



Archaeology Legacy Grant Report

Recipient name:	Dr Michael Potterton
Discipline and subject area:	Archaeology Legacy Projects Grant
Year awarded:	2022
Title of project:	Moynagh Lough Project

Summary of findings:

This report provides details of the components of the Moynagh Lough Project funded by an Archaeology Legacy Projects grant from the Royal Irish Academy in 2022-23. Information is provided on the methodology and outcomes of the four strands completed under this scheme, namely finds illustration and the specialist analysis of a) lithics, b) palaeo-botanical remains and c) jet/jet-like jewellery finds. Other aspects of the project took place simultaneously, but these were funded by other bodies (Maynooth University, Meath County Council, Creative Ireland) and these are not reported on here. Mention is made of plans for an interim publication next year (2024).

Please outline the objectives of the project.

The primary objectives this year were to move the post-excavation phase of the Moynagh Lough investigations closer to completion, to publication and to a point at which the entire archive and finds assemblage are ready to hand over to the National Museum of Ireland. The funding provided by this grant were used for four primary purposes:

Lithics remains (Graeme Warren & Deborah Buchanan)

Prof. Graeme Warren and two postgraduate students (Deborah Buchanan and Beth Kirwan) at UCD were engaged to carry out advanced research on the Mesolithic lithics assemblage from Moynagh. This was to involve the technological analysis of some 900 artefacts (c.900), the refitting of Mesolithic contexts, the identification of potential knapping sequences and a comparative analysis of Moynagh Points and Kerry Points.

Botanical remains (David Stone)

Environmental archaeologist David Stone has assessed the palaeo-botanical samples. He completed an Environmental Remains Assessment Report (ERAR), providing an overview of the environmental remains present (cereal, fruit, weed species), an overview of preservation and condition of archaeobotanical material, and a ranked scale of abundance (rare, common, frequent etc.) of remains present. He has identified a selection of appropriate material for radiocarbon dating and recommended samples for full archaeobotanical analyses, to be carried out later.

Illustration (Sara Nylund)

Both the Core Team and the Steering Committee believe it is imperative that we keep up the steady progress we have made and that work proceeds on as many fronts as possible. Sara Nylund has done an exceptional job of



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digitising plans and section drawings and has begun the illustration of finds (including lithics, spindle whorls, ceramic crucibles, leather). This year Ms Nylund has completed the drawings of a variety of artefacts singled out by finds specialists. She has also worked on digitising and ‘touching up’ existing drawings, bringing them into line with current norms and standards for the discipline.

Jet (Paul Stevens)

There is an exceptional assemblage of jet and lignite artefacts from the excavations at Moynagh Lough, from both Bronze Age and Early Medieval horizons. Archaeological specialist Paul Stevens was engaged to carry out an analysis of these pieces in 2023. Paul’s analyses included close visual inspection, illustration and photography, comparative research and a finds report prepared to publication standards. He made recommendations for further specialist scientific analysis that could shed further light on the assemblage.

Please describe the methodology used in conducting the research.

Lithics remains

Prof. Graeme Warren and his team at the School of Archaeology in UCD are key collaborators on this phase of the project. Warren is a qualified professional with a proven track record for the delivery and publication of reports to the very highest standards. The team followed closely the approaches, methodologies and standards of the discipline in the laboratory at Belfield, using the most appropriate and relevant techniques and technologies to extract as much information as possible from each artefact and the wider lithic collection.

Botanical remains

All samples were 100% analysed using a Leica 9SD stereomicroscope with magnification between x6.3 to x50. The archaeobotanical material extracted were initially classified according to gross morphology (shape and size) and then identified by comparison to reference materials of modern seed diaspores and illustrations and pictures from various seed key publications (Anderberg 1994; Berggren 1981; Cappers and Bekker, 2013; Clapham et al., 1962; Gale and Cutler, 2000; Martin and Barkley, 1973; Neef et al., 2012). All botanical and common names follow the order and nomenclature of Stace’s (2010) *New Flora of the British Isles* (Third edition). Nomenclature for cereals and other cultivars follows Zohary et al., 2013. An AmScope MU300 microscope cameras was used to photograph seeds used in the report.



