

A Guidance Document to Support Regenerative Tourism





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1 Introduction

- 1.1 One of the aims of the Coastal Uplands: Heritage and Tourism (CUPHAT) INTERREG operation has been to pilot a different model of tourism for the coastal uplands (upland areas that lie inland and adjacent to popular coastal areas) of Ireland and Wales. The pilot was developed to be a model that could be followed potentially by other coastal upland areas, indeed any area that wanted to develop an alternative model of tourism that drew on its cultural and natural heritage to effect positive economic, social, cultural and environmental change.
- 1.2 This guidance document provides information about the alternative approach to tourism adopted by CUPHAT. It details the activities undertaken by the operation, the impact of our work and the lessons learnt. It does not purport to be a comprehensive account of how a positive type of tourism might be developed in coastal upland areas. Rather it seeks to give a flavour of what could be done, drawing on the specific activities undertaken as part of the operation.
- 1.3 The original aim of the operation was to work with the idea of sustainable tourism but an increasing emphasis on ideas of regenerative tourism – within tourism practice if not academia – informed our activities. As such, this guidance document seeks to provide some practical examples of how different agencies might promote a regenerative approach to tourism within specific areas or destinations.

CUPHAT Project Team, August 2023

2 The principles of regenerative tourism

- 2.1 The idea of regenerative tourism has gained some popularity over the past two or three years but it is a concept that remains elusive and, until now, relatively ill-defined. At a fundamental level, it is something that seeks to go beyond sustainable tourism. Whereas sustainable tourism can be criticised for merely seeking to ‘sustain’ communities and places, regenerative tourism seeks more actively to regenerate places; in terms of their economy, services, cultures, environments and so on.
- 2.2 Others (e.g. the LIVE INTERREG operation) working with the idea of regenerative tourism advocates the need to think first and foremost about places as homes – and secondly as visitor destinations. In effect, regenerative tourism should be understood as an activity whereby visitors are effectively ‘invited into people’s living rooms’, and that it was only right that local communities should therefore expect appropriate behaviour, practices and respect from those that choose to visit. Such a perspective sees tourism as only one element in a wider, interlocking jigsaw that sustains the fabric, the feel and the vitality of places. Such views echoed those heard at the May 2023 CUPHAT symposium, titled ‘Heritage Tourism: Making Waves Across the Irish Sea’, where representatives of recent Wales-Ireland INTERREG projects reflected on their experience of delivering major cross-border heritage tourism projects and concluded that “if our communities are lively, vibrant places people will want to visit”.
- 2.3 Regenerative tourism also tries to develop a different understanding the tourist or visitor. A regenerative tourist feels more of a sense of responsibility towards the places that they visit. They, potentially, want slower kinds of tourism experiences, ones that enable them to ‘get under the skin’ of a particular place. They want to connect to places, and particularly to their cultural, social and environmental distinctiveness. Above all, a regenerative tourist is someone who wants to give something back to the places they visit, indeed to put more in than they take out of a place.
- 2.4 The above provides a broad sense of what is meant by regenerative tourism but there is still room to define the meaning of the concept in more detail. There is also a need to reflect on the extent to which regenerative tourism should be something that is defined and owned in different ways in different places. In that sense, Wales or Ireland’s approach to regenerative tourism ought to be different from the approach adopted in other areas, such as Scotland, Cornwall or the coastal uplands of, say, France and Spain. On this basis, a Stakeholder Workshop on Regenerative Tourism was held at Aberystwyth University in June 2022. The Workshop lead to creation of a series of ‘Draft Principles for Regenerative Tourism



in Rural Wales' (Woods 2022) and it is these that have informed, in broad terms, the work undertaken as part of the CUPHAT operation (see Table 1).

Draft Principles for Regenerative Tourism in Rural Wales' (Woods 2022)

1. The core principles of Regenerative Tourism are responsibility and additionality, it means visitors 'leaving a place better than they found it'.
2. Regenerative Tourism is a holistic approach, contributing to the economic, social, cultural and environmental regeneration of a place. In Rural Wales, Regenerative Tourism should support the regeneration of sustainable farming, of communities and of Welsh language and culture, and be practiced in a way that is compatible with the regeneration of natural habitats and landscapes.
3. Regenerative Tourism reflects the seven Wellbeing Goals in Wales, contributing to a Prosperous Wales, a Resilient Wales, a Healthier Wales, a More Equal Wales, a Wales of Cohesive Communities, a Globally Responsible Wales, and a Wales with a Vibrant Culture and Thriving Welsh Language.
4. Regenerative Tourism is tailored to local needs and priorities and shows responsibility towards distinctive ways of life. It involves local solutions, not 'one-size-fits-all' models, and working with existing natural and community assets.
5. Regenerative Tourism involves a 'visitor offer' that is characterized by quality, longevity, sustainability and inclusivity.
6. Regenerative Tourism is about more than scenery. It is about visitors experiencing and understanding life in Rural Wales and the connections between communities and nature. Regenerative Tourism is educational, with visitors learning and taking something away.
7. Regenerative Tourism is about showing, not telling. It involves building relationships between visitors and local communities, creating immersive experiences and locally-guided consumption and interpretation.
8. Regenerative Tourism enhances the positive impact of the visitor economy on local people's lives. It involves maximizing spending in the local economy, creating and supporting facilities that can also be used by the community, and supporting a skilled, sustainable and joined-up workforce.
9. Regenerative Tourism is balanced geographically and seasonally, avoiding the detrimental impacts of over-crowded honey-pots. Regenerative Tourism involves a 12-month visitor experience, creating year-round spend and steady cash-flow for local businesses, with benefits for all parts of Rural Wales.
10. Regenerative Tourism is inclusive and accountable to local communities. Regenerative Tourism is constructed through co-design, with inclusive community participation in project management and decision-making.
11. Regenerative Tourism requires new ways of measuring the benefits and impacts of tourism, moving away from conventional KPIs; for example, measuring residents' satisfaction with tourism, not just visitor satisfaction, and measuring satisfaction with jobs in tourism, not just the number of jobs created. It places quality above quantity.



12. Regenerative Tourism requires joined-up thinking in planning, marketing, business development, public services and infrastructure provision. It promotes innovative approaches that find holistic solutions to both visitor and community needs, as well as the needs of the natural environment. It involves cooperation and collaboration between local government, public agencies, tourism providers and other businesses, land managers and local communities.

2.5 In the remaining sections of this guidance document, we provide an outline of the ways in which the CUPHAT operation used these principles to inform our work in the operation, focusing in turn on the following themes: marketing regenerative tourism; community engagement; citizen science; tourism entrepreneurship and community development; the use of digital technologies.

3 Marketing regenerative tourism

- 3.1 On the basis of the discussion in section 2, it is clear that promoting a regenerative approach to tourism entails thinking about tourism in different kinds of ways in relation to: how destinations are marketed; the goals and targets that are set in relation to tourism; the coherence of the regenerative tourism 'product'; the link between tourism and other services within localities; the definition of a regenerative tourist.
- 3.2 In terms of the marketing of destinations, there is a need to consider the kinds of messages that are conveyed to potential visitors. Marketing campaigns need to be able to convey a sense that visitors to areas promoting a regenerative approach to tourism will be experiencing a different kind of tourism and a different kind of connection to the place there are visiting. For instance, the LIVE Operation has developed the idea of the Llyn and Iweragh Peninsulas being 'Yn Gartref ac yn Gyrchfan'/'A Home and a Destination'. This brand conveys the idea that visitors to these two areas are entering the extended homes of local residents, with implications for how they experience those destinations. The CUPHAT operation has developed an alternative brand, focusing on 'Coastal Uplands: Revive, Explore'. Once again, there is a sense in which potential visitors are being asked to think about their active role in exploring these areas (and not merely acting as passive visitors to them) and reviving both themselves and the areas that they are exploring.
- 3.3. The above two examples provide two illustrations of how one might market destinations in slightly different ways on the basis of the principles of regenerative tourism. They are merely examples, in that sense, and it would be up to other destinations seeking to promote a regenerative approach to tourism to consider what kind of brand that would be most effective for their area or place.
- 3.4 There is a need also for a marketing campaign based on regenerative approaches to tourism to consider what the appropriate goals and targets are for that campaign. At a fundamental level, a regenerative approach to tourism calls into question a focus on merely increasing visitor numbers. Some of the areas adopting a regenerative approach to tourism, such as the Llyn and Iweragh Peninsulas are already suffering from over-tourism, especially during the summer months. As such, there is a need to focus more on targets such as tourist spend, on visits during the shoulder and off-peak seasons, and on visits to lesser explored parts of destinations. Focusing on these targets would echo recent trends in tourism strategies, such as Visit Wales' emphasis on the need to address spend, seasonality and the geographical spread of tourists.

