



## Archaeology Research Excavation Grant Report

Name of Grantee:	Dr Alan Hawkes
Title of Project:	The Rathcoran Hillfort Project
Amount and year awarded:	€10,580 in 2020

### Summary of report:

This report presents the preliminary results of an archaeological investigation undertaken in July/August 2020 at a multiple enclosure (Rathcoran) in the townlands of Collinarrig Upper, Pinnacle, and Tuckmill Hill, Co. Wicklow. This excavation represents the fourth season of investigation at the site.

The 2020 season focused on establishing when the large ‘quarry pits’ recorded between the two enclosing elements at Rathcoran were in use. One of the most popular theories is that these hollows were used to extract stone for the construction of the ramparts. It was hoped that recovering secure dating material from one of these pits would clarify when the second phase of rampart building took place. Another trench examined a smaller ‘hut platform’ situated a short distance north of Trench 4. Excavation here in 2019 provided some evidence to suggest these may not have been prehistoric houses. This uncertainty would be clarified by more extensive excavation of another, smaller terrace, where the entire internal space would be investigated.

Trench 5 was positioned over one of the quarry hollows and associated radial banks in the north-western section of the enclosure, between the two ramparts. This particular hollow was located externally to the inner rampart. The cutting exposed the terminal end of a N/S rock-cut ditch that widened towards the south-east and which appeared to continue further south towards the inner rampart, between the two radial banks of the hollow. Excavation of the ditch confirmed that the upper horizon of the softer shale bedrock was excavated first to access the underlying harder rock and deposited on either side of the hollow, forming the existing N-S radial banks. Once the required amount of harder rock was extracted, the ditch was deliberately backfilled. There was no evidence to suggest the quarry hole was opened for any considerable amount of time. Sherds of Neolithic pottery were recovered near the base of the ditch between a basal stony layer and the redeposited natural. A possible hearth or dump of oxidised soil and burnt stone was apparent in the upper fill of the hollow, along with some sherds of possibly Bronze Age pottery (TBC), indicating the possibility of later prehistoric activity within the quarry hollow.

Trench 6 was positioned over another smaller terraced platform defined by a ring of large boulders or kerbs on the south-eastern side of the enclosure. The excavation exposed a linear stone-filled pit that splayed downslope to the north. It was cut into the underlying natural granite fluvio-glacial geology and was filled with heavily compacted stone and silt derived from hillwash. The linear cut continued outside the limits of the excavation and importantly underlay the boulder ‘kerb’, suggesting that these are later in the sequence and may in fact have accumulated their naturally. No finds were recovered from the trench and it is possible much of the material was natural in origin. The results from two of these ‘hut platforms’ now calls into question their original interpretation as house sites.

### Please outline the objectives of the Project:



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The primary aim of the Rathcoran Hillfort Project is to provide greater clarity to one of Ireland's most impressive but least understood hilltop monuments. The objective is to explore the construction origins of the monument, mainly through investigation of the enclosing ramparts. The central research questions to be addressed in 2020 related to findings obtained from the 2019 season of excavation.

While the initial research aims of the project have been successful i.e. dating the construction of the monument, there were a number of related key issues that remain unanswered. The 2019 cutting over the outer rampart and ditch confirmed that the stone component of the bank was not made up of material extracted from the outer ditch. Therefore, it is unclear where this vast quantity of quarried stone was sourced. One of the most popular theories is that the many 'quarry pits' recorded between the two ramparts were used for the extraction of the stone for the construction of the banks. This would imply that they date to the second phase of rebuilding at the site for which there is no dating to date. A cutting over one of these pits and associated spoil heaps would confirm their date and function.

Excavations in 2019 indicated the possibility that a number of terraced platforms in the south-eastern may not have functioned as roofed buildings for prehistoric occupation. A boulder kerb did not function as walling or foundation for a structure and no occupation layers, internal hearth or postholes were uncovered. Instead, the stone kerbing surrounded two pits, one of which was 4m long with an internal stone partition and/or collapsed roofing stone and contained a sherd of Neolithic pottery and charcoal dating to the Middle-Late. While its function as a prehistoric dwelling is circumspect, its interpretation as a ritual monument associated with burial is equally problematic due to the lack of human remains. Additional trenching in another example could clarify whether this was the case and would be instrumental in our understanding of how this enclosure was unitised during the Neolithic.



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### **Please describe the methodology used in conducting the research:**

The methodology used in conducting the research was by means of archaeological excavation. Two trenches were excavated at Rathcoran over a five-week period between July and August 2020. Trench 5 was positioned across one of the recorded 'quarry pits' in the north-western section of the enclosure, between the two existing ramparts. Trench 6 was placed over another terraced platform on the southeast side of the hilltop enclosure, with the entire internal space targeted.

Prior to excavation, both areas were cleared of vegetation to facilitate the positioning of the trenches. All archaeological deposits were excavated in plan and by hand, using small digging tools to underlying natural levels. The single context recording system was adopted with plans and sections produced at appropriate scales. Drone technology also aided in producing accurate 3D photogrammetry models (courtesy of Munster Archaeology and UCC). A complete photographic record was maintained throughout the excavation and all charcoal deposits were 100% sampled for post-excavation analysis and radiocarbon dating. On completion of work the trenches were back-filled by hand and the ground surface restored.





