

Archaeology Legacy Grant scheme 2022

Michael Potterton- final report

Submission Date Oct 20, 2022

1. Title: Dr

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2. Email:

3. Grant programme Archaeology Legacy Projects

4. Year awarded 2022

5. Title of project Moynagh Lough Project

6. Summary of report (Min. allowed 100 words)

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. Information is provided on the methodology and outcomes of the five strands completed under this scheme, namely finds illustration, archive digitisation/scanning and the specialist analysis of a) faunal remains, b) palaeobotanical remains and c) medieval leather artefacts. 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 a major conference that was held in September 2022, and an article that appeared in Archaeology Ireland (summer 2022).

7. Please provide two appropriate images



Cattle radius

Moynagh Lough Archaeobotany
David Stone

- 90 samples assessed
- 22,090 specimens extracted
- 29 species
 - fruit/nut: 82%
 - wild/weeds: 12%
 - cultivars (cereal/non cereal): 6.5%
 - unknown: 0.5%
- 15,000+ bramble seeds (blackberry)

9. 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 five primary purposes:

Faunal remains

Zooarchaeologist Dr Ruth Carden has carried out an analysis of the faunal remains assemblage, including identifications, cataloguing and preparation of a database, zooarchaeology analysis and a specialist zooarchaeological report.

Botanical remains

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.

Leather

There are approximately 125 finds of leather from Moynagh Lough. Some of these were conserved in the 1980s and are now back with the main assemblage in Maynooth, while 13 items are stored in the National Museum of Ireland. John Nicholl has carried out a careful analysis of 111 leather items and prepared a detailed report on the collection. Mr Nicholl's report and catalogue includes artefact identification, description, species identification, discussion of finds with comparanda, a photographic record of significant finds and recommendations for conservation and illustration.

Illustration

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 digitising plans and section drawings and has begun the illustration of finds (specifically lithics in 2021). This year Ms Nylund has completed the drawings of stone spindle whorls, ceramic crucibles and leather.

Archive digitisation

The hard-copy drawings, photographs and slides have now been scanned. These can now be duplicated, shared and printed as required, allowing for easier research, sorting, comparison, searchability, security and storage, as well as being economically, logistically and environmentally preferable. The scanned images can now be linked to a searchable database of illustrative material by a Research Assistant.

10. Please describe the methodology used in conducting the research

Faunal remains

Taxonomic identifications were made using Carden's modern comparative collections and aided using bone and teeth atlases. Bone fragments were weighed using a digital weighing electronic scales. Combined fragment weights were recorded for small bone flakes/fragments of unidentifiable material. All fragments were identified to taxon and element where possible. Ovicaprids was used where sheep and goat bones were indistinguishable between the species. Other recorded information included the state of the epiphyseal fusion, the presence of various taphonomic causal agents, arthropathies on the bones and the overall condition of preservation and estimated age or developmental stage of the domestic species. For further details, see Carden's report.

Botanical remains

The samples were contained in either well-labelled polyethylene archaeological

storage bags or robust plastic containers with screwcap lids. The samples analysed consisted only of flots with no heavy residue material. The flotation method is one of the most important methodological developments in archaeobotanical research worldwide. The aim of this method is the recovery of seeds, animal bone and other small cultural remains that are overlooked or lost during the normal soil screening processes. 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.

Leather

There are two sides to every piece of leather, an inner flesh side and an outer hair or grain side. The type of leather used in the manufacture of leather goods can be identified by an examination of the hair follicle pattern on the grain side of the leather. The main species utilised for such work are cow or calf, goat or kid, sheep and deer. Each species has a distinctive follicle pattern, which can identify the animal hide used. Unfortunately, the follicle pattern can sometimes be damaged or obscured by wear, the manufacturing process or embedded dirt, which can make positive identification impossible. Where this was the case in the Moynagh report the species was not identified. For further details, see Nicholl's 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.

Archive digitisation

Research assistants spent several weeks progressing the preparation of a permanent digital record of the photographic and illustrative archive associated with the Moynagh Lough excavations and post-excavation to date. The files were scanned to a USB memory stick and copied for security to a portable hard drive.

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

Faunal remains

Some domesticated species' bones bear butchery processing modifications. Large mammal-bone fragments amounted to NISP=768, whereas those attributed to medium-sized mammals amounted to NISP=72. General patterns of skeletal element presence indicated that the domesticated species were represented by full bodies or carcasses on site (primary producer site). There is a mixture of juveniles and adults domesticates. Wild animal species, including fish, appear to be of incidental importance or represented an opportunistic resource. Red deer remains amounted to NISP = 81, of which 30 were antler tine or main beam fragments, indicating that shed antlers were collected in the area every spring or stags were hunted.

