



Archaeology Research Excavation Grant Report

Name of Grantee:	Dr Michelle Comber
Title of Project:	Revealing the detail: post-excavation analysis at Caherconnell Cashel, Co. Clare
Amount and year awarded:	€29,730 in 2020

Summary of report:

This post-excavation study is part of a larger research project investigating the ringfort landscapes of the Burren, Co. Clare. It comprises one year of post-excavation processing and analysis of material excavated from Caherconnell cashel. The excavations ran from 2010 to 2019, and some post-excavation work will continue beyond this Academy-funded phase. This phase has seen the physical processing (conservation, numbering, photography, cataloguing, and some specialist analysis) of over 1800 artefacts, and the processing and analyses of modest samples of marine shell, bird and fish bone, and coprolite, and large samples of metallurgical material, charcoal and plant remains. All have contributed to an understanding of life inside this high-status cashel, from the late 10th to early 17th century AD.

Please outline the objectives of the Project:

1. The cashel was initially excavated to determine its role within a wider ringfort landscape. Post-excavation analyses of metallurgical evidence, faunal remains, charcoal, and plant remains, chronological phases etc. have all contributed to this determination. The settlement clearly exploited all local resources whilst also maintaining links with the wider world. The inhabitants' concern with tradition/identity has also become very clear.
2. Test excavation in 2007 (07E0820) suggested an unusual chronology for this ringfort. This led to the next objective – determining the dates of construction and use of the cashel. This has been achieved using various methods of both relative and absolute dating. The Academy-funded phase of the project has contributed a number of radiocarbon dates to this determination. The site was constructed in the late 10th century, saw several 'phases' of (continuous) settlement, ending at the start of the 17th century. This confirms the traditional Early Medieval construction date for ringforts. It also, however, provides extensive evidence of continued use throughout the medieval centuries – something previously only hinted at or suggested at a handful of sites.
3. With extensive medieval activity confirmed, this project is now exploring native settlement in an otherwise generally intrusive archaeological context – how native noble families lived in a time of Anglo-Norman, and later English, settlement. The evidence from this phase of study is highlighting the continuing importance of tradition, but not to the detriment of progress, e.g. the metallurgical analyses have revealed an advanced, Scandinavian-influenced, form of ironworking at the site.



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Please describe the methodology used in conducting the research:

The significance of this site for both monument studies and medieval settlement in Ireland demanded detailed interrogation of the various, often rich, assemblages recovered during excavation. A range of post-excavation investigations and analyses were undertaken/are ongoing.

A programme of radiocarbon dating has been undertaken, with dates determined by the Chrono Centre at Queens University Belfast. Secure samples (mostly animal bone, as it usually produces more accurate results than charcoal) from different phases of activity were submitted for dating.

All artefacts requiring conservation (over 1800 artefacts were recovered) have been conserved by Susannah Kelly at UCD. All metal artefacts have been x-rayed. Artefacts have also been carefully catalogued and measured in both publication format and NMI database format. Detailed digital artefact photography has been completed. [Museum-grade archive boxes have been purchased for the eventual transfer of material to the NMI.]

Find co-ordinates were recorded for all artefacts and some sampled material (e.g. slag) during excavation, and ArcGIS is being used to produce and analyse artefact distribution plots.

Artefacts are being recorded using 2d (completed) and 3d photography and scanning (ongoing, not funded by RIA but designed to enhance public interaction with the findings).

Specialist analysis of the following is completed/ongoing:

- Marine shell – to identify species, sources, uses etc. Emily Murray.



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- Metallurgical remains (including chemical/mineralogical analyses) – to determine processes represented, possible sources etc. Paul Rondelez.
- Archaeobotanical remains – to identify grains, seeds, nuts, charcoal, and explore their significance. Susan Lyons.
- Lithics and stone axes – over 400 lithics and 6 stone-axe fragments were recovered and required classification and chronological investigation. Noel McCarthy.
- Coprolite – a relatively small assemblage with the potential to reveal dietary information. Don O'Meara.
- Human bone – remains from the burial mound have already been analysed, with a small collection of stray fragments recovered from faunal samples now added to the original report. Linda Lynch.
- Beads – expert analysis completed. Mags Mannion.
- Animal bone – a very large assemblage of animal bone was recovered; detailed analysis is underway at UCC. Bird and fish bones were extracted as part of this process, and are studied separately. Róisín NicCnáimhín.

