Institute of Archaeologists of Ireland

2016 Conference

A Matter of Time

Menlo Park Hotel, Galway

Friday 29th & Saturday 30th April

Programme Kindly Sponsored by



Friday 29th

9:30-10.00 Registration

Session 1:

- 10.00 10.20: **Ros Ó Maoldúin** The chaîne opératoire and biography of a 'small' megalith
- 10.20 10.40: **Thomas Collin, Ron Pinhasi & Robin Feeney** Ancient Metagenomics from Anthropogenic Substrates: Reconstructing and Redefining the Human Past
- 10.40 11.00: **Thorsten Kahlert** The Caves of Keash, Co. Sligo: surveying 'old' and 'new' caves and discovering the archaeology of archaeology
- 11.00 11.15: Q&A
- 11.15 11.45: Tea/coffee
- Session 2:
- 11.45 12.05: **Paul Gosling** About Time and Tide recognition of the early modern archaeology of Island Eddy, Galway Bay
- 12.05 12.25: **Rory Sherlock** New techniques to date old castles the Irish Tower House Dating Project
- 12.25 12.45: Michael Gibbons Connemara's Empty Quarter?
- 12.45 13.00: Q&A
- 13.00 14.00: Lunch
- 14.00 16.00: AGM
- 16.00 16.20: Tea/coffee
- 16.20 17.00: Archaeology 2025/Discussion and updates on the commercial archaeology sector
- 17.00 17.40: Keynote Lecture Professor Elizabeth Fitzpatrick Suspending Time: Wilderness and Boundary Places in Medieval Ireland
- 17.40 18.00: Q&A

20.00 – Late: **Table Quiz Menlo Park Hotel**

Fantastic prizes from our generous sponsors so be sure to come along! Entry costs €40 per table of four with funds raised going towards the JIA Post Graduate Prize.

Saturday 30th

9:00-09.30 Registration

Session 1	
09.30 – 09.50:	Stuart Rathbone & James Bonsall – Looking for a pointless answer? Archaeological contributions to the understanding of Signal Tower sites of known date and function.
09.50 – 10.10:	Richard Clutterbuck – Time for Improvement: the archaeology of an ideology and how it shaped time in later historic Ireland.
10.10 – 10.30:	Maeve L'Estrange – Roadside Memorials: an archaeology of private and public commemoration
10.30 – 10.45:	Q&A
10.45 – 11.15:	Tea/coffee
Session 2	
Session 2 11.15 – 11.35:	William O'Brien – Recent Research on Hillfort Chronology in Ireland
11.35 – 11.55:	Peter Woodman – Later Mesolithic Lithics from Drumakeely and Castlecarra. How were they used?
11.55 – 12.15:	Thor McVeigh – Newgrange and Chronology: will there be light at the end of the tunnel
12.15 – 12.30:	Q&A
12.30 – 13.30:	Lunch
Session 3	
13.30 – 13.50:	Alan Hawkes – The re-use of prehistoric burnt mounds in Ireland: the importance of social memory, identity and place
13.50 – 14.10:	Patrick Gleeson – Chronologies and Historical Archaeologies of Early Medieval Ireland
14.10 – 14.30:	Paul Duffy & Aidan Giblin – Of Moats and Monasteries: a case for pre-Norman moated sites?
14.30 – 14.50:	Gary Dempsey – The Digital Heritage Age - How to make the most of 3D recording for Archaeology
14.50 – 15.00:	Q&A

Abstracts

Ros Ó Maoldúin – NUI Galway

'The chaîne opératoire and biography of a 'small' megalith'

During the summer of 2015, we conducted the first of what we plan to be several excavations of megalithic wedge tombs on Roughan Hill, in the Burren, Co. Clare. The monument we encountered during excavation was a far more complex structure than could initially be seen. It was apparently built in three stages; however, it is, at this stage, difficult to say whether these were carried out in close succession or in different phases. What we can say, is that its builders had very carefully selected and shaped several of the chamber elements and orientated the richly textured and eroded surfaces in particular directions. Furthermore, we know where the slabs were sourced; in a quarry on Roughan Hill some distance from many of the tombs. Prepared slabs, propped up and awaiting removal, still sit in the quarry; presumably abandoned because of some flaw, or because the era of wedge tomb building had come to an end before a need for them arose. The slabs were left sitting in the locations from which they had been pried up, with one side balanced on small rounded sub-aerially eroded boulders. In this way, we have the beginning and the end of the chaîne opératoire of our monument's construction on Roughan Hill, and the contents of the tomb, changes to its structure, signs of activity surrounding it and its partial destruction, all combine to give, what at first might have been considered a relatively unimpressive 'small' monument, a rich and potentially storied biography.

