



Peat and cultural heritage workshop

Cultural heritage – why it matters, how it adds value to projects and how to include it in your projects

Dr Hannah Fluck, National Trust Senior National Archaeologist

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Session plan



- Introductions
- Part 1: Why cultural heritage is relevant to peatland restoration, some creative inspiration
- Discussion
- Part 2: heritage in practice - regulation and delivery
- Regulation around UK and Ireland;
- Scheme delivery – how to work with heritage;
- Contractors perspective – how to be a good client

Go to slido.com and enter code #1576362 to take part

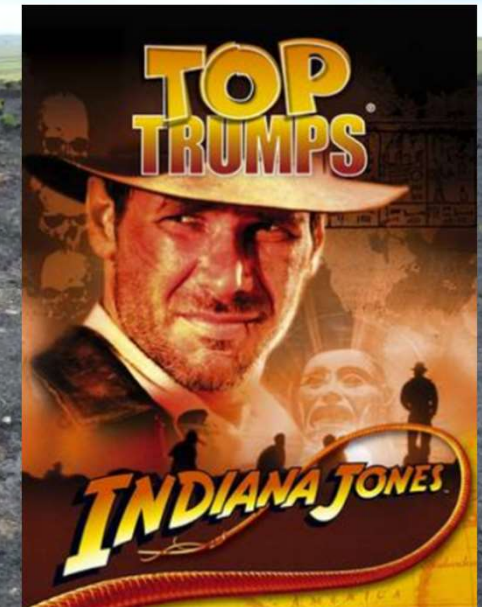


What do you think of when we talk about heritage and peatlands? Be honest!

Go to [slido.com](https://www.slido.com) and enter code #1576362 to take part



VS



<https://wall.sli.do/event/5m6etxj8sKBAXB6QEwbsEw?section=c7d4423b-9e4e-431f-b636-afa4e554d925>

Peatland heritage

- Heritage landscapes
- Historic environment features
- Archaeological deposits & artefacts
- Paleoenvironmental records
- Cultural connections
- Tangible and intangible



Heritage assets, landscape features **ON THE SURFACE OF THE PEAT**. Some visible, some less obvious

Archaeological deposits, objects, layers showing human activity **UNDERNEATH THE PEAT**. Some visible, some less obvious

Archaeological deposits, objects, layers showing human activity **WITHIN THE PEAT**. Some visible, some less obvious

Evidence of human-environment relationship, environmental change over time. **HUMAN STORIES OF MILLENNIA OF A CHANGING ENVIRONMENT**

Prehistoric (1 million years ago to 43AD)
Roman 43AD to c. 420AD
Medieval and post medieval
420AD to 1900AD

Typically catch meadow and remnants of land use and structure *

Remains of settlement on floodplain, sometimes only visible as cropmarks/lidar/geophysical survey, sometimes as earthworks (esp. medieval) but often obscured by alluvium ***

Archaeology of river use – boats, structures etc within river bed deposits ***

Ponds, often artificial – e.g. decoy ponds, fishponds *

Settlement on terraces **

Remnant water meadow / floodplain meadow *

Decreasing ground water table

Waterlogged deposits rich in palaeoenvironmental evidence ***

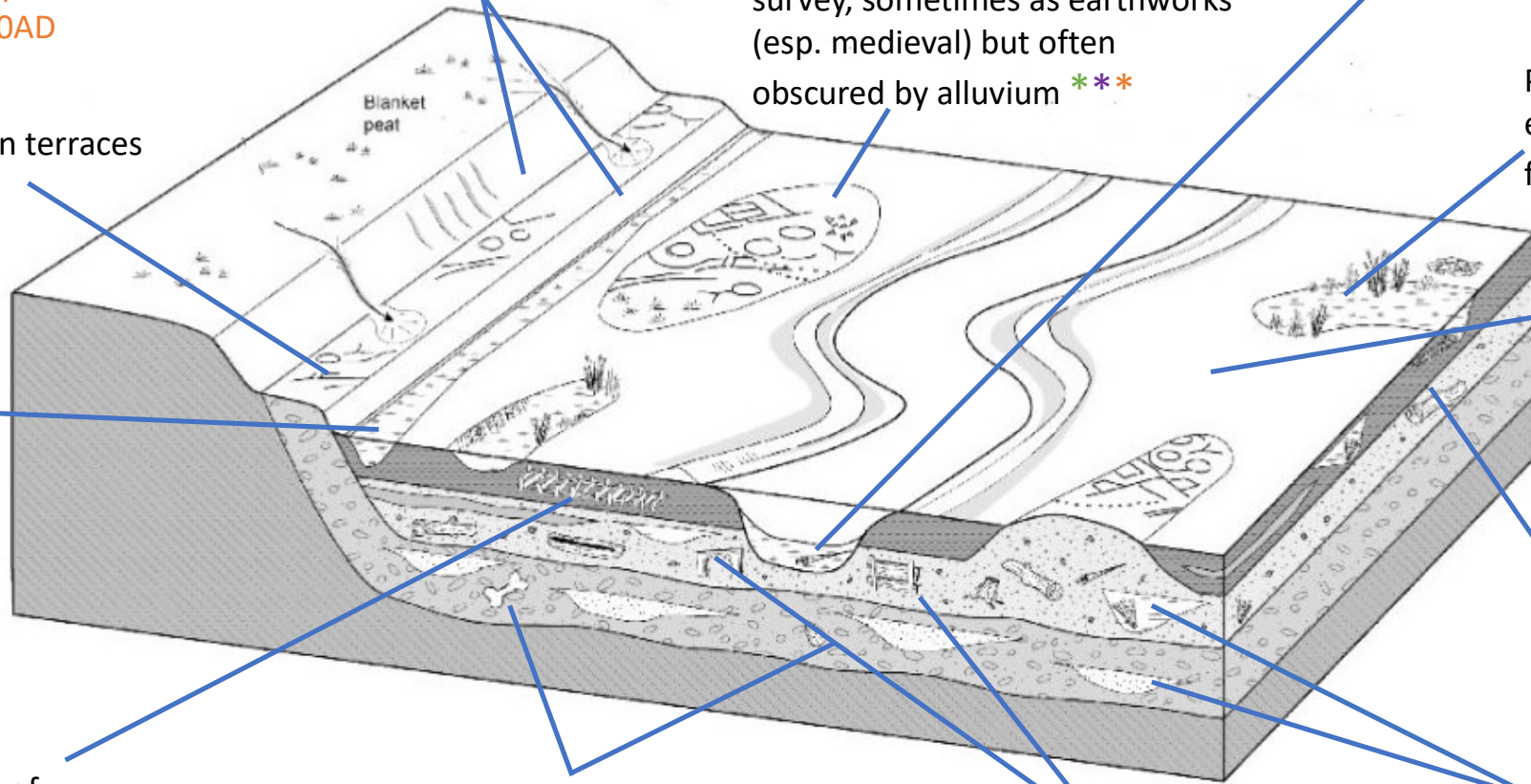
Palaeochannels with associated archaeological deposits **

Artificial channel – mill leat / irrigation ***

Remnants of trackways and other wetland archaeology **

Archaeological artefacts and faunal remains in Pleistocene sands and gravels (Palaeolithic archaeology) *

Archaeology of the river bank and past river management, access and past use ***





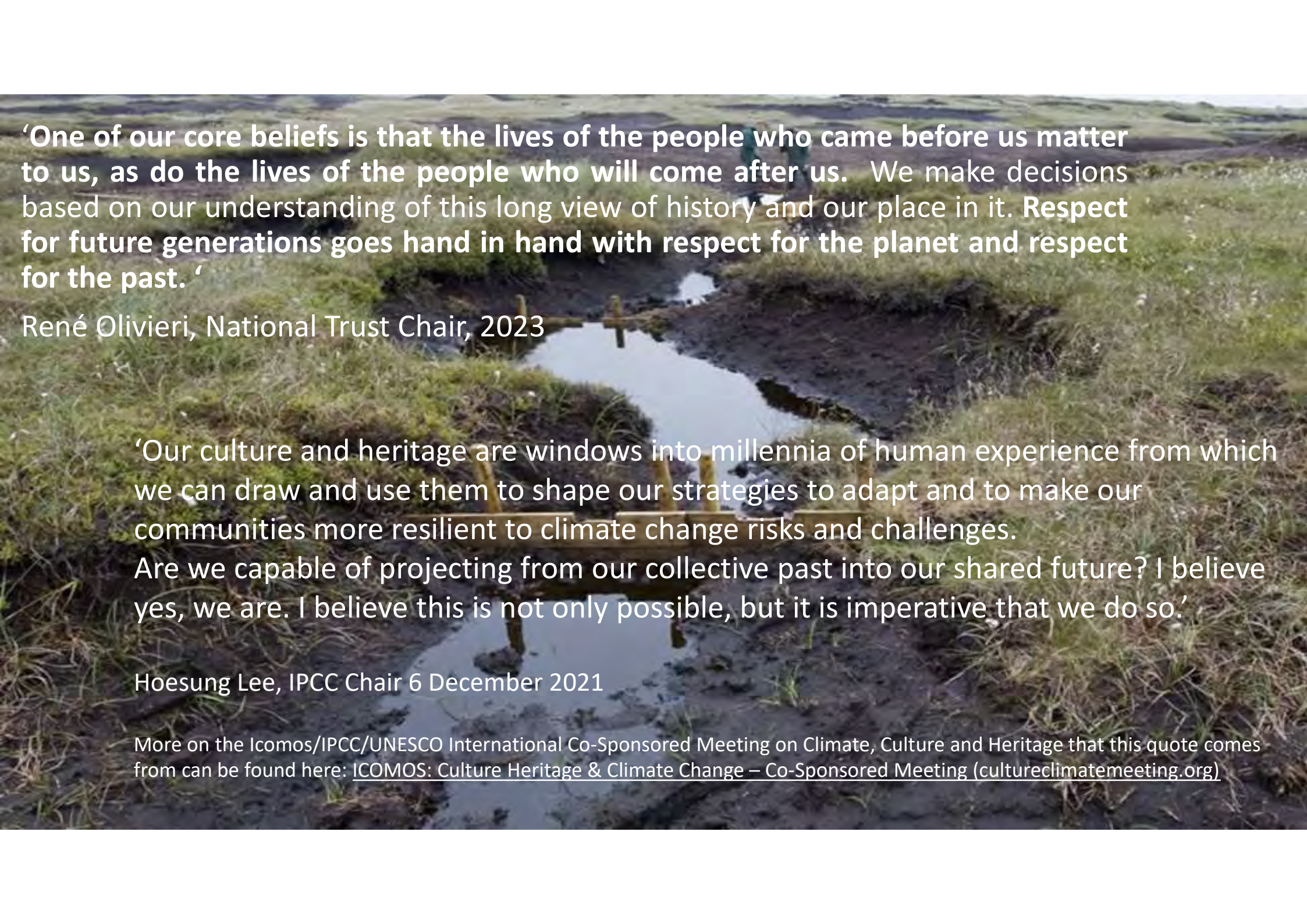
Why does it matter?