The research methods employed are clearly varied and designed for the relevant sub-assemblage. It is the role of the report author/project director to orchestrate all of the above and seamlessly integrate the various results into the overall narrative.

Please outline the findings of your research and/or milestones achieved:

A detailed chronology has now been revealed for Caherconnell cashel. The earliest activity dates to the late 6th/early 7th century AD, and comprises a small burial mound. The cashel was built in the late 10th century, deliberately incorporating the earlier burial. Four phases of occupation followed, starting with a large, central circular house with associated metalworking areas and kiln in the late 10th century. In the 11th century, the circular house was replaced by two rectangular structures. These continued in use from the late 11th to the 14th century, with the addition of a third rectangular structure. The final phase of occupation, marked by the remodelling of the cashel entrance and replacement of the three earlier houses with a new rectangular house, occurred in the 15th/16th century, likely ending in the early 17th century.

This is the first significant assemblage from a modern excavation of a native dryland, high-status, settlement site of these centuries. As such, it has presented an unprecedented opportunity to explore life for a native family in medieval Ireland, tracing both continuity and change from the Early Medieval period right through to the start of the 17th century.

Much is known about agricultural practice in Early Medieval Ireland. The same cannot be said for native farming in medieval centuries, where surviving evidence is often dominated by external groups and practices. Soil samples retained during excavation were recently processed for archaeobotanical remains. An assemblage of carbonized grain was recovered, including wheat, barley, rye, and oats. Bone preservation is excellent at the site which, combined with centuries of domestic use, resulted in a securely stratified large collection of animal, fish, and bird bone. Analysis of the animal bone is underway as the subject of a doctoral thesis at UCC. The bone suggests a diet of mostly beef and pork, with lesser quantities of mutton. Other species represented include domestic fowl, goat, dog, cat, horse, red deer, and fish.

Craft activities included ironworking and precious metalworking, textile and leather-working, and boneworking. Post-excavation analyses have revealed much about the organisation of these activities, and their relationships to one another in the various phases of occupation. Detailed analysis has revealed/is revealing a subtle Scandinavian influence in the earlier phases of activity. It seems likely that this was facilitated by the family connections of the builders/occupants, being part of the Brian Boru dynasty with its links to Viking Limerick in particular. Such



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connections probably continued into later phases of activity. The English coins, Italian bead, German jeton, and early reams could all have arrived at Caherconnell via such social, economic, and political connections.

All of the post-excavation analyses have combined with the stratigraphic record to significantly impact archaeological knowledge in two main ways:

1. Our understanding of ringfort use and significance has improved.
2. The place of native lords in a changing world has been revealed, with native nobility finally represented in a significant manner in the archaeological picture of medieval Ireland.



Please provide details of the dissemination of the outcomes from this project:

A number of different forms of dissemination are in use by the project.

While the final project volume(s) is in preparation, shorter academic papers on relevant aspects of the site and its economy have been published in various peer-reviewed sources. These include the Oxford volume *Fortified Settlements in Early Medieval Europe: Defended Communities of the 8th-10th Centuries*, and journals such as the *Proceedings of the Royal Irish Academy*, the *Journal of Irish Archaeology*, the *Journal of the North Atlantic*, and *Medieval Archaeology*. New data produced by post-excavation analyses will allow the exploration of additional aspects of the site and its significance in peer-reviewed journals such as those listed above.

Papers based on preliminary results from the excavations in Caherconnell townland have already been given at the Early Medieval Archaeology Project conference in UCD (2010), the Early Medieval Defended Communities Across Europe conference in Oxford University (2013), the annual Society of American Archaeologists conference in Hawaii (2013), the Space and Settlement IV and VI conferences in Trinity College Dublin (2013 and 2015), the



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51st International Congress on Medieval Studies at Kalamazoo, USA (2016), the annual Association of Young Irish Archaeologists conference in NUI, Galway (2018), and the Discovery 2020 conference in Queens University Belfast (2020). Follow-on papers may be presented at several of these, with additional opportunities at conferences such as that of the European Association of Archaeologists.