Thomas Collin¹, Ron Pinhasi^{2,3}, Robin Feeney¹ – ¹School of Medicine, University College Dublin, ²School of Archaeology & Earth institute, University College Dublin

'Ancient Metagenomics from Anthropogenic Substrates: Reconstructing and Redefining the Human Past'

Anthropological studies typically involve examination of preserved remains, a limitation at sites with poor preservation. Metagenomic Next Generation Shotgun Sequencing represents a pioneering approach to investigate past societies through in-depth biostatistics analyses of genomic data within anthropogenic substrates. Investigators can assess what organisms are present and draw conclusions from their numbers and their function. This research aims to apply a novel protocol to the analyses of anthropogenic substrates to reconstruct past communities.

Bulk samples were gathered from well-documented sites spanning the Georgian (Satsurblia) and South African (VK2) Upper Palaeolithic (12,000BP) to the Early Irish (Drumclay Cranog) Medieval period (1100BP). Samples of 50µg to 10g were extracted using an optimised extraction buffer and then library prepared using repair/adaption buffers. Chemical tags were added before PCR amplification. Samples were sequenced using Illumia MiSeq[™] and analysed using bioinformatic software.

Ancient DNA (aDNA) was isolated from all sites, with high yields and quality aDNA achieved using an optimised technique. Literature on preservation of aDNA at wetland sites, states overall poor preservation compared to drier environments, which is at odds with the data produced here. Larger yields and quality from highly-saturated sites indicate long-term retention of aDNA within soil context. A number of ancient species were identified from Drumclay including: *Strongyloides papillosus* (i.e., animal domestication), *Oryza sativa* (Asian rice) and *Xanthomonas oryzae* (blight bacteria). Presence of *Oryza Sativa* in Early Medieval Ireland may be the earliest confirmation of rice grain within Western Europe, while prevalence of *X. oryzae* (multiply in wet, organic soil), indicates possible cultivation.

Thorsten Kahlert – Institute of Technology, Sligo

'The Caves of Keash, Co. Sligo: surveying 'old' and 'new' caves and discovering the archaeology of archaeology.'

The Caves of Keash is one of the most iconic cave systems in Ireland. Located in the heart of south Co. Sligo, the 17 prominent cave entrances command the surrounding landscape from their location in the east face of Keshcorrann Hill. On the back of late 19th century naturalists' discovery of pleistocene fauna and early hominids in many parts of the world, the caves became subject to three antiquarian

excavation campaigns between 1901 and 1930. The excavations produced a vast number of Pleistocene and Holocene fauna such as arctic lemming, giant Irish elk and brown bear alongside some archaeological remains of predominantly Iron Age and early Medieval date. A rough survey by R.F. Scharff from 1901 was the only attempt by researchers to record the entire network of cave passages. More detailed surveys only exist for two small sections in two of the caves. In 2012, the caves became subject of an IRC funded doctoral research which included detailed surveys of over 100 cave passages in counties Sligo and Leitrim over three consecutive years. This paper presents this new and detailed survey of the Keash Caves, with a focus on re-tracing the antiquarian excavations through re-examining surviving archival material and remains from inside the caves. The paper further illustrates how the removal of substantial amounts of sediments from the caves by antiquarians significantly altered their appearance and accessibility.

Paul Gosling – Galway-Mayo Institute of Technology

'About Time and Tide – recognition of the early modern archaeology of Island Eddy, Galway Bay'

Since 2008 an open-ended, community-based and multi-disciplinary research project has been underway to record the natural and built heritage of Island Eddy in Galway Bay. The results of the research are being published in various formats and promoted via a Wikipedia webpage. The talk will examine how the dating of much of the island's archaeology – nausts, mearing stones, castle – is heavily reliant on an interdisciplinary understanding of the dynamic character of the island itself, in particular its spits, lagoons and dunes.

Rory Sherlock – NUI Galway

'New techniques to date old castles - the Irish Tower House Dating Project.'

