

Climate action in practice at museums and galleries across the UK

May 2025

THE HERDS Art Fund Grants

Museum Case Studies

THE HERDS is a public art and climate action on an unprecedented scale. Herds of life-size puppet animals created in renewable and recyclable materials are journeying 12,000 miles through Africa and Europe, gaining new species as they go, crashing into civilisation in major cities, warning of environmental disaster. THE HERDS is a project by The Walk Productions.

Museums, galleries and cultural organisations across the UK have joined this international conversation, inviting their local communities to engage in dialogue informed by their collections, public programmes and place-based activities.

These case studies have been compiled to support museums to convene their communities, hold conversations about the climate emergency, and reduce the environmental impact of their activities.

THE
HERDS

THE
WALK
PRODUCTIONS





Museums are highly trusted places for learning, a fertile ground for conversations about the climate emergency, and able to bring together different viewpoints from their local communities.

Museums, galleries and cultural organisations across the UK are taking on the challenge of creating exhibitions, programmes and events which explore the local and global impacts of the climate emergency. We have compiled a variety of examples and experiences from across the sector – from practical interventions on sustainable lighting, to community collaborations and youth led exhibitions.

Case Studies

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Case Studies

Case Study	Overview	Storytelling	Family activities	School activities	School climate discussion	Centring young peoples' voices	Reducing environmental impact
Putting community engagement and environmental awareness at the core of the <u>Dales Countryside Museum</u>	<ul style="list-style-type: none"> Prioritising partnership building and experimentation to engage in climate conversations Working towards a low carbon footprint 						
Case Study: Exploring climate change, art and activism with youth audiences at <u>Falmouth Art Gallery</u>	<ul style="list-style-type: none"> Empowering young people (11-14) to consider their relationship to the natural world, and engage in climate action 						
Using storytelling to explore climate and environmental responsibility and through the River Wye at <u>Hay Castle Trust</u>	<ul style="list-style-type: none"> Sharing local stories of climate change within the rural environment through storytelling and film 						
Environmental Sustainability and Schools Engagement at <u>Herefordshire Museums & Galleries</u>	<ul style="list-style-type: none"> Working towards a zero-waste outreach programme Creating the UK's first EnerPHit building through capital redevelopment 						
Environmental Sustainability and Community Engagement at <u>Stevenage Museum</u>	<ul style="list-style-type: none"> Expanding audiences through craftivism and animal events 						
<u>The Turnpike Gallery</u> – Empowering Young Curators through the <i>Climate. Emergency. Hope.</i> Exhibition	<ul style="list-style-type: none"> Engaging young people as decision makers and curators to delivery an impactful, socially conscious exhibition Artist collaboration 						
Reanimating the Past – Blending Digital Innovation with Natural Science Education at the <u>Watt Institution</u>	<ul style="list-style-type: none"> Using Augmented Reality to bring natural history collections to life and teach about biodiversity 						

Case Study: Putting community engagement and environmental awareness at the core of the **Dales Countryside Museum**

The Dales Countryside Museum shares the stories of the people and places of the Yorkshire Dales National Park with a particular focus on community engagement and environmental awareness.

Insights, challenges and opportunities

- Much of the museum programming focuses on the impact of climate change on the Yorkshire Dales National Park, for example the destruction of habitat, as well as the importance of conservation.
- Working in partnership enables the Museum to overcome resource limitations, seize opportunities and maintain flexibility in strategy.
- When focusing on environmental responsibility partnerships are crucial; whether it's organisations or individuals, without working with others, the Museum wouldn't be able to effectively communicate.



Insights, challenges and opportunities (cont.)

- Finding sustainable materials that are both durable and environmentally friendly for long-term use in exhibitions can be challenging. The Museum has experimented with using cardboard, but this has not proved robust enough for long term use. Cotton banners worked better as they were more durable.
- The small size of the Museum allows for quicker decision-making and adaptability in programming, for example they can respond quickly to requests from the local community.
- Regularly testing new ideas means that a wide range of events can be offered covering both populist and more specialist content.
- The Museum faces challenges in engaging with secondary schools due to curriculum pressures and budget constraints. Success has been achieved by working with primary schools and on specific climate focused projects that directly align with their curriculum needs.
- When working with artists, the Museum sells their work and generates income through a small commission.