Botanical remains

Analysis of environmental samples by David Stone has revealed large quantities of cultivated, gathered and wild plant species. Hulled barley and oat are common, while hulled and naked wheats are also present. Gathered foods include hazelnuts, bramble, raspberry and sloe. Wild species comprise those typical of wet or damp areas, disturbed and enriched soils and cereal fields. Further research should illuminate the use of wild resources, agricultural practices and the environment.

Leather

Assessment by John Nicholl of more than one hundred leather fragments has shown that most are off-cuts, trimmings and scraps. Some bear traces of animal hair/fur. Fragments of shoe soles suggest that turn-shoes were worn, while an incomplete sheath for a small knife shows traces of decorative linear, dot and key motifs.

Illustration

An initial batch of stone spindle whorls, ceramic crucibles and leather items was delivered for illustration and pagination to publication standard. 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.

Archive digitisation

Scanning has seen a permanent digital record created of a large part of the photographic and illustrative archive. Given the international and collaborative nature of the project, such a digital archive will facilitate fast and efficient sharing and searching of information. The importance of being able to send and share documents electronically was driven home during the travel restrictions necessitated by the global pandemic. Unfortunately, part of the archive was irretrievably damaged by flooding some years ago; having a digital copy of the record negates the potentially awful consequences if such an event were to recur. Not all the information in the archive will be included in the final publication, of course, but having digital files will enable future researchers to look back through the primary written record. A copy of this digital archive will be made available to the National Museum of Ireland and the National Monuments Service in due course.

12. a) Please provide details of the dissemination of the outcomes from this project (inc. publications, presentations, outreach, media etc.) including details of any social media/web platforms used to publicise this project

I published a 6-page article about the project in the summer 2022 issue of Archaeology Ireland. This has generated a lot of positive feedback and renewed interest in the project.

We held a very successful two-day Moynagh Lough Conference in Maynooth University in September 2022, showcasing some of the ongoing research as well as revisiting some of the previously completed and published elements of the earlier phases. We had 25 speakers and 7 people who presented their work by poster.

On 5 September I gave a lecture to the Royal Society of Antiquaries of Ireland. This was well attended in person and live-streamed online. Dr Kelly Fitzgerald, President of the RSAI, wrote to me afterwards to say: 'On behalf of the members of the Royal Society of Antiquaries of Ireland may I thank you for your contribution to our first Monday talk for the academic year. I was particularly delighted to hear you speak after witnessing the successful Moynagh Lough conference via social media in the days before your presentation. It is a testament to your commitment to meaningful, scholarly dialogue that you have dedicated such time to the continuation of discussions in this area. We look forward to future publications, albeit by yourself or in edited conference proceedings, that will make a substantial mark in the research of understanding Co. Meath. The response of the audience was testimony to the triumph of the contribution.'

b) No. of Academic Papers/articles published:

1

c) No. of Lectures given/outreach events involved in:

23

d) Media Coverage (article in local newspaper, feature on University website etc.):

The Archaeology Ireland piece, the conference and the RSAI lecture (mentioned above) all generated a flurry of activity relating to the project on social media, notably Twitter and Facebook. The Maynooth University Research Week poster session will feature two posters on the Moynagh Lough Project.

Please upload any relevant media coverage

Link to Archaeology Ireland article: <https://www.ria.ie/sites/default/files/archaeology-ireland.pdf>

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

We have set up a website for the project and we are currently creating and adding content before it goes live in 2023. 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 – which is pencilled-in for 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 plan to run two more Moynagh Lough Conferences at Maynooth before the end of the project in 2028 (probably in 2024 and 2026). For more on our publication plans, see Q. 18 below.

16. How did the grant enhance your professional development (e.g. in terms of specific opportunities, opportunities for enhancing skills, collaborations with others etc.)?

Without the grant this project would not be possible. Not only did it enable us to carry out a series of key strands of research and other work this year, but it also allowed us to attract collaborators and funding from other quarters, and to get the project more widely known.

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

I will apply tomorrow to the RIA for funding to progress the project through 2023. 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 us. The answers to Questions 12e above and 18 below also address our plans for progression.

18. For Archaeology Legacy Projects only: 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.