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

The central research question of the Rathcoran Hillfort Project was to obtain information on the design of the enclosing elements and the methods and materials employed in the construction of one of the largest prehistoric enclosures in Ireland. It was hoped to obtain dating evidence for the construction and abandonment of the enclosure. There was also the possibility of recovering artifacts and environmental evidence relating to the occupation of the site. This information was deemed vital to our understanding of the hilltop and the local area. Recent survey and excavation reveal the Baltinglass landscape was a seminal area in both the Late Bronze Age and Early Neolithic.

Four seasons of excavation have successfully answered these central research questions and have brought to close outstanding queries relating to the construction origins of the site. Trenches targeting each of the enclosing elements have confirmed that the prominent hilltop location and the highest point of Baltinglass Hill was first enclosed by a wooden palisade during the Early Neolithic. This fence enclosed an area of roughly 7.2 hectares. It appears that the post-structure may have been part of a double palisade comprising two lines of posts positioned 1.8-2m apart. Alternatively, the structure may have comprised a single fence with a number of supporting or bracing timbers on the inner side. It appears that a significant burning event discovered in one of the trenches on the north-western side of the monument is localised to this side of the fence-line, as is indicated from the geophysical survey. Currently, it is unclear whether this fire event was accidental, an act of ritual or if it was caused by some act of warfare.

The inner palisade enclosure at Rathcoran appears to have been removed and replaced by a substantial stone and earth bank at a later stage. Currently, it is unclear when this re-building took place, however, it is likely to have



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occurred soon after the substantial fire event on the north-eastern side of the enclosure, with the stone quarried from large pits immediately adjacent. It is also likely that the outer stone rampart with associated ditch was also added at this time. Further remodeling of ramparts may also have occurred during the Late Bronze Age.

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

To date, I have published two small articles detailing the results of the excavations (see below). These are small summary papers designed to publicise the project.

Hawkes, A. 2018. Excavations at Rathcoran Hillfort, Co. Wicklow. Institute of Archaeologists of Ireland Autumn Newsletter Issue 18, Series 2, 21-23.

Hawkes, A. 2019. Archaeological excavations on Baltinglass Hill: An update. Journal of the West Wicklow Historical Society No. 10, 11-16.

I have presented the preliminary results of the projects to local audiences for the 2019 Heritage Week in Baltinglass. I have also presented the project to an academic audience at the IAI Spring Conference held in Cork City and to research students and staff of the Archaeology Department University College Cork. Also, in October 2019, I presented at the 'Revealing the Past' conference held at The Royal Irish Academy, Dublin. The project has featured in several published newspaper articles, such as the 'The Wicklow Reader' and the 'Sunday Independent'. Due to the worldwide pandemic in 2020, the author hasn't had the opportunity to publicise this season's excavation.

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

It is hoped that when the project has been completed, the results will be published in several academic, peer-reviewed journals such as the Proceedings of the Prehistoric Society or Proceedings of the Royal Irish Academy. Also, the author is currently in talks with the National Monuments Service to publish the results of the excavation in their popular monograph series. This has yet to be confirmed.

It is also important to stress how important the results of this work will be to the local community in the Baltinglass region. It has been particularly rewarding for me to help communicate the results of the excavations to the local interest groups. The targeted excavation of these monuments and particularly Rathcoran provide an important information base, not just for our own academic advantage, but more importantly for the local community, who can use the information gleaned from the excavation to construct a structured narrative of this unique prehistoric landscape to inform the wider public.

### How did the award enhance your professional development?

The grant experience afforded me the opportunity to network with my peers, establish new professional relationships, and broaden my archaeological career.



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

Now that the main period of excavation has been completed, a second phase of post-excavation writing and analysis has begun and a new but related series of research questions must be answered. The primary of which relates to aspects of the construction history of the site. The stratigraphic sequence indicates that two phases of enclosing elements existed, however preliminary radiocarbon dating has failed to corroborate this due to limited dating evidence. However, new sample evidence uncovered from the 2019 and 2020 seasons of excavation should establish once and for all the chronological sequence of rampart building at Rathcoran and importantly provide an indication of where and at what period the quarry pits were excavated. The evidence suggests that after the palisade enclosure was removed, it was replaced with a stone rampart- the source of the stone deriving from the large quarry pits recorded between the two existing enclosures. It is also suggested that the outer rampart was added at this time complete with an external ditch. Presently, there is no adequate dating evidence for this phase of building, however samples recovered from a quarry pit in 2020 should answer this outstanding question. With over 1500g of charcoal available for study, much of it recovered from secure contexts, it is vital that this material is analysed, not only to provide information relating to the contemporary landscape but also for radiocarbon dating purposes. This programme of radiocarbon dating will be supported not only by a study of the artefactual evidence but also by Bayesian statistical analysis which will hopefully refine the dating evidence. This can be compared to similar studies carried out on nearby Neolithic enclosures and others excavated previously in Ireland.

The prehistoric pottery recovered from the 2020 season is an important discovery, as Neolithic ceramics from enclosure sites are rarely available for study. It is my understanding that the sherds are ideally suited for lipid analysis, a study which would add greatly to our understanding of local food resources, due to the absence of preserved archeobotanical and faunal remains from the site. Now that lipid remains can be specifically dated from pottery sherds, this will also be an important inclusion to the study and for Neolithic pottery studies. Added to this would be the large quantity of charcoal, which will support a landscape understanding of the monument. An analysis of the stone tool assemblage will also contribute to our knowledge of prehistoric technology and stone-tool use, as well as the exploitation of local natural resources.

Rathcoran is one of a very small number of Neolithic enclosure sites to be excavated in Ireland with a clear understanding of its construction history. Therefore, it is essential the results are brought to the attention of wider academic audiences.