though its regular shape and small size suggest it was portable. In general the artefacts represent a range of chronological periods and are residual deposits within this stratigraphically late layer.

The uppermost layers encountered were the humus (03) and sod (02) which were quite thin (0.02m – 0.05m) across the top of the mound. In many areas away from the mound, the humus had formed directly on the bedrock with no underlying deposits. There were some deeper pockets of humus filling hollows in the bedrock and against the bedrock plinth. This build-up of material is the result of erosion and soil creep, where the slope and quite smooth underlying bedrock would allow for the easy movement of material. Thirteen of the 34 artefacts recovered during the excavation of Site A were found within the humus. Ten of these were chert, with a core, debitage pieces and sub-circular scrapers identified. Each of these pieces is Early Bronze Age in origin and are likely associated with activity at the nearby house of that date, excavated in 2008 and 2009. The other three objects, an iron nail, possible bone handle and crucible sherd, appear to be residual of activity within the cashel.

Backfilling

The material from Site A was returned to reform its original mound-like appearance with the fallen uprights returned to their standing positions. The feature lies adjacent to a pathway used by visitors to Caherconnell, and though not accessible to the public, remains a visible component of the visitor trail.

Discussion

The surviving remains of the platform illustrate that it was very deliberately constructed, with care given to the formation of the structure. The lower levels of the feature draw parallels with some of the construction styles visible within Caherconnell Cashel, and it seems most likely that the platform was constructed during the occupation of the cashel. Although a small number of prehistoric lithics were found during excavation there is little evidence of a prehistoric origin for the platform.

The role of wooden elements of the platform appears to be minimal. No evidence of post-holes or beam-slots was identified, while none of the grykes had been altered or packed to support wooden components. The care given to creating well set, level stone layers (contexts 12 and 14) also suggests that these layers were intended to be more than foundations for a wooden superstructure. The jumbled nature of the upper strata of the 'mound' suggests the presence of material that once formed the platform, indicating that the platform was once taller than the in-situ remains indicate. It is estimated that, with the aid of the underlying bedrock plinth, the platform may once have stood c.0.8m proud of the surrounding ground level.

The purpose of the platform remains unclear and it likely had multiple functions. The platform's location just outside the entrance of the cashel, on the sloped approach from the southeast suggest it was a feature intended to be encountered by people moving to and from the cashel. It therefore may have had a central role in gatherings outside the cashel such as the giving of audiences or announcements, while the level base could even have supported a market cross.

Finds from Site A

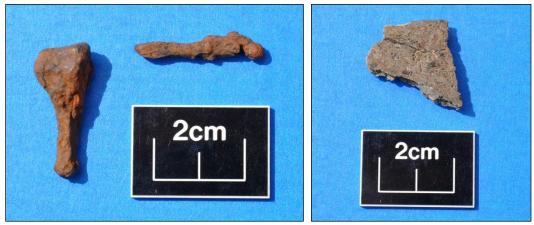


Figure 15 – Iron nail and possible buckle tongue (left), and crucible sherd (right).

Figure 16 – Worked bone objects.

Rounded bone point (left)

Bone handle fragment (middle)

Decorated bone comb fragments (right)



Figure 17 – Chert scrapers.

Broken convex scraper (left)

Two small oval scrapers (upper right)

Two small broken scrapers (lower right)



Figure 18 – Chert bipolar core fragments.



22E0226 excavation results

Site B – Doline

A doline is a form of natural solution hole that occurs commonly across the limestone pavement of the Burren. There are numerous examples of varying shapes and sizes in the immediate environs of Caherconnell but the feature under consideration here is the closest example to the cashel entrance. The doline is irregular in plan with its longer axis aligned N-S along a linear gryke that can be seen to extend in excess of 40m to the north and south of the doline. Prior to excavation the surface of the doline was level and grass-covered with numerous protruding rocks and large stones.



Figure 19 – Vertical image of Site B – The Doline.

The purpose of excavating the doline was to investigate how it may have been used by the residents of either the nearby Bronze Age house or Early Medieval cashel. Excavation at each of these sites revealed large quantities of artefacts and detritus, and it was envisioned that even in the absence of insitu archaeology, a proportion of this material may have found its way into a convenient nearby hollow feature such as a doline.



Figure 20 – The doline after sod removal, showing the level soil surface and heavily eroded bedrock sides. Scale graduations 0.5m.

Only two features with archaeological potential were identified within the doline. The first was quite a deep (0.43m) keyhole-shaped pit positioned close to the south-west side of the doline. The cut (107) of the pit had a round bottom with an almost vertical eastern side, the other sides were concave suggesting the feature was hand-dug. The pit measured 0.36 N-S and 0.52m E-W at surface level and descended into the underlying natural subsoil (00). There was no evidence for any associated above ground superstructure in the guise of a furnace or kiln. The pit was surrounded by a 0.07m wide band of iron-rich soil at surface level.