Programme strategy

The Museum's exhibition and programming strategy is closely aligned with its collections and the themes of the Yorkshire Dales National Park. Temporary exhibitions often delve into environmental issues. Materials are reused in permanent galleries or loaned to other organisations whenever feasible. The Museum typically hosts 3-4 temporary exhibitions each year, collaborating with a wide range of organisations and artists. Exhibition planning can span 1-2 years, with the current programme extending to 2029.

Temporary exhibitions are complemented by school programmes and family activities, either within the exhibition or during school holidays. The Museum operates on a limited discretionary budget of £22,000 per year for all exhibition and event programming, displays, marketing and leaflet distribution, IT licensing, and equipment. To optimise resources, the Museum frequently partners with others, seeks external funding, and repurposes exhibition materials for touring or use in the permanent galleries.

The Museum strives to keep family programmes free to enhance the visitor experience, while occasionally charging for special events to cover costs. It maintains a flexible approach, allowing for adaptation to new opportunities and partnerships as they arise. This means that the museum regularly includes input from community engagement.

Engaging with schools and families is a top priority for the museum. Interactive and often free family programmes enhance the value of museum visits. The museum collaborates with partners where possible, such as the British Library and the county council to adapt resources to suit local contexts and sustainability themes.



Exhibitions and programming

- *“It’s Rubbish...Or Is It?”*: This exhibition and project undertaken in 2005/06 explored recycling, repurposing, and sustainability, using resources developed by the Schools Waste Action Club in conjunction with the charity, Waste Watch, <http://www.wastewatch.org.uk>. It encouraged families to calculate their carbon footprint and sparked discussions about environmental issues. The resources used in the exhibition have been particularly valuable because they were clearly directed at children. Many families and schoolteachers commented on how they hadn’t thought about using recycling for craft activities, but that they would look at this in future and put a little time into sorting them. Families took part in the carbon footprint activity in the exhibition. Some were surprised at the outcome, and many who took part said they could probably make changes to improve their score.
- *“Campaign – Make an Impact”*: The Museum took part in this British Library initiative and following the end of the project, adapted campaigning resources from the British Library to focus on climate-related campaigns tailored to their local context. The way in which the children invested in the project was highlighted in much of the feedback.
- *“Give Peat a Chance”*: A partnership with the Yorkshire Wildlife Trust to create an exhibition on the importance of peat restoration for carbon storage. The trust delivered school and family activities on environmental conservation.
- The current exhibition, *“Trail of Inspiration: The Pennine Way at 60”*, features creative responses from writers, poets, artists, photographers, and musicians, all interwoven with messages about conservation and the importance of green spaces for well-being.