- 3.5 Arguably, however, there is a need to move beyond such measures by considering the extent to which regenerative tourism might enable stronger connections to be forged between tourists and the places they visit. For instance, data on repeat visits might help to give a sense in which visitors were forging stronger connections with an area, ones that were precursors to them contributing in more active ways to everyday life in these areas.
- 3.6 In addition, a focus on regenerative tourism also necessitates a collection of more qualitative information about the experiences of visitors within particular areas. It is by collecting such data that agencies might develop a better understanding of the extent to which visitors might feel a sense of responsibility to the areas they visit, a sense of connection to these areas, and a desire to give something back to these areas. Despite the significance of such data, it is difficult to envisage how such factors might be translated into specific goals and targets.
- 3.7 Regenerative tourism necessitates creating links between different stakeholders within destinations in order to create a coherent tourism product. Importantly, there should be an active buy-in of stakeholders to the value of a regenerative approach to tourism. CUPHAT's work has shown the value of creating networks within the specific areas within which we have been working (Cambrian Mountains, Mynydd Preseli, Southern Wicklow Mountains, Blackstairs Mountains). These networks have helped individual stakeholders to develop an understanding of the range of other tourism providers operating locally, leading to cross-selling and up-selling of different products. Tourism providers, as such, provide advice and 'consultations' of visitors, leading to increased spend within areas, as well as different means of enabling visitors to develop stronger and more varied connections with the areas.
- 3.8 Building on the above, regenerative tourism strategies also need to consider the link between tourism and other services existing within localities. At present, tourism strategies exist in relative isolation and not connect strongly enough with economic development strategies or other policies and strategies focusing on the provision of services within specific localities. Regenerative tourism has the potential to sustain and even revive local services that can be used by local residents and tourists alike. Examples cited included a local 'green bus' (powered by a community-owned hydropower plant), which is available for local community use in the Ogwen Valley, but also offers an environmentally friendly travel option for visitors – with the income returning direct to the community. But there is a need for tourism marketing strategies to be written in ways that attempt to make the connections with the kinds of services that would benefit local residents and visitors alike.
- 3.9 Finally, there is a need for tourism marketing strategies reflecting the ethos of regenerative tourism to have a clear conception of the kind of person that they are

seeking to attract to destinations and of the kinds of activities and behaviours that could or should be undertaken by these visitors. In that sense, each strategy should reflect on the nature of a regenerative tourist within their own area.

- 3.10 Key themes here might include an individual having a sense of respect for the culture and customs of the areas that they are visiting. The regenerative tourist might also be environmentally aware of the impact of their travel to the area. Similarly, a regenerative tourist might be interested in different learning experiences through their travel, and they might participate in community projects, and seek to support for local communities and businesses.
- 3.11 Regenerative tourists might appeal more to certain segments, including families, mature couples, walkers and hikers, members of history groups and societies, and people interested in developing a better understanding of specialist subjects such as Geology and Biodiversity. The emphasis on slowing down and making stronger connections with places that have a slower pace of life might also appeal to the wellness tourist.
- 3.12 In all of this, there is a need to guard against promoting regenerative tourism as something that is exclusive and selective, whether in terms of money or education. There is also a need to ensure that the idea of regenerative tourism is not portrayed as something that is 'worthy' or overly serious, e.g. by emphasising the responsibility of tourists to the areas that they are visiting. In this sense, there is a need to emphasise the appeal of being a regenerative tourist. It is something that gives authentic and meaningful experiences to individuals. It enables tourists to contribute to the enhancement of the environment, to immerse themselves in culture and to access 'hidden gem' experiences. It should lead to a sense of fulfilment and purpose through identifiable social impact, thus helping to contribute to personal growth and responsible citizenship.



The final brand for the Coastal Uplands of Ireland and Wales

4 Community engagement

- 4.1 By definition, community engagement is key to regenerative tourism. In seeking to develop tourism offerings that support the building of more resilient local communities, it is vital to listen to the needs and requirements of community members. Our methodology embedded a partnership approach to regenerative heritage tourism development. This was operationalised through a series of whole project events designed to build dialogue with local communities and a range of community activities focused on better understanding core aspects of the local cultural and natural heritage.
- 4.2 The whole project events evolved over time. Initially focused on communicating the project's aims, raising awareness, and collecting local insights about important aspects of local heritage, later events showcased project outputs giving community members opportunities to feedback. There were three main community activities – gathering oral histories and archival materials, engaging schools in local heritage projects, and working with locals to identify existing activities reflective of the community's living heritage that could be promoted to tourists.
- 4.3 Through the oral histories, archival material, and schools projects, we have compiled a rich archive of place-based narratives to showcase local heritage to a tourist audience. In documenting the myriad ways that people relate to local heritage across their life course, this also facilitates age appropriate communication for tourists of different ages. Importantly from the perspective of giving back, these materials will act as an important repository of community memory now and for future generations. The materials collected challenge us to consider the complexity of defining a community and what it means to be local. This encourages us to reflect on what might be missed through mainstream community engagement methods, where the silences in the collected material lie and how best to deal with competing definitions of local heritage.



Community Information Evening, Kiltealy, September 2022

- 4.4 Our focus has been on community lives. We settled on this terminology as it captured our interest in contemporary, living heritage while allowing scope to gather information about local history, traditional practices and ways of life now gone. It was important that our work recognised the vibrant, evolving and often contested nature of contemporary heritage in these communities and avoided tendencies to suggest that these were somehow static places or relicts of the past.
- 4.5 To better understand these nuances, and before any attempt at data collection, we engaged in a sustained period of community outreach, consultation and listening. At our community launches, community information evenings (in Ireland), and community coffee mornings (in Wales) attendees were asked to identify aspects of their local cultural and natural heritage that they would like to showcase to tourists and to suggest what regenerative tourism would look like for them. Their feedback allowed us to build a list of potential interviewees, identify key aspects of local heritage and establish a set of contacts willing to link us into the schools and local organisations. In Wales, PLANED and the Cambrian Mountains Initiative (CMI), our community partners led the creation of these community contacts.



Community Launch Event, Cambrian Mountains, June 2022

- 4.6 Data gathering began with an in depth audit of all existing cultural heritage repositories containing oral histories and archival material related to the project areas. This highlighted already collected and accessible materials, prevented overlaps and identified silences. We then worked with PLANED and CMI to develop an oral history question schedule appropriate for Ireland and Wales. We arranged community events to identify and digitise privately held archival materials (Twrio in Wales / Celebrating Heritage in Ireland), and a community photographic competition to capture contemporary images related to the project themes. Oral history training was provided to upskill individuals and community groups to enable future recording. An online symposium was organised to bring together people from across all four project areas to consider the evidence for a shared coastal upland heritage based on the materials gathered during the Twrio / Celebrating Heritage events.
- 4.7 Working closely with our citizen science colleagues we developed a set of school activities covering citizen science, creative activities (poetry, prose and art) and life logs (designed to uncover patterns of daily life in relation to local networks, activities, and language use).
- 4.8 Finally, we developed 'Live like a Local' community activities. These are existing community activities reflective of the cultural heritage of each area – sport, music, song, walking – that are not usually advertised to tourists. With the organisers agreement these have now been added to a Facebook Group for each area which we hope will be used by local communities long after the project ends. We rounded out our events with a series of project festival events in each area and a hybrid

community conference that brought our work back to the communities who had so generously supported it.



