

The multiple values and preferences for saltmarshes: *Three approaches*

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Speakers:

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WP3 Research Questions & approaches

Research questions:

- What are the tangible and intangible values of saltmarshes and other coastal habitats?
- What factors influence these different values?
- What are peoples' preferences for natural flood management vs grey infrastructure?

Approaches:

1. Choice experiment – national monetary values
2. Multi-modal study – local intangible values and perceptions
3. Photo-rating study – non-monetary quantitative values



Quantifying the monetary value of saltmarshes

(Olivia Rendón)

- A stated preference technique values environmental amenities through a constructed market scenario for a change
- **Choice Experiment:** a survey-based valuation asking respondents' preferences among several multi-attribute alternatives
- **Willingness-to-pay** for each attribute is obtained, capturing the monetary value of the ecosystem services derived from saltmarshes



Overall willingness-to-pay



Attribute	WTP/ month/ household for 1% increase (double current area)
Expand saltmarsh area	£0.463 (£6)
High saltmarsh vegetation	£0.464 (£9)
Build defense structures	-£0.169 (-£2)

Key insights

- **Natural flood management** is highly preferred
- The **willingness-to-pay is high**
- There are clear **groups in society with differing opinions**
- The majority are **willing to pay for change**, especially “**concerned coastal residents**”
- Those not willing to pay live inland, haven't experienced flooding and **don't know what a saltmarsh is/** haven't visited



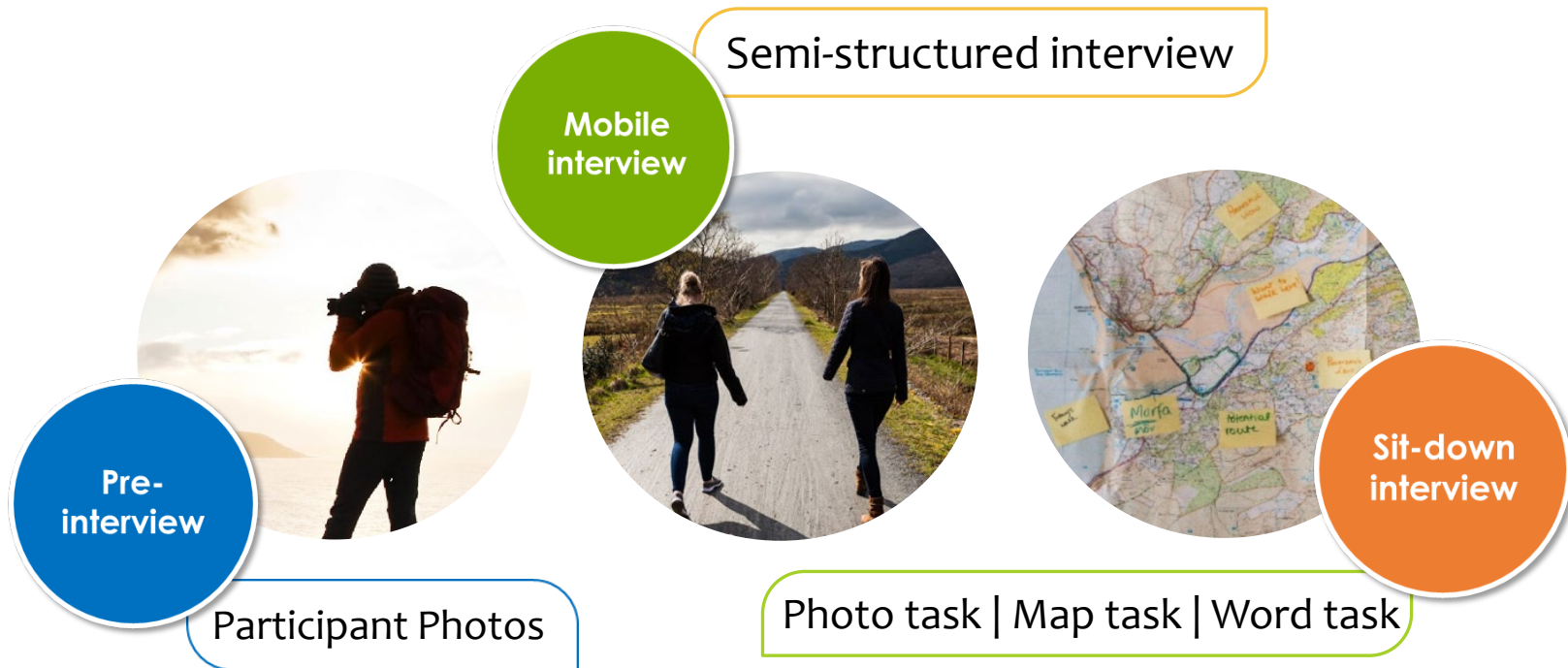
Policy & management implications

- **Natural flood management** needs to be implemented whenever feasible
- **All groups in society with differing opinions** need to be considered in policy and management, especially those unwilling to pay for change
- Need to create **awareness of coastal habitats** & the role they play in coastal defense and the provision of other ecosystem services
- ***This study is only one part of the story...***