- Archaeological deposits are a precious non-renewable resource – evidence of past lives, past environments.
- Connects people to these places, can tell a human story, engage people, improve nature connectedness, wellbeing and understanding of our environment and our relationship with it
- Can inform decisions through greater understanding of the environment we are seeking to change
- Working with local and traditional communities



Key issues for peatland restoration and heritage

- Planning – uncertainty how much do we know about the archaeological interest?
- Construction - Ground disturbance – Where? How? How deep?
- Changes in below ground conditions (these affect preservation) – hydrology, chemistry, bioturbation
- Future management? Machinery, erosion and impact from footfall (animals and people)
- Visibility and visual change (setting, legibility, changes to familiar places)

A landscape photograph of a bog with a stream and a wooden bridge. The stream flows through the bog, and a simple wooden bridge crosses it. The bog is covered in green grass and moss, and the background shows rolling hills under a bright sky.

‘One of our core beliefs is that the lives of the people who came before us matter to us, as do the lives of the people who will come after us. We make decisions based on our understanding of this long view of history and our place in it. Respect for future generations goes hand in hand with respect for the planet and respect for the past.’

René Olivieri, National Trust Chair, 2023

‘Our culture and heritage are windows into millennia of human experience from which we can draw and use them to shape our strategies to adapt and to make our communities more resilient to climate change risks and challenges. Are we capable of projecting from our collective past into our shared future? I believe yes, we are. I believe this is not only possible, but it is imperative that we do so.’

Hoesung Lee, IPCC Chair 6 December 2021

More on the Icomos/IPCC/UNESCO International Co-Sponsored Meeting on Climate, Culture and Heritage that this quote comes from can be found here: [ICOMOS: Culture Heritage & Climate Change – Co-Sponsored Meeting \(cultureclimatemeeting.org\)](https://cultureclimatemeeting.org)

**Creative approaches to peatlands:
past, present, future**

Prof Melanie Giles & Dr Rose Ferraby

If you would like a copy of the Peat poetry pamphlet then please email
Prof Melanie Giles

melanie.giles@manchester.ac.uk

Discussion

Why does heritage matter to peatland restoration?



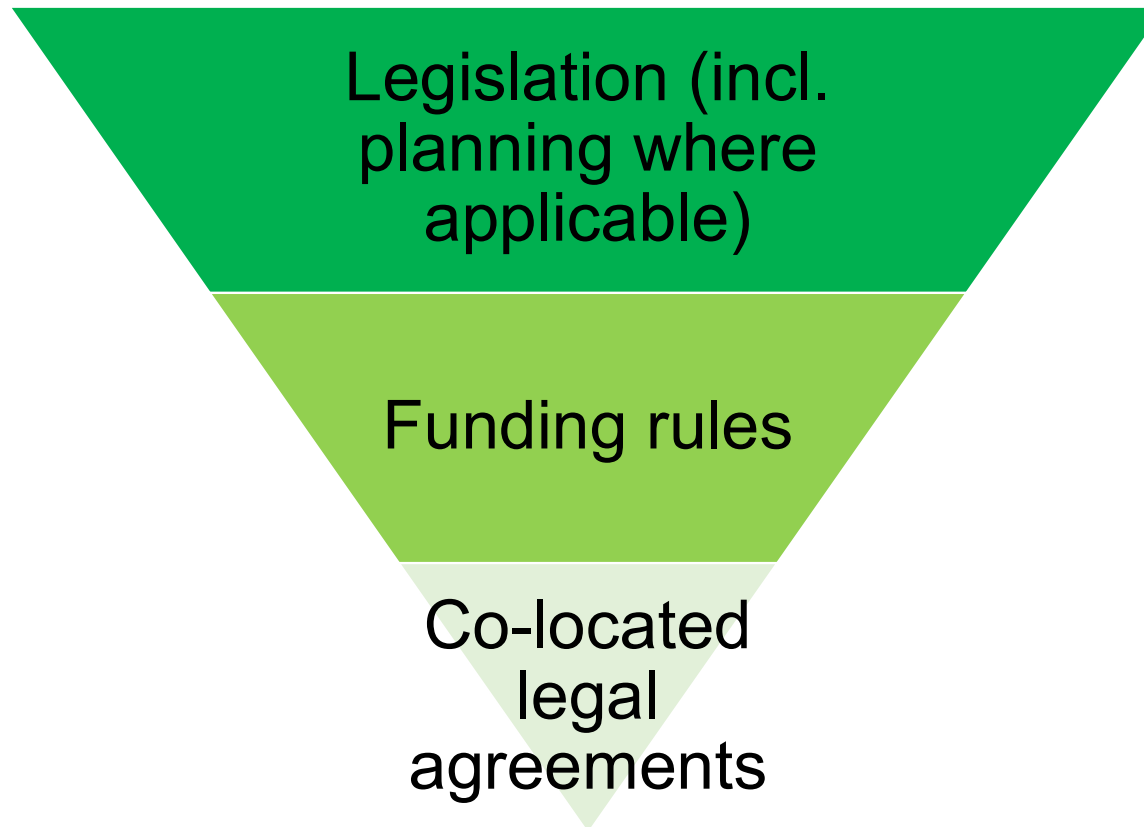
Regulation of heritage in peatland restoration

Kat Hopwood-Lewis, BA (Hons), MA, MCIfA

Natural England



Heritage protection hierarchy



Legislation

Known sites

- Designated sites – SMs, LBs, RPG etc
- ~~International designations e.g. WHS~~
- Protection of Military Remains Act 1986

Incidental Finds

- Treasure trove
- Human remains



HISTORIC ENVIRONMENT SCOTLAND | ÀRAINNEACHD EACHDRAIDHEIL ALBA



Historic England

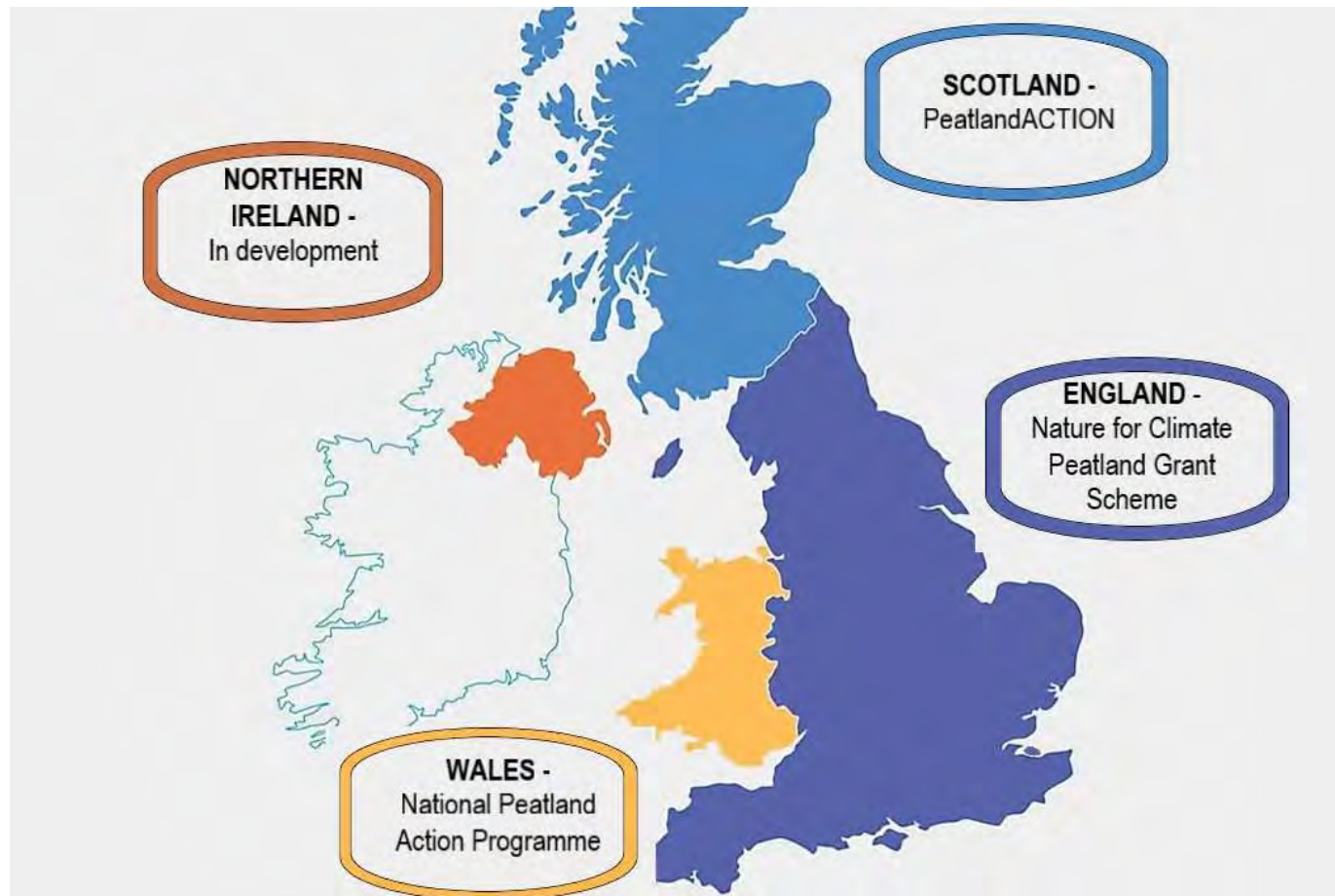


Llywodraeth Cymru
Welsh Government

Planning & EIA

- Scotland – all peatland restoration is permitted development with prior notification
- England & Wales – complex set of triggers mean sometimes planning is required sometimes not
- National Planning Policy Framework includes reference to ‘non-designated heritage assets’ recognising that designation is not the only indicator of significance
- Overview of planning and heritage in the UK available here <https://www.gov.uk/guidance/conserving-and-enhancing-the-historic-environment>
- Requirements from planners and funders may differ slightly e.g. whether coring has been asked for
- Use of planning conditions to include archaeological ‘mitigation’ e.g. watching briefs but doesn’t allow for co-design of projects to avoid impacts
- Can lead to unintentional ‘islands’ of unrestored peat on heritage missing co-benefits

Funding rules – Main Government Grants (UK)