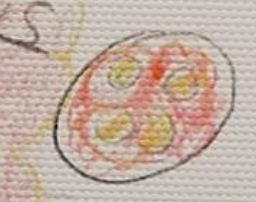
PROTECT THE CURLEW

Curlew
all birds
are air

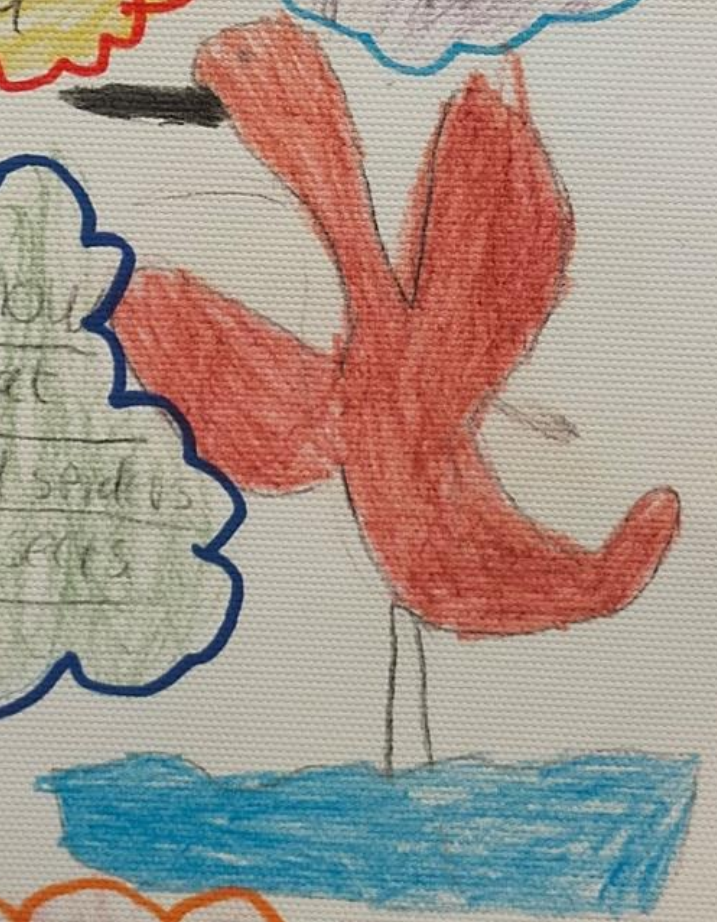
Curlew
live on the
ground

we have
lost a lot of
Curlew
in many
years

Curlews
have 4
eggs



Did you know
Curlews eat
worms and seeds
and insects



If you hear
a Curlew call
there might be
something like
a combine harvester
coming

Please keep your dog
on the lead because
it may harm Curlew
eggs

There wing span
is one meter long

- “Cry of the Curlew”: In 2023, children from Settle and Kirkby Malham schools worked with Curlew Action and artists Sarah Smith and Sue Harrison. The children explored the plight of the Curlew and created quilted felt curlew landscapes, posters, poems and paintings featured in the exhibition. The education work grew out of the Clapham Curlew Cluster – a group of 15 farms and 20 volunteers in the Clapham area. Working in partnership with the RSPB and supported by the Yorkshire Dales Millennium Trust, the Cluster is collecting data on Curlew, including carrying out wader surveys.

The Cry of the Curlew exhibition highlighted species conservation and involved multiple artists and children in creating artwork and campaign posters. The Yorkshire Dales served as a case study for protecting the threatened curlew species. The exhibition was very popular and as a result of the enthusiasm of one of the artists involved, has toured multiple locations. Education work was supported by the Yorkshire Dales Millennium Trust.

Environmental sustainability initiatives

Environmental sustainability is a core aspect of the Museum's operations. External funding was used to install a biomass boiler, solar panels and LED lighting.

The Biomass boiler was installed when a review of the Museum undertaken in 2012. They worked with Kristina Lomas (now of ecoaffinity) and CO2 Sense, through the Museum Sustainability programme run by Museum Development Yorkshire. As part of this, they accessed a free consultancy opportunity to look at the 'green' options for the site, including the heating system.