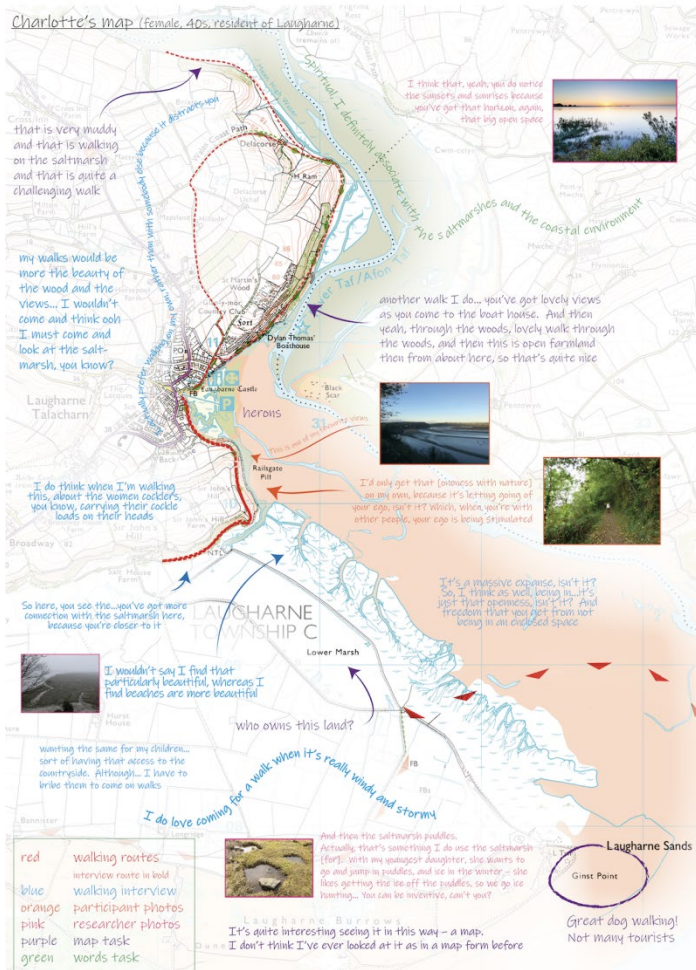


Exploring intangible values of saltmarshes for well-being

(Nick Pidgeon)

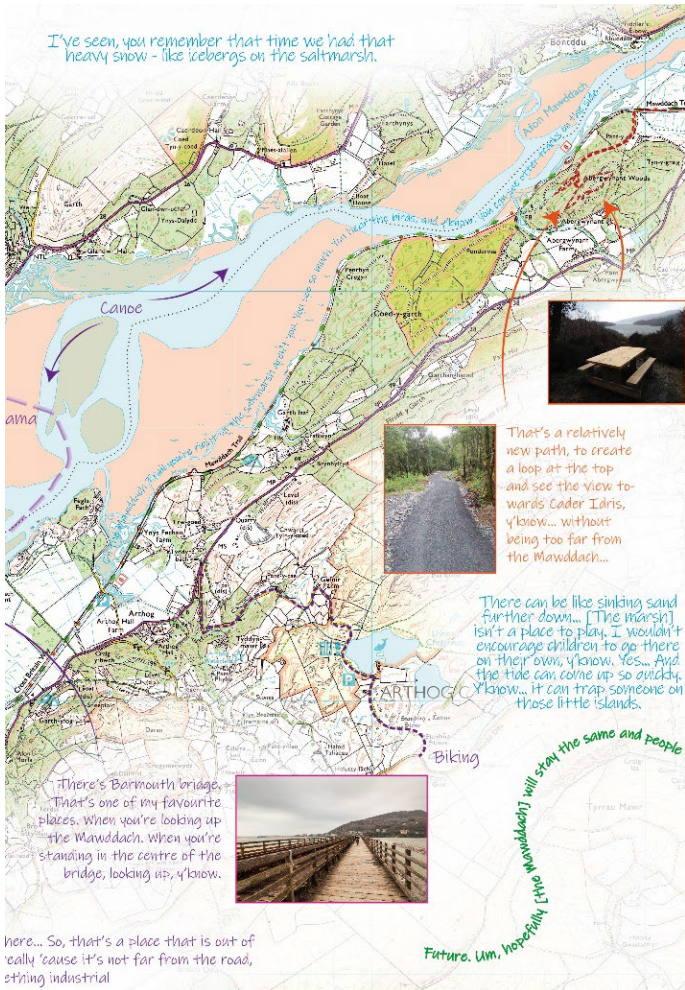


Key insights



- **Saltmarshes are important for (some) peoples' wellbeing** - relationships between saltmarshes and individuals produce wellbeing in particular places at particular times
- **Saltmarshes enable people in different ways** - individuals value both the direct and indirect 'affordances' of saltmarshes, which can be positive or negative
- **The qualities of landscape change are important** - how changes are perceived to impact valued human-nature relationships has a bearing on wellbeing