Funding – grant schemes

- PeatlandACTION – heritage covered under permitted development prior notification, this involves local authority archaeologists (ALGAO) and HES
- National Peatland Action programme – requires consultation with CADW and Welsh Archaeological Trusts
- NCPGS – in-house rules covered in manual, consultations on designated sites with the statutory authorities required (chiefly Historic England).
- Northern Ireland intend to include elements of best practice from other grant schemes

Funding via sale of carbon credits – Peatland Code 2.0

- Section 1.4 - Historic environment preservation
- Validation – keep appropriate records
- Make certain decision making is transparent and recorded, especially where expert opinion is used e.g. advice from county archaeologists, national heritage agencies or Welsh Archaeological Trusts

Co-located legal agreements

- Usually known to the landowner/tenant but may not be mapped/publicly available
- Key examples of legal agreements including heritage protection
 - Guardianship
 - Agri-environment
 - Inheritance tax exemption
- Needs consultation before works start to avoid triggering penalties for the landowner
- Can create unintended consequences due to ‘stacking’ of different funding requirements

England – peatland restoration and ‘SHINE’

- The Selected Heritage Inventory for Natural England (SHINE) is a targeting dataset that was designed to help land managers put historic environment options onto known historic features in agri-environment schemes
- Created by local authority archaeologists (ALGAO), viewable by Natural England staff – but not shareable externally
- All agri-environment agreements in England have a blanket caveat that works should not damage or destroy historic features included in this dataset (or the paper versions which preceded it)
- **HOWEVER** there are unintended consequences for some peat projects

Details

SHINE reference number DR8331

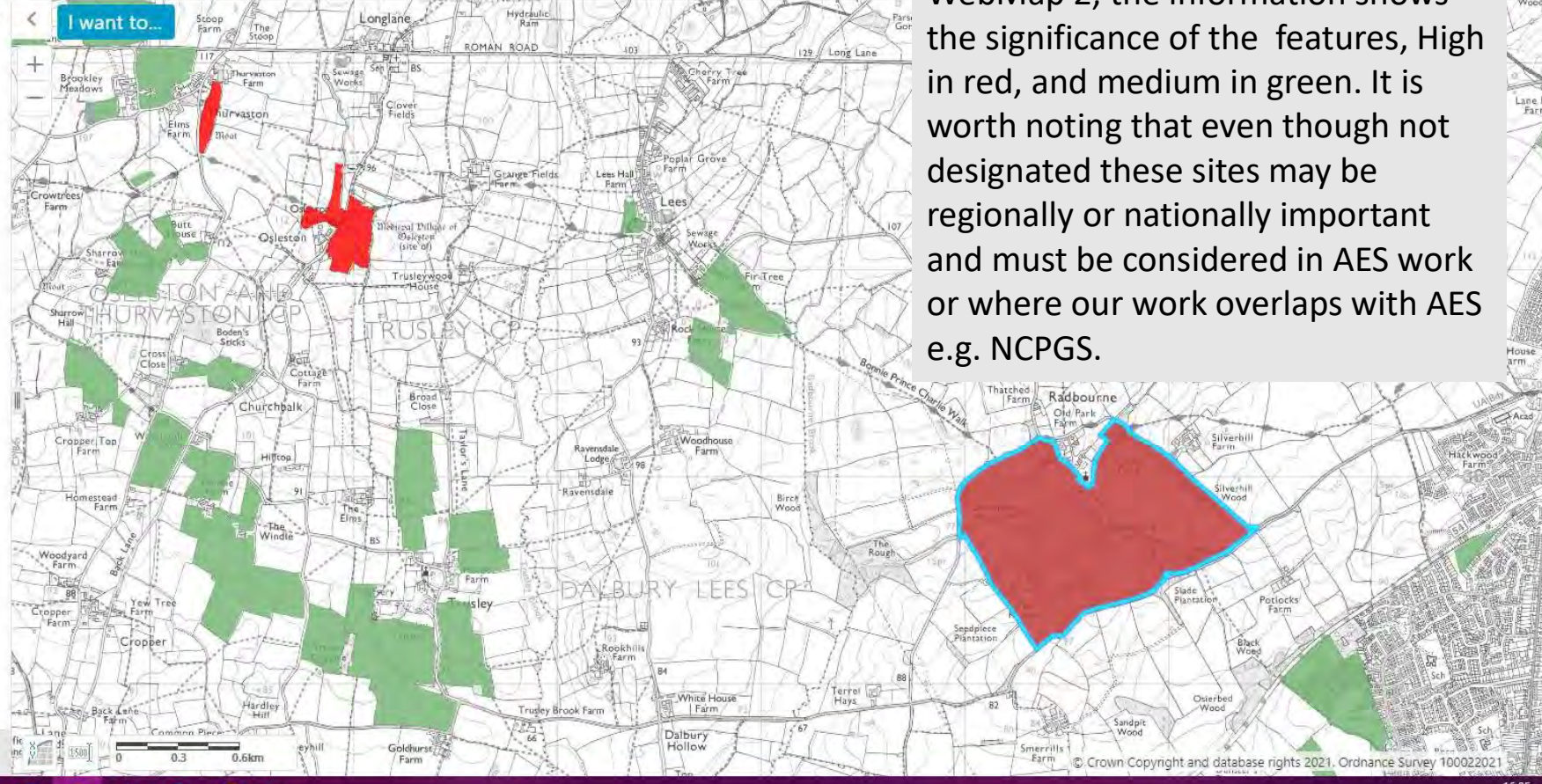
Monument Name
18th century parkland and gardens, including possible shrunken village, and extensive medieval ridge and furrow earthworks, Radbourne Hall

Monument Form
Structure(s) + above + below-ground feature(s)

Significance High

More information

Feature last edited 2014-09-25 11:53:22



An extract from SHINE layers on WebMap 2, the information shows the significance of the features, High in red, and medium in green. It is worth noting that even though not designated these sites may be regionally or nationally important and must be considered in AES work or where our work overlaps with AES e.g. NCPGS.

Things that get missed

- Archaeological potential
- ‘Setting’ – not just visual but can include indirect physical impacts e.g. changed hydrology affecting buried remains
- ‘Curtilage’ – buildings nearby to and built at the same time as designated buildings may inherit their protections (often applies to barns and agricultural buildings e.g. water pumps/windmills)
- Intangible heritage



Project Implications

- Delays
- Enforcement – legal prosecution rare but does happen in case of major damage
- Reputational risk
- Financial risk – withholding of grant aid for ineligible works, AES enforcement (reclaim with penalties)
- Physical risks – UXO, mining heritage
- Withdrawing of community/landowner support for project

How to avoid issues



- Educate yourself ✓
- Make the historic environment part of project planning
- Assign the responsibility for checks to a named person
- Use your 'friendly local archaeologist'
- Think about heritage-friendly restoration techniques in sensitive areas; reduce ground disturbance; consider chemical and hydrological changes carefully



Peatland Restoration & Cultural Heritage: Developments in Scotland

Dr Tom Gardner

- Peatland Restoration classed at development under permitted development rights
- Guidance document published by ALGAO Scotland
- Two significant archaeological sites discovered through restoration walkover now scheduled and legally protected
- A further peatland case study



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Stone rows, Tongue, Highlands (SM13762)

“The monument comprises a setting of multiple stone rows in peat and heather moorland dating from the Bronze Age (around 2500BC–800BC). The setting comprises at least 15 roughly parallel rows of edge-set slabs spread over a slightly dished area of about 29m from north to south by 27m east-west. The rows lie between 1m and 1.5m apart, with the longest visible row of six stones extending for 16m in a line from north northwest to south southeast.

The setting is located on a rounded knoll with a generally south facing aspect overlooking an area of peat cutting. The edge-set slabs, of which 33 are visible (although 56 are recorded), are generally aligned with the direction of the rows.”



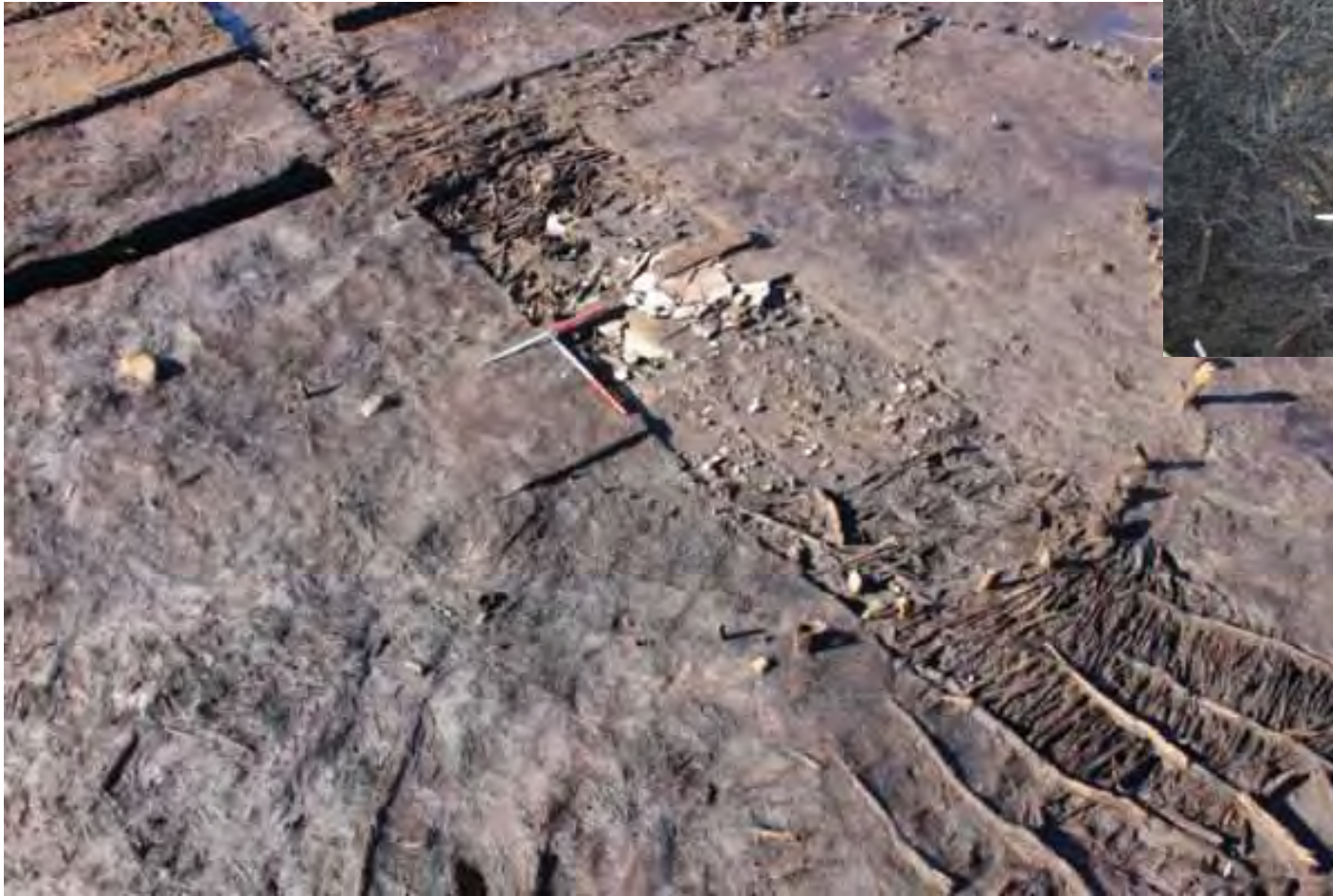
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Hyndford Quarry, South Ayrshire (undesigned)

- Developer funded quarry expansion
- Excavated by AOC Archaeology Ltd.





