





6: Cultural Heritage

Chair - Antony Firth,
Head of Marine and Coastal Heritage
Historic England









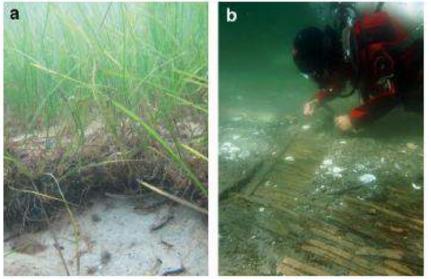




Fig. 1 a Seagrass meadow currently growing on the site of Nekselø, the roots of which are preventing removal of the sand overlying the site by underwater currents. b Diver investigating the remains of the wattle mats from Nekselø, c Areas of the seabed around the fish weir site of Nekselø have lost seagrass coverage resulting in the loss of overlying sand and erosion of the layers containing archaeological remains, Photos: National Museum of Denmark



Figure 5.14 Panel 2027 exposed after excavation

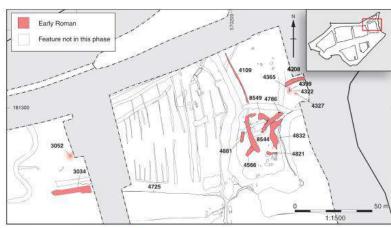


Figure 5.15 Early Roman features in Areas B and C

Stanford Wharf Nature Reserve, Thurrock

Nekselø, Denmark

Moors at Arne, Dorset





NEWS

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'Finding 3,500-year-old wooden spade was exciting'



The wooden spade, that dates back to the Bronze Age, has been described as "really unique"

Katie Waple

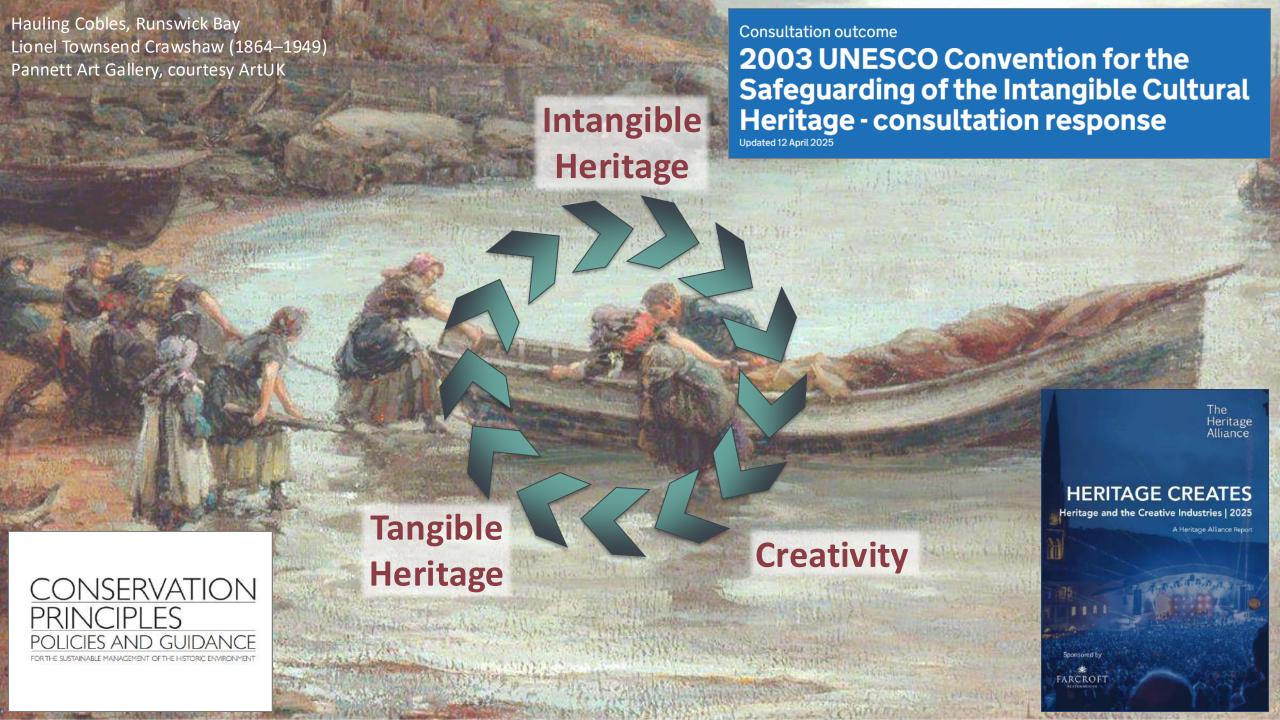
BBC News

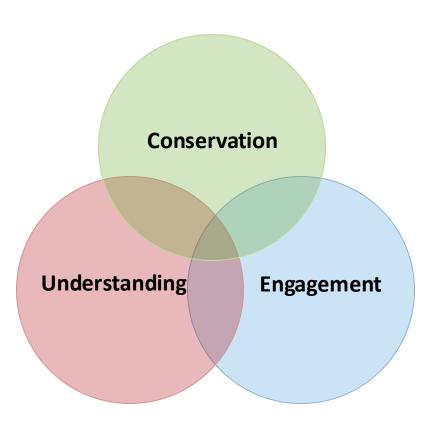
23 October 2024

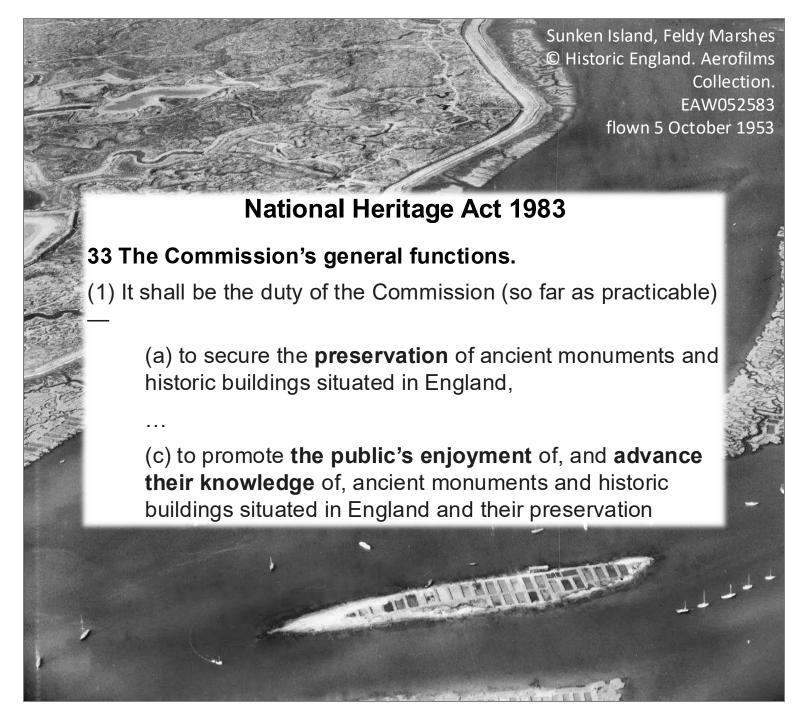
It's a "once-in-a-career" find and an "indescribable" moment.

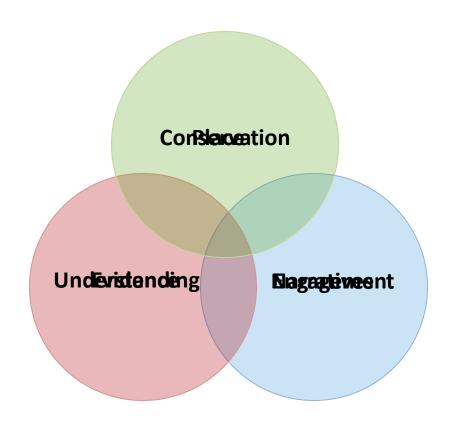
The archaeologists who unearthed an extremely rare 3,500-year-old wooden spade, believed to date to the Bronze Age, has been speaking about the experience.