School children engaging in Citizen Science Activities

4.9 Engaging local communities has been one of the most rewarding and yet challenging aspects of this project. Building relationships with new communities takes time and must be undertaken in a genuine spirit of openness, honesty and partnership. One key difference between Ireland and Wales was our partnership with PLANED and CMI in Wales. As regional community umbrella organisations they facilitated our introductions to the communities of the Cambrian Mountains and Mynydd Preseli. In Ireland, where no analogous organisation exists, finding an entry point to the communities was more challenging. A media campaign was mounted, an online search for local organisations was undertaken and we identified local stakeholders to circulate event notifications on our behalf. A series of community engagement evenings offered opportunities for consultation and feedback and were vital in achieving local awareness about the project, allowing the communities to meet key team members. By contrast, PLANED and CMI introduced us to their communities but building real connections proved more difficult. Our reliance on PLANED and CMI to use their existing contact lists and to communicate on our behalf kept us at a step removed from the communities. This limited our ability to build personal contacts and relationships and while it has not impacted

project outputs due to the hard work and dedication of PLANED and CMI, our project networks in the Welsh areas are weaker than hoped.

- 4.10 Initial community engagement efforts also highlighted the importance of managing local expectations from the outset. Across the project areas, the announcement of the project's headline funding raised hopes of direct funding for communities. When it became clear that this was not possible there was some disappointment and frustration. This combined with the short-term nature of the project led to questions around the team's ability to enact change, to leave a legacy and to really make a difference. Acknowledging these challenges and having a clear message about what we would do helped allay some concerns, but it reinforced the importance of open, regular and transparent dialogue with communities.



CUPHAT's Wicklow Mountains Festival Event, Avoca, June 2023

- 4.11 Our commitments to give back and get to know the areas were valued. Local people recognised and appreciated our interest in preserving their heritage and showcasing it to visitors. Taking on board their feedback about important heritage sites and our interest in learning more was viewed positively. Site visits gave us a better sense of the geography of each area, allowing us to ask informed questions and giving us insights into the specificity of the places and communities we engaged with. This also altered communities' perceptions of us as it clarified that we were not simply expecting them to provide the answers. This was reinforced through our commitment to collect and digitise materials the communities identified as important, making them accessible and preserving them for future generations. Providing community training for oral history collecting was an important tool in upskilling communities to preserve their own heritage and the school activities were welcomed as a way to develop passion for natural and cultural heritage among the younger generation.

- 4.12 Communities were incredibly generous with their time, their advice, their heritage objects and stories. The most successful community lives themed events were the Twrio / Celebrating Heritage events where people brought their historical family photographs, documents and objects to be digitised and made publicly accessible. Reports of our interest and enthusiasm for the content spread around the communities and materials continued to appear until the events closed. Feedback afterwards noted that these events had reminded communities of the importance and value of their heritage.



Listening to oral history extracts at CUPHAT's Mynydd Preseli Festival Event, Maenchlochog, June 2023

- 4.13 In seeing their areas through outsider eyes, there has been growing awareness that activities taken for granted as normal and everyday could be harnessed to offer unique experiences for visitors wanting to truly understand coastal upland life. Our 'Live like a Local' Facebook Groups can help realise this potential. They are an additional tool in the hands of the communities and while there has been good initial buy in, their success depends on the community to keep them updated after the project ends.
- 4.14 Our work has explored and highlighted the extent to which four coastal upland communities across the Irish Sea share similar heritages and challenges. It has also illuminated a shared vibrancy of community where support for each other and a willingness to collaborate for community good is deeply embedded. The shared nature of the links between our communities have been highlighted



through oral histories, our online shared heritage event, and informal conversations. There is a sense of visible connections across the Irish Sea reinforced by centuries of practical connections and there is an implicit local understanding of and appetite to do more to develop them. We are privileged to have been so welcomed and to have received so much support, albeit to different extents in different places. The most rewarding aspect for us has been where our work has renewed a sense of place pride and positive place identity. Our regenerative approach has asked people to (re)engage with their heritage as a community. Our events have brought people together and given those 'who ordinarily wouldn't have had much in common, something to talk about and get involved in together' (Community Email Feedback).

5 Citizen Science

- 5.1 The CUPHAT operation has used citizen science in two ways. First, and as noted in the previous section, it has been a way of enabling us to work with communities and schools to help develop a better understanding of the cultural and natural heritage of the areas within which we have been working. Second, it has enabled us to develop a series of experiences that can potentially either attract visitors to these areas or enrich the experiences of visitors already present within the coastal uplands.
- 5.2 In both cases, citizen science can be viewed as something that contributes to regenerative tourism. In the case of citizen science activities targeted at local residents, it help individuals to identify and celebrate aspects of their local cultural and natural heritage. In terms of citizen science as an activity for tourists, this enables visitors to become active contributors to everyday life and environments in the places that they visit, thus becoming individuals who 'give something back'.
- 5.3 In recent years, citizen science has become an increasingly popular and valuable mode of engagement between stakeholders, communities and scientists, and citizen scientists are contributing more and more to environmental monitoring, for example in the context of water quality in rivers and biodiversity. Although definitions of citizen science abound, the US National Oceanic and Atmospheric Administration definition encapsulates its essence: 'a form of open collaboration where members of the public participate in the scientific process to address real-world problems in ways that include identifying research questions, collecting and analysing data, interpreting results, making new discoveries, developing technologies and applications, and solving complex problems.' Citizen science activities can operate at a variety of scales, from the very local to the international, and can address scientific problems that are highly localised or that can be seen across the globe.
- 5.4 While tourism can lead to environmental problems that require environmental monitoring and intervention (e.g. litter, pollution, impacts on landscapes through footpath erosion, impacts on biodiversity), there is also great potential for tourists to contribute to citizen science activities while visiting an area. The wide range of potential citizen science activities, that may often be associated with, or located at, popular tourist destinations, mean that there is potential to appeal to both tourists who are visiting an area with no specialised interest in e.g. biodiversity, and visitors whose choice of destination may have been determined by a specialised interest.
- 5.5 Data collected by visiting citizen scientists can potentially contribute to greater understanding of environmental issues (e.g. the location of litter 'hotspots', the scale and source of plastic pollution in rivers, the presence of particular species at

sites, the nature of landscape change at heritage sites), and better-informed environmental management by regulatory agencies and third-sector organisations. This, in turn, could lead to improvements in the quality of the environment in popular tourist areas.

- 5.6 The CUPHAT project adopted a contributory, collaborative, and co-creation approach to identify and establish appropriate citizen science activities that could contribute to regenerative tourism in the four project areas in Wales and Ireland, themed around the four project themes (biodiversity, archaeology, community lives, and geology and landforms). Initial actions were to evaluate existing citizen science activities either operating in the project areas and associated with one or more theme, or operating nationally or internationally, but where valuable contributions could be made from the project areas. This was achieved through an initial web search alongside a series of public engagement activities engaging stakeholders, including local and regional organisations, individual community members, and schools located in the communities.
- 5.7 Several conditions needed to be met for selection: clear contribution of citizen science activity to address local, regional or international scientific problems; stakeholder and community buy-in; minimal infrastructure set up and maintenance costs/requirements (especially considering the short project duration); technology-led, using mobile devices and free, open-access digital platforms; intuitive and minimal training requirement (where expert training was required these activities are targeted to community members and organizations with the intention that information will be retained and cascaded to visitors); appeal to a variety of tourist audiences; offer an immersive learning experience for tourists and communities that serve to contribute to improving understanding of the environment and the issues it faces.
- 5.8 These conditions were explored, discussed and tested through indoor and outdoor community engagement activities, including informal coffee mornings, Twilio/show and tell events, school workshops, citizen science days (including bioblitzes and app/platform training). With the stakeholders' feedback and buy-in, important sites and environmental issues requiring attention were identified and appropriate activities designed and tested. This led to three inter-related but distinct groups of activities (see Box 2).