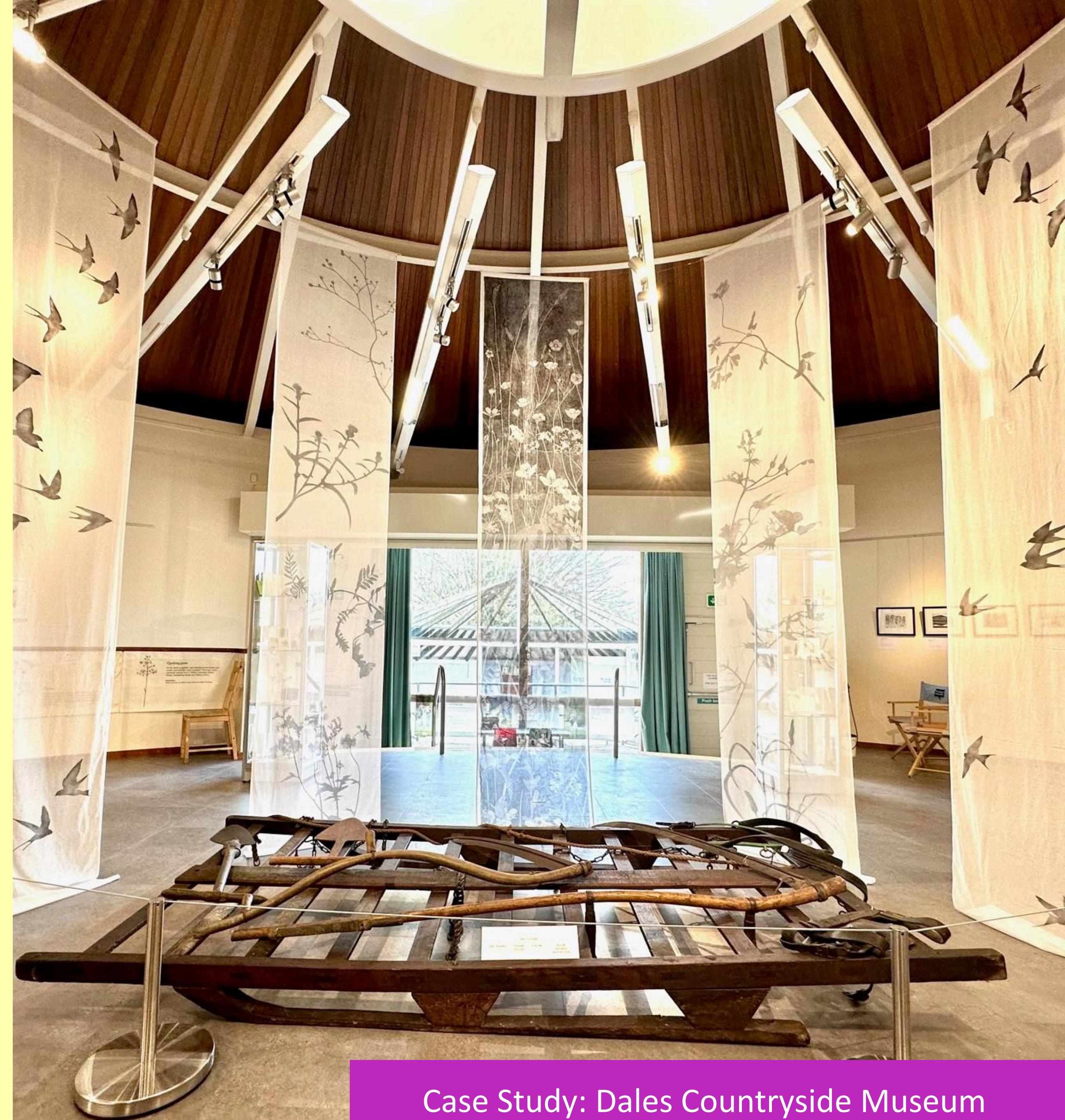
One of the outcomes of that work was the suggestion that, for approximately £71k, a biomass boiler could be installed that would generate a net annual benefit to the Authority of some £12k, derived from reduced fuel costs and income from the Renewable Heat Incentive (RHI). So, on top of a substantial decrease in carbon emissions, this 'invest to save' opportunity would give a return on investment after approximately seven years (allowing for lost interest from the cash spent). In the end,

due to the site, the cost was considerably more, but the YDNPA committee supported the installation because this project would enable the emission targets of the Authority to be achieved. In summary, the initial groundwork, surveys and feasibility study were supported through MDY, but the actual installation was an invest to save project.

The museum received a 'Public sector decarbonisation scheme' grant for the solar panels, and the LED lighting upgrade in 2020/2021.

Exhibition design also considers sustainability, creating banners instead of large foamex or solid panels and using more sustainable materials which are easier to store and tour. The museum has experimented with using corrugated cardboard for temporary exhibition purposes but found it dented, and corners were easily damaged when moving on to another location. They have had more success with cotton banners supported with wooden dowels. The cotton is recyclable and unbleached, and the inks used are latex and water based. The dowels are all FSC approved European sourced wood.

To further support sustainability efforts, the admin officer has completed carbon literacy training. All exhibitions and programmes align with the Museum's collections or broader national park themes, ensuring a consistent focus on environmental and cultural heritage themes. Carbon literacy training has spurred the team on to re-visit previous carbon reduction proposals that lacked funding and to look at how these can be achieved in the future, for example sensors on lights and double glazing. As a team they are more committed to considering environmental sustainability in all aspects of their work including procurement, sharing messages with visitors about steps they have taken, and finding ways to embed climate concern activities into their learning programme.