Illustration

Having digitised many of the site plans and section drawings, and drawn many of the lithics, Sara Nylund proceeded to draw a selection of crucibles, whorls and leather fragments. The resulting vector illustrations are suitable for analysis and comparison by research specialists and conform to the highest publication standards. The artefacts were selected by the various specialists concerned and the work was carried out in liaison with them so that every important detail was noted and illustrated appropriately.

Jet

The specialist engaged to collaborate on this phase of the project – Dr Paul Stevens – is a qualified professional with a proven track record for the delivery of reports to the very highest standards. In his analysis of the Moynagh Lough



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jet and jet-like artefacts, he followed closely the approaches, methodologies and standards of his discipline, within the broader field of archaeological research and reporting. In practical terms, he carried out his research on the relevant jet component of the Moynagh Lough assemblage in his own laboratory space, using the most appropriate and relevant techniques and technologies to extract as much information as possible from each artefact and the wider collection. He prepared a catalogue, generated a report, offered recommendations and, finally, he will return the collection to Maynooth upon completion of the next phase of research.

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

Lithics remains

The analysis of some 900 artefacts was completed, including comparative analysis of Moynagh and Kerry Points.

Lithics were selected and prepared on a context-by-context basis (including the repackaging of all items).

Technological analysis revealed that most of the Mesolithic contexts are consistent in character, and very much in keeping with Later Mesolithic assemblages in general. Some contexts (1627/1630/1631) were notable for not having smaller material, and were clearly dominated by large flakes/blades. The refitting analysis showed no evidence (at this stage) for knapping sequences, with the only refits being broken artefacts. While this can be seen as something of a negative result, it suggests that little knapping was taking place on site, which seems counter-intuitive and worthy of further analysis. [full report available]

Botanical remains

22,090 plant-macro specimens were recovered, including cereal cultivars, other economic plants, fruit, nut and wild/weed species dating from the Mesolithic, Late Bronze Age and early medieval periods. Cultivars made up 6% of identified specimens and were present in 37% of samples. Cultivars identified included carbonised examples of cereals oat (*Avena sativa*), barley (*Hordeum vulgare*) naked wheat (*Triticum aestivum/durum/turgidum*) and rye (*Secale cereale*). Sixteen Mesolithic samples all derived from hazel

(*Corylus avellana*). Hazelnuts are often found on Mesolithic sites and would have been an important seasonal food. Three samples dating to the Late Bronze Age produced a large quantity of carbonised plant remains. A large deposit of carbonised barley is evidence of its cultivation and consumption at Moynagh at this time. [full report available]



Illustration

A portfolio of professional artefact drawings, prepared to publication standard, complete with scale and section. The final product consists of vector illustrations provided as eps files and pdfs. These are suitable for analysis and comparison by research specialists and conform to the highest possible publication standards. The artefacts were selected and the work was carried out in liaison with the relevant specialists so that every important detail is noted and illustrated appropriately. This component of the project is key for the record and for the final publication, but the digitised drawings are also indispensable for interpretation and analysis as the project progresses. [image files available]

Jet

A total of 71 jet-like objects were analysed (5 complete & 66 fragments): 59 (MNI=55) bangle or bracelet fragments, several that fit together including five bracelets (with terminal); 6 beads (various types); 2 smaller bangles or ringlets (unknown function); 3 finger rings (one unfinished); 1 waste chunk. Provisional assessment indicates that 5+ raw-



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material types are represented and appear to be both local and imported (a more detailed programme of geo-chemical analyses is recommended and forms part of next year's funding application). Late Bronze Age finds included six beads (five complete) and several very heavy arm bracelets, plus a bangle decorated and embellished with bands of precious metal (not surviving). The discovery of Late Bronze Age finger-ring manufacturing is unique in the archaeological record and needs to be further studied. [full report available]

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

All strands of this project are working towards a full publication of the Moynagh Lough Excavation. I published a 6-page article about the project in the summer 2022 issue of Archaeology Ireland. We held a very successful two-day Moynagh Lough Conference at Maynooth University in September 2022. On 5 September 2022 I gave a lecture to the Royal Society of Antiquaries of Ireland. This was well attended in person and live-streamed online. The new heritage centre in Nobber includes a permanent exhibition on Moynagh Lough, with replicas of some of the key artefacts and a model of the site c.AD700. I gave a talk there on the Moynagh Lough Project on 13 May 2023.