Numerous less academic talks and site tours have been given to the general public and local and international archaeological, historical, and heritage societies. These range from a lunchtime lecture series in Galway Town Hall Theatre, to hosting groups from the Royal Societies of Antiquaries of Scotland and Ireland.

The Caherconnell project has engaged with the local community and general public throughout the excavation of the site – and is continuing this through the post-excavation phase. The results of excavation are disseminated at Caherconnell via a 26-page guidebook written by this author and given to all that pass through the site visitor centre. The post-excavation results will inform the final version of this guidebook. We also engage directly with national and international visitors at the visitor centre, with on-site AV movies and site tours. Our international audience extends to the Caherconnell.com/archaeology website and Caherconnell Stone Fort Facebook and Twitter pages.

Our work at Caherconnell has also featured regularly in regional newspapers and on radio stations, and occasionally national print and radio media. The author has filmed pieces for a number of TV documentaries – True Gaelic: Searching for Ireland's Lost History: a US documentary by HEC TV (streaming on Amazon, iTunes, and Hoopla), Burren Girl: a US-based independent documentary (released 2020, currently showing at international film festivals), Secrets of the Burren for RTE (by Katrina Costello, producer of the award-winning Silver Branch), and DNA Caillte a three-part series for TG4 dealing with scientific discoveries and how they inform our knowledge of the past (broadcast 2020). An interview for an Australian archaeology podcast series was also recently completed (January 2021).

www.caherconnell.com/archaeology

<https://www.burrengirl.doc.com>

<http://www.truegaelic.com>

<https://www.tg4.ie/en/player/online-boxsets/?series=DNA%20Caillte&genre=Faisneis>

How will you continue to communicate the results of your project and what are your publication plans?

The primary publication is envisaged as either a single- or double-volume book, incorporating the results of landscape survey (funded by the Heritage Council) and previous excavations at Caherconnell such as IOEI 19, the sub-square cashel located less than 100m south of Caherconnell cashel (excavation funded by an RIA Research Excavation Grant). This exploration of Burren ringfort landscapes hopes to make a significant contribution to our understanding of Early Medieval and Medieval rural landscapes in the west of Ireland.

The author hopes to organise a conference on Caherconnell-related themes at the end of the project. Papers will cover excavation and post-excavation topics from Caherconnell itself, but also the broader themes that the Caherconnell material contributes to – studies of native enclosed settlement, the importance of place and identity, the archaeology of native medieval Ireland etc.

It is planned to submit some articles to Archaeology Ireland magazine – artefact- and craft-related stories are particularly appealing. The first of these will focus on the pen discovered during excavation



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in 2019. Working with an experimental archaeologist in the UK, the author plans to replicate the artefact and then experiment with its use – the replica production has recently commenced (January 2021).

How did the award enhance your professional development?

The size and varied nature of the excavated assemblage being studied requires collaboration with a number of specialists in several disciplines. The RIA funding has facilitated this network creation and exchange of knowledge and skills. Some relationships were already established, for example with metallurgical expert Paul Rondelez, yet new methods of scientific analysis of metals and residues were previously unknown. This project has also provided an opportunity to establish connections with specialists such as Fay Worley and Don O'Meara of Historic England, Steve Ashby of the University of York, and work with an experimental archaeologist in the UK and renowned Irish calligrapher and scholar Tim O'Neill.

What plans (if any) do you have to further this project?

Immediate plans see the completion of post-excavation work: the animal-bone study at UCC, artefact illustrations by the author, and preparation of the primary project publication. The archive and material assemblage will then be transferred to the relevant State authorities.

If possible, targeted excavation will be undertaken to obtain dating evidence for the cashel that lies between Caherconnell cashel and the square cashel in the same townland – to determine their chronological relationship. Ideally, this information would be incorporated into the primary project publication.

Future, related projects, may include investigation of other cashels and related features in the region and beyond. Particularly intriguing are those ringforts that occur towards the beginning and end of the Early Medieval period, with their potential to explore the significance of continuity and tradition in the Irish past.