Case Study: Dales Countryside Museum



Image credits:

- p. 5 Paintings featured in the Cry of the Curlew exhibition by children from Settle and Kirkby Malham schools
- p. 7 Children enjoying a Dales Countryside Museum display
- p. 9 Child's campaign poster featured in the Cry of the Curlew exhibition
- p. 11 Banners created by artist Hester Cox, featured in the Within These Walls Exhibition
- p. 12 Within these Walls - Haytime in the Yorkshire Dales exhibition, reusing banners from the 2010 exhibition

All images courtesy of Dales Countryside Museum / Yorkshire Dales NPA

Organisational context

The Dales Countryside Museum is a vibrant institution that celebrates the region's rich heritage and natural beauty. Under Fiona Rosher's leadership, the Museum manages its site, staff, collections, fundraising, and exhibition programmes with a focus on community engagement and environmental awareness. The Museum operates with a small but dedicated team with educational activities delivered by freelancers.

For further information:

Dales Countryside Museum www.dalescountrysidemuseum.org.uk/

Waste Watch www.wastewatch.org.uk

Public sector decarbonisation scheme
www.gov.uk/government/collections/public-sector-decarbonisation-scheme

For more information about the projects contact Fiona Rosher, Museum Manager dcm@yorkshiredales.org.uk

Case Study: Exploring climate change, art and activism with youth audiences at **Falmouth Art Gallery**

Falmouth Art Gallery launched *Splanna* (meaning shine in Cornish) in November 2021. It is a collaborative youth project exploring the themes of climate, art and activism for young people aged 11 to 14. This case study explores the project's objectives, impact, and future aspirations.

Overview

- Over the last 5 years, the project has successfully combined art and activism, empowering young participants to advocate for environmental change through exhibitions, workshops, and collaborative projects.
- Focusing on climate, well-being, and art, each year the Splanna group recruits 15 young people who meet on a weekly basis during term time. The emphasis on creating a safe, regular space for participants to engage in discussions and activities related to climate change and well-being has been especially powerful.





Overview (cont.)

- The group sessions incorporate elements like circle times and shared meals, as well as following a restorative justice model. These elements have been especially important to the young participants experiencing anxiety.
- Recruitment for the Splanna project was initially challenging – approaches included trying to reach young people through posters in schools, word of mouth and online promotion. A couple of young people were referred through local school art departments and others came through friends of friends. The first two years was the most diverse group. Splanna now fills quickly through word of mouth. Often attracting young people whose parents are familiar with the art gallery. The Gallery hope to work with schools again for the 2026 intake, to make sure the intake reaches those who may not otherwise access the art gallery. The project helps young people build a sense of belonging and attracts those who feel unable to express themselves confidently in the school environment.
- The project's focus shifts to reflect the interests of each annual cohort and has varied from large-scale climate action to micro actions, focusing on 'our' relationship to nature as well as how we can all protect nature.

Overview (cont.)

- Empowering participants to influence and shape the nature of the group's activity is crucial to the success of the project.
- The planning of the Splanna project involves reaching out to local networks and professionals working in the arts, environmental sciences and climate action.
- Splanna regularly programme local artists to work with them.
- Research into how other organisations have approached youth panels was useful, in particular looking at Kids in Museums and MOMA.
- Challenges faced in the project include managing time scales, balancing the project's demands with other job responsibilities and balancing the need to showcase a wide variety of arts practice as well as being guided by the interest of the participants.
- The key sustainability impacts of the project aim to change participants' views on the world and their relationship with

nature, influencing the gallery's exhibition programming and environmental sustainability practices.

The Project

Splanna is a collaborative youth project for young people aged 11-14 exploring themes of climate, art and activism. Young people join for a year. The project involves weekly meetings during term time and a series of talks, outdoor trips and creative artist led workshops. The meetings are every Thursday evening at Falmouth Art Gallery from 5.00pm to 7:30pm. The group shares pizza together, makes art together and shares ideas and concerns. The project offers local young people the chance to gain new skills, meet new people & learn about local arts heritage.

