Acadamh Ríoga na hÉireann
Royal Irish Academy

An Roinn Tithíochta,
Rialtais Áitiúil agus Oidhreachta
Department of Housing,
Local Government and Heritage

Archaeology Research Excavation Grant Report

Name of Grantee:	Dr Michael Potterton
Title of Project:	Moynagh Lough Project
Amount and year awarded:	€19,400 in 2020

Summary of report:

I am delighted to be able to report excellent progress on various fronts, despite the various challenges we faced this year.

Moynagh Lough Steering Committee - The term of office of the initial Steering Committee ended this year and so there was an opportunity to reconvene the committee, with 5 members staying on, 5 stepping down, and 5 new members joining. I'd like to take this opportunity to note my thanks to all members, outgoing, remaining and incoming. I have met individually with almost everybody on the panel, at least once, and we had an excellent Zoom meeting in October. I also met with Maeve Sikora last year, as a project mentor on behalf of the Standing Committee.

Moynagh Lough Project Steering Committee, 2020–2024:
• Chris Corlett – National Monuments Service
• Alison FitzGerald – Maynooth University
• Eoin Grogan – Maynooth University
• Loreto Guinan – Meath County Council (Heritage Office)
• Ann Lynch – Independent
• Con Manning – RIA Standing Committee for Archaeology
• Aidan O'Sullivan – University College Dublin
• Michael Potterton – Maynooth University
• Carol Smith – National Museum of Ireland
• Graeme Warren – University College Dublin

Moynagh Lough Core Team - The principal team has now been formalised with collaboration between MU and UCD, as primary stakeholders. Colleagues have been appointed to oversee certain elements of the project based on their expertise and experience.

Moynagh Lough Project Core Team
• Principal Investigator: Michael Potterton (MU)
• Vice-Principal Investigator: Aidan O'Sullivan (UCD)
• Medieval: AOS & MP
• Bronze Age: Eoin Grogan (MU)
• Mesolithic & Neolithic: Graeme Warren (UCD)
• Research Assistant (part time): David Collins (MU)

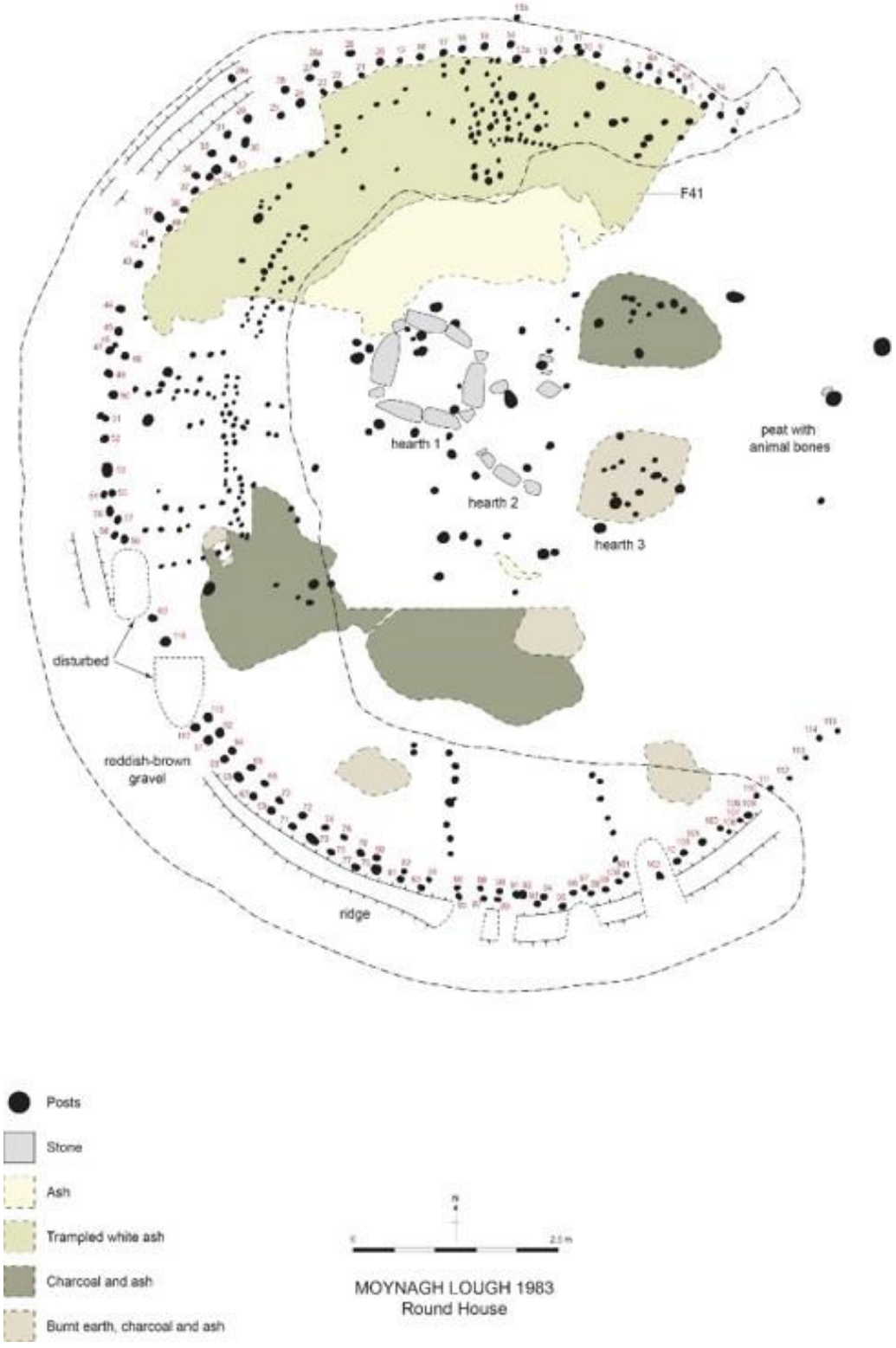
Finds database - The complicated task of compiling a finds database is now 80% complete.

