

## Corlea Trackway, Longford



Photo: Claire Nolan

**Wetland archaeological discoveries indicate that past people's perceptions and understanding of landscape, was not only relating to it as a resource for economic benefit, but also as a storehouse of cultural values and beliefs (882). The bog was considered a sacred space and place (166) as well as providing a range of practical uses and products. These included the use of *Sphagnum* moss as a wound dressing, rushes for weaving, flooring and basketry and edible seed heads (1000). The Irish Archaeological Wetland Unit surveyed many bogs in the Irish midlands from the 1990s to early 2000s.**

# PEATLANDS AND ARCHAEOLOGY

## An exceptional repository of knowledge

In Ireland, peatland and wetland archaeology has been the subject of archaeological fieldwork and research for decades (101, 1000). Artefacts and archaeological sites preserved in peatland deposits have provided an exceptionally rich repository of knowledge about communities who lived and interacted with the bogs throughout all periods in the past (28, 239, 338, 392, 457, 574, 669, 1000).

The waterlogged conditions of peatlands preserve a wide range of archaeological and palaeo-environmental evidence, collectively known as the archaeo-environmental record (328). The preservative qualities of peatlands arise from their acidic and anoxic environment (i.e. deficiency of oxygen) (1000) and have contributed to the preservation of human and animal tissues (713).

The value of bogs for understanding human history and the past over millennia through palaeo-environment studies is also evident in research. Interpreting the archaeological record requires an understanding of the context of the site or find, which can inform interpretation and feed into theory building (327, 1000). Pollen, sampled from cores extracted from peat bogs, provide the means to reconstruct local vegetation and identify human impacts and abandonment in various historical periods (541).



Photos: IAC Archaeology (1); John Sunderland (2-4)

**A range of objects have been discovered in Irish bogs including illuminated manuscripts, spears, fish-traps and baskets, clothing/shoes (1), bear bones, deer antlers (2), deer traps, wooden vessels (3), dwellings, bog butter, human remains, wheels (4) and wooden trackways or toghers (from the Irish word *tóchar* for road).**

“The fate of sites and records is closely tied to the fate of peatlands themselves” (328)

# PEATLANDS AND ARCHAEOLOGY

## Key Research Findings

- **The peatland archive:** Research has identified the importance of bogs as historical archives of past human activity (239, 338, 392, 457, 574, 669, 1000).
- **Damage and loss of archaeological sites:** Historic peatland degradation and milling has resulted in the damage and loss of significant numbers of archaeological sites, and trends indicate that those that remain are vulnerable (330).
- **Bord na Móna peatlands:** Nearly 4000 archaeological sites and 510 Recorded Monuments have been identified in Bord na Móna peatlands since 1990. Archaeological mitigation including survey and excavation has taken place in 39 of the 162 bogs owned by Bord na Móna (329, 1001).
- **Threats to archaeology:** Industrial development, land reclamation, drainage, peat extraction, afforestation, burning and climate change continue to threaten the integrity of the remaining archaeological resource (328).
- **Sustainable management:** Need for recognition of current and future threats in the context of broader sustainable management of peatlands. Peatland restoration can provide benefits for the future protection of the archaeo-environmental resource but must include archaeological expertise in the process (328). It is crucial that archaeological remains are protected and that appropriate mitigation is carried out early in the process of planning restoration and rehabilitation work (330).

Photo: Irish Archaeological Wetland Unit

### Bord na Móna excavation revealing a pathway.

Palaeoenvironmental studies have value for understanding human history and the past over millennia. Interpreting the archaeological record requires understanding the context of the site or find, and wet environments provide exceptional potential for such contextual reconstruction. Environmental Archaeology research uses a variety of methods to investigate the environmental context of sites including analysis of pollen, wood, insects, peat humification, peat stratigraphy, testate amoebae and plant macrofossils to understand past human-environment interactions.



Photo: Daisy Spencer



Photo: Eileen Reilly

**Pollen types (left) and *Plateumaris braccata* beetle (right) found in raised bogs**

# PEATLANDS AND ARCHAEOLOGY

## Key Research Findings (continued)

### Bog Bodies

The preservative qualities of intact peatlands contribute to the preservation of human and animal tissue. The remains of more than 100 men, women, and children dated to various historical periods, have been found in Irish bogs. Ireland's bog bodies are the subject of an exhibition in the National Museum of Ireland titled "Kingship and Sacrifice", which features Iron Age bog bodies and associated artefacts that link the bodies with kingship and sovereignty rituals. Best practice guidelines, produced in 2020, are available for the study of bog bodies, which aim to ensure future discoveries are adequately investigated, and facilitate re-analysis of previous discoveries (586).



Photo: Fiona McDonald

**Irish Peatland Early Career Research group visit to the National Museum exhibition.**

***“The value of peatlands extends beyond ecological functions and cannot be captured solely by scientific metrics; there are always human aspects, such as personal attachments and memories associated with peatlands” (330).***

### Bog Butter

Bog butters are white or yellow waxy deposits of agricultural products discovered within the peat bogs of Ireland. There is a long-lived tradition of deposition of butter in bogs spanning at least 3500 years, from the Early Bronze Age (c. 1700 BC) to 17th C AD (791).



**Cask of bog butter scarcely decayed since it was stowed centuries ago in a wet bog.**

Photo: Florence Renou-Wilson at National Museum of Ireland.

### Creative engagement with communities

The WetFutures team carried out a palaeo-ecological study at Drummin Bog, Co Carlow in collaboration with the Drummin Bog Project committee. The ancient pollens and microscopic organisms discovered provided a rich visual resource for young and old to engage with the bog.



**Taking samples at Drummin Bog (left) and Sphagnum spore woodblock print (right).**

# PEATLANDS AND ARCHAEOLOGY

## How can we effectively address the preservation of the archaeological record alongside sustainable management of Irish peatlands?

- **Protection of sites during peatland restoration and rehabilitation:** Peatland projects should include input from archaeologists to ensure understanding of landscape character, vulnerability of the record and guidance for mitigation. Collaboration between archaeologists, conservationists and restoration practitioners is needed to align restoration with heritage management and mitigate potential conflicts.
- **Management of records:** Addressing the archival challenges of existing archaeological records, particularly those from the Bord na Móna program, is vital for future accessibility and research.
- **Best practice guidance:** Research gaps highlight the need for best practice guidance, interdisciplinary collaboration and improved data on preservation factors to inform management decisions and ensure the long-term survival of archaeological and palaeo-environmental archives.
- **Stakeholder engagement:** Given the need for sustainable peatland management, attention should be given to the private horticulture industry, farmers/landowners and communities to ensure future protection of the diversity of archaeological sites in peatland environments. This requires stakeholder engagement, research, and development of guidelines to ensure best practice is followed.
- **Regular surveys, publication and dissemination:** Regular surveys and the inclusion of archaeological value in the ecosystem services framework can enhance the understanding and protection of these sites. Publication and dissemination of results is also crucial.



Archaeological excavation of prehistoric trackways at Edercloon, Co. Longford. Photos: John Sunderland.



This factsheet is part of a series produced by Peat Hub Ireland (PHI). The reference numbers in brackets refer to individual publications in the PHI database which link to the original source of evidence. Use the QR codes to access the database or view research projects associated with the themes. All factsheets in the series are available on the PHI website.