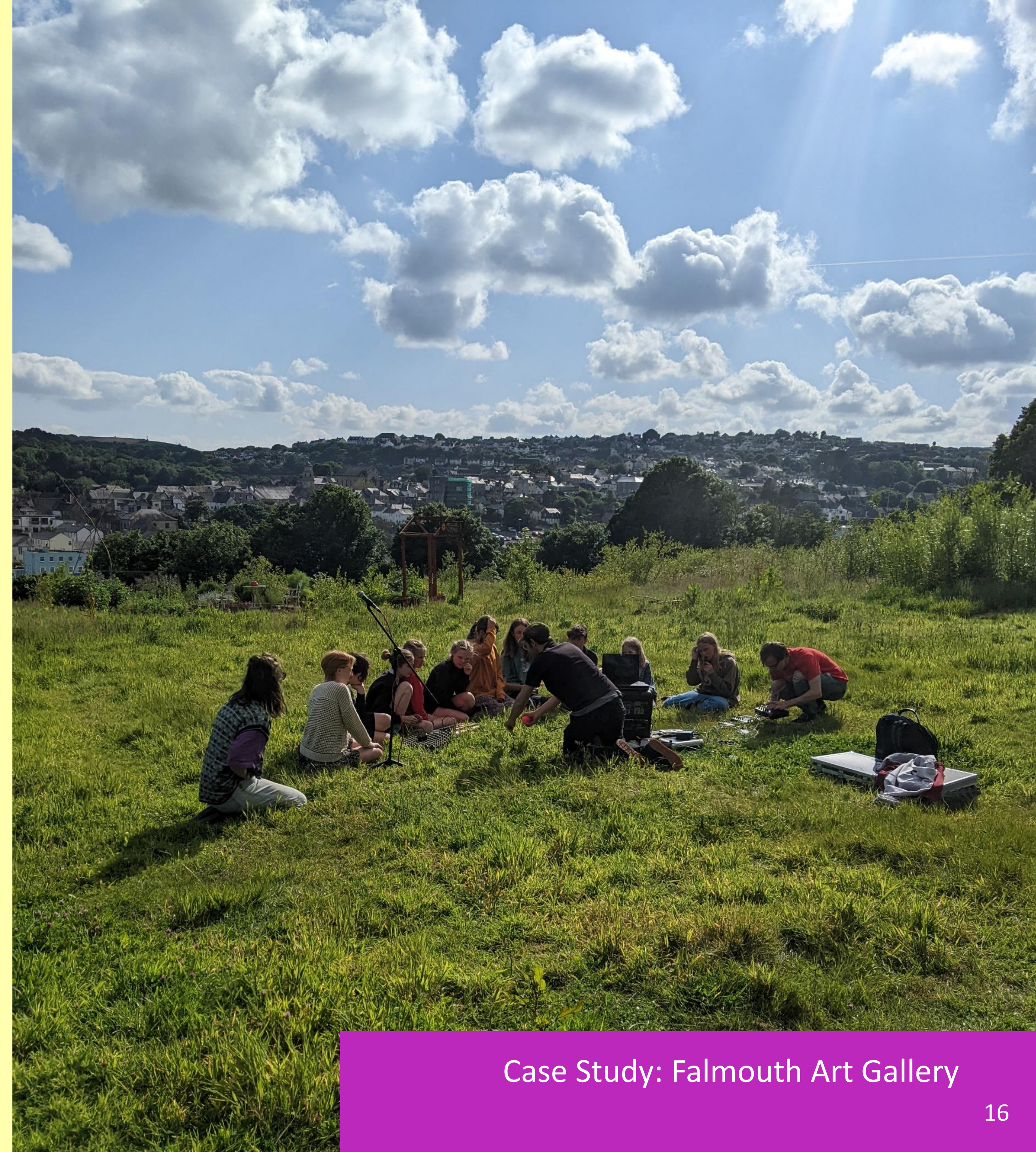
The project was initiated in response to the growing concern among young people about climate change and the need for creative avenues to express their perspectives. It provides a platform for young people to explore environmental issues through creative expression while fostering activism and community engagement.

The project objectives are to:

- To engage young people, in climate conversations through artistic practices.
- To provide a supportive space for youth-led activism.
- To collaborate with local artists, activists, and organizations to amplify environmental awareness.
- To use art as a tool for education and advocacy on climate-related issues.

Execution and Timeline

The project launched in 2021 at Falmouth Art Gallery, the year when the G7 met in St Ives. There had long been an ambition to run a youth programme and the G7 taking place locally provided the focus and funding for the programme. Initially the funding for the project came from Cornwall Council via Cornwall Museums Partnership (which has since closed), an organisation that received National Portfolio Organisation (NPO) funding with seven partner museums across Cornwall. It is now match funded by the Arts Council and the £5k budget covers the food, the materials and artists. It is run by the Access and Interpretation Manager and the Learning Assistant, and these staffing costs are not included in the project's operational budget.