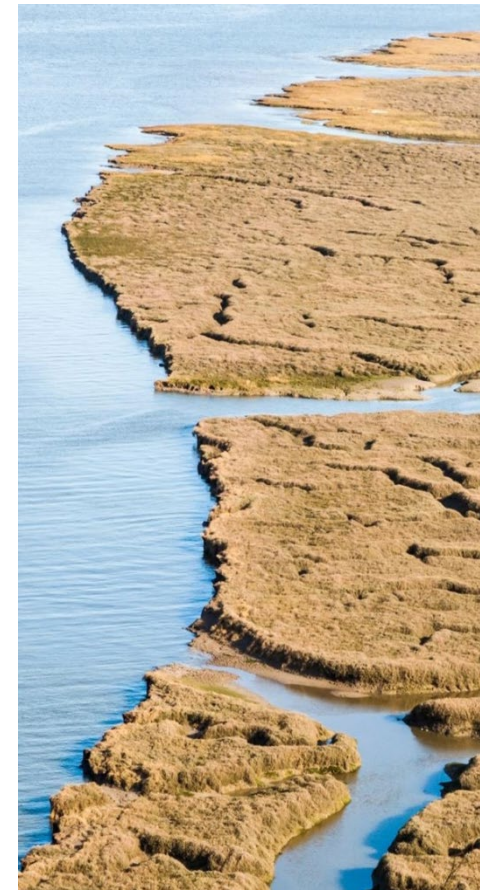
Key insights



- **Wellbeing is emergent in situ** - it stems from webs of relations, and is therefore situated, dynamic and changeable
- **Participatory place making** – our multi-modal approach allows a sensorial and socio-cultural understanding of coastal landscapes as valued but vulnerable environments
- **There are challenges** – e.g. in representing relationships with images. But creating spaces of reflection can lead to rich, nuanced understandings of coastal wellbeing

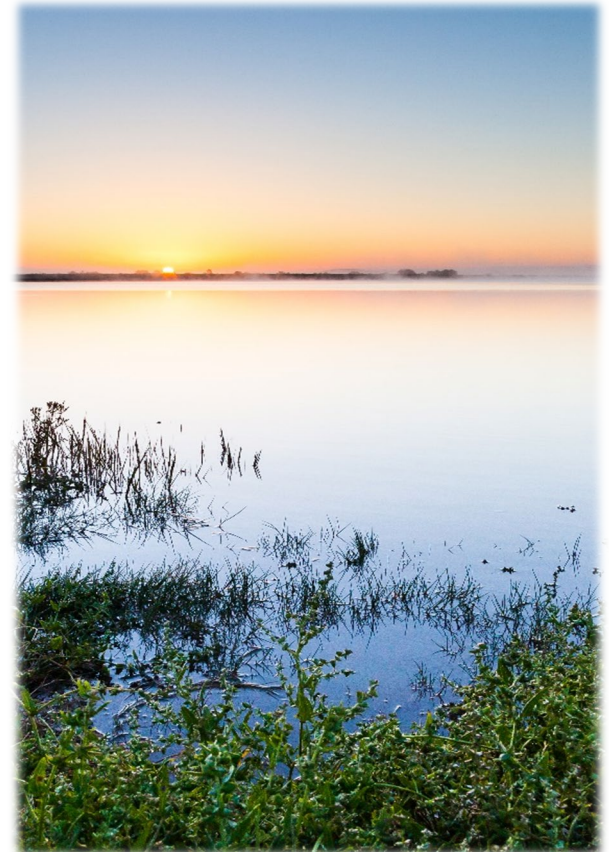
Policy relevance

- **Generalised interventions are not appropriate** – context (culture, place & time) is important, and decisions should be tailored to meet communities' specific needs
- **The need for flexibility in decision-making** - saltmarsh affordances and values shift in and out of focus as they are dependent upon the perceptions, abilities and knowledges of the people interacting with the marsh. Management decisions therefore need to be adaptable.