No. of Lectures given/outreach events: 2

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

The main publication of the project results is proposed for 2028. In the interim, there will be a range of 'stepping-stone' publications, lectures, seminars and social media presentations. Papers presented at the recent conference will form the backbone of the next major publication – Moynagh Lough Studies 1 – in 2024. This will allow us to get important research into the public and professional domain while the core project is ongoing. Essays in this volume can then be cross-referenced in the final publication. Similarly, it is envisaged that a second stepping-stone publication – Moynagh Lough Studies 2 – will appear in 2026, incorporating further strands of research undertaken in the interim. One of the questions raised by the Standing Committee for Archaeology in 2021 was how we were going to bridge the gap between now and 2028 in terms of publication; the proposed three-step plan addresses this very pertinent issue. We also aim to run two more Moynagh Lough Conferences at Maynooth before the end of the project in 2028 (in 2024 and probably 2026).

The preliminary reports prepared by John Bradley were completed to a high standard and these will form a foundation for the final publication. Some specialist reports have been completed, and a series of radiocarbon dates have been established. Some plans and drawings are ready for publication. A lot more work needs to be done, of course, and the work proposed for 2024 will form an important component of this. The project and publication are being coordinated, managed and edited by me. I feel it is fair to say that the Royal Irish Academy recognises my expertise in the field of publication – in recent years the Academy has appointed me as an Editorial Board member of its prestigious Irish Historic Towns Atlas project (of which I am now the Chair), and as an Editorial Board member of the Proceedings of the Royal Irish Academy. The final excavation report will, of course, be fully peer reviewed.

How did the award enhance your professional development?

Being the PI of this project was one of the items I highlighted on my recent (successful - woot woot!) application for promotion.



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What plans (if any) do you have to further your proposal/project?

Major plans. Full publication etc. within the next 6 years. Then retirement to the Greek Islands never to hear the words 'Moynagh Lough' or 'deadline' again.

Also:

I am 100% committed to this project, please let there be no doubt about that, despite the odd moment of levity as above. I have applied to the RIA for funding to progress the project through 2024. I have also applied to Creative Ireland, the Heritage Officer in Meath County Council and Maynooth University for further support. All these bodies are committed to and invested in the project. This is clearly a mutually beneficial arrangement for all parties. We plan to proceed with specialist analysis of finds and samples from the excavations, continuing with digitisation and duplication of the record, drawing finds and refining the databases. This is a complex and multi-strand project but we have good momentum now and a lot of good will behind

Please outline current plans to lead to completion of a final excavation report as per licence/consent and original grant condition

All strands of this project are working towards a full publication of the Moynagh Lough Excavation. The preliminary reports prepared by John Bradley were completed to a high standard and these will form a foundation for the final publication. Some specialist reports have been completed, and a series of radiocarbon dates have been established. Some plans and drawings are ready for publication. A lot more work needs to be done, of course, and the work achieved this year and proposed for next year will form an important component of this. In terms of the final publication, I have enlisted one senior academic person to take responsibility for the Mesolithic section of the report, one for the Bronze Age and one for the Early Medieval period. The project and publication are being coordinated, managed and edited by me. I feel it is fair to say that the Royal Irish Academy recognises my expertise in the field of publication – in recent years the Academy has appointed me Chairman of the Editorial Board of its prestigious Irish Historic Towns Atlas project, and as an Editorial Board member of the Proceedings of the Royal Irish Academy. The final excavation report will, of course, be fully peer reviewed.