Box 2: CUPHAT citizen science activities

- Promotion of existing third-party citizen science apps and platforms
- Crowdfunder for recording river flow and plastic pollution in watercourses (geology and landforms, biodiversity)
- Litterbug for monitoring and documenting litter (biodiversity)
- BirdTrack for recording bird species (biodiversity)
- LERC Wales for recording plant and animal species (biodiversity)
- MammalWeb for squirrel monitoring in mid Wales (biodiversity)
- Earth Track, for land cover and habitat identification (geology and landforms, biodiversity, archaeology, community lives)
- Mapio Cymru for Welsh place-name mapping (community lives)
- Ireland's Environmental Protection Agency 'See it Say it' for monitoring pollution etc. (geology and landforms, biodiversity)
- Biodiversity Data Capture in Ireland for recording biodiversity • Field activities

- 5.9 Other activities included “expert-led citizen science activities” such as bioblitzes led by local biodiversity recording officers and conservation organisations to identify and record presence of flora and fauna; kick-sampling for macroinvertebrates in streams and 3D scanning of built heritage/archaeology with school groups; Archaeology/Heritage Days including community archaeological investigations using earth observation data (raising awareness of available LiDAR data and LiDAR training, including ground-truthing).
- 5.10 Through establishing partnerships with local and regional organisations (e.g. schools, Coed y Bont community woodland, the Mid Wales Red Squirrel Partnership, Natural Resources Wales, Coillte) we aimed to both address existing data needs and build capacity in communities that could engage present and future community interest and lay foundations for developing tourist-facing activities that would contribute to improving environmental management and potentially environmental and community regeneration in the long term, beyond the end of the CUPHAT project.
- 5.11 CUPHAT also established new citizen science activities including repeat photography and audio posts across thirteen sites in Wales and Ireland (Figure 1) using the Survey 123 ESRI ArcGIS app (accessible at <https://arcg.is/18fWzW> or via scanning a QR code (Figure 2). The selected sites are areas of conservation and environmental importance to stakeholders and individuals in the communities and beyond, and already serve as immersive sites of learning for tourists. Through the establishment of opportunities to take repeat photos and audio recordings, addressing changing landforms and biodiversity, our aim was to enrich these learning experiences by offering visitors an opportunity to contribute to

- understanding of environmental change by collecting data that would be shared with appropriate environmental management organisations in the area (Figure 3).
- 5.12 The experience of establishing citizen science activities through the CUPHAT project has highlighted some key strengths and future opportunities, as well as challenges. The experience of the work package team indicated that the collaborative approach to co-creation of citizen science activities that address the varying needs of stakeholders can be an engaging and enriching experience for all participants. These activities have the potential to enrich the interest that members of a community, as well as visitors, have in the environment of an area, and to enrich existing interests through practice. Building a foundation for such activities and a community of citizen scientists requires significant investment of time and labour. While identifying international citizen science activities that could be applied in a particular area is a relatively easy task, ensuring that these address the challenges facing communities and align with their interests and priorities, and that they also can be used by tourists, requires in-depth and sustained discussion, collaboration, and co-creation. Practicalities of establishing physical infrastructure requires that links with landowners and land managers are made at an early stage.
- 5.13 While the project has achieved its objectives of establishing a variety of citizen science activities appealing to tourists, it would have benefitted from having more time to develop these activities, particularly in terms of conducting more trials with tourists to establish how best to ensure that community enthusiasm is shared with visitors. In terms of citizen science events, it is clear from feedback received, and from reflection by project staff, that more time to conduct activities would have been beneficial. In a longer project, feedback like this could have been incorporated into a series of citizen science activities.
- 5.14 Field-based citizen science activities, even those that are more traditional group activities such as bioblitzes or community archaeological activities, are likely to be associated with websites, apps, or other digital platforms that are straightforward to use but that require photographs, data, or observations to be uploaded using mobile phone signal that is often poor or non-existent. This issue is compounded by wider accessibility issues relating to cost (either of travelling to the site, general costs of appropriate devices, or data roaming charges for overseas visitors) or physical accessibility. Concerns related to GDPR, particularly related to encouraging the use of apps that collect personal data and store it outside the EU also introduce considerations that take time to resolve.
- 5.15 In line with the overarching goals of the project, the citizen science activities emphasised common environmental challenges that faced the four project areas, and the landscapes that shared similar characteristics. These common challenges

was valuable contextual information with which the communities could be inspired to participate in the activities by creating a sense of contribution to a common goal that transcended the local context as well as being firmly rooted in it. However, attempting to establish a common set of activities across four regions with different landowners, regulators, public access arrangements, environmental data availability, and local priorities was not without its challenges. Again, ensuring sufficient time to discuss these issues was important.

- 5.16 While the length of project was not sufficient to undertake a full evaluation of the citizen science activities undertaken, some sources of feedback on the activities can be analysed. First, written feedback gathered at the end of the citizen science days highlighted both positive general comments about the activities (e.g. 'Very informative, THANK YOU, looking forward to participating in more CUPHAT events' and 'Thank you for helping to add my home on the map. Welsh place name mapping is very important and will teach visitors to be respectful of Welsh names and not change them.') and specific areas to improve. The latter mainly related to wanting more time and more activities (e.g. 'Bioblitz should be a whole day, more time required to learn to record species' and 'More archaeological trips necessary to highlight significant rich heritage in the area') but also to the long-term sustainability of the project ('Concerns with continuity of the activities after the project ends'). The number of attendees, particularly at the citizen science days and at the LiDAR training sessions in Wales clearly indicate an enthusiasm for these types of activities, and future work should try to build on this.
- 5.17 The fact that scientific data have been successfully collected during CUPHAT events and uploaded to appropriate online citizen science databases (e.g. evidence collected during bioblitzes at Cors Caron and kick sampling activities with schools, Welsh place names uploaded to Mapio Cymru, LiDAR data ground-truthed, data on litter uploaded to Litterbug) indicate that group activities with community stakeholders can be very effective, if labour- and time-intensive, ways of organising citizen science.
- 5.18 Feedback on school activities (social media posts, feedback from school staff and reflections of CUPHAT staff) indicate that the novel combination of field activities and classroom-based creative writing workshops was a very engaging way of involving school pupils in the citizen science process. As well as providing a baseline survey of biodiversity in their local area, these activities have inspired repeat visits by pupils outside of school hours, and have, it is hoped, cascaded enthusiasm for the natural environment to families and the wider community. They have also upskilled and built capacity among school staff in relation to field-based activities, which will be valuable in future as these activities are repeated with future cohorts, during which data can be collected and compared to the 2023 baseline.



- 5.19 The enthusiasm with which local and regional stakeholders (e.g. NRW, Coillte, Coed y Bont Community Woodland, Pembrokeshire Coast National Park Authority, individual landowners) engaged with the citizen science aspects of the project and were willing to provide support for them also indicated that the CUPHAT approach to citizen science aligned with their environmental management priorities.
- 5.20 The citizen science activities undertaken as part of the CUPHAT project have shown that there is significant enthusiasm in communities for contributing to data collection that address local, regional and international environmental issues. Situating citizen science initiatives within existing stakeholder ecosystems, e.g. in collaboration with schools, regulatory agencies, third sector community organisations, is essential but is time- and labour-intensive. Iterative evaluation incorporating feedback to identify the most effective practices, harmonisation of themes and activities across regions with diverse local contexts, and resolving technical issues also require a longer timeframe.
- 5.21 As well as ensuring robust long-term management and sharing of data collected during the project, sustaining the links established and enriched between University-based scientists and communities and stakeholders engaged in environmental monitoring and conservation should be prioritised. Several activities that were not possible during the project should also be explored, particularly related to developing capacity within tourism providers to incorporate citizen science in their offer to visitors, facilitating less traditional citizen science activities e.g. Mapio Cymru, and the marketing of citizen science activities as part of a moral, ethical and regenerative tourism.