Policy relevance

- **Local support is conditional** – relationships with the coast are in flux, so responses to management decisions are as well
- Find out what people value about their locality and involve them in the decision-making process so that they may have a say/stake in place-making
- Qualitative methodologies can be used to engage publics and gain a deeper understanding of their values, needs, desires and fears for the future



Psychological restoration potential of coastal habitats

(Lizzi Gabe-Thomas)

Aim: To quantify intangible ecosystem service by comparing different habitats in terms of perceived psychological restoration (a pathway to wellbeing)

Psychological Restoration
Recovery of mental resources depleted by day to day demands and stressors

Salt Marsh



Sandy Beaches



Shingle Beaches



Rocky Shores



Method



Imagine you are visiting the British coastline on your own and have stopped to take in the view...

To what extent does this view make you feel **calm and relaxed**?

Not at all calm and relaxed 1	2	3	4	5	6	7	8	9	Extremely calm and relaxed 10
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Sample

- * Laboratory (F=44, M=5, M=19.6, SD=1.59)
- * Online (F=24, M=27, M=49.12 SD=14.44)

Measures

- * Outcome - Perceived restoration
- * Image level factors
- * Person level factors

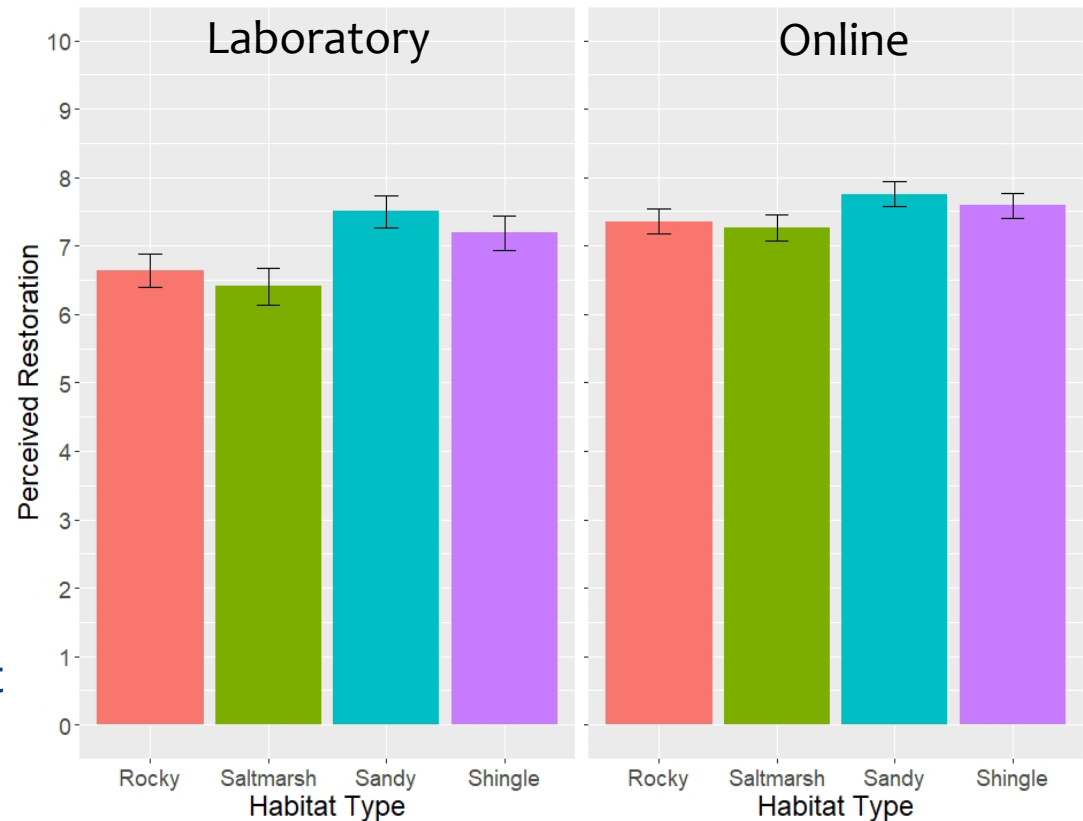


Ocean Connectedness

An individual's emotional and cognitive bond to the marine environment

Key insights

- * **Sandy beaches** rated *slightly* higher than rocky shores & saltmarsh
- * **Ocean Connectedness (OC)** matters more than habitat type
- * Indication that those with **lower OC prefer sandy beaches** whilst high OC had little preference
- * **Colourfulness** also important factor



Policy Implications

- * Improving access to natural coastal habitats likely to improve wellbeing (esp. sandy beaches)
- * Fostering OC in coastal communities may improve wellbeing
- * Photo-rating useful tool to value nature via restoration e.g. levels of management or changes in ecosystems



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