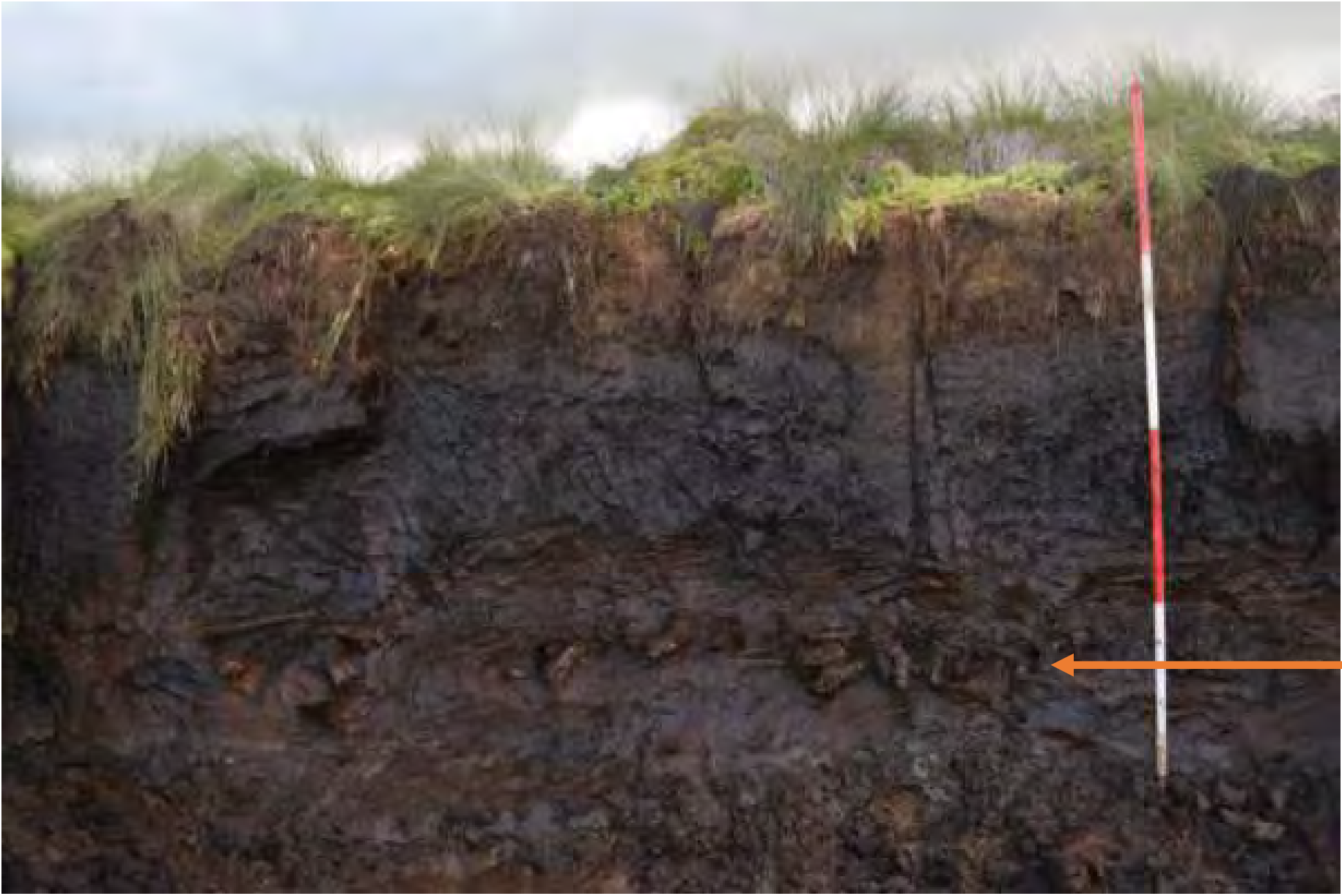
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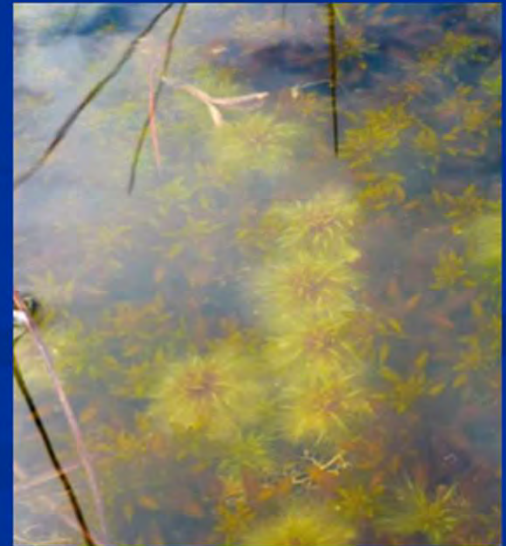
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Peatland Restoration, Benefits for Climate Change and Heritage in Ireland

Margaret Keane



10/2/2023

What Peatlands do for us?

WHAT DO PEATLANDS DO FOR US?

IRISH PEATLANDS AND THE ECOSYSTEM SERVICES THEY PROVIDE

ECOSYSTEM SERVICES SIMPLY MEANS THE MANY AND VARIED BENEFITS THAT HUMANS GAIN FROM THE NATURAL ENVIRONMENT WHEN PROPERLY FUNCTIONING ECOSYSTEMS ARE MAINTAINED.

BIODIVERSITY

PEATLAND HABITATS ARE WILDLIFE HAVENS AND CONTAIN UNIQUE SPECIES GROUPS: TERRESTRIAL, AQUATIC AND MICROBIAL.



WATER PURIFICATION + FLOOD ATTENUATION

PEATLANDS CAN MODERATE RUN-OFF AND, IN DOING SO, REDUCE THE RISK OF DOWN-STREAM FLOODING.

WHEN PEATLANDS ARE DEGRADED, WATER QUALITY DETERIORATES. THIS LEADS TO INCREASED TREATMENT COSTS AND LOSS OF FISH SPawning GROUNDS AND IMPACTS ON OTHER SPECIES, INCLUDING THE THREATENED FRESHWATER PEARL MUSSEL.

DIRECT ECONOMIC RESOURCES

PEATLANDS HAVE PLAYED AN ESSENTIAL ROLE IN THE ECONOMIC DEVELOPMENT OF IRELAND. THEY HAVE BEEN EXPLOITED FOR HORTICULTURE, ELECTRICITY PRODUCTION AND PEAT EXTRACTION FOR FUEL FOR CENTURIES. LARGE TRACTS OF PEATLANDS HAVE BEEN RECLAIMED FOR AGRICULTURE, GRAZING AND FORESTRY. OFTEN THESE ACTIVITIES ARE NON-SUSTAINABLE AND INTERRUPT NATURAL PROCESSES THAT SUSTAIN THEM.

THE VAST MAJORITY OF PEATLANDS IN IRELAND ARE NO LONGER FULLY FUNCTIONING ECOSYSTEMS.



BOGS ARE KEY FOR THE SURVIVAL OF ENDEMIC, RARE SPECIES AT A GLOBAL SCALE WITH SPECIAL ADAPTATIONS TO THESE UNIQUE ENVIRONMENTS.

LANDSCAPE AND RECREATION

PEATLANDS ARE AN INTRINSIC PART OF THE IRISH LANDSCAPE. THEY ARE THE CLOSEST WE HAVE TO WILDERNESS. PEATLANDS ARE UNIQUE AMENITY SPACES TO ESCAPE TO, SEEK CULTURAL ARTISTIC INSPIRATION OR SIMPLY ENJOY NATURE. THEIR ROLE IN FOSTERING HUMAN WELL-BEING IS BECOMING WIDELY RECOGNISED.

DEVELOPED BY THE REGIONAL PARKS AND PEATLANDS OFFICE
Rialtas na hÉireann
Government of Ireland



AIR QUALITY

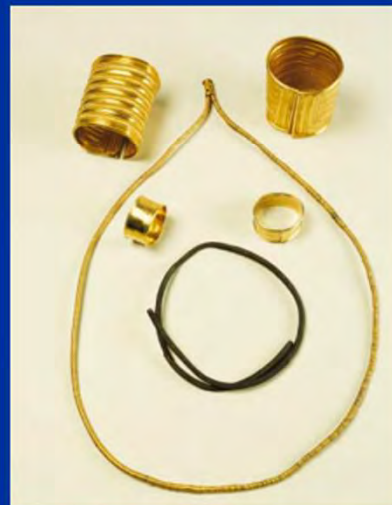
BURNING OF PEAT IS A SOURCE OF EMISSIONS OF A RANGE OF AIR POLLUTANTS THAT CAN IMPACT ON HUMAN HEALTH. PROPERLY FUNCTIONING PEATLANDS HELP THE SURROUNDING COUNTRYSIDE TO PROVIDE FRESH + HEALTHY AIR.

THE FOLLOWING IRISH WORDS AND PLACE NAMES HAVE AN ASSOCIATION WITH BOG OR WETLAND: "BOGACH" (BOGGAGHBACH), "EARNACH" (ANNAGHMORE), "MOING" (MONART), "MOIN" (MOICDIN) AND "CURRACH" (CURRAGHMORE).

CULTURAL HERITAGE

PEATLANDS AND IRISH PEOPLE HAVE A LONG HISTORY AND CULTURAL RELATIONSHIP. PEATLANDS ARE LINKED TO TRADITIONAL CULTURE AND IN THE PAST TO RITUALS OF DEPOSITION. THEY FEATURE IN LITERATURE, HERITAGE AND ORAL TRADITION. DUE TO THEIR PARTICULAR CHEMISTRY THEY PRESERVE MONUMENTS AND ARTEFACTS WHICH IN OTHER ENVIRONMENTS WOULD PERISH.