The study of Irish tower houses has always been hampered by problems of chronology. Most of the discussion surrounding tower house chronology in recent years has focussed upon tower house origins, but the broader evolution of tower house architecture has not yet been fully understood. This project seeks to investigate tower house chronology through the systematic sampling and dating of wicker-centring twigs preserved *in situ* in the mortar on the underside of tower house vaults using AMS C14 dating technology. Samples were taken from sixteen tower houses in the first phase of this project and the data generated in the AMS C14 dating process was then calibrated and analysed using Bayesian analysis and OxCal software. The use of Bayesian analysis is not common in medieval archaeology, but this project has shown that significant refinements can be made to chronological models if known dates of use are factored into the calculations. A number of significant tower houses have been found to be older than previously thought and our understanding of the evolution of the Irish tower house must now change accordingly.

Michael Gibbons – Archaeology Travel

'Connemara's Empty Quarter?'

Over the past two decades, a new generation of field-work and the increased availability of radiocarbon dating has created an increasing contrast between prehistoric settlement and early historic settlement patterns as revealed by surveys of diagnostic monuments and the very different picture created by coastal midden inspections and dated samples.

One vivid example of this contrast is found in south and west Connemara; a vast sprawling landscape of glacially scoured granites with a myriad of lakes and islands dominated by the mountain spine of Cnoc Mordáin rising from the shore of Cuan Cill Chíaráin. The region appears on distribution maps as a vast empty space: virtually devoid of known diagnostic monuments for both the prehistoric and early historic periods. While a small number of island monasteries have been identified from the early-Christian period and later, with the exception of the distinctive island-cashels found on rocky islets in the lakes there are virtually no secular diagnostic monuments from the same period south of the Galway road. The absence of monuments does not appear to reflect a survival or fieldwork bias; in spite of

some thirty years of fieldwork since the production of the Galway Survey in the 1980s, only one ringfort has been discovered in southwest Connemara whereas over a dozen have been identified in NW Connemara.

In spite of this, a series of radiocarbon dates have begun to reveal the presence of a non-monumental world of unenclosed Bronze Age, Iron Age and Early Medieval Settlement associated with the Machair Dune systems which hug the coastline. Recent storms and follow-up field work have also uncovered a significant late-Mesolithic presence revealed by a series of stone-axe finds along a 160-mile stretch of coast in a variety of ecological settings.

The existence of this contradiction in the evidence illustrates that an over-reliance on diagnostic monuments of apparently known dates in settlement studies can give a profoundly misleading impression of both the distribution and duration of human settlement in non-traditional environments.

Stuart Rathbone¹ & James Bonsall² – ¹Achill Archaeological Fieldschool, ²Institute of Technology, Sligo

'Looking for a pointless answer? Archaeological contributions to the understanding of Signal Tower sites of known date and function.'

Two of the fundamental things that archaeologists try to establish about any site they are investigating are its date and function. When investigating historic sites it is sometimes possible to offer unusually specific answers to those questions. The Napoleonic era Signal Towers are an interesting case because not only do we know their date of construction with considerable accuracy, they had a very singular and specific function. Indeed the function was so specific that they had a remarkably short period of use and, where not repurposed, have existed as ruins 20 times longer than they existed as functional buildings.

Given this baseline knowledge that is readily available and that the form of the sites is so specific that mis-identification would be unlikely, what else can be gained through archaeological study of these sites. An ongoing post graduate study at IT Sligo is investigating the Napoleonic Signal Tower sites around the coast of North West of Ireland. The study is providing a wealth of new information about the sites ranging from detailed accounts of what currently survives at each location, secondary use of the sites, how the sites are recognised locally, how they are fitted into the tourist landscape of 'The Wild Atlantic Way' and, perhaps most significantly, how the Signal Tower system fits into the global story of the development of communication technology throughout the 18th and 19th centuries.

Richard Clutterbuck – NUI Galway

'Time for Improvement: the archaeology of an ideology and how it shaped time in later historic Ireland.'