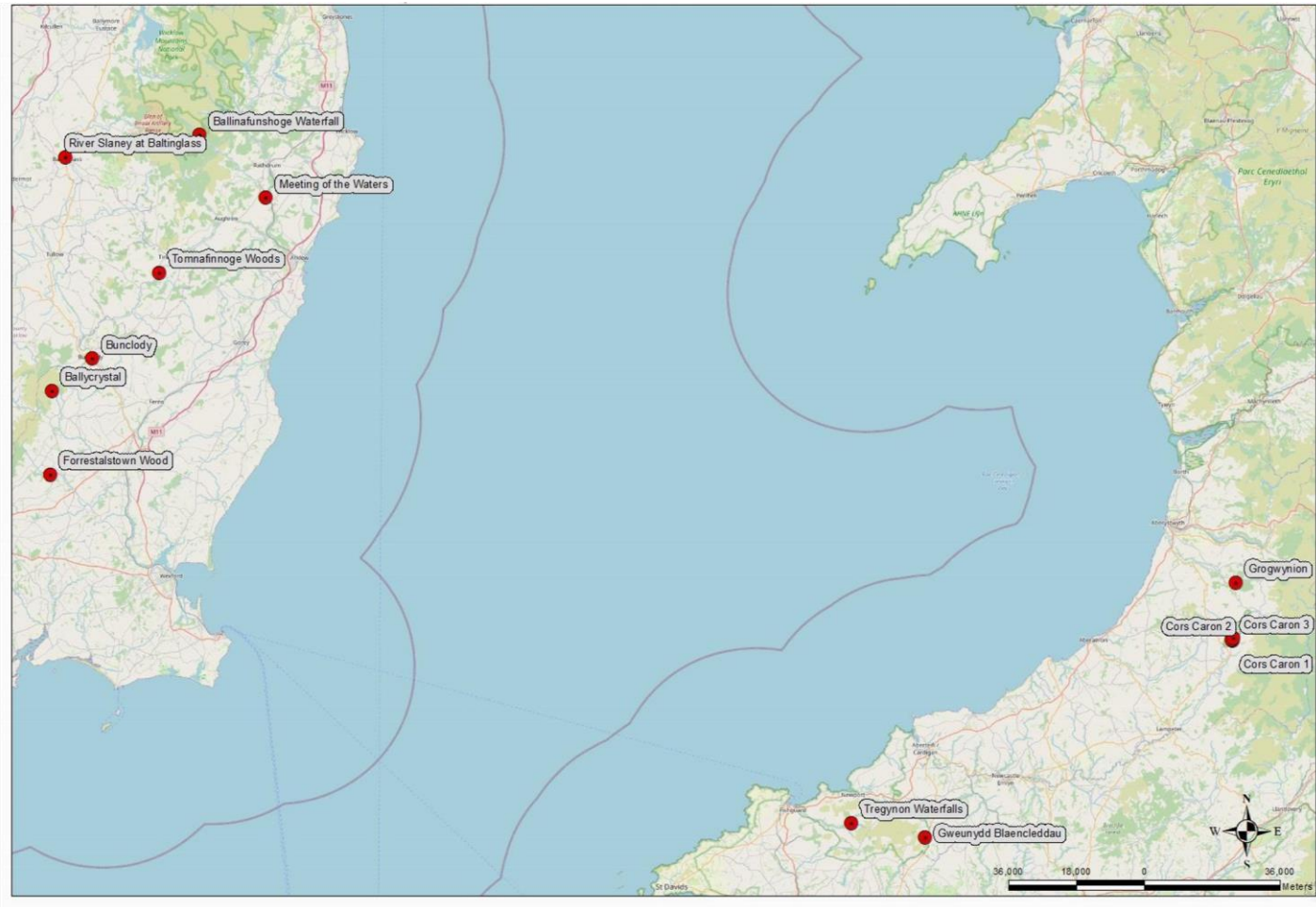


Figure 1: Maps of locations of repeat photo and audio posts in Wales and Ireland.



Ucheldiroedd Arfordirol: Treftadaeth a Thwristiaeth | Coastal Uplands: Heritage and Tourism



Postyn Llun & Sain I Photo & Audio Post

Mae'r postion llun a sain yma yn cofnodi newidiadau yn ucheldiroedd arfordirol Cymru ac Iwerddon. **Dyma safle Cors Caron.**

These repeat photo and audio posts record changes in the coastal uplands of Wales and Ireland. **This is Cors Caron.**



Mae'r postyn hwn yn cofnodi newidiadau yn:

- Lefel dŵr ar y gors
- Planhigion a choed
- Synau bywyd gwyllt

yn dilyn gwaith adfer.

This post records changes in:

- Water level on the bog
- Plants and trees
- Sounds of wildlife

following restoration work.

Diolch am helpu | Thank you for helping.



Gosodwch eich ffôn/tabled yn y braced.
Place your phone/tablet in the bracket.



Tynnwch 3 llun, recordiwch 30 eiliad o sain.
Take 3 photos, record 30 secs of audio.



Defnyddiwch y cod QR neu'r ddolen er mwyn mynd at yr arolwg <https://arcg.is/18fWzW>.
Dewiswch bostyn: **CC3**

Use the QR code or link to access the survey <https://arcg.is/18fWzW>. Select post: **CC3**



Cyflwynwch eich ymatebion pan mae signal gyda chi.
Submit responses when you have signal.

Submit responses when you have signal.



University College Dublin
An Coláiste Ollscoile, Baile Átha Cliath



Figure 2: Example of photo and audio post sign.



Figure 3: Photo and audio posts installed at Tregynon waterfall and Gweunydd Blaencleddau (with Foel Drigan in the background), Preseli Mountains.



6 Entrepreneurialism and community development

- 6.1 The central aim of CUPHAT has been to support sustainable livelihoods, entrepreneurial activities and community development linked to regenerative and heritage-based tourism within the 4 project areas of Ireland and Wales. These coastal uplands have unique livelihood and development challenges, calling for a nuanced, rather than 'one-size-fits all', approach. Livelihood diversification, instead of a reliance on single income streams, is the norm for many, especially for more customary livelihood practices, like upland and commonage farming. Many people in the project areas continue to value traditional livelihoods even while these are increasingly unviable, and on- or off-farm diversification into tourism is an attractive complementary opportunity. To realise the aim of CUPHAT, it was important to work with the opportunities and demands this situation presented.
- 6.2 An initial exploration and mapping of tourism-related businesses and infrastructure in the 4 project areas revealed a diverse range of promising community groups and tourism enterprises, often very small, sole trader, and family-run. In order to truly support local livelihoods and economies, it was critical to work specifically at the micro- and community scale. Key deliverables included targets to support 8 community development projects, 8 enhanced microenterprises and 8 start-ups. To achieve this, a peer learning group was co-created, bringing together microenterprises and community groups for shared learning, reflection, collaboration and innovation to facilitate regenerative tourism initiatives within the Wicklow, Blackstairs, Cambrian and Preseli Mountains.
- 6.3 The rationale for a combined-sector (private and third sector) peer learning approach is that community organisations are increasingly required to think more strategically in today's VUCA world (meaning a volatile, uncertain, complex and ambiguous context) to identify how to fund and finance changes that they would like to see in their communities. Likewise, small businesses are progressively keen to embed aspects of sustainability, circularity and contribute to the wellbeing of their local communities as part of how they operate. This dovetails with the regenerative tourism focus of CUPHAT. Through this process, CUPHAT engaged with 60+ microenterprises and community groups across these regions.
- 6.4 The first step was to map the existing tourism-related businesses and infrastructure within the project regions, to identify gaps and opportunities. The existing ecosystem of support for start-ups, microenterprise and community development was also identified. Next, focus groups were held with community members in each of the 4 project areas to further understand both localised and shared challenges, barriers and opportunities. Common challenges included a need to improve marketing and local infrastructure within the project regions, as