Artefacts and Monuments from Ireland's peaty past (Raised Bogs)



10/2/2023

Artefacts and Bog Body images copyright National Museum of Ireland

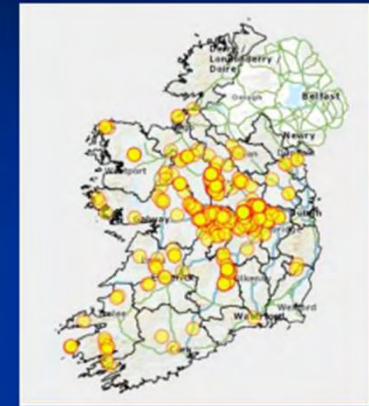
Raised bog - Peatland Site types

Site Type	
Peatland Platform	264
Peatland Post Row	54
Road Class 1 Togher	131
Road Class 2 Togher	252
Road Class 3 Togher	991
Road Gravel/Stone trackway	52
Road Unclassified togher	255
Structure Peatland	1722
Other	3
	3774

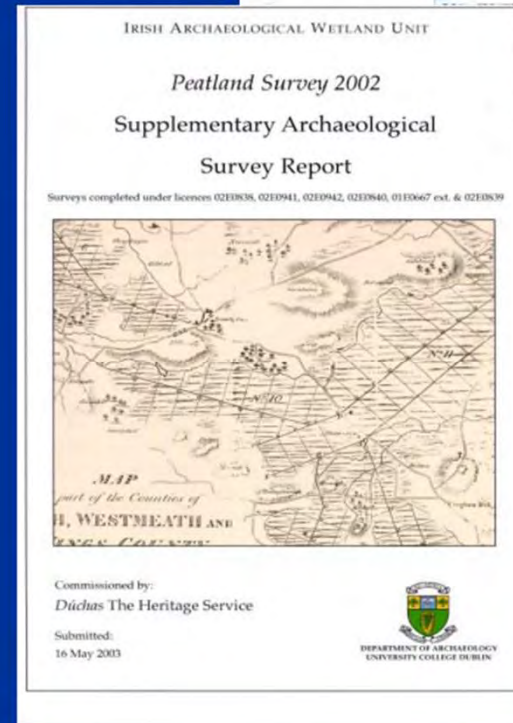
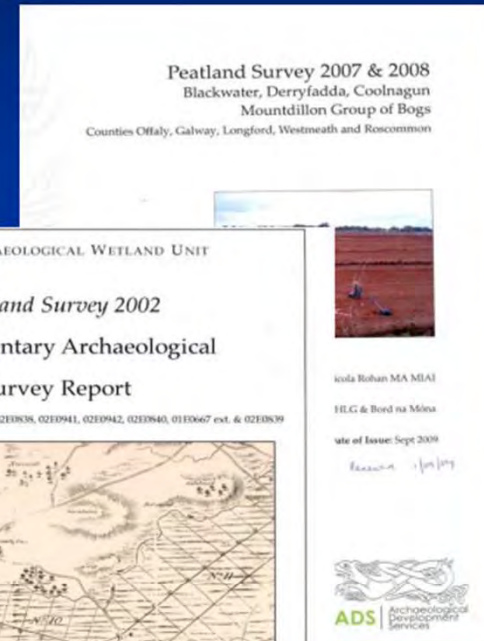
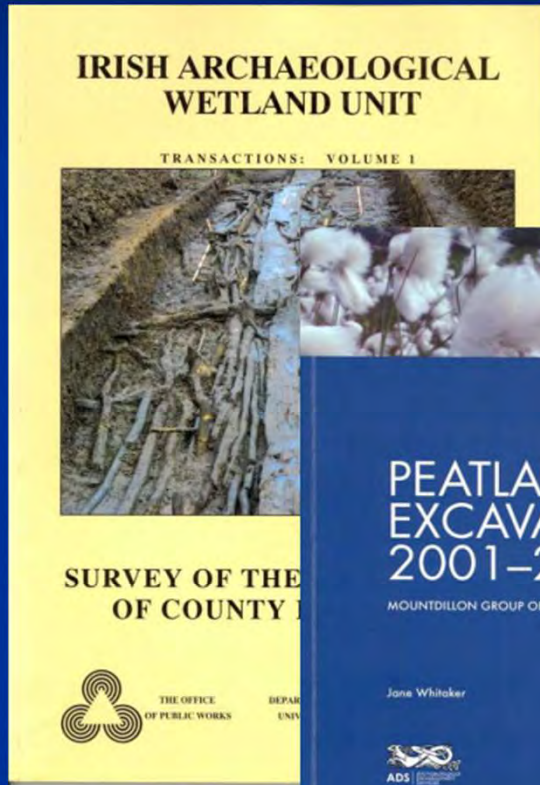


Excavations of over 400 structures in industrial bogs funded by BNM since 1991 following on from field-walking surveys funded by NMS

Raised bog - Peatland Site types

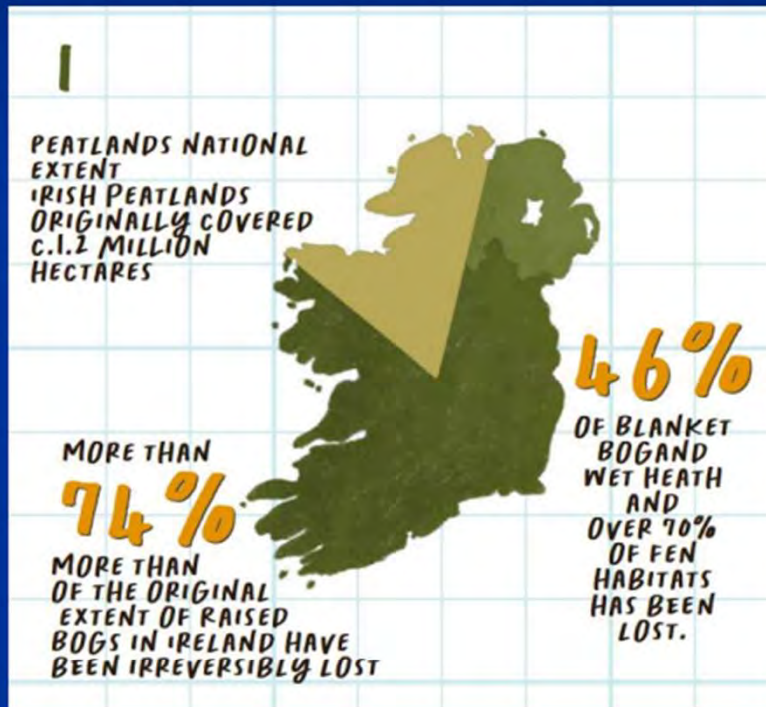


The Record – Monographs and Reports and Publications



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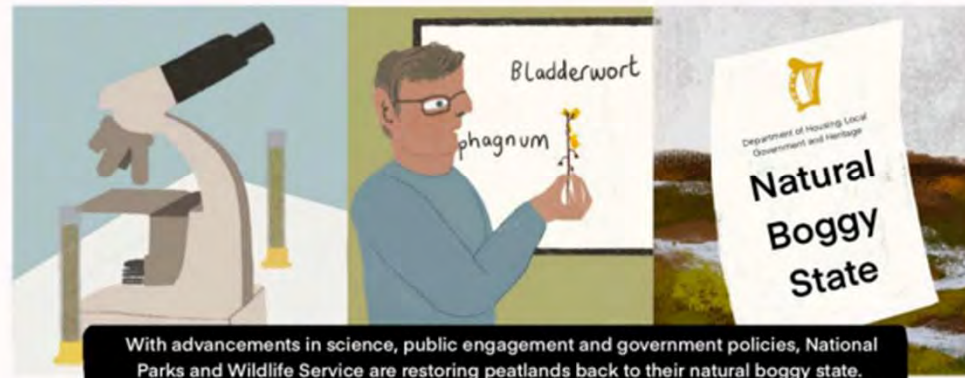
Conservation and Restoration



Only 0.5% (1,659ha) of extent of raised bog present in the 1800s is still alive (forming peat).

Peatlands Restoration Efforts

Ireland is at the forefront of peatland restoration and rehabilitation practices and research.



Enhanced Decommissioning Restoration and Rehabilitation Scheme (EDRRS)

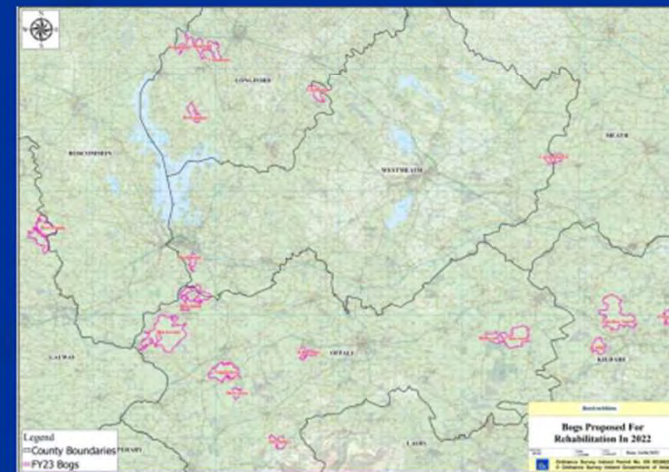
Year 1 2021, 18 bogs under rehab. Large scale work including drain blocking, bulldozing and creation of bunds. Funding by Dept of Environment, Climate and Communications administered by National Parks and Wildlife Service.

Pilot National Monuments Service funded monitoring in 4 bogs. Carried out by AMS - very successful, works monitored, new archaeological material identified.



EDRRS 2022

Year 2 2022, 19 bogs under rehab. Greatly dispersed across BNM landholding. NMS commissioned IAC to carry out monitoring on all 19 bogs. Scale of work immense. Built in enhanced training programme of BNM personnel with toolbox talks and powerpoint presentations provided.



10/3/2023

Outcomes of Edrrs - Clonfinlough, County Offaly,
Late Bronze Age Palisaded Enclosure



Rehabilitation will provide for the preservation *in situ* of Peatland Archaeology into the future *vs* the destruction through extraction and/or excavation.