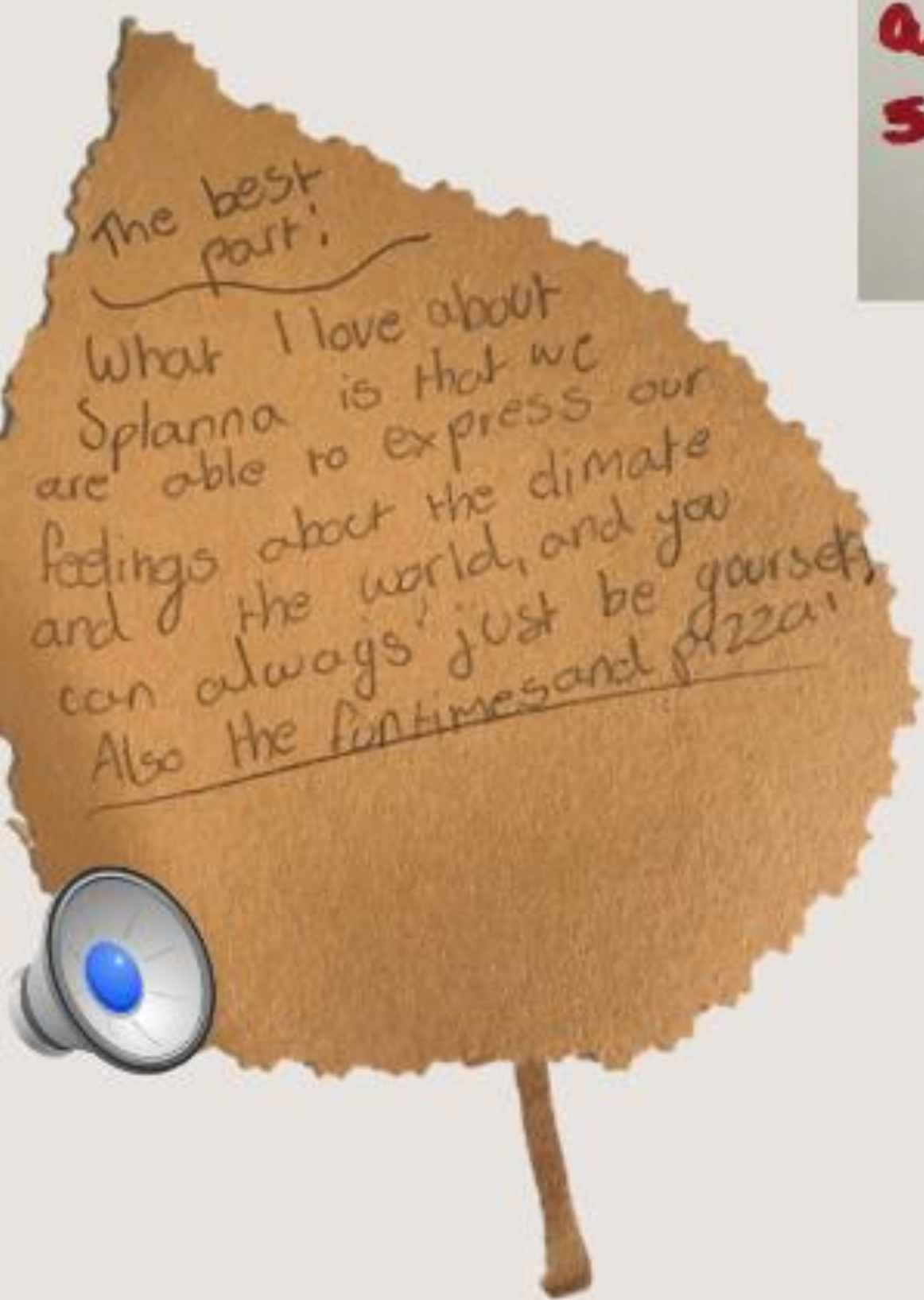


Recruitment to the group in its first year was initially difficult. The Gallery team approached art teachers in local schools who were able to identify some students who would benefit from joining. The team also used social media to reach new participants. During the first year, the group was at its most diverse in terms of the backgrounds and interests of those participating.