- well as a deeper awareness of how to access and be successful at attracting funding for community projects and microenterprise.
- 6.5 Based on the findings from the focus groups, the CUPHAT team developed a peer learning educational programme on Regenerative Tourism for microenterprise and community groups to co-design approaches to overcome the shared challenges that were identified by the communities. The purpose was to create a space for networking and collaboration, to foster innovation, and to support businesses and community groups to reflect upon and creatively respond to the common challenges raised. The programme was delivered in collaboration with UpThink Innovation Agency (Ireland) and Menter a Busnes (Wales).
 - 6.6 The CUPHAT Regenerative Tourism programme was open to any microenterprise or community group based within the project areas. Bespoke templates were iterated for the programme, including a heritage brand design template and an elevator pitch template, whilst also embedding more established tools into the design and facilitation of the course, such as a Business and Social Model Canvas which were adapted for the project context. These tools and templates were worked on in group sessions during a 5-6 week series of themed workshops aimed at supporting programme participants to complete a 10 step Action Plan.
 - 6.7 Workshop themes covered: Regenerative Tourism and the Circular Economy; Design Thinking in the Community; Heritage Brand Design, Storytelling and Marketing; Digital Marketing Strategies; Revenue Models and Funding Opportunities; Social Enterprise.
 - 6.8 During each week, participants completed learning activities corresponding to a different section of the Action Plan. The Action Plan outlined the participant's business or community project goals and how these would be realised. Any business or community group can emulate this approach by reflecting on and completing the 10 Steps to Success in the image below. These are the core building blocks to achieving clearly-defined business or community project goals.
 - 6.9 One-to-one coaching was offered to all programme participants from the project areas who submitted an Action Plan and indicated interest. Coaching enabled participants to delve deeper into steps of their Action Plan, and to hone in on specific areas that required more focus, such as strengthening their market analysis or value propositions, and to receive individualised feedback on their Action Plans, current operations and future planning.
 - 6.10 At the conclusion of the programme, a celebratory Showcase Event was held in both Ireland and Wales. This gave participants an opportunity to pitch their business or project to key funding bodies and stakeholders representing enterprise, tourism, rural and community development, heritage, circular economy,

the arts, and social enterprise sectors. The Showcase Events resulted in new opportunities, including employment for businesses, funding proposals for community projects, capital investment opportunities, and stimulated new networks and bridging social capital with stakeholders.



The celebratory event held in Wales, June 2023.

10 steps to success: Creating your action plan & pitch



6.11 A number of important lessons were learned throughout the course of developing and implementing the CUPHAT Regenerative Tourism programme. The importance



of an outreach and assessment stage cannot be overstated. Taking time to observe, speak with, and understand the community and their specific needs, rather than assuming specific and generic ones from the outset is a vital step prior to any support programme design. This allows for an awareness of place-based challenges and needs as well as any core similarities in these that can act as the foundation for a support programme without being too one-size-fits all; striking a balance.

- 6.12 Co-designing responses to address challenges in collaboration with the community is critical to building meaningful relationships with the community and to ensure relevance, engagement, and sustainability of the project's achievements. The CUPHAT team tried to retain co-design elements in the programme from start to finish, and remain agile to alter the approach based on inputs from participants on what was working and what wasn't.
- 6.13 The focus groups revealed many of the challenges communities are now facing are complex and require collaboration, particularly with policy makers, to resolve effectively. Key challenges around the limitations of local infrastructure, like very limited or infrequent public transportation, could not be resolved within the CUPHAT project timeframe. The central focus was therefore on challenges that could be responded to in collaboration with other community members. This included supporting access to funding, marketing approaches, how to address sustainability within supply chains, understanding circular economy models, and unpacking the concept of innovation as this applies to what community groups and local microenterprises are doing.
- 6.14 The programme validated that cross-sectoral engagement and collaboration is an important asset for both community projects and businesses in the context of regenerative tourism and growing tourism in a sustainable way. As one participant voiced, "The programme was very effective at bringing local businesses and community groups together. Having recently moved to the area, I had no opportunity to do this, and would not really know how to begin to network with other groups and local enterprises as there is nothing in the region that I am aware of that fills this gap. We now hope as a group to continue our relationships going forward." Another participant commented, "I discovered so much more about local organisations and businesses, and realised that there is plenty of future collaboration possible. We want to utilise local organisations more within future business plans, and direct guests towards collaborators."
- 6.15 It is important to recognise that local microenterprises in the project areas were sometimes already 'doing' regenerative tourism and straddling these two sectors, wearing different hats as tourism businesses while also running community projects. It's important to recognise that a burden can be placed on communities through a regenerative tourism model (e.g. volunteer burden) without the proper

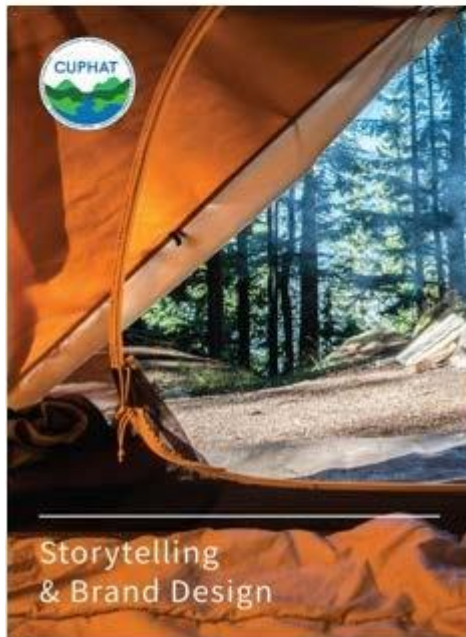
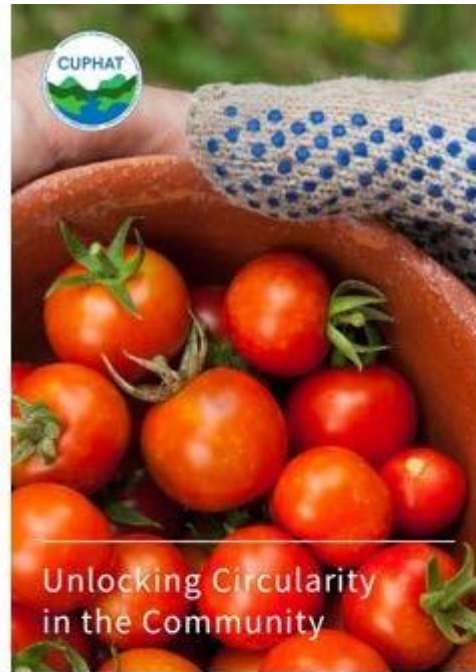