Discussion

Regulation processes for heritage
in peatland restoration in UK and
Ireland



Peatland Restoration on Dartmoor and cultural heritage: Beyond 'Preservation'

Martin Gillard: SWPP Historic Environment Officer





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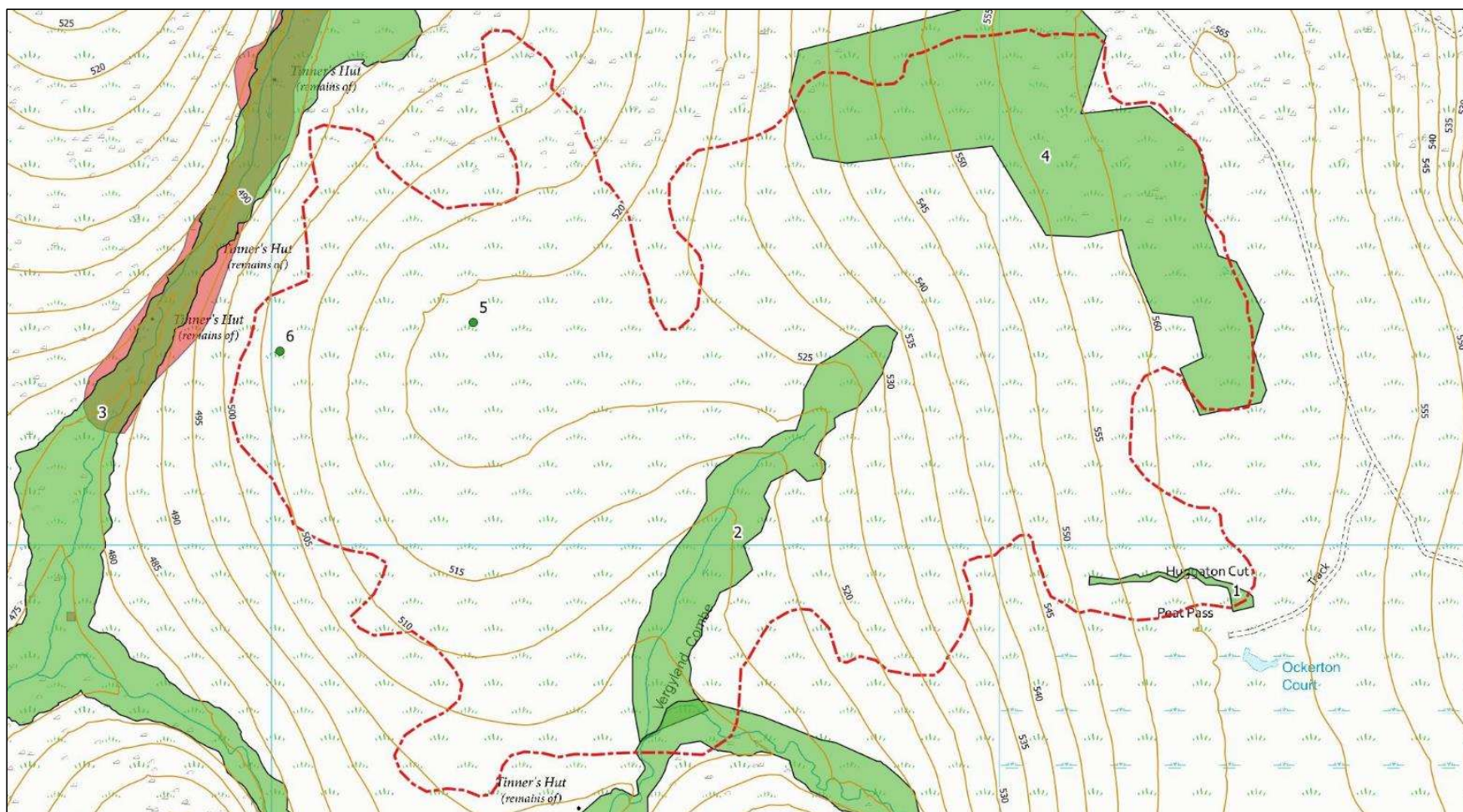


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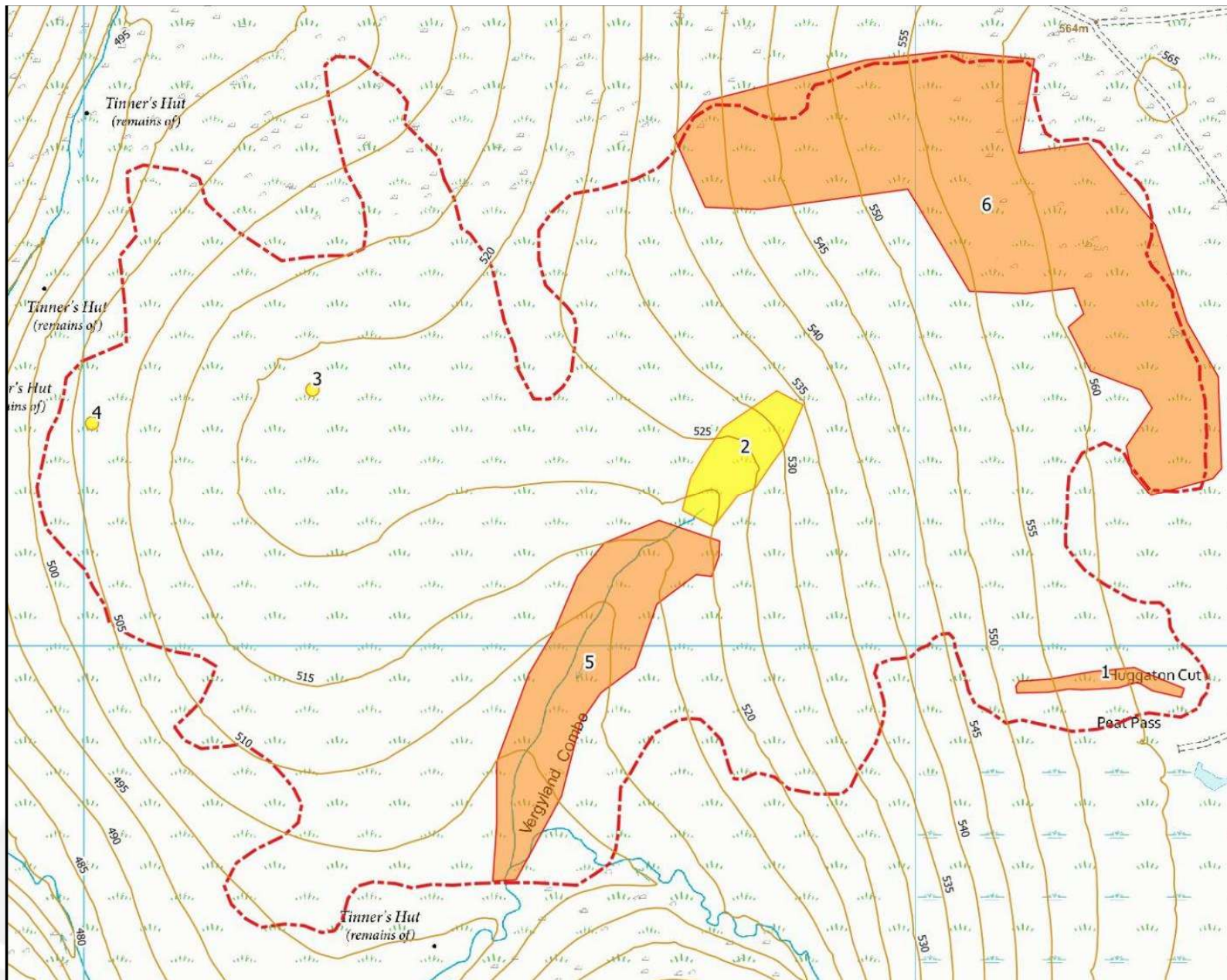


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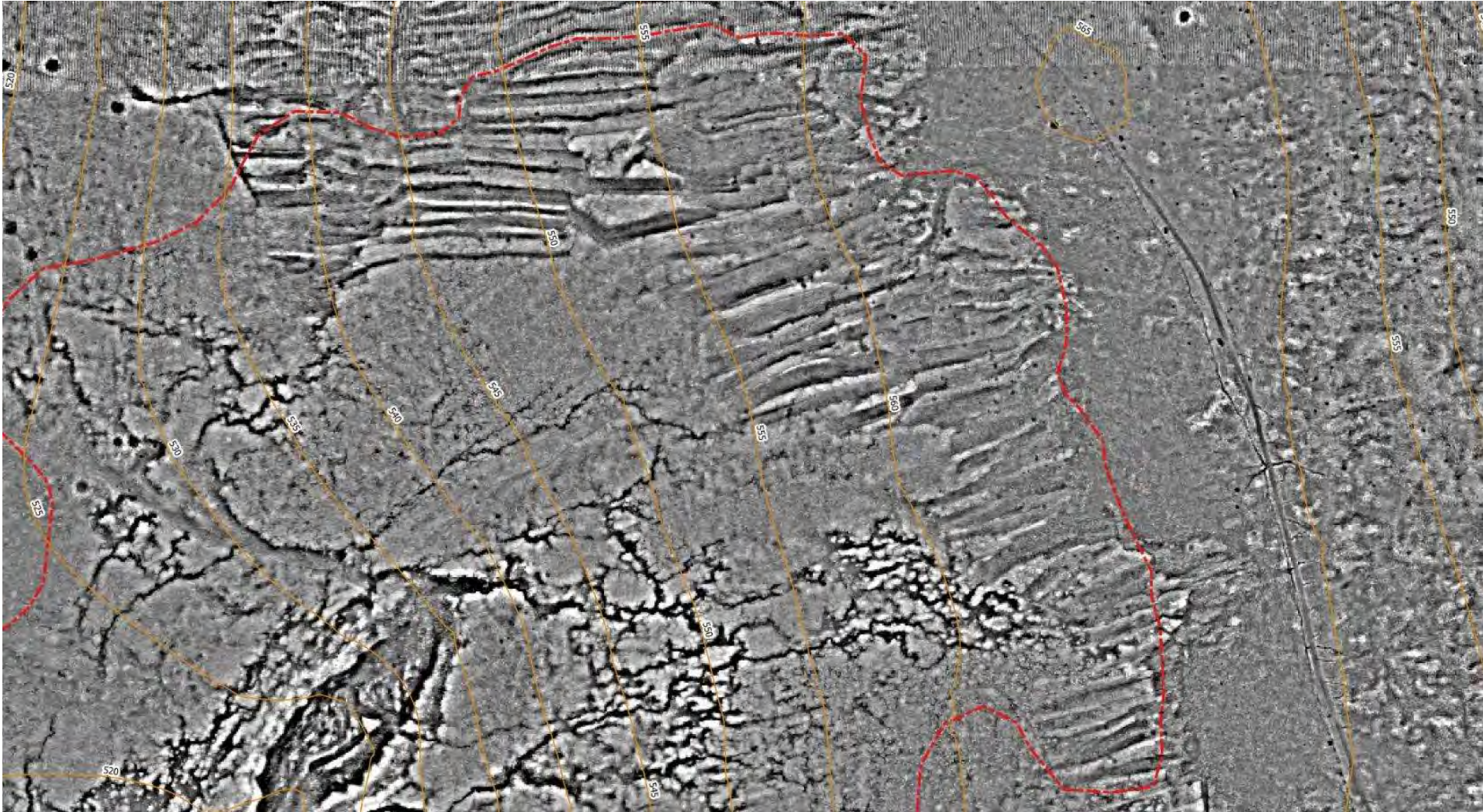
Ockerton: Site and Historic features