It was uncovered in Poole Harbour during work on a scheme to create coastal







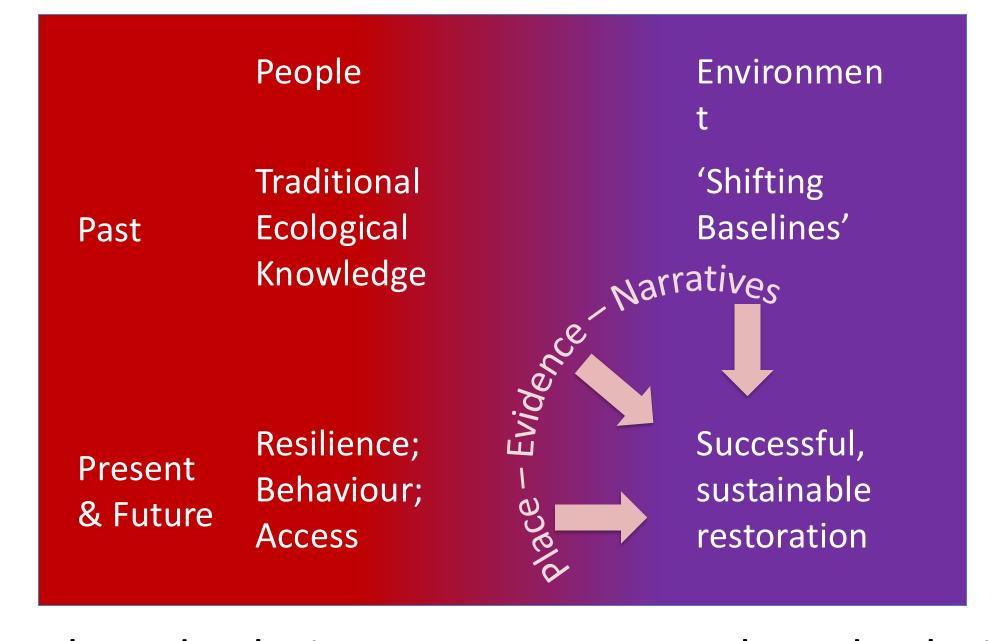




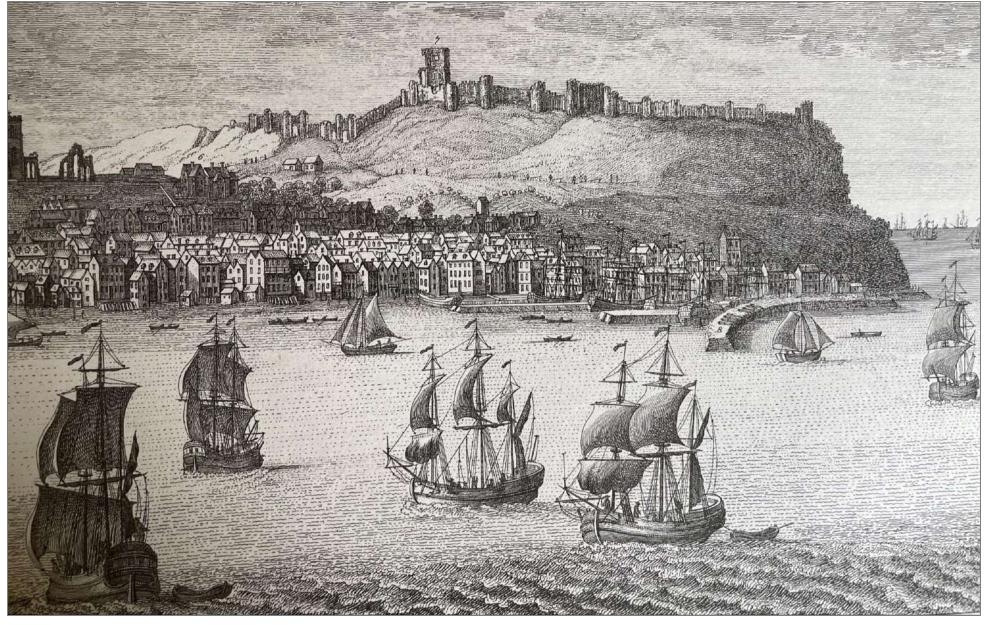


Cultural Heritage = People x Environment

Time past, present, future ...



Culture-based Solutions support Nature-based Solutions



The South Prospect of Scarborough, in the County of York, 1745 Samuel and Nathaniel Buck, 1745





Project Eisirean: A culturally-embedded framework approach towards restoration of native oysters in the west coast of Scotland for natural, cultural and economic benefits

Carolyn McNamara¹ & Anna McGregor²

¹School of Celtic & Gaelic Studies & MyAcademic Family

²school of Biodiversity, One Health & Veterinary Medicine



FÀILTE OIRBHSE A DH'ATHARRAICHEAS AN SAOGHAL TOP 100
UNIVERSITY



Ecosystem Services & Gàidhealtachd

"Ecosystem Services are the direct and indirect contributions ecosystems (known as natural capital) provide for human wellbeing and quality of life."

- Cultural section "non-material benefits obtained from ecosystems" – MEA 2005
- Stems cultural values and perceptions with
- communities not uniform within countries!

 Gàidhealtachd cultural community associated with traditional Gaelic-speaking parts of the country
- Sealladh a' Ghàidheil (the Gaelic worldview; Cheape 2011)

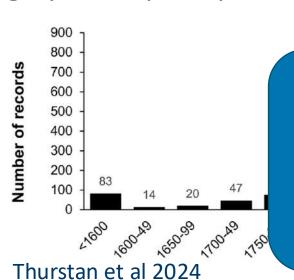


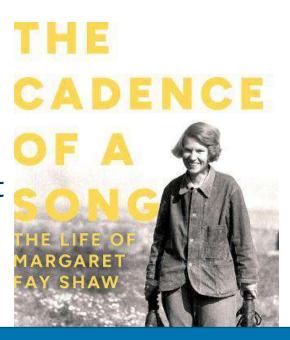
Source: NatureScot (nature.scot)

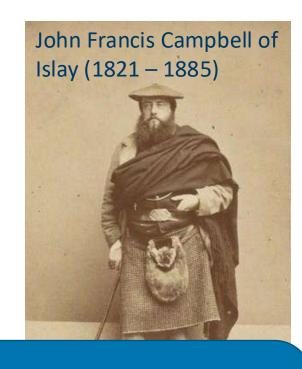


Material Culture & Cultural Artefacts

- Long history of relying on shellfish & oysters for subsistence given coastal areas
- Importance of oral traditions within Gaelic culture captures relationship & place without writing – window into everyday life
- Highly descriptive place-names







Aims: 1) Explore extent of oyster mentions in cultural artefacts to understand Gaelic view historically
2) Embed references in present-day work to re-connect people to animal & benefits



Potential oyster and oyster habitat terms

Gaelic

- eisir 'oyster' (m and f), plural eisirean, also eisirein 'an oyster' (Mac Eachainn s.v. eisir; LearnGaelic s.v. eisir)
- oitir (GEN oitirean) 'a shoal, a bank of sand' (f) (Mac Eachainn s.v. oitir)
- dòirlinn (GEN dòirlinne) 'an isthmus, a tidal causeway' (f) (Mac Eachainn s.v. dòirlinn)
- sligeach (adj) 'shelly' (Mac Eachainn s.v. slige)
- maorach (GEN maoraich) 'a shellfish' (m) (Mac Eachainn s.v. maorach)

Scots

 scaur/scar 'a gravel-bank, a stony bank' (DOST s.v. scar n.3); (only in the south-west) a bank of gravel and stones' (SND scaur n.2)

Norse

- oronsay/ornsay/orosay 'tidal island' (Macbain and Watson)
- eidh/uidh/uiy/eiy 'isthmus, a neck of land' (Macbain and Watson)