The pit had a single fill (105) of loose, granular silt with frequent pieces of what appeared to be light-weight fuel ash. There

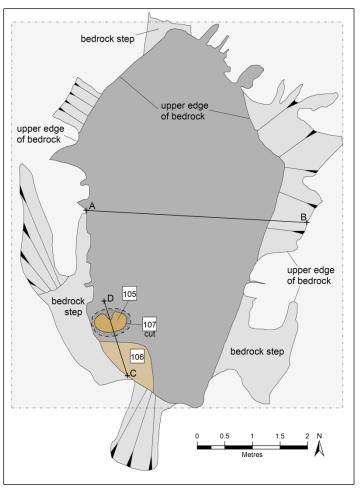


Figure 21 – Plan of doline.

was a more compact concentration of this material against the northern side of the pit. There were no artefacts within the pit and its fill was bulk sampled to be analysed. Dr Paul Rondelez (pers. comm.) has identified the fill (105) of the pit as a form of iron ore that in other conditions would form bog

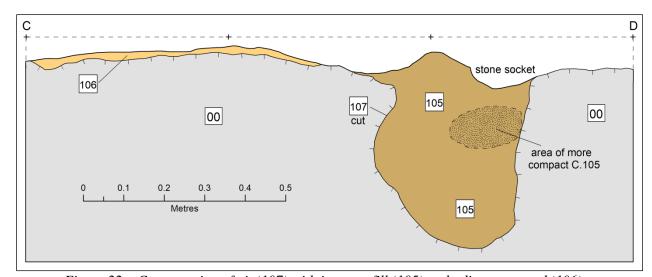


Figure 22 – Cross-section of pit (107) with iron ore fill (105) and adjacent spread (106).





Figure 23 – Pre and post-excavation images of pit (105/107) with striking iron-rich fill visible.

iron. It would appear therefore that the fill of the pit is the result of natural occurrences, though the formation processes of such a deposit are currently not understood. The feature was located adjacent to the western face of the doline and was also along the line of a gryke. These aspects may have seen quite a volume of water seep through the area and the 'pit' appears to have acted as a reservoir for iron-rich elements within that water.

The only other feature of archaeological potential identified within the doline was a thin spread (106) of silty clay positioned immediately south of the pit (105/107). This spread had a small amount of orange flecking suggesting an iron-rich material, and was 0.05m - 0.10m thick with a maximum diameter of 0.95m. It overlaid the natural subsoil (00) and appears to be residual material from the adjacent pit. There were no artefacts associated with this spread of material, while its more compact nature and clay component indicate it is not composed primarily of material from the pit, but was been influenced by it. If the adjacent pit had been created to exploit a previous ore deposit this may be residual spillage from that episode of digging.

Excavation was terminated at the base of the doline, which was formed by either the limestone bedrock or a natural sterile light orange clay (00). This orange clay is commonly found deep within grykes and bedrock hollows in the area around Caherconnell. Surprisingly little archaeology, and very few artefacts, just two possible pieces of chert debitage waste, were encountered during the excavation

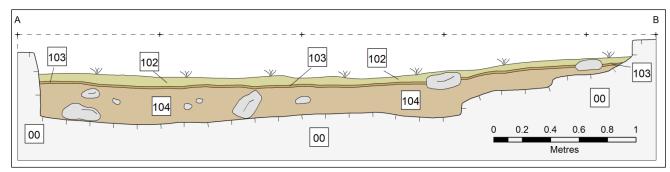


Figure 24 – South-facing section through doline.

of the doline. This is somewhat unusual as all other excavations in the environs of Caherconnell have surrendered either substantial in-situ archaeology or residual material from nearby activity; either associated with the Bronze Age house or Early Medieval cashel. The lack of material from a nearby sunken feature such as the doline, which appears to be an ideal feature for dumping or residual build-up of material, was somewhat perplexing. As a doline is formed by the erosion and in-washing from the surrounding higher ground, a sondage was excavated in the northern half of the doline to investigate the possibility of earlier strata being subsumed by later, naturally occurring material. This test pit showed that the sterile light orange clay continued to a maximum depth of 0.30m before the limestone bedrock was reached. No archaeologically significant deposits or items were uncovered within this test pit.

Discussion

The low level of archaeological remains encountered during excavation of the doline stands strongly at odds with the general pattern in the vicinity of Caherconnell. The more prevalent local pattern is typified by the platform excavation where 34 artefacts were recovered. None of these can be reliably identified as associated with activity at the site itself, but all could be attributed to activity nearby in the Early Bronze Age or Medieval periods. Indeed, the nature of the residual scattering of materials, particularly from the cashel, is exemplified by the discovery of a piece of rotary quern on the surface of the field to the south of the excavated area. Within this distributional pattern the only logical explanation for the lack of material or features within the doline is that the feature was cleared of its original deposits.