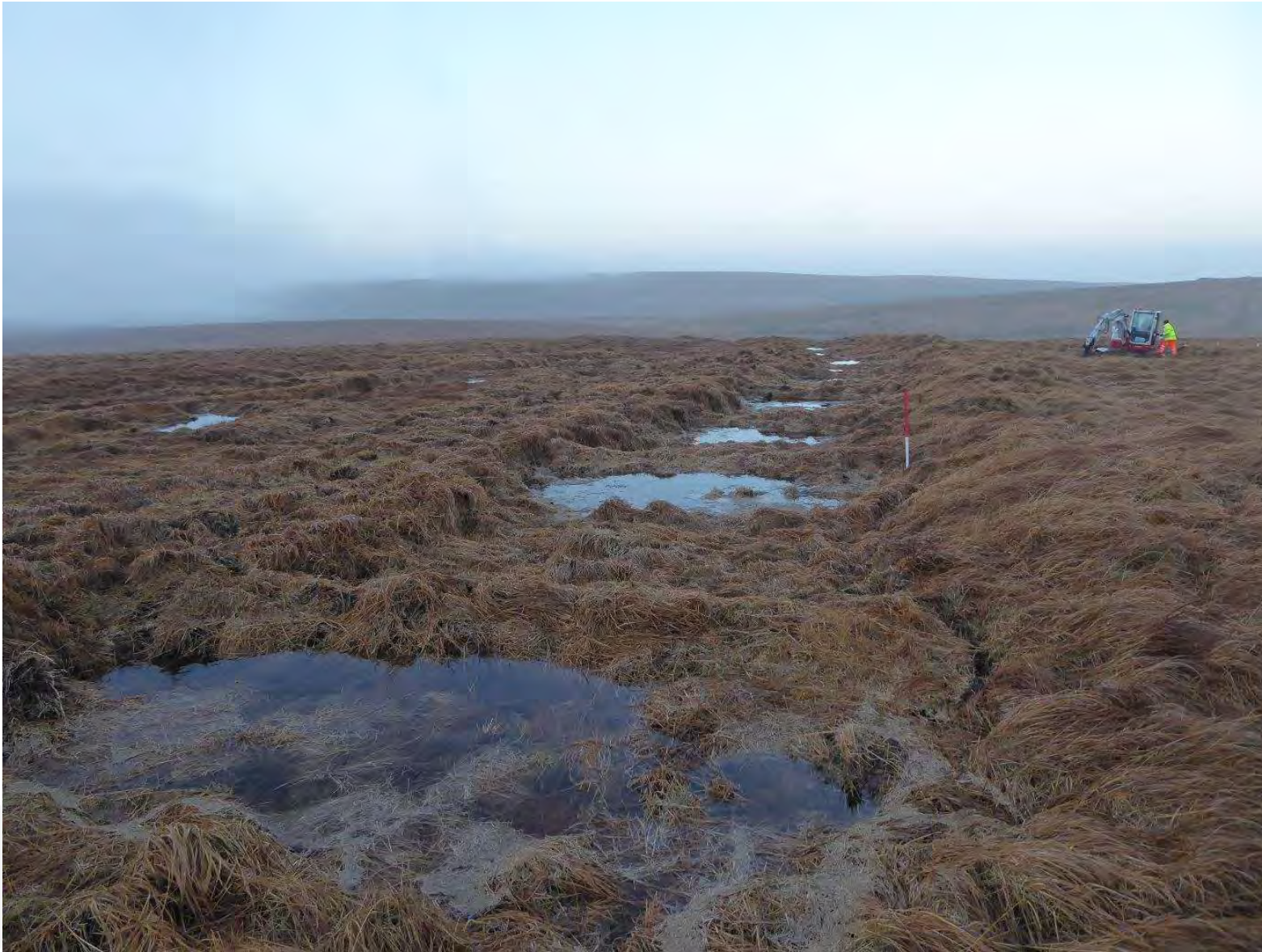
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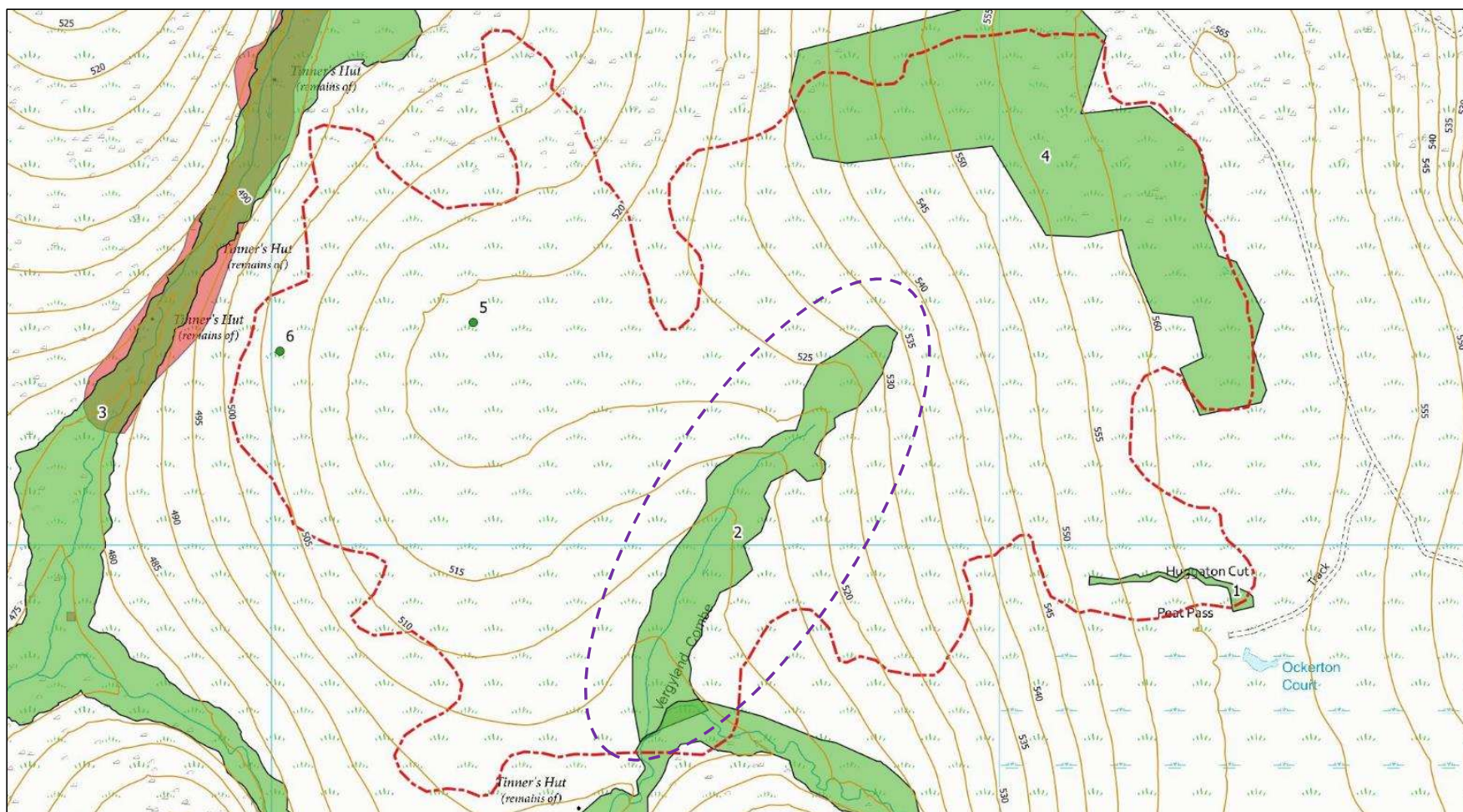
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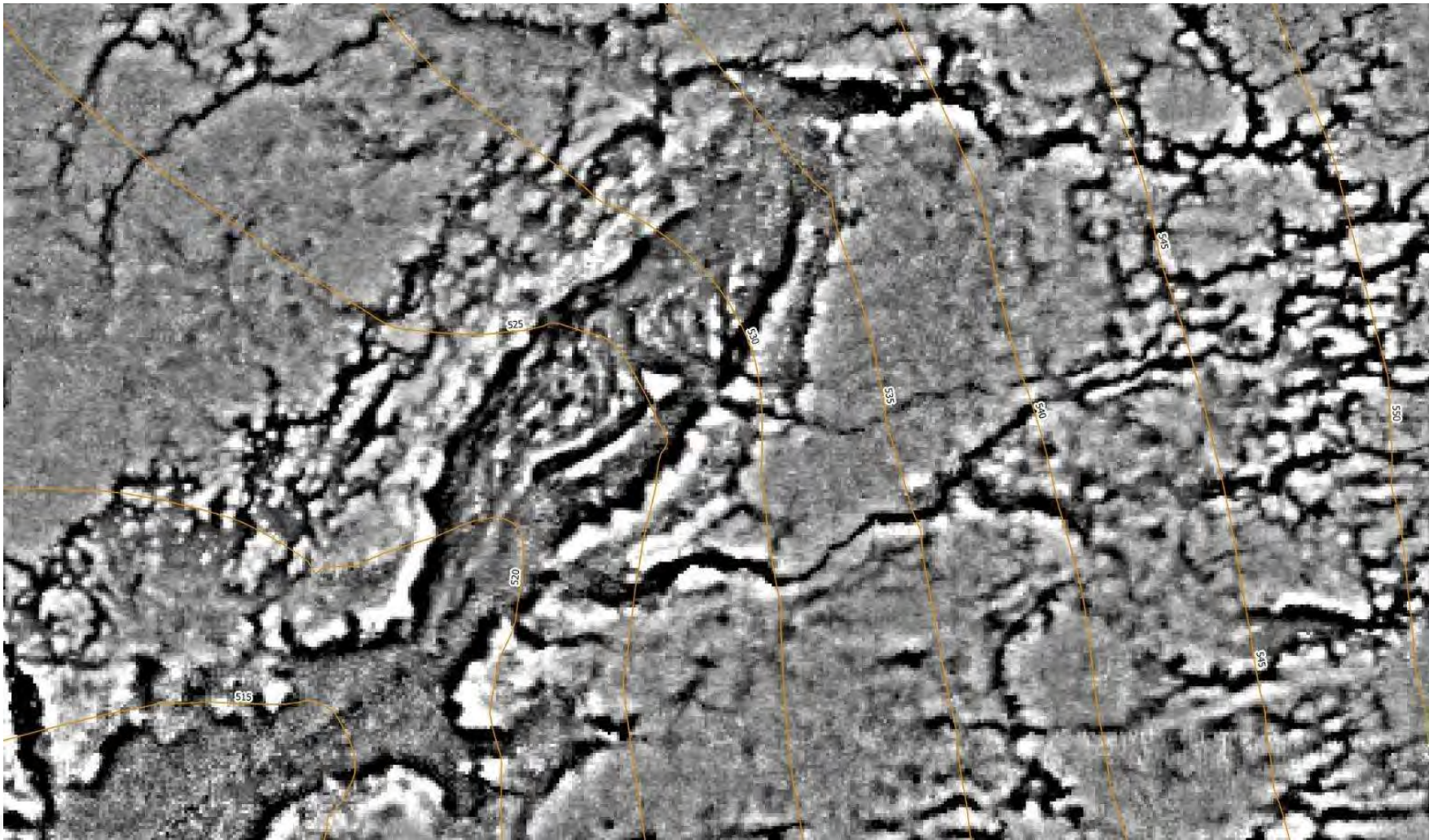