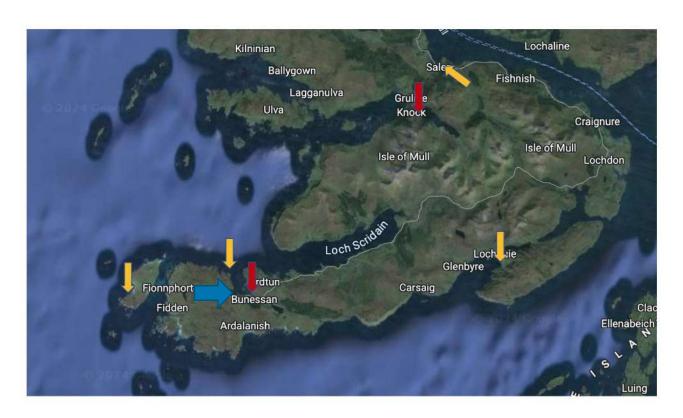


An Doirling, West Loch Tarbet

Map © NLS 2023



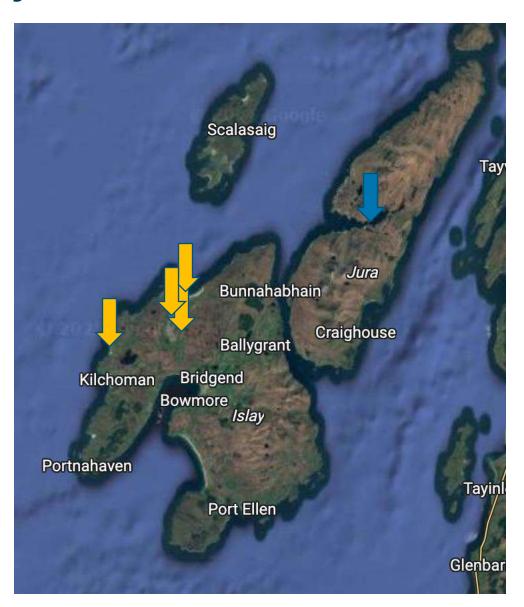
Place-names in Mull & Islay – Inner Hebrides













Fàisneachd mu uachdaran Dhiùra Prophecy about laird of Jura

From Gaelic sources: A woman was gathering oysters in Tarbert once when the laird appeared and kicked over her basket. She said that he would leave Jura with a one-eyed laird and that a white horse would take him to the quay. This came true.

Last laird of Jura: Charles Graham Campbell (11th laird) did have one-eye and left the island with all his possessions, taken by a white horse



Recorded from Sandy Buie, Jura recorded 1971
Listen at Tobar an Dualchais







Cultivation vs Gathering

Shellfish collection was clearly part of daily life

- An tèid thu bhuain mhaoraich (Will you go and gather mussels
- 'S trusaidh mi na coilleagan the cocklegathers
- Chaidh Mi 'n Tràigh 's Cha do Rinn Mi Maorach
- The Limpet Gather
- A' bhean Eudaich the jealous woman

From Màiri Mhòr nan Òran, Skeabost, Skye. 1871 'S ràinig mi Tobar-a-Mhàil, Far an tric a dh'òl mi sàth, Sligean eisirean na mhàs, 'S tha e 'n-diugh cho làn de dhruaip. (I arrived at Tobar-a-Mhàil, / Where I frequently drank my fill, / Scallop shells at its bottom, / and today it is so full of sediment).

But also cultivation & consumption in land-owning classes

- 1873 request to Crown for rights for an oyster fishery
- 1864 Letter about scoping Ardfenaig, Mull for oyster farm
- 1752-1753 salt water pond built on Inveraray Castle grounds for oysters; Silted up & then filled in
- 1742 / 1750 oyster knifes & pan in kitchen inventory
- 1698 metal frame for farming oysters included in inheritance

'As I'[d] found the oysters put already in the salt water pond are all covered pretty deep with mud, we're afraid to believe putting in any more, until we discover whether their mudding be hurtful to them or not.' Argyll Estate Papers 1753

Embedding alongside Science Co-Development with Bowmore Primary

Dr Claire Ramjan,Initial teacher Education



Lesson Plans & Evaluation: Aligned with age-appropriate Curriculum for Excellence levels

Taught both Gaelic Medium and English streams in the same school, May 2025 (first phase), follow-up in September 2025

Lesson Structure: Ecology of the Oyster, Cultural heritage (subsistence use), Mentions in Gaelic songs & stories, Environmental monitoring,

Pupils filmed Gaelic OR English do and their connection to Islay

- Primary 1-3 'Oyster Tales'
- Primary 4-5 'Farming for Oysters
- Primary 6-7 'Should we reintrodu

Teacher evaluation:

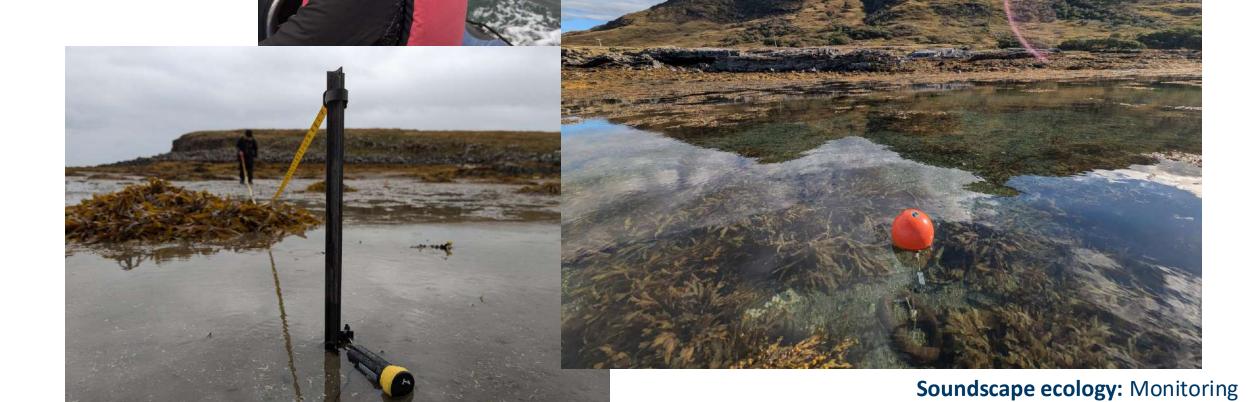
View at start was skepticism – 'huh, oysters? really?'
View at end was fascination & engagement. Range of activities brought everyone in to appreciate ecosystem benefits
Expanded their use of Gaelic science terminology (heart, lungs)
Motivated school visit to Islay Oyster Farm
Established clear link between local outdoor space & cultural artefacts



Dr Alejandra VovidesNearshore water movements through MiniBuoys

environmental health through

collection of natural sounds





Come hear us!

- Integration of Gaelic music & marine science performance & workshop of traditional shellfish & sea songs
 - Loch Abar National Mòd October 2025
 - Islay Gaelic Centre November 2025
 - Glasgow Ocean Sciences February 2026
- Working with Mull & Iona Community Trust, Kilchoan Estate & Community of Lochs & Sounds (CAOLAS)
- Next steps: locally-significant cultural displays supporting history, present restoration monitoring & hands-on education for outdoor learning – miniaquaria with museum display



On-site 'mobile' aquarium for education & demonstration

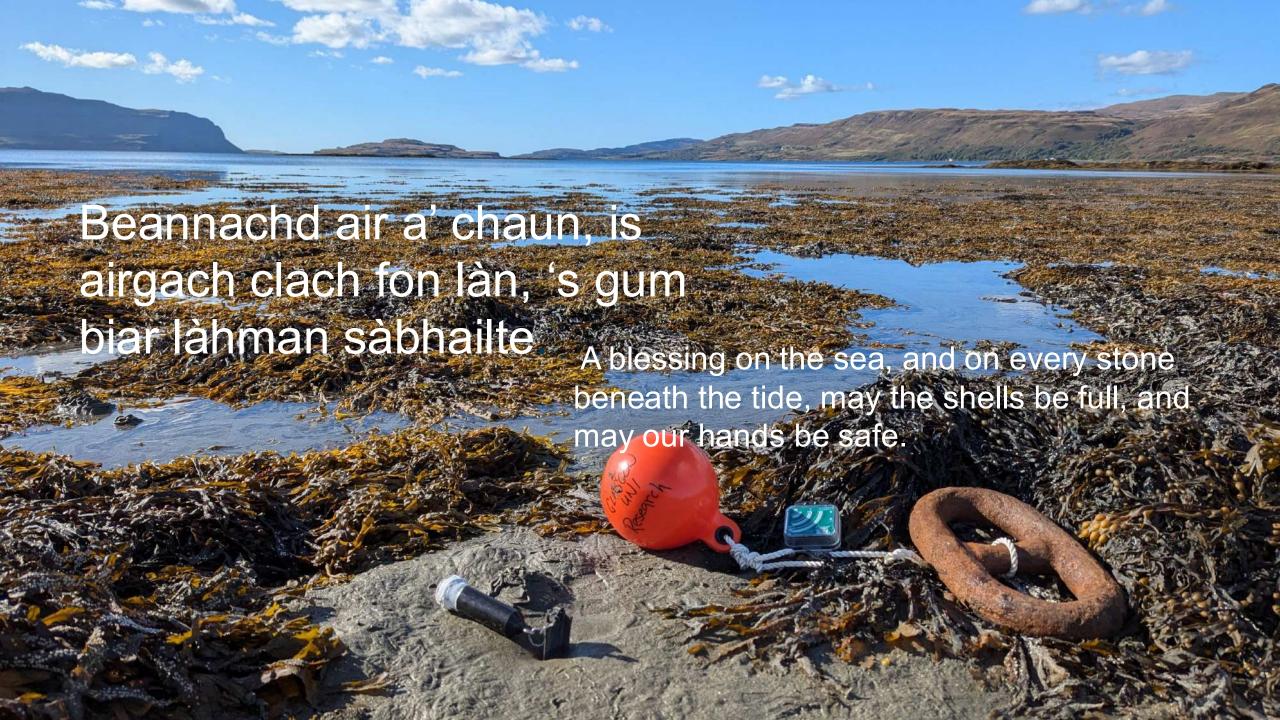
Original composition:

Chumadh biadh fad mile

bliadhn'

They fed people for a thousand

vears





Mòran taing a chairdean!