The clearing of the doline also explains the very simple and limited stratigraphy encountered. Beneath the sod and humus there was only one quite homogenous layer of silty clay above the natural sub-soil and bedrock. The reason for clearing the doline may be explained by the one unusual feature identified, the iron ore filled 'pit'. How the pit formed remains unexplained but its fill suggests that the doline may once have been a greater reservoir of iron-rich material, possibly the result of the

development and degradation of moss in the immediate area (Paul Rondelez pers. comm.). The

excavations at the nearby Caherconnell Cashel uncovered slag produced through the smelting of iron,

as well as secondary working and recycling. If ore was forming in the doline it seems very likely that a

local smith would identify and exploit the source. It can be postulated therefore that the exploitation of

a more extensive spread of ore or iron-rich material, saw the removal of these deposits and any other

materials or features within the doline. Indeed, the doline contained quite a number of large stones and

small boulders (see Figure 20) but proportionally few small stones, suggesting the removal of the

smaller material while just rolling the larger material aside. The ore uncovered during the excavation

appears to be either a residual pocket of material that was not removed, or a reformation of material in

a convenient pit or hollow.

Further work

Artefacts in need of conservation have been delivered to recognised conservator Susannah Kelly

(UCD) to commence the conservation process. Other artefacts and samples have also been delivered to

relevant specialists. Site director Noel McCarthy will conduct the lithic analysis while Róisín

NicCnáimhín (UCC) will analyse the animal bone from Site A. The ore-like material from Site B has

been delivered to Dr Paul Rondelez for analysis.

The sample of cattle bone from beneath the Site A platform (Sample 09, Context 15) has been selected

for radiocarbon dating and, subsequent to appropriate licencing, will be submitted to Queen's

University Belfast for AMS radiocarbon dating.

On receipt of specialist reports and other necessary components a final archaeological report will be

produced and submitted to the relevant authorities.

A summary of the results of the excavation is being submitted to the Excavations online portal.

Dr Noel McCarthy

September 2022

University of Galway

Caherconnell Archaeological Field School

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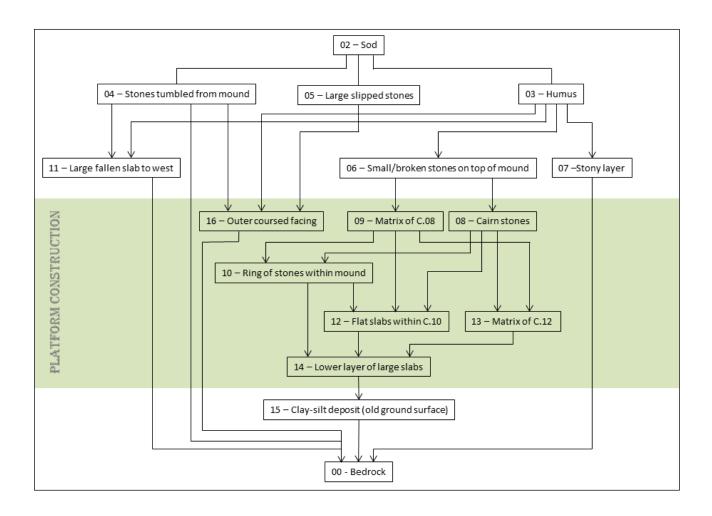
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Appendix 1Context Register – Site A

No.	Description	Grid square	Sample	Date assigned
00	Bedrock	All cutting	-	07/06/22
01	Mound/cairn	614-618 / 514-518	-	07/06/22
02	Sod	All cutting	-	07/06/22
03	Humus	All cutting	01	07/06/22
04	Stone tumble from mound	614-618 / 514-518	-	07/06/22
05	Large slipped stones, south of mound	616 / 514	-	07/06/22
06	Small broken stones on top of mound	616 / 516-518	-	07/06/22
07	Stony layer beneath humus	612 / 512-518	02, 03	08/06/22
08	Cairn stones	614-618 / 516-518	-	09/06/22
09	Dark brown matrix of c.08	614-618 / 516-518	05	14/06/22
10	Ring of stones within mound	614-616 / 516-518	-	15/06/22
11	Large fallen slab, west of mound	614 / 516-518	-	15/06/22
12	Horizontal flat slabs within c.10	614-616 / 516-518	-	15/06/22
13	Matrix of c.12 = lower c.09	614-616 / 516-518	07	15/06/22
14	Lower layer of large slabs within mound	614-616 / 516-518	-	16/06/22
15	Dark brown clay-slit beneath c.14	614-616 / 516-518	08	16/06/22
16	Outer facings of mound	614-616 / 516-518	-	16/06/22