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Ockerton: Site and Historic features



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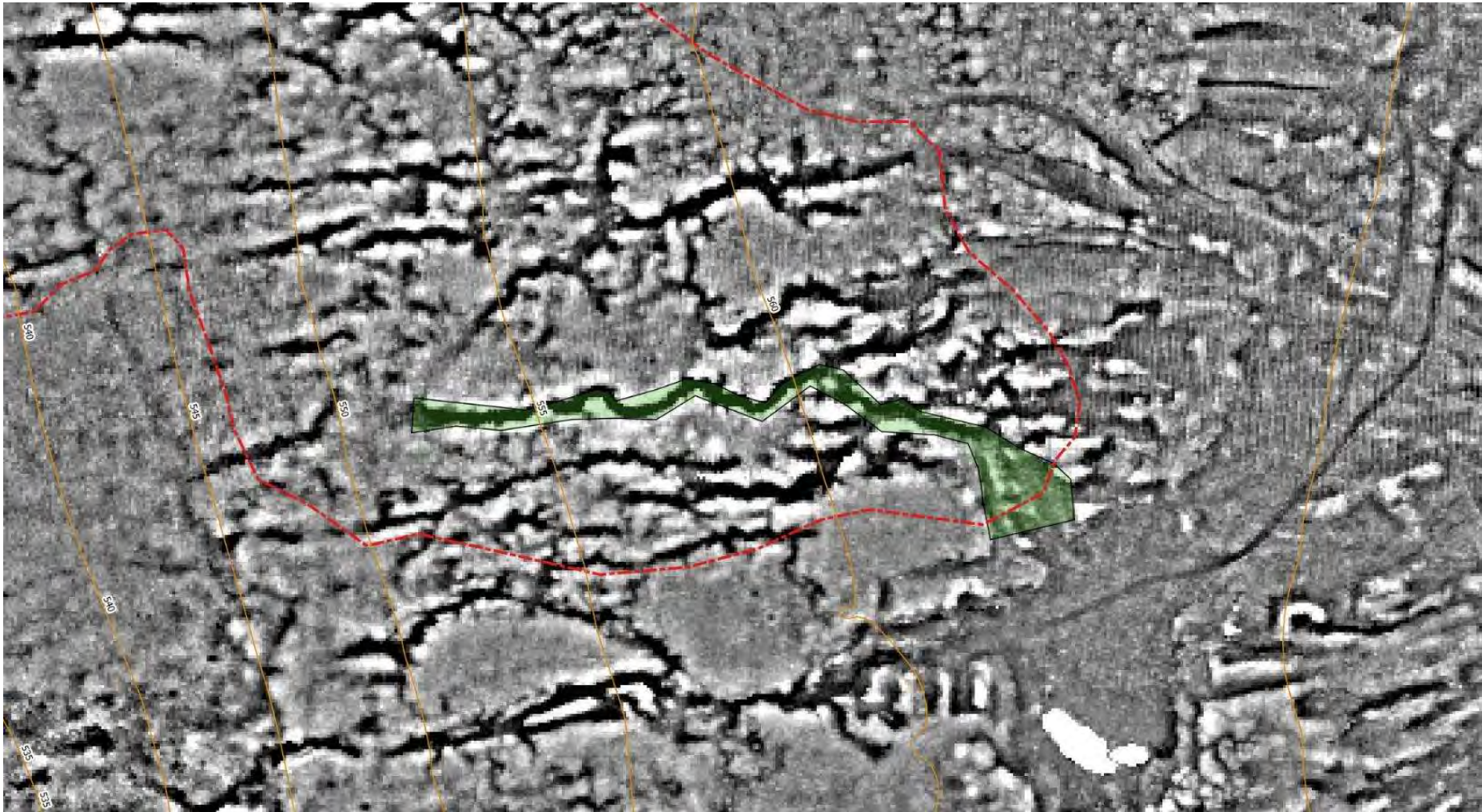
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“Huggaton”

“Okement Hill”

“Ockerton Court”



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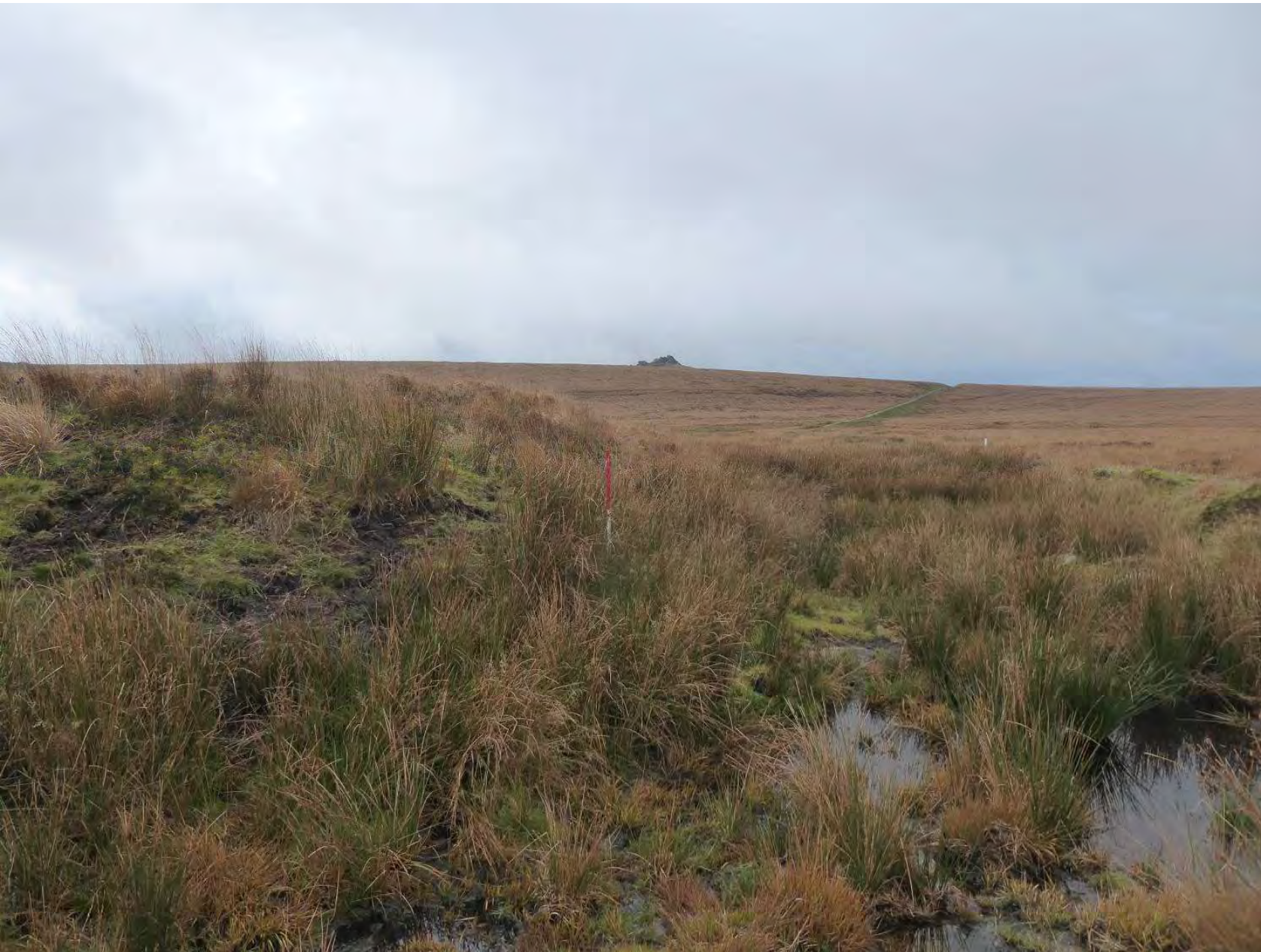




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Thank you



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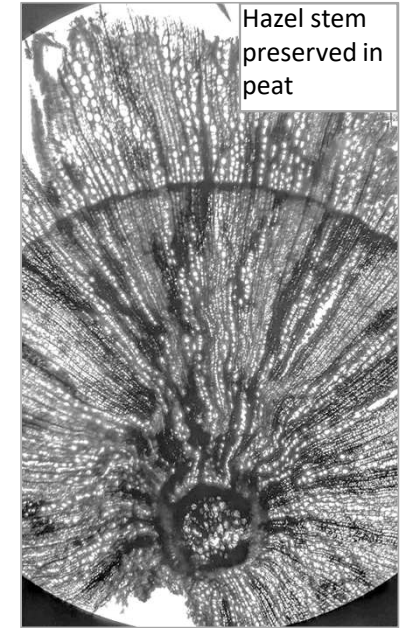
What heritage contractors need to know

Ed Treasure



What can we do for you?

- Pre-restoration
 - Desk-based assessment (DBA)
 - Walk-over surveys
 - Palaeoenvironmental sampling
- Restoration
 - Watching briefs
 - Palaeoenvironmental sampling
- Post-restoration
 - Dissemination and publication
 - Community outreach



Working effectively together

- Early involvement and contact
- Creating a common language
- Sharing knowledge and expertise
- Basic logistics
 - Site access
 - Timescales
 - Costs
- Engaging with local communities



A case study: Alderman's Barrow, Exmoor

- Restoration techniques involved deep trench bunds
- Palaeoenvironmental sampling of exposed peat deposits in trenches
- Enhanced understanding of the palaeoenvironmental resource, extending back c.4500 years
- What next?



Conclusions and questions



Discussion

How to be a good client

How to get the most from heritage in
peatland restoration schemes



What do you think of when we talk about heritage and peatlands?

Go to [slido.com](https://www.slido.com) and enter code #1576362 to take part



<https://wall.sli.do/event/5m6etxj8sKBAXB6QEwbsEw?section=c7d4423b-9e4e-431f-b636-afa4e554d925>