Thanks to: Bowmore Teachers- Mairi Macdonald, Alice Baxter, Jane Deakin, Arlene McKerrell, Claire Ramjan, Iona Maitland, Morven Scott

Alasdair Whyte, Peigi MacVicar, Brian Barrett, Martin Llewellyn, Alison Diamond & Argyll Estate Archives Project Partners: NatureScot, Native Oyster Restoration Alliance, An Comunn Gàidhealach, Ionad Chaluim Chille Ìle (Islay Gaelic Centre) and Argyll & Bute Council

Funding: UKRI Joint Impact Accelerator, NERC Cross-Discipline Fund & Glasgow Natural History Society **#UofGWorldChangers**







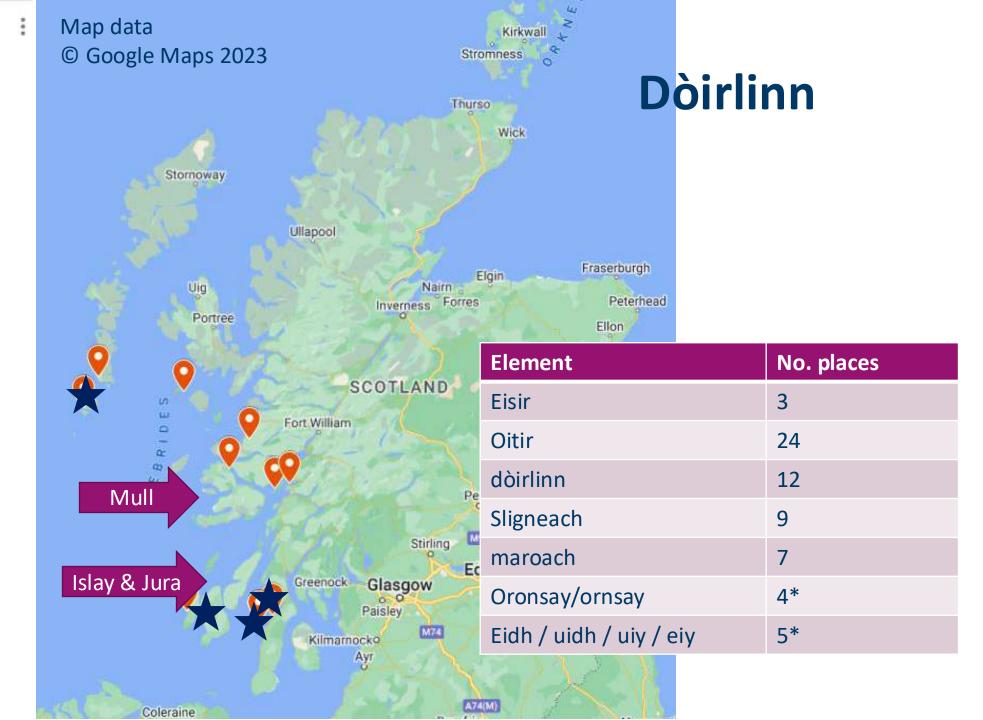














Project Summary

Project Eisirean | Native Oysters! Restoration of native oysters for natural, economic and cultural benefits and the regeneration of coastal communities via science and language. Drs Anna McGregor, Claire Ramjan & Alejandra Vovides

Problem: native oysters were once extremely abundant in coastal European waters, but due to overharvesting and disease, only remnant populations remain. As a key food source, they had notable cultural value within coastal communities, as indicated by mentions in place-names and stories, songs & sayings.

Solution: restoration work on Scotland's west coast is very localised but needs to be expanded. Previous research identified potential locations for restoration with place-names, with follow-up habitat surveys to provide more localised site selection, as well as recognition of the cultural importance of these animals through mentions in stories & song.

Work to date:

- 1. Map of shellfish & habitat place-names
- Preliminary habitat characterisation with aerial survey techniques (AUV & ROV)
- Initial collection of Gaelic sayings & stories related to shellfish
- 4. Knowledge Exchange events: CHARTS, COAST, Explorathon
- 5. Native Oyster Restoration Alliance conference



Next Steps:

- From existing place-names, identify 2-3
 partner communities to collect geophysical
 data collection & eDNA sampling to
 evaluate site selection
- 2. Distribute larvae in those locations to start enhancement
- 3. Expand approach to include international place-names
- 4. Connect cultural & linguistic heritage with ecosystem benefits to recognise parallel importance within coastal communities



Gaelic Idioms on Shellfish

buain am maorach nuair a tha an tràigh ann ('make hay while the sun shines')

'harvest the shellfish when the tide is out'

cha d'rinn mi maorach fhad 's a bha an tràigh ann ('I missed the chance')

'I didn't make shellfish when the tide was out'

chan fhuirich am muir ri uallach 's cha dèan bean luath maorach ('time and tide wait for no one but haste makes waste')

'the sea will not wait on responsibility and a hasty woman will not make shellfish'

cho làn ri cliabh maoraich ('full to the brim')
'as full as a creel of shellfish

nuair a bhios a' chaora caol bidh am maorach reamhar ('beggars can't be choosers')

'when the sheep is thin the shellfish is fat'

nuair a bhios sinn ri òrach, biomaid ri òrach is nuair a bhios sinn ri maorach, biomaid ri maorach ('one thing at a time and everything in its own time')

'when we are gilding, we are gilding, and when we are shellfishing, we are shellfishing'

tha uiread aig Calum ri dhèanadh eadar duileasg is maorach ('Calum has so much on his plate/ so many things to deal with')

'Calum has a multitude of things to do between dulse and shellfish'

ag iarraidh maoraich ri làn-mara ('a hopeless task')

'seeking shellfish at high tide'



- Thurstan, Ruth H., Hannah McCormick, Joanne Preston, Elizabeth C. Ashton, Floris P. Bennema, Ana Bratoš Cetinić, Janet H. Brown, et al. 2024. "Historical Dataset Details the Distribution, Extent and Form of Lost Ostrea Edulis Reef Ecosystems." *Scientific Data* 11 (1): 1198. https://doi.org/10.1038/s41597-024-04048-8.
- Budge, Donald (1960) Jura, An island of Argyll. Glasgow: John Smith & Son
- Charles Graham Campbell.
 https://glasgowbenefactors.com/2017/10/24/captain-campbell-of-jura/#_edn96
- Lindsay, Ian G., and Mary Cosh. 1973. *Inveraray and the Dukes of Argyll*. Edinburgh: Edinburgh University.



Key Activities, Deliverables & Partners

- Field sampling of sediment, water movements & eDNA to benefit oyster growth, combined with increasing community awareness of Gaelic cultural heritage around shellfish as a sustainable food source & industry
- Improve supply of oyster to sites informed by placenames. Trial mobile oyster hatchery to supply oyster larvae to communities, monitor for disease & provide skills training for capacity-building: Community Association of Lochs and Sounds (CAOLAS), Native Oyster Restoration Alliance (NORA) & NatureScot
- Community & Schools education pack, including interactive map on parallel declines of cultural/linguistic heritage & oysters & bilingual science resources □ Native Oyster Restoration Alliance (NORA), NatureScot, Local Primary Schools
- Co-designed artist sharing element: Music Festival, Sept 2025; Album





Understanding cultural values of Intertidal Soft Sediments in Europe's coastline through an ecosystem service lens

Evangelia (Valia) Drakou with contributions from K. Apostolopoulou, G. Kefalas









The REWRITE Project

Rewilding European Shorelines and Beyond

We promote the adaptation of the innovative conservation approach of 'rewilding' as a nature-based solution to restore Europe's intertidal areas.

https://rewriteproject.eu/





Mudflats with Microphytobenthos

Mudflats are coastal areas with fine sediment exposed during low tide, hosting microphytobenthos, microscopic photosynthetic organisms crucial to marine ecosystems.