The ideology of Improvement helped shape landscapes and society in later historic Ireland (*c*.1650 to 1850), in large part because Improvement shaped the perception and value of time. Improvement was an Enlightenment ideology, propagated by the elite, which held that society could be progressively enhanced by changing people's environment and their daily routines. Fundamentally, the Improvement agenda sought to alter the way people thought about themselves and their place in society, and to legitimise the position of the elite. It was an ideology of the novel – of replacing old-fashioned ways for new practices. However, Improvement influenced the way people behaved, the objects they used, the design of their homes, towns and cities, how farms and estates were organised and operated. Improvement shaped places and things, which makes it an archaeologically legible idea. This paper, based in part on my own doctoral research, will look at the archaeological evidence for how Improvement shaped the value of time in rural Ireland. I will talk about the ideology of Improvement and ideas of time in historical archaeology. I will explore how the value of time was expressed in the archaeology of buildings, farms and demesne landscapes in Ireland.

Maeve L'Estrange – Trinity College Dublin

'Roadside Memorials: an archaeology of private and public commemoration'

Roadside memorials are public shrines, representing an important but often forgotten part of our archaeological and cultural heritage. They are usually put in place to mark the spot of a fatal accident, more often than not to unofficially mourn the sudden loss of a loved one. Such memorials are part of the material culture of many countries; records of death and remembrance, very different to burial sites such as graveyards, particularly in the amount of information chosen to accompany them.

In Ireland, roadside memorials can be traced back over three centuries, and can vary from a purposefully cross-shaped hawthorn tree, to an elaborately constructed public memorial; supplying the observer with varying degrees of information regarding the person or people they commemorate, from guesswork to a full description of their life. Regardless, they usually mark a place of sudden or unexpected death, important to those who chose to make such a public statement about those they loved and lost, and a need to instil in the observer a sense of sorrow.

There is a danger nowadays that these emotive expressions of grief, important to the archaeological record and cultural heritage of our country, may, in a matter of time, disappear from public view. As our new infrastructure develops, with many rural towns being bypassed, these uncommon cultural expressions of private grief may fade into a background that no longer affords them the attention and recognition their designers and constructors envisioned.

William O'Brien – University College Cork

'Recent Research on Hillfort Chronology in Ireland'

Hilltop enclosures of different types have a long history in Ireland, dating from Neolithic to medieval times. The 'hillfort' is the best-known example, with approximately 100 recorded sites that include univallate (Class 1), multiple enclosure (Class 2), and inland promontory forts (Class 3). The Class 2 hillforts are particularly interesting, as they represent the largest prehistoric monuments in Ireland, often exceeding 10ha in extent. They comprise two or three (rarely four) widely spaced, concentric, enclosures, variously built with stone walls, earthen banks, ditches and/or wooden palisades, along or across the contours of a prominent hill or ridge, or on a cliff edge. Current estimates indicate around 40 examples across Ireland, with a concentration of large sites in north Munster and south Leinster, including a well-known cluster in Baltinglass, Co. Wicklow.

The Class 2 hillfort is often explained in terms of emergent Bronze Age chiefdoms controlling regional territories, where these centres provided strongholds for high-status residence, ceremony and assembly at a time of endemic warfare. While researchers disagree as to their function, these prominent places in the landscape do seem to have been an important part of the visual display of power in late prehistoric Ireland. This talk will examine the chronology of Bronze Age hillforts in light of investigations recently conducted at nine sites across southern Ireland.

Peter Woodman¹, Annemeike Verbaas² & Sarah Nicol³ – ¹University College Cork, ²Leiden University, ³Northern Archaeological Consultancy

'Later Mesolithic Lithics from Drumakeely and Castlecarra. How were they used?'

Within the Irish later Mesolithic the purpose of a range of lithic tools made up of butt-trimmed forms and related forms, as well as the numerous blanks with which they are associated, has remained somewhat enigmatic. Many assemblages examined for micro-wear traces had often proved to be not particularly suitable or, in the case of flint knapping sites, the most useful pieces had been removed. The fresh condition of the material from Drumakeely and Castlecarra, which were located some distance from flint sources, has allowed the Stichting Lab in Leiden to carry out a micro wear study on selected artefacts. This has shown that much of the material was used for gutting soft materials such as fish but also revealed that irregular shaped pieces may have been used much more intensely than the so called retouched tool types.