Archaeology Research Excavation Grant Report

Palaeo-environmental samples - Entomological analysis was carried out at UCD by Steve Davis. A full report is appended, but essentially it contains a variety of evidence that will facilitate the virtually reconstruction of the local landscape at Moynagh from the Mesolithic to the early medieval period.

Digitisation of plans - Illustrator Sara Nylund completed the digitisation of some 200 hand-drawn plans, structures, features and sections.

Archaeology Research Excavation Grant Report



Please outline the objectives of the Project:

Archaeology Research Excavation Grant Report

The primary objectives of this phase of the project can be summarised as follows:
a) prepare a database of the artefactual assemblage
b) carry out microscopic analysis of a selection of the palaeo-environmental samples
c) digitise a selection of plans, sections and other drawings

Please describe the methodology used in conducting the research:

ARCHIVAL WORK: The compilation of the finds database is a multi-faceted task. In addition to systematically entering information about each of over eight thousand objects individually, it involves simultaneously a) sorting finds by category; b) separating of samples from the artefacts; c) crosschecking physical finds v. labelling v. lists and notebooks etc.; d) identifying and correcting discrepancies; e) highlighting remaining problematic entries; f) populating database with additional information; g) updating database; h) replacing labels; and i) noting artefacts requiring urgent conservation/attention.

PALAEO-ENVIRONMENTAL ANALYSIS: In his appraisal of the site, Prof. Aidan O'Sullivan noted the significance of the 'survival of organic materials' at Moynagh Lough. The 2019 scoping exercise identified a range of palaeo-environmental samples with potential to reward careful scrutiny and analysis. Dr Steve Davis of the School of Archaeology at UCD carried out this work at Belfield. Among the samples selected by Dr Davis were vegetation, brushwood, and soil. These were processed, assessed and analysed at UCD before a final report was prepared by Dr Davis.

DIGITISATION OF PLANS AND SECTIONS: The scoping exercise identified some 300 site plans, section drawings and other plans. This component of the project is key a) for the record (some of the plans are almost forty years old and are almost illegible); b) for interpretation, analysis and preparation of the final report; c) for publication. It is important to note that before this no plans, drawings, sections or sketches of any sort had been digitised for Moynagh Lough. This year, Sara Nylund scanned, interpreted and annotated over 300 sheets of permatrace plans, sections and drawings. She then scanned to full publication standard almost 200 of these, despite the usual challenges combined with brittle 40-yearold permatrace, faded pencil lines and labels, some enormous plans and various other constraints.

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Archaeology Research Excavation Grant Report

Moynagh Lough Palaeo-environmental early medieval insects

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

ARCHIVE/FINDS/CATALOGUE: David Collins and Emma Ward have been working assiduously on the compilation of the finds database. This task is multi-faceted and involves all sorts of logistical and practical roles as well as the intellectual and professional capabilities that David and Emma bring to bear. They were also involved in the preparation of plans and drawings for digitisation, and the preparation of palaeoenvironmental samples for analysis. The database is now 80% complete.

PALAEO-ENVIRONMENTAL SAMPLES: A first phase of entomological analysis was completed by Steve Davis at UCD. Steve assessed a series of twenty-five vegetation, brushwood and soil samples, spanning the Mesolithic to the early medieval, and has supplied a detailed scientific report on this work. Much of what turned up is as we expected, although it is always good to get empirical evidence to support our assumptions. Steve found a wide range of excellent evidence that will allow us to virtually recreate the local landscape at Moynagh through the ages. For example, microscopic analysis of samples from one of the Mesolithic deposits reveals clearly an environment comprising 'open wet woodland, possibly alder carr, with standing stagnant water, dead wood and clayey soils. The standing water has significant emergent vegetation, most likely reeds and rushes with mosses. The presence of a single elmid rifle beetle possibly indicates the input of fast flowing water locally.

DIGITISATION OF PLANS: Among the 200 hand-drawn plans that have now been digitised by Sara Nylund are several complicated multi- phase site plans, beautifully detailed plans and drawings of individual structures, individual feature plans and a whole series of key section drawings. This component of the project is key for the record and for the final publication, but the digitised plans and sections are also indispensable for interpretation and analysis as the project progresses.

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

Seminar presentation to UCD Archaeology Society 5 November 2020: 90 people present; online views in following days (https://www.facebook.com/mishut.nagyova/videos/10215448487280241/).
Twitter coverage of lithics research (see #Moynaghlough)

Facebook coverage of MP seminar presentation to UCD Archaeology Society 5 November 2020

Archaeology Research Excavation Grant Report

Maynooth University Department of History blog:
https://maynoothhistory.wordpress.com/2020/11/03/is-there-more-to-coprolites-than-meets-the-eye/?fbclid=IwAR1WgjpByb4PIxMsJLIOiXp6e7Zp689Kg2bDv3FYWWIuBCPQatrdCs0tuK0

Maynooth University Research Week poster session: 2 posters on Moynagh Lough Project on display (highly commended by judges)

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

There will be an article in Archaeology Ireland in 2021. We plan to establish a social media presence for the project in 2021. 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.

How did the award enhance your professional development?

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.

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

Our plans for the next phase of the project can be summarised as follows:

1. radiocarbon dates: 14CHRONO / QUB (P. Reimer)
Among the key recommendations of the 2019 Scoping Report was the undertaking of a programme of dating for all phases of activity at Moynagh Lough. The urgent need for this has been underlined by subsequent analysis of ceramics, lithics and other finds and samples. A collaborative arrangement has been initiated with 14CHRONO in Belfast, and they are willing to carry out Accelerator Mass Spectrometry (AMS) dating at reduced cost.

2. charcoal analysis/identification (L. O'Donnell)
There are several hundred bulk and one hundred specific charcoal samples from Moynagh. Before the programme of radiocarbon dating begins, it will be important to select the most appropriate samples for dating and study. Analysis of samples will identify suitable short-lived charcoal for AMS dating. While this is a key objective of the charcoal analysis, the study will also address a wide range of questions. I have been in contact with Lorna O'Donnell about this work.

3. Finds drawings (recommendations from Sternke, Warren, Roche)
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. I think you will agree that Sara Nylund has done an exceptional job of digitising plans and section drawings and is ready to move on to the illustration of finds.

Archaeology Research Excavation Grant Report

4. duplication of paper archive by scanning
This year, MU funded the transcription of John Bradley's unpublished 1980-1989 report (c.60,000 words), a key task identified in 2019. The next part of this strand is to scan the paper archive, creating PDF documents of each notebook, each finds/samples log, each batch of, say, 100 feature sheets, 100 drawings, 100 photographs etc., which can be saved, duplicated, shared and printed as required.

5. completion of finds database, samples database
6. analysis of coprolites: York U. (J. Hendy, E. Green)
7. (further) analysis of faunal remains (R. Carden)
6. (further) analysis of lithics (G. Warren UCD; A. Little York U.)
7. metallurgy/metalworking (B. O'Neill UCD)
8. jet/lignite (P. Stevens) / bone combs (B. Sines) both COVID delayed