Seagrass Meadows

Intertidal meadows dominated by seagrasses, providing vital habitats for marine life, enhancing water quality, and stabilizing coastal sediments.



Saltmarsh

Coastal wetlands inundated by saltwater, characterized by halophytic plants, offering protection against erosion, supporting diverse wildlife, and promoting biodiversity.



Understanding the plural values of rewilding

- Rewilding as a strategy with dual objective; a means to enhance nature's functions, but also a means to improve people-nature co-existence.
- Within REWRITE we address the plural values of nature and how these can be altered through a rewilding trajectory





Understanding the plural values of rewilding

• Understanding the role of *humans* and *culture* in relation to "wilderness", remains a challenge and re-opens the discussion on whether nature and culture are separate or integrated (*Hawkins et al 2025, Ambio 54:869–881*).

Cultural ecosystem services
Non-material benefits
Cultural values
Relational values

. . . .



Cultural Ecosystem Services (CES)

ES Divisions (CICES)

- <u>Physical and experiential</u> interactions with natural environment (active or passive)
- <u>Intellectual and representative</u> interactions with natural environment (e.g., education, training, conservation)
- Spiritual, symbolic and other cultural interactions with natural environment (e.g., sense of place, religious or symbolic interactions)





Cultural Ecosystem Services (CES)

Long-term questions/topics we aim to answer/address

- Are more "rewilded" seascapes more likely to supply CES or is it the other way around?
- On the mosaic of seascape uses by society, which ones are valued for their cultural contributions?
- At what **scale** do we experience this? (*seascape, habitat, species*)
- Identification indicators (ecological & socio-cultural) that can adequately deal with temporal dynamics, openness of processes and value pluralism
- Can we use cultural value as a means to engage society in nature protection and restoration?



Examples of spatial CES indicators used

IPBES Indicator	CICES Class	Ecological Supply	Anthropogenic contribution to supply	Demand	Assessed value of
Supporting identities	Characteristics of living systems that are resonant in terms of <i>culture or heritage</i>	Locations of Biodiversity, Protected area, Nature reserve, Park	Path, Footway, Footpath, Hunting stand, Bridleway	Establishment of archaeological	AV W
Supporting identities	Elements of living systems that have sacred or religious meaning	Specific species, habitat structures (oyster reef, saltmarsh)	Place of worship, chapel	Number of visit	ors Salines in Cadiz ba
Learning and inspiration	Characteristics of living systems that enable scientific investigation or the creation of traditional ecological knowledge	Locations of Biodiversity, Protected area, Nature reserve, Park	Traditional recipes, Food rituals, Local festivals, Educational areas (schools, universities), Archaeological sites		Gyldensteen, Denmai



Framework

BASELINE CONDITION

stories and failure

Plural Costs & Benefits

throughout the rewilding



Environmental Social Cultural Relational Other...

trajectory

Participatory modelling [MALs]





Bayesian Belief Networks (BBNs)

Remoteness	Topography	Wildlife observation	High	Medium	Low	
0 to 1	High	Yes	79.2	5	15.8	71
0 to 1	High	No	47.5	5	47.5	
0 to 1	Medium	Yes	46.7	35	10.3	
0 to 1	Medium	No	15	35	50	
0 to 1	Low	Yes	31.7	5	63.3	
0 to 1	Low	No	0	5	55	
1 to 3	High	Yes	84.2	15	0.0	
1 to 3	High	No	52.5	15	32.5	
1 to 3	Medium	Yes	30	65	5	
1 to 3	Medium	No	20	45	35	
1 to 3	Low	Yes	36,7	15	40.3	
1 to 3	Low	No	5	15	80	
3 to 10	High	Yes	95	5	0	
3 to 10	High	No	63.3	5	31.7	
3 to 10	Medium	Yes	62.5	35	2.5	
3 to 10	Medium	No	30.8	35	34.2	
3 to 10	Low	Yes	47.5	5	47.5	
3 to 10	Low	No	15.0	5	79.2	
			eviden			e from road - remoteness [b]
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Scenario Development

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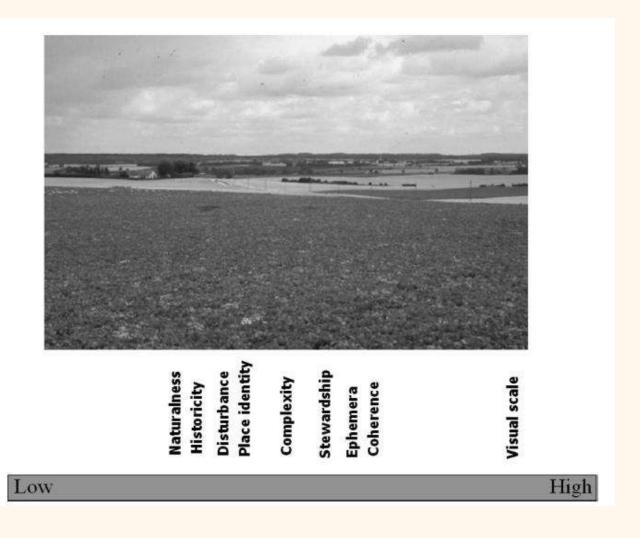
Identification of low-cost options

MONITORING CHANGES

Task 3.2



Framework



- Capturing perceptions through seascape analysis to understand "seascape character"
- Attribution of key seascape characteristics to values



Expected outcomes

- In our approach we go beyond the mechanistic role of nature and focus on the role of culture as a means to preserve, restore and safeguard critical biodiversity elements;
- We combine a geospatial approach to map core *natural* and *cultural* elements with an understanding of people's perceptions;
- ❖ Overall, through the value pluralism we emphasize on the need to use culture as a means to engage societies in nature protection.



Thank you

https://rewriteproject.eu/

Contact: e.drakou@hua.gr





Principal Historic Environment Officer

Natural England



What is the historic environment?

- All aspects of the environment resulting from the interaction between people and places through time, including:
 - all surviving physical remains of past human activity, whether visible, buried or submerged
- Includes archaeological sites, historic buildings, landscapes, structures and vessels or wrecks
- Finite and non-renewable resource

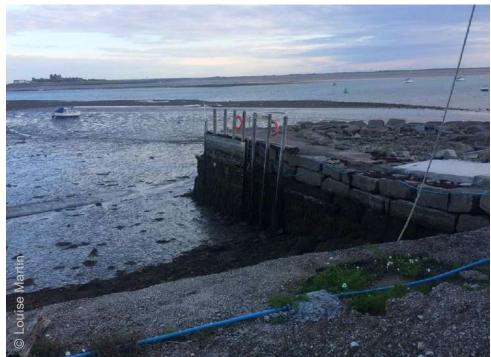
Coastal











Inter-tidal











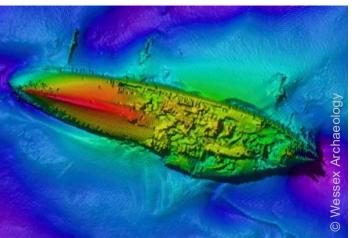






Marine



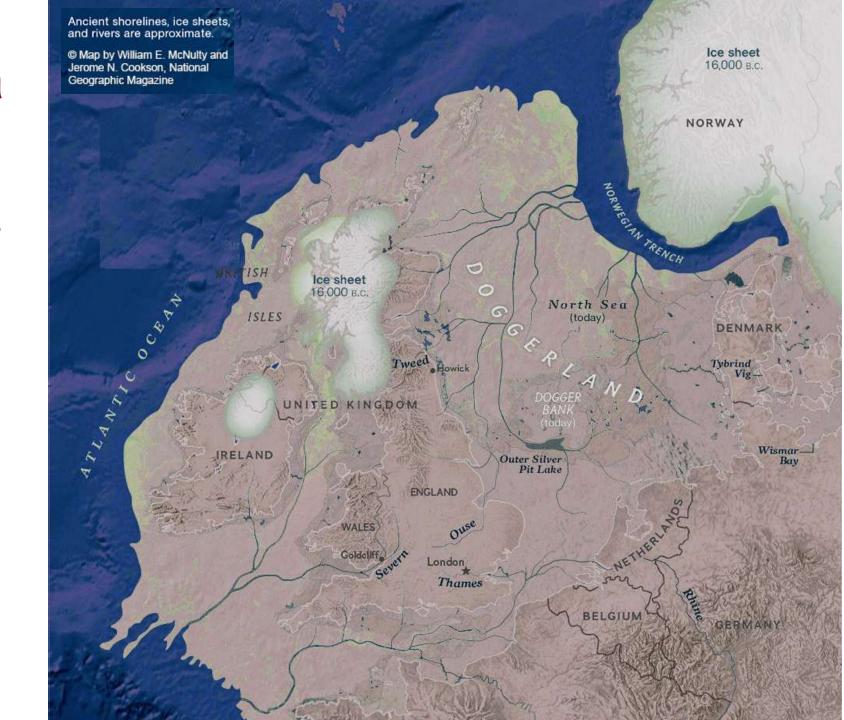




Old Land at Sea

Continental Europe above sea level:

MAC.