Thor McVeigh – NUI Galway

'Newgrange and Chronology: will there be light at the end of the tunnel'

This paper reviews the chronology of activity within the Newgrange Complex and its context within the Boyne Valley, Co. Meath. It also explores potential implications for our understanding of the construction and negotiation of group identities from the late-4th to the erarlier 2nd millennium BC. The construction of substantial Boyne tombs indicates the potential significance of the region in the conception and mediation of large-group identities during the Middle Neolithic. The sources of materials utilized in the construction of these monuments and the distribution of contemporary sites across eastern Ireland may provide information about the scale and geographical extent of the groups associated with these substantial construction projects. Evidence for Late Neolithic Grooved Ware associated feasting at Newgrange confirms the continued significance of the Boyne Valley in the constitution of large-scale group identities during the mid-3rd Millennium BC. A working hypothesis about the phasing of the activity will be outlined and estimation of the numbers involved in Late Neolithic feasting at the site will be advanced. The significance of different scales of feasting event will be considered, and finally, the importance of calendrically scheduled winter solstice gatherings in the reinforcement of group identities will be discussed. The role of Newgrange and the Boyne Valley in the construction of group identities appears to wain by the mid-2nd millennium BC and a possible reason for this phenomenon will be advanced. An overview of evidence supporting the theory that large-scale winter solstice associated feasting took place at the site will be presented.

Alan Hawkes – University College Cork

'The re-use of prehistoric burnt mounds in Ireland: the importance of social memory, identity and place.'

This paper will explore the long-term re-use of burnt mounds, practices of trough re-cutting and abandonment, and the implications of these actions for the construction of memory, myth and identity in prehistoric communities in Ireland. The archaeological evidence suggests that the sustained re-use and modification of certain sites was carried out in order to create conscious links with the past, where evidence of pyrolithic activity influenced subsequent activities at the same locations. Burnt mounds must have been redolent with 'memories' of past social occasions involving feasting, and as such would have been important for the construction and reproduction of social memory.

Paul Duffy & Aidan Giblin – Grassroots Archaeology

'Of Moats and Monasteries: a case for pre-Norman moated sites?'

The concurrence of moated sites and monastic granges has long been recognised in England. This association however has, to a large extent, been given little serious attention in Ireland until very recently. Results from community driven excavations in Baldoyle, Co. Dublin have provided scope for investigating this association further. In conjunction with analysis of aerial photography in the wider Fingal area, this paper explores the possibility that many moated sites visible within the landscape may be attributed to pre-Norman monastic granges. This would push back the generally accepted date range of these monuments by up to a century.

Gary Dempsey – Realsim Ltd

'The Digital Heritage Age - How to make the most of 3D recording for Archaeology'

Digital technology is a major part of modern life. It has been adopted into fabric of our social and vocational lives that for many it is difficult to understand how we managed before the invention of the plethora of digital devices we now rely on. Archaeologist has been quick to adopt to the digital age with the use of Laser Scanners and Drones becoming common in the field. While we have adopted these technologies which allow us to create detailed digital records of the past, there has been such a rush to jump on the technology bandwagon that the question of why are we recording the past has been over looked. This has led to claims that digital recording techniques can 'recover' 'save' and 'preserve' that past from damage.

In light of these recent claims, relating to conflict zones, this talk will discuss the limits of digital recording of heritage and archaeology, while demonstrating the practical benefits of technologies such as laser

scanning and photogrammetric and how we as archaeologists can use them to develop a deeper understanding, awareness and respect for the past.

Drawing from experiences working with community groups on the Roscommon3D and Galway3D projects this talk will practically demonstrate how proper use of digital recording techniques can be used to create an awareness of local heritage and increase our knowledge of the past using local knowledge and digital recording methods to reveal hidden or worn features on monuments which are missing from the official record.

The IAI wishes to thank all those who participated in this year's conference as well as the many organisations who so generously sponsored the event.



Accommodation Options:

Maldron Hotel – 2 mins walk to Menlo Park Nox Hotel – 6 mins walk to Menlo Park Travelodge – 15 mins walk to Menlo Park G Hotel – 15 mins walk to Menlo Park Western Hotel – 18 mins walk, 4 mins by car to Menlo Park Jury's Inn – 22 mins walk to Menlo Park Flannery's Hotel – 8 mins by car to Menlo Park Clayton Hotel – 10 mins by car to Menlo Park

Teach na Coiribe – 17 mins walk, 5 mins by car to Menlo Park **Asgard Guesthouse** – 22 mins walk, 5 mins by car to Menlo Park **Ardawn House** – 20 mins walk, 5 mins by car to Menlo Park

SPECIAL THANKS TO THE FOLLOWING FOR DONATING PRIZES FOR

THE TABLE QUIZ



IAC Archaeology