- policies in place. For regenerative tourism to thrive, it needs to be acknowledged, nurtured, supported by and integrated into existing supports and future programmes where opportunities exist.
- 6.16 The scoping of existing supports, together with the focus groups with community members to understand their experiences with accessing these, revealed a number of limitations. Existing supports tend to silo business and communities, support more established or larger scale businesses, sometimes use language that isolates community members, are complex to access and deliver on (such as proposal writing and auditing protocols), and do not always advertise the support they provide in a way that reaches community members. Many community members do not know what support and programmes they are eligible to tap into.
- 6.17 It is evident that networking proved to be one of the most important aspects for community members in both Ireland and Wales. Community members' feedback was that they would have liked even more time to network with one another and discuss one another's projects and goals. Due to the fast pace of the programme and the volume of information and activities that had to be shared in order to address participants' needs, it did not allow sufficient time for this to fully happen.
- 6.18 The project team received feedback on the effectiveness of the Regenerative Tourism programme from community members and stakeholders. One-to-one interviews were undertaken to gather data on impact and capture feedback that was used to develop a set of case studies featuring CUPHAT programme participants. The case studies outlined the support that the programme provided and included critical feedback from participants. The case studies can be accessed at on <https://cuphat.aber.ac.uk>.
- 6.19 Participants also shared feedback about their experience developing an Action Plan. Many participants affirmed that completing the Action Plan was a very useful exercise that enabled them to define and focus on short-term and long-term goals, creating milestones across a 5 year period. It can also be used as the basis for a funding application. As one participant expressed, the Action Plan exercise, "created a road map and made me examine and tease out each step of the plan. I started to focus on what is achievable and reasonable."
- 6.20 At the Showcase Events in Ireland and Wales, programme participants pitched their projects to their peers, as well as to representatives from key funding bodies and stakeholders. In Ireland, these stakeholders included: County Wicklow Partnership, Wexford Local Development, Wicklow and Wexford Local Enterprise Offices (LEOs), Visit Wexford, Carlow Tourism, Ireland's Ancient East - Fáilte Ireland, Design and Crafts Council Ireland, the Environmental Protection Agency and representatives from Wicklow and Wexford County Councils. During the event in Ireland, programme participants representing Killanne and Rathnure Community



Development Groups linked with Wexford LEADER to discuss ways to access funding collaboratively and upcoming opportunities through the next round of LEADER funding. In Wales, stakeholders attending the Showcase event included representatives from Welsh Government, Antur Cymru, Menter a Busnes, and Ceredigion County Council. Menter a Busnes were able to identify future programme and support opportunities for a number of the programme participants.

- 6.21 The programme facilitated new partnerships within and between project areas, including some cross border links between Welsh and Irish programme participants. For example, two community groups in Ireland came together to collaborate on a broader regenerative tourism-related plan for the wider area, while in Wales, new clusters of businesses and community groups with synergistic offerings have formed and plan to work together going forward. Two online action learning sets were held in summer 2023 with participants from the Preseli and Cambrian Mountains to provide another platform through CUPHAT for building on these newly established partnerships.
- 6.22 It is evident that business and community need to collaborate to respond to local challenges. CUPHAT will share feedback from community members with local enterprise and community development stakeholders, for them to evaluate and iterate their offerings. The CUPHAT team is collaborating with business and community ecosystem support stakeholders to secure a plan for handing over programme learning materials, templates and activities to ensure that project outputs continue to benefit community members into the future.
- 6.23 Key frameworks used on the programme, like the Business Model Canvas, Social Model Canvas, Action Plan template, and set of weekly learning materials, were useful assets for programme participants. Some of the more generic, globally recognised tools were adapted into bespoke versions for coastal upland community members on the programme to ensure they were well tailored for businesses and community groups.
- 6.24 The CUPHAT team is in dialogue with existing stakeholders including LEADER representatives (Ireland), local Tourism Officers, and Menter a Busnes (Wales), on how to best adapt the programme learning materials and tools so that they can be made openly accessible as a resource for the public. Based on this input, the programme materials will be further iterated so they can be independently used and followed by community groups and businesses, either individually or as a collective. However, in the longer-term, the programme resources would ideally continue to be updated as required, in order to accommodate contextual, policy and other changes that will occur over time following the project's completion. This will require the buy-in and support of relevant local and regional bodies in tourism, enterprise and local development.



Some images of the different aspects of the training scheme delivered by CUPHAT



7 Digital technologies

- 7.1 An important aspect of CUPHAT has been to attract and inform visitors to the coastal uplands, with all of this being informed by the ethos of regenerative tourism. Digital technologies play an important role in enabling regenerative tourism by helping visitors to develop more detailed understandings of the areas that they are visiting, thus enabling them to become more engaged and connected with those areas (and the various cultural and natural heritage sites that they contain).
- 7.2 This goal was achieved through two complementary routes. CUPHAT created digital reconstructions of sites and features, including 3D representations, for use on the project website and through the apps. CUPHAT also scanned and digitally repatriated artefacts to the coastal uplands. In doing so, out was to inspire tourists to visit the areas outside of the main tourist season, to encourage those with specific interests to visit and thus support related conservation activities, and to highlight alternative sites to visit that are less well known.
- 7.3 Our first task was to collate pre-existing digital representations relating to the cultural and natural heritage of the four regions of the CUPHAT project (the Cambrian Mountains, Preseli Mountains, Wicklow Mountains, and Blackstairs Mountains). This was a challenge due to the size of the regional areas being covering and the short time available. However, outputs from an earlier task in which academic specialists had contributed to the creation of four themed Google Earth maps that detailed the locations of potential sites across the regions provided a useful starting point for searches across the following platforms: YouTube, Sketchfab and Google. A search was made for each potential site and filtered to images, with any pre-existing digital representations recorded. The spreadsheet produced will be of subsequent benefit to any other organisations or group wishing to know more about what resources are already available and where to access these.
- 7.4 The next stage was to develop a long list of potential sites for focussed reconstruction from across the four regions, taking into account the four project themes (Archaeology, Biodiversity, Geology and Landforms, and Community Lives). A total of over 100 sites were identified. In consultation with the wider project five sites per region were subsequently selected for reconstruction. Each set of five sites consisted of a focus site chosen as example of each of the themes, plus a landscape-scale site of interest which encompassed all the themes.
- 7.5 Within the selection we also strove to achieve a balance between sites which were already relatively well known within the tourist industry, and sites which were under-exploited and/or had received little attention to date. With the latter we had



- to be particularly mindful of landowners and neighbours, and their views on the desirability of increasing footfall in the area. This led to some changes to the focus sites that had been initially chosen, although replacements always represented the corresponding theme. The approach we adopted, however, reflected the ethos of regenerative tourism, namely our concern to promote only those sites that had the full support of community members.
- 7.6 The development of our 3D graphical reconstructions took into account a number of factors. These were: time; the tourists; the communities; and, due to the very nature of the uplands, those members of society who can't access these locations due to their physical disabilities but still wished to visit those communities.
- 7.7 Our most elaborate reconstructions were those of the 3D landscapes, which provide users with sense of the location as well as their bearings within it. These 3D landscapes were to become the springboards from which we were able to add digital interactivity using the software solution 3D Vista. An advantage of using 3D Vista was it also offered our community members the ability to use an interactive tourism tool as a standalone solution. Each 3D landscape was then populated with an array of interactive sites chosen by the theme academic specialists, and these choices dictated the extent of these landscapes. This generated a variety of different sized landscape locations all of which were then populated with interactive points of interest. To reduce the time taken to create these landscapes the online solution 3D Mapper was used. Although this incurred a monetary cost, these outweighed the time it would have taken to generate the models from scratch.
- 7.8 Further refinements subsequently made to the models included replacing the landscape texture with better imagery, and adding in features such as a 3D compass to indicate to the user which direction they were looking in. Further models were then added in. These included assets created from drone footage, 3D models of architectural buildings built in 3D Studio Max, and 3D models generated using photogrammetry. The type of equipment required for the latter approach can include DSLR cameras, tripods, light sets or lightboxes. However, simpler reconstructions were also created using apps available to anyone, such as Polycam or Widar. Such apps are easy to use, as they only require a phone with a camera. However, the software can have limitations as regards the size of the object that can be scanned, plus generally there are fewer editing possibilities and the 3D models produced are of a lower resolution. Enhanced features are often available with purchased (rather than free) versions of apps or software. Freely available Geographic Information Systems such as Google Earth and QGIS also supported the development of attractive and high-quality models to represent the landscape. Traditional photography was also used, alongside close-up macro photography to provide alternative views of biodiversity or geological features.