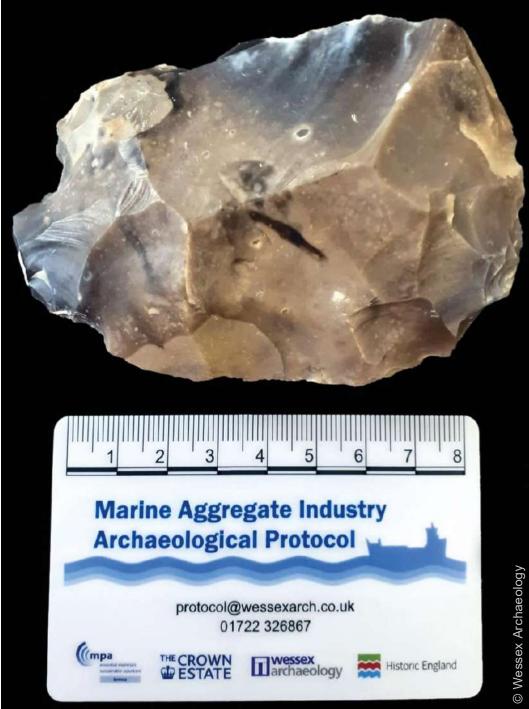
Aggregate Extraction

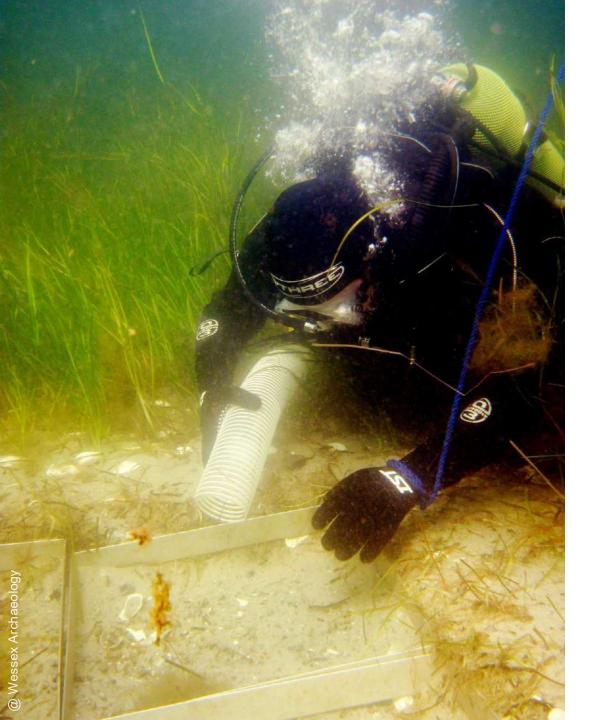


© Wessex Archaeology





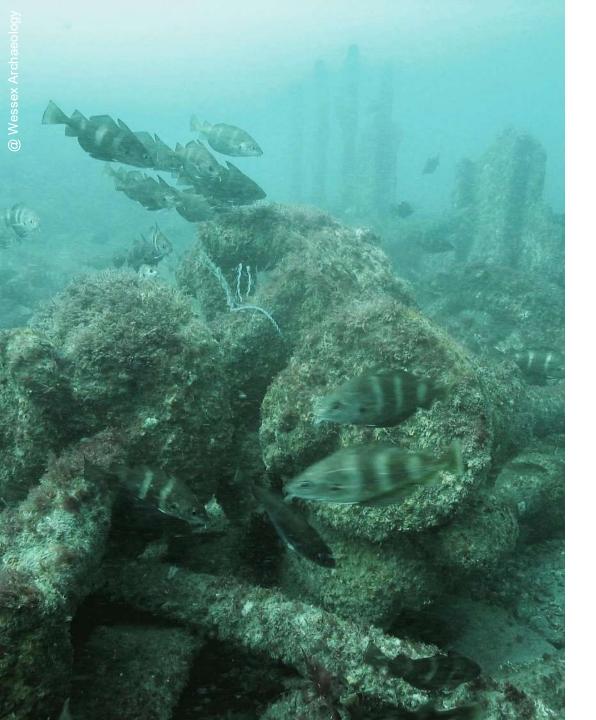




Impacts to the Benthic Historic Environment

Impacts on benthic biodiversity and heritage can come from the same source:

- Anchorage and chain dragging
- Sediment removal, dredging, sampling, dragging
- Fishing gear snagging
- Vessels for salvage and recovery
- Wave scour and storm damage
- Pollution changing water chemistry and depositing sediments
- Damage from divers



How Historic Environment 'fits' with nature

- Historic and natural environments are indivisible; they are one and the same
- Many marine habitats and submerged landscapes have anthropogenic origins, some have been created by past cultural management practices
- Scientific basis for evidence-led decision making
- Key component of sustainability
- Biodiversity/HE synergies FAR outweigh conflicts

Ecosystems Services from Heritage Assets











Applying experiences on land to the sea

- Decades of terrestrial experience
 - Agri-environment schemes
 - National Lottery Heritage Fund landscape-scale partnerships
 - Protected Landscape designations
 - Nature-based solutions
- Nature Recovery Guidance
- Application of concepts such as preservation by record and adaptive release
- Integration is the key



Nature recovery and the historic environment





Where next?

Natural England, working with partners, has been working towards:

- Establishing a clearer picture of the integrated opportunities
- Creating strong links with key partners and stakeholders
- Inputting into Stage 3 of mNCEA project
- Developing marine-specific guidance for Nature Recovery and the Historic Environment



A Coastal Wildbelt - celebrating and strengthening the connections between people, nature and place

Kate Jury – Coastal Wildbelt Programme Manager

England Coast Path

- → Marine and Coastal Access Act (2009)
- → 2700 miles / 4500km
- New rollback powers
- Coastal margin

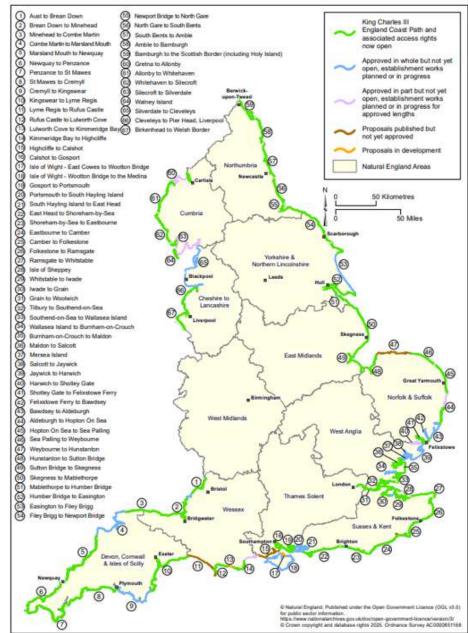
"One of the most ambitious ways we are opening up the natural world is through the England Coast Path"

Department for Environment, Food and Rural Affairs, 25yr Environment Plan



King Charles III England Coast Path National Trail - Stretch Progress

24th June 2025



What is the coastal margin?

The land between the King Charles III England Coast Path and the sea at low tide.

This is a **living landscape**—rich in wildlife, heritage, and opportunity— where people can connect with the coast, and where vital habitats, natural landscapes, and communities can thrive side by side.

"...accessible to the public for the purposes of its enjoyment"

Marine and Coastal Access Act (2009)





Why is this significant?