Appendix 2

Harris Matrix – Site A



Appendix 3Artefact Register – Site A

No.	Description	Context	Easting	Northing	Date
1	Chert core	03	613.31	519.30	07/06/22
2	Iron nail	03	613.30	514.94	08/06/22
3	Stone 'tablet'	06	616.50	516.21	08/06/22
4	Chert crude scraper	03	614.23	515.78	08/06/22
5	Chert retouched piece	03	616.82	519.55	08/06/22
6	Chert debitage	06	615.19	517.62	08/06/22
7	Bone comb frag side plate	07	613.84	518.23	08/06/22
8	Chert debitage	03	618.16	519.05	08/06/22
9	Chert debitage	03	615.95	519.60	09/06/22
10	Chert scraper - small	03	615.42	519.27	09/06/22
11	Chert scraper - small	03	615.45	519.36	09/06/22
12	Chert debitage	06	614.38	517.02	09/06/22
13	Chert blade fragment	03	615.53	514.34	09/06/22
14	Chert bipolar core	07	613.79	516.81	10/06/22
15	Chert debitage	07	614.05	518.42	10/06/22
16	Flint blade fragment	07	613.96	518.97	10/06/22
17	Bone comb frag tooth plate	07	Sieve	Sieve	10/06/22
18	Iron buckle tongue, poss.	07	Sieve	Sieve	10/06/22
19	Siderite nodule	03 / 08	615.55	518.78	10/06/22
20	Chert scraper fragment	06	617.50	517.30	13/06/22
21	Chert debitage	06	616.40	517.40	13/06/22
22	Flake	06	614.20	517.95	13/06/22
23	Chert debitage	03	616.45	515.10	13/06/22
24	Crucible sherd	03 / 04	614.80	516.55	13/06/22
25	Chert flake	06	616.90	517.25	14/06/22
26	Worked bone, poss. handle	03	616.65	516.00	14/06/22
27	Shale flakes	09	616.12	516.67	15/06/22
28	Chert scraper, broken	09	616.22	517.38	15/06/22
29	Water-rolled stone	13	617.43	517.84	15/06/22
30	Bone point, in two pieces	15	616.18	516.52	16/06/22

31	Chert scraper, broken	15	615.91	517.13	16/06/22
32	Chert debitage	03	615.80	519.11	16/06/22
33	Chert retouched piece	07	Sieve	Sieve	16/06/22
34	Quern frag. (from outside cutting, to south)	02	613.77	509.88	16/06/22

Appendix 4Sample Register – Site A

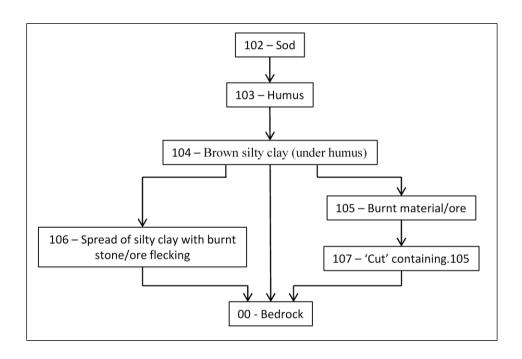
No.	Description	Context	Easting	Northing	Date
1	Animal bone	03	613-618	513-519	08/06/22
2	Animal bone	07	612	512-518	09/06/22
3	Animal bone	07	612	512-518	09/06/22
4	Slag	03	613.90	520.20	13/06/22
5	Animal bone	08 / 09	614-618	516-518	13/06/22
6	Slag	13	615.72	517.91	15/06/22
7	Animal bone	13	614-618	516-518	15/06/22
8	Animal bone	15	614-618	516-518	16/06/22
9	Bone, for C14	15 base	614	516	17/06/22

Appendix 5Context Register – Site B

No.	Description	Grid square	Sample	Date assigned
00	Bedrock/Natural	All cutting	-	14/06/22
101	Doline	636-642 / 486-494	-	14/06/22
102	Sod	636-642 / 486-494	-	14/06/22
103	Humus	636-642 / 486-494	-	14/06/22
104	Brown silty clay (under humus)	636-642 / 486-494	01	15/06/22
105	Burnt material/ore	636-8 / 488	02	16/06/22
106	Spread of silty clay with burnt stone flecking	636-8 / 488	-	16/06/22
107	'Cut' containing.105	636-8 / 488	-	30/06/22

Appendix 6

Harris Matrix - Site B



Appendix 7

Artefact Register – Site B

No.	Description	Context	Easting	Northing	Date
501	Chert debitage	04	638.28	491.74	15/06/22
502	Chert debitage flake	04	638.77	493.43	17/06/22

Appendix 8

Sample Register – Site B

No.	Description	Context	Easting	Northing	Date
101	Animal bone	04	636-642	486-494	16/06/22
102	Burnt material/ore	05	636-8	488	17/06/22
103	Solidified burnt material/ore	05	636-8	488	17/06/22