- 7.9 Using a similar process to that used to select sites, a long list of potential artefacts for digital capture and repatriation was produced, and from this, artefacts that reflected each of the four themes in each of the four regions were selected. As with the sites, photogrammetry was used to create 3D models of artefacts. The high specification approach to this involved a DSLR camera, a turntable with software that controlled both the turntable's movement and the shutter on the camera, and a light box.
- 7.10 We used Agisoft software to stitch together the photos and carry out further processing. This specialist method is slower than using mobile apps but provides greater detail and accuracy. The process worked on middle-large sized objects, although the turntable was not used for some of the larger items due to their weight and the item not being properly supported. Further limitations included issues with digitising small and thin objects since Agisoft couldn't stitch together the photos as there weren't enough common points. We also used a simpler approach to collecting photogrammetry data based on the Polycam app. We found this worked best on structurally varied artefacts, but, like the Agisoft software, struggled to successfully capture small (<15cm) and/or thinly shaped artefacts.
- 7.11 Further factors to consider when doing photogrammetry included the size of the turntable and the requirement for items to be placed in the centre of the turntable so they stay in one position. In some situations, this may result in not being able to get the camera close enough to smaller objects, even when using a tripod and different lenses. Some of the 3D models prepared would have benefitted from closer imaging to gain more detail.



A selection of artefacts captured using Polycam. A: Bardic chair from 1938 Eisteddfod. B: Post medieval hollowed out stone C: Pine marten skull. D: 19th century sheep ear tagging book.

- 7.12 In terms of broader lessons, we found that getting landowner permission for access can take much longer than expected, especially if contact has to be made through third parties such as land agents. Where concerns about increasing tourist activity were raised, these were in some cases allayed by highlighting that the objectives of the initiatives were to encourage visits by tourists with specific interests that aligned to the themes and to extend the tourist season, and thus promote more regenerative tourism. Access to museum pieces may also take more time than expected. There are forms to be filled out, wait for staff availability, consider museum hours, etc.
- 7.13 The comparatively short duration for image, video and data collection within the project meant that initial aspirations regarding depicting seasonal changes and the attractiveness of sites outside the traditional tourist season could not be fully achieved. If similar work were to be undertaken in future, seasonality should be a key aspect to factor into the workplan. Collecting imagery in the winter and spring also meant the number of occasions when weather conditions were suitable were more limited, particularly with regards to the use of drones for aerial shots. When flying was possible, drone-mounted cameras were used to capture some incredible photos and film within this project, but this option may not be available to all. An experienced drone pilot with appropriate licencing is required and the rules and regulations regarding flying drones are constantly changing. We also found that some landowners/managers were unwilling to allow drone flights over their sites.



- 7.14 Weather can also be a constraint as regards outdoor photogrammetric reconstruction. Sunny weather does not necessarily mean optimal conditions as factors such as shadows and excessive brightness can create problems within images for photogrammetry construction, whereas wet days generally means having to postpone. Some themes had greater limitations in terms of heritage digitisation than others. For example, we found it can be very difficult to capture high-quality photographs of certain species targeted within the Biodiversity theme, or to use 3D models as an approach.
- 7.15 A concept that wasn't fully realised within the current project was the digital recreation of historical characters. Such 3D reconstruction offer visitors a glimpse into our shared ancestral past, and their use would have offered a number of benefits. The first would have been providing an insight into who once lived in these ancient landscapes; what they looked like and what they did. Secondly, they could have provided context to a number of artefacts we'd digitally recreated from museum pieces using photogrammetry. Alone, these objects offer very little insight into their use or even a sense of scale. In the hands or being worn by our 3D digital characters the context would have been clearer. Finally, the characters need not to be generic models of men and women but digital twins of current community members. This could produce a meaningful link back to communities, aiding the transition of the final outputs into their ownership.
- 7.16 With regards to future use of the materials generated and/or the adoption of the methods employed across new site, a certain level of digital literacy will be required within the community. Thus, there may be challenges with access and maintenance of the assets generated in the long-term in some situations. Digital connectivity to allow further developments and capacity for longer-term storage may also be issues.
- 7.17 Digital tools offer a flexible approach by which to record heritage and to analyse and study it in detail, continuously, without the limitations of fieldwork. They are an opportunity for returning heritage to local people, allowing them to engage and interact with elements of the natural and cultural elements that can be difficult to access - either for access reasons, conservation of rare habitats, flora and fauna, physically vulnerable sites in the case of geological or archaeological heritage, or simply because this heritage is held in museums or collections, often not accessible to public. In doing so, heritage digitisations provide new content and tools for recreation, tourism, and education and offer the possibility of increasing pride in place by helping people understand what makes their local area's heritage distinctive and worthy of preservation and access. The plethora of different visualisations of the cultural and natural heritage of the coastal uplands that have been created should: a) attract more people to visit the coastal uplands in the first place; b) make the experience of visiting sites and landscapes in the coastal uplands more enjoyable. In addition, by providing reconstructions



alongside more information about the sites online should give a deeper understanding of the fragility of many of these, and the value of related conservation efforts underway.

- 7.18 As part of our work, we emphasised the need to upskill community members so that they could contribute to the process of using digital technologies to recreate sites and landscapes (see the advert for the LiDAR training session below). However, the compressed timescale of the CUPHAT project meant that we had fewer opportunities to develop this aspect of the work. In order to realise the full potential of regenerative tourism, there is a need to invest more time and resources in this aspect, so that communities themselves can take ownership over the digitisation of their own 'resources', with potential positive spin-offs in terms of employment, skills development and income generation.

Using LiDAR to Explore Heritage in the Cambrian Mountains

**Saturday 27 May 2023
10:00 - 16:30**

**Canolfan Cymunedol Mynach
Community Centre
Pontarfynach, Devil's Bridge**

Interested in the heritage of the Cambrian Mountains? **Join us for the day!**

10:00-12:15 INTRODUCTION TO LIDAR
Learn about this technique, how it is applied to heritage and identify archaeological features in the Cambrian Mountains.

13:00-16:30 Ground-Truthing Fieldtrip
Learn how archaeologists ground-truth features and identify them yourself in the field.

LIMITED SPACES! For enquiries and additional information, email j.domiczew@dyfedarchaeology.org.uk

An advert for a LiDAR workshop run by CUPHAT in the Cambrian Mountains

8 Conclusions

- 8.1 This guidance document has sought to provide information about the alternative approach to tourism, namely regenerative tourism, adopted by CUPHAT. It has detailed the activities undertaken by the operation, the impact of our work and the lessons learnt. As noted in the introduction, it does not purport to be a comprehensive account of how regenerative tourism might be developed in coastal upland areas. Rather it seeks to give a flavour of what could be done, drawing on the specific activities undertaken as part of the operation.
- 8.2 This guidance document has provided some practical examples of how different agencies might promote a regenerative approach to tourism within specific areas or destinations. However, there is a need to test the effectiveness of this approach more fully. To what extent can it, or does it, lead to better outcomes for communities and environments that act as tourist destinations? Alternatively, to what extent does it offer an appealing kind of tourism to tourists or visitors? How can one devise effective means of measuring the impact of regenerative tourism?
- 8.3 More broadly, to what extent is there an appetite among policy-makers in the concept of regenerative tourism? For instance, it is clear that tourism has become contentious in recent years in Wales, particularly in the north and west of the country. As such, there is some interest in developing an alternative approach to tourism – one that works for the benefit of communities in more sustainable and just ways. Regenerative tourism might offer one potential solution to this challenge.
- 8.4 If the full potential of regenerative tourism is to be realised and if it is to become the basis of an alternative approach to tourism more broadly, it is important that its specific manifestation in various places or destinations should be sensitive to the specific social, cultural, economic, environmental, political and institutional contexts that exists in those places. In that sense, while there are general principles associated with regenerative tourism, it does not – it should not – offer a one-size-fits-all approach to tourism.
- 8.5 Taken together, such statements illustrate that there is much still to be achieved in relation to regenerative tourism. There is a need to develop more conceptual clarity around the term. There is a need for the development of more methodological rigour in terms of how it might be promoted and evaluated. And there is a need for greater understanding of the varied benefits and drawbacks associated with its implementation in different geographical settings.