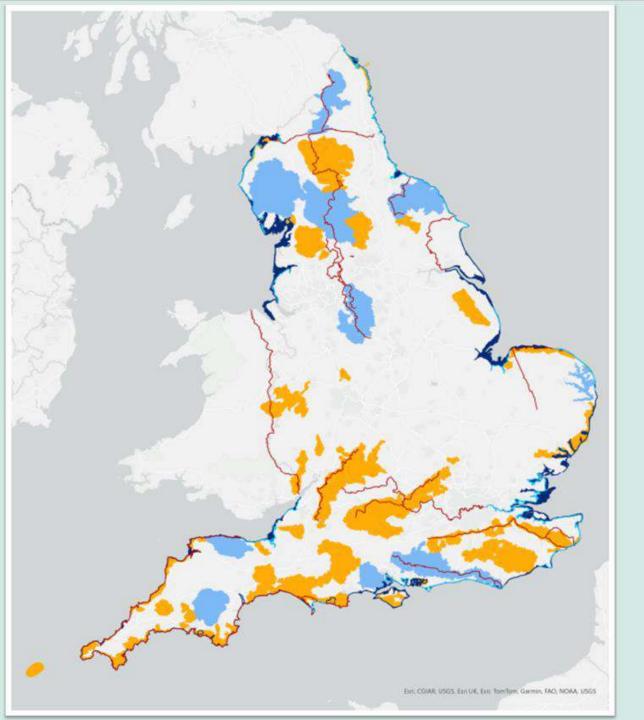
- 943 square miles of coastal margin (245,000ha) – England's largest connected open access land
- 5150km of Public Rights of Way, 2775km are National Trails
- 21 Protected Landscapes
- **4** World Heritage Sites
- 392 Scheduled Monuments

81% of the coastal margin is designated for nature

71% of the coastal margin is made up of priority habitats

86.5% of the coastal margin has the potential for 30by30





Protected Landscapes and the coastal margin

79% of the coastal margin falls **outside** a National Park or a National Landscape.

The coastal margin could have a key role providing **connectivity** between these important landscapes – which is key to nature's recovery.

10,946,500 people live within 5 km of the coastal margin.

That's **19%** of England's population; more than the population of Greater London.

This means almost **1 in 5** people in England live within 5km of the coastal margin.

3.6 million people live within walking distance (15 minutes) to the coastal margin, yet access and engagement remain unequal.



A coast where nature thrives and communities flourish — where people feel connected, the landscape is celebrated, and anyone can enjoy its beauty, culture, and opportunities.



A Coast for All – Cherished, Restored, and Alive

A national initiative championing people and nature—celebrating our coastline as a place of shared joy, care, and connection.

Nature



Culture







Joy



Purpose

We believe thriving habitats and thriving communities go hand in hand—where heritage, creativity, and wellbeing flourish alongside nature.



More Than a Programme

A Coastal Movement

Coastal Wildbelt is a bold, unifying voice— connecting people, places, and projects to shape a stronger, more vibrant coast for the future.

Coastal Wildbelt

Kate Jury – Coastal Wildbelt Programme Manager

kate@nationaltrails.uk

Sign up to our e-News to find out more:



We are the Protected Landscapes Partnership









What seagrass means to people: Legacy, beauty & emotional connections to seagrass meadows/

HEIDI MCILVENNY

Dr Sarah Helyar, Queen's University Belfast Dr Annika Clements, Queen's University Belfast Dr Flurina Wartmann, University of Aberdeen

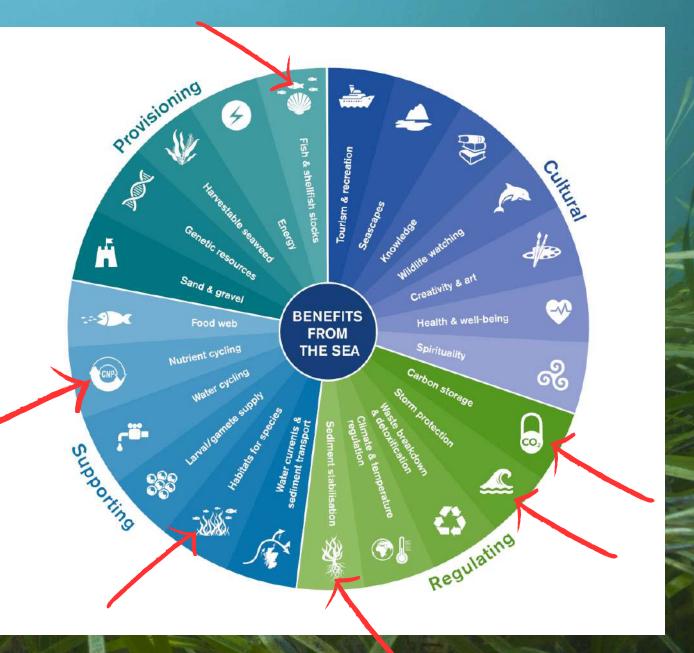








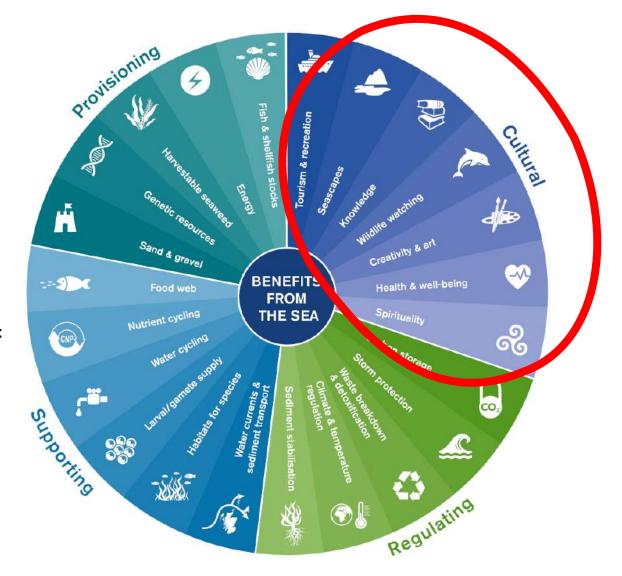
Seagrass Ecosystem Services





Effective conservation
hinges on contextspecific understandings of
human-nature
interactions.

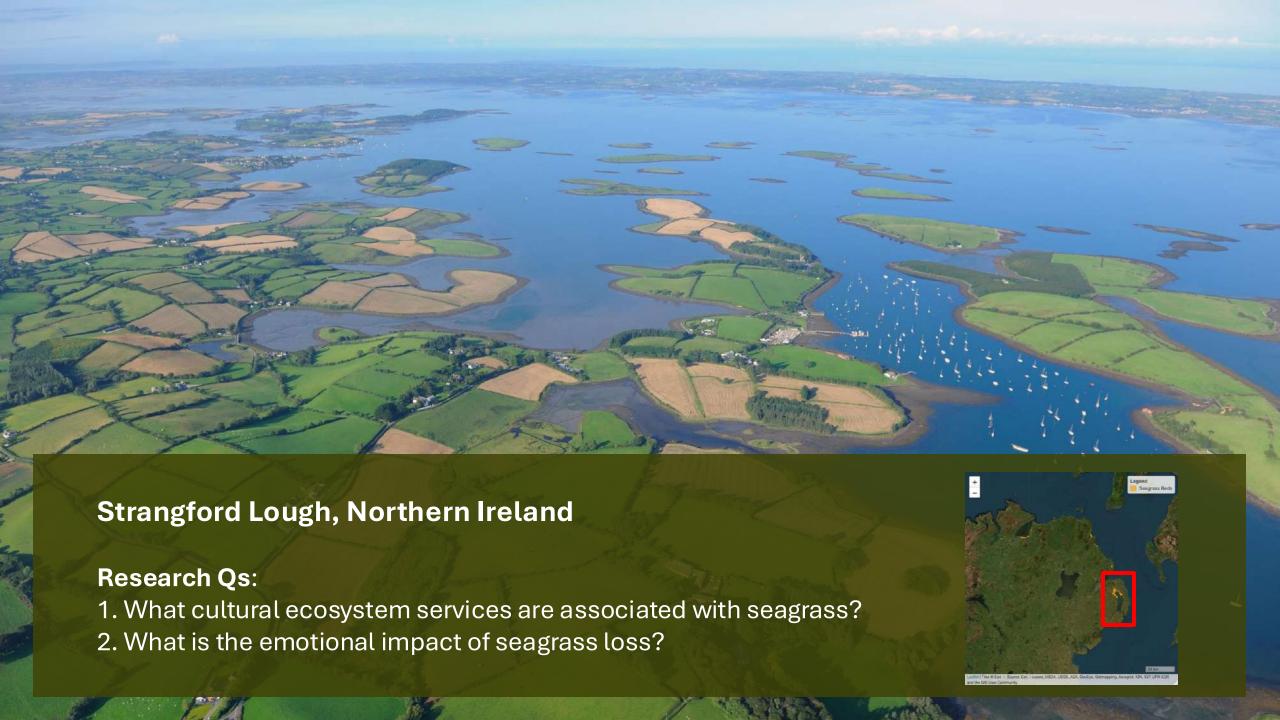
IPBES: Nature's Contribution to People



Cultural Ecosystem
Services are the intangible
benefits derived from
humans interacting with
nature

