### Title:
Dr Michael Potterton

### Grant programme
Archaeology Research Excavation Grant

### Year awarded
2021

### Title of project
Moynagh Lough Project

### Summary of report (Min. allowed 100 words)
The four strands completed under the 2021 AREG funding are cornerstones of the current phase of the Moynagh Lough Project. They were identified as ‘key actions’ in the 2019 Scoping Exercise and the Steering Committee noted in 2020 that they were ‘priorities for completion’. Each of the four strands – radiocarbon dating, charcoal analysis, finds illustration and archive digitisation – will facilitate further research and progress of the project towards publication and a handover of the archive to the National Museum of Ireland in 2028. Further details are provided below, but essentially the 14C dating of 33 charcoal samples was carried out by 14CHRONO in Belfast, the charcoal having been analysed, identified and prepared by Dr Lorna O’Donnell. Sara Nylund completed the drawing of a selection of prehistoric lithics to publication standard, while research assistants at Maynooth University completed the digital scanning of a large part of the paper archive associated with the excavation.

### Date the report was submitted
Oct 29, 2021

### Please provide two appropriate images

![Image 1](https://example.com/image1.jpg)

![Image 2](https://example.com/image2.jpg)
9. Please outline the objectives of the project

The primary objectives this year were to move the post-exavcation 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:

- Radiocarbon dating
- Charcoal analysis
- Finds illustration
- Digitisation of archive

10. Please describe the methodology used in conducting the research

**Dating**

The radiocarbon dating was carried out by 14CHRONO at Queen's University Belfast, one of the foremost radiocarbon dating laboratories in Europe. Full details of their methodologies are available on their website at http://14chrono.org. The charcoal samples for dating were selected by Dr Lorna O'Donnell from a larger assemblage of samples analysed by her.

**Charcoal**

Charcoal samples from Moynagh Lough were processed, assessed and analysed by environmental archaeologist Dr Lorna O'Donnell. Several additional charcoal samples were identified (with other palaeo-environmental samples) by Dr Steve Davis in 2019 and these too were delivered to Dr O'Donnell. She investigated the samples for abundance, diversity, preservation, insect infestation etc., following best international practice. She also prioritised samples appropriate for accelerated mass spectrometry radiocarbon dating.

**Illustration**

Having digitised many of the site plans and section drawings, Sara Nylund proceeded to draw a selection of lithics. 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 lithics specialist Dr Graeme Warren and the work was carried out in liaison with him so that every important detail was noted and illustrated appropriately.

**Archive**

Research assistants spent several weeks progressing the preparation of a permanent digital record of the paper 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

**Dating**

The programme of radiocarbon dating in collaboration with 14CHRONO at Queen's University Belfast has generated a sequence of dates for Moynagh Lough that will form the framework for the existing as well as future research on the site. These dates are crucial to the stratigraphic report and the final publication.

**Charcoal**

The charcoal report includes a list of short-lived material suitable for AMS radiocarbon dating, which informed our selection of samples for radiocarbon dating a 14CHRONO. The detailed report also provides details of the sample strategy, aims and methods of analysis. The report comprises statements on abundance, diversity and state of preservation of the charcoal/wood recovered, discussion of insect infestation and presence of bark, ring counts and annual growth patterns, evidence for woodland management, and worked wood analysis. The data has been tabulated and compared with other relevant assemblages. Finally, the report makes recommendations for future analysis and retention. In general, the Mesolithic contexts were dominated by hazel and the Bronze Age contexts were more diverse.
Illustration
An initial batch of some eighty lithics were 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 lithics specialist 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
This year’s scanning has seen a permanent digital record created of a large part of the paper archive associated with the Moynagh Lough excavations and post-excavation to date. 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 has been driven home in the last eighteen months by 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 would negate the potentially awful consequences if such an event were to recur. Not all of 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

- Seminar presentation to UCD Archaeology Society 5 November 2020: 90 people present; now over 1,000 views (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;
- Maynooth University Department of History blog: https://maynoothhistory.wordpress.com/2020/11/03/is-there-more-to-coprolites-than-meets-the-eye/?fbclid=IwAR1WgpByb4PlxMsJLIOiXp6e7Zp689Kg2bDv3FYWWtUC6q4tK54
- Maynooth University Research Week poster session: 2 posters on Moynagh Lough Project on display

b) No. of Academic Papers/articles published: In the past year: 0 (so far in the lifetime of the project: 40)
c) No. of Lectures given/outreach events involved in: In the past year: 1 (so far in the lifetime of the project: 100)

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

- Mention in Meath Chronicle, January 2021

e) 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 2022. We are currently engaged in establishing a social media presence for the project. 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.
Our plans for the next phase of the project can be summarised as follows:

**Faunal remains**
Finbar McCormick carried out the analysis of the faunal remains from the early years of the excavation at Moynagh Lough. Prof. McCormick has now retired and zooarchaeologist Ruth Carden has agreed to study the rest of the assemblage. This will include identifications, cataloguing and provision of full database, zooarchaeology analysis and a publication-standard specialist zooarchaeological report. Dr Carden has been in regular contact with the project and proposes to carry out this work in 2022.

**Botanical remains**
There are approximately eighty palaeobotanical samples in the Moynagh archive that have not yet been assessed or analysed. Discussions have taken place with environmental archaeologist David Stone and he has agreed to assess these samples in 2022. Dr Stone will complete 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 will provide advice and a selection of appropriate material for radiocarbon dating and recommend samples for full archaeobotanical analyses, to be carried out at a later date.

**Leather**
There are approximately 120 nds 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 been to MU to carry out an initial assessment of the leather items and he is on standby to begin a detailed analysis and report on the collection. Mr Nicholl’s report and catalogue will include artefact identification, description, species identification, discussion of nds with comparanda, a photographic record of significant nds 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 nds (specifically lithics in 2021). It has been decided to focus on the bone and antler nds for the next phase of artefact illustration.

**Archive digitisation**
The next part of this strand is to scan the hard-copy drawings, photographs, slides etc. These can then be saved, duplicated, shared and printed as required. Duplication by scanning is desirable for research, sorting, comparison, searchability, security and storage, as well as economical, logistical and environmental concerns. The scanned images will be linked to a searchable database of illustrative material, also generated as part of this phase of the project. This work will be carried out by a Research Assistant.