(Fish et al., 2016)





Survey Themes



Awareness



Engagement



Perceived Threats



Demographics

Cultural Ecosystem Services



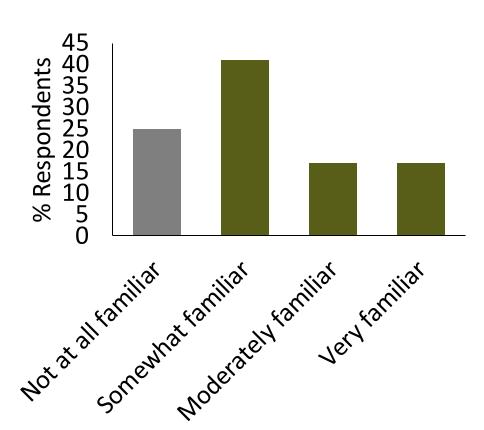
Strongly Disagree	Disagree	Neutral Agre		Strongly Agree
1	2	3	4	5

Likert-scale

CES Category	Indicator Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
Aesthetic	I think the seagrass meadows are beautiful.	1	2	3	4	5	
Recreational	The seagrass meadows provide me with opportunities for outdoor activities (e.g., bird-watching, snorkeling).						
Spiritual	Visiting the seagrass meadows makes me feel part of something that is greater than myself						
Knowledge	I have learned more about nature when visiting the seagrass meadows.						
Scientific	The seagrass meadows provide me with opportunities for scientific research and study.						
Inspirational	The seagrass meadows inspire me in creative, artistic, or thoughtful ways.						
Place identity	I've had a lot of memorable experiences around the seagrass meadows.						
Sense of place	The seagrass meadows create a strong sense of belonging for me in these sites.						
Health	Visiting the seagrass meadows make me feel physically or mentally better such as feeling calmer or more relaxed.						
Social bond	The seagrass meadows provide me with outdoor places to get together with family and friends.						
Bequest	I believe the seagrass meadows should be preserved for future generations to experience and enjoy.						
Connection to nature	Visiting the seagrass meadows makes me feel more connected to nature.						

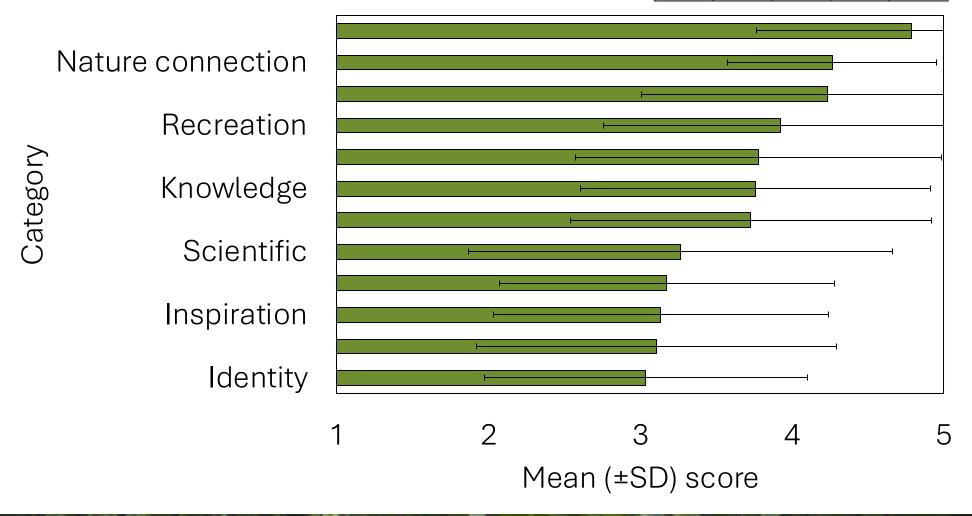
Participant Profile

- 112 responses.
- Demographic composition
 mirrored census data (gender
 and age).
- 75% of participants possessed at least a basic awareness of the seagrass meadows.

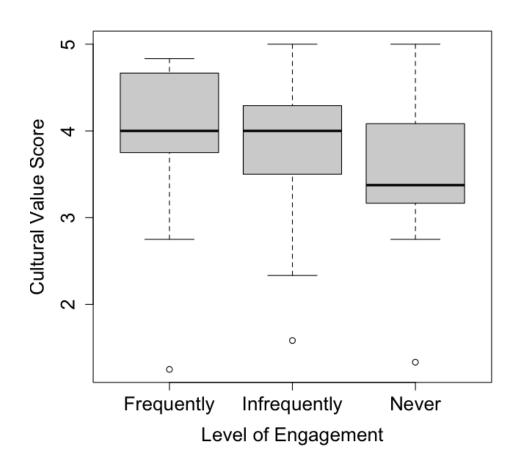


Cultural Ecosystem Services

Strongly Disagree	Disagree	Neutral Agree		Strongly Agree
1	2	3	4	5



Frequency of engagement

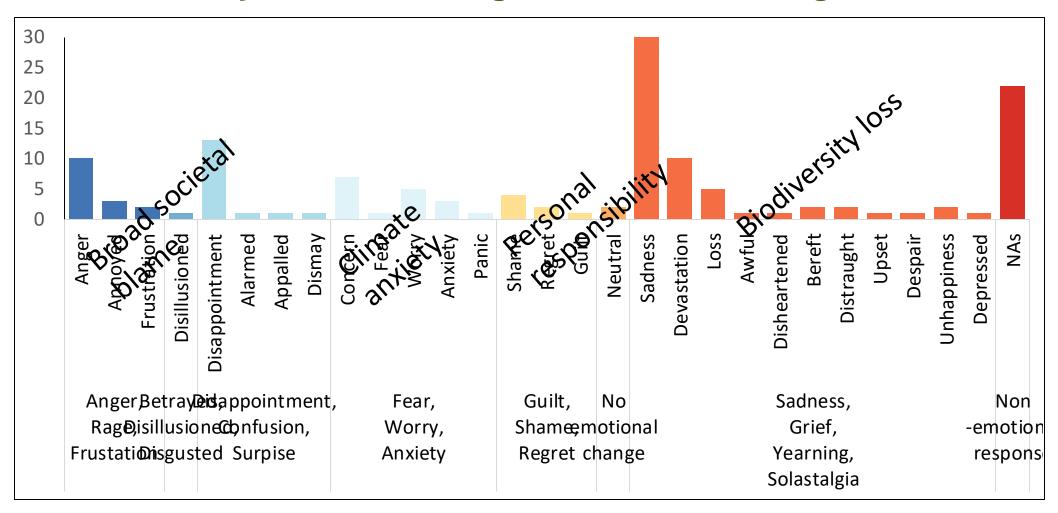


Kruskal Wallis Test $(\chi^2 (2) = 5.8228, p < 0.05)$

Moments, not minutes?

Richardson et al., (2021) The nature-wellbeing relationship

How would you feel if the seagrass meadows no longer existed?



Reflections

1. Seagrass plays multifaceted roles in supporting this coastal community that go far beyond traditional ecosystem services.

2. Seagrass degradation would not just be an ecological loss – but an emotional one.

3. This tool can be used by policymakers & practitioners for assessing cultural ES in marine and coastal contexts

4. Integrating cultural ecosystem services into conservation strategies, means more inclusive and locally-grounded plans

Would you like your site included in the project? 💭

What seagrass means to people: Legacy, beauty & emotional connections to temperate seagrass meadows









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Get involved!

Big Rock Pool Challenge



Information for starting a new hub!



Start a New Hub -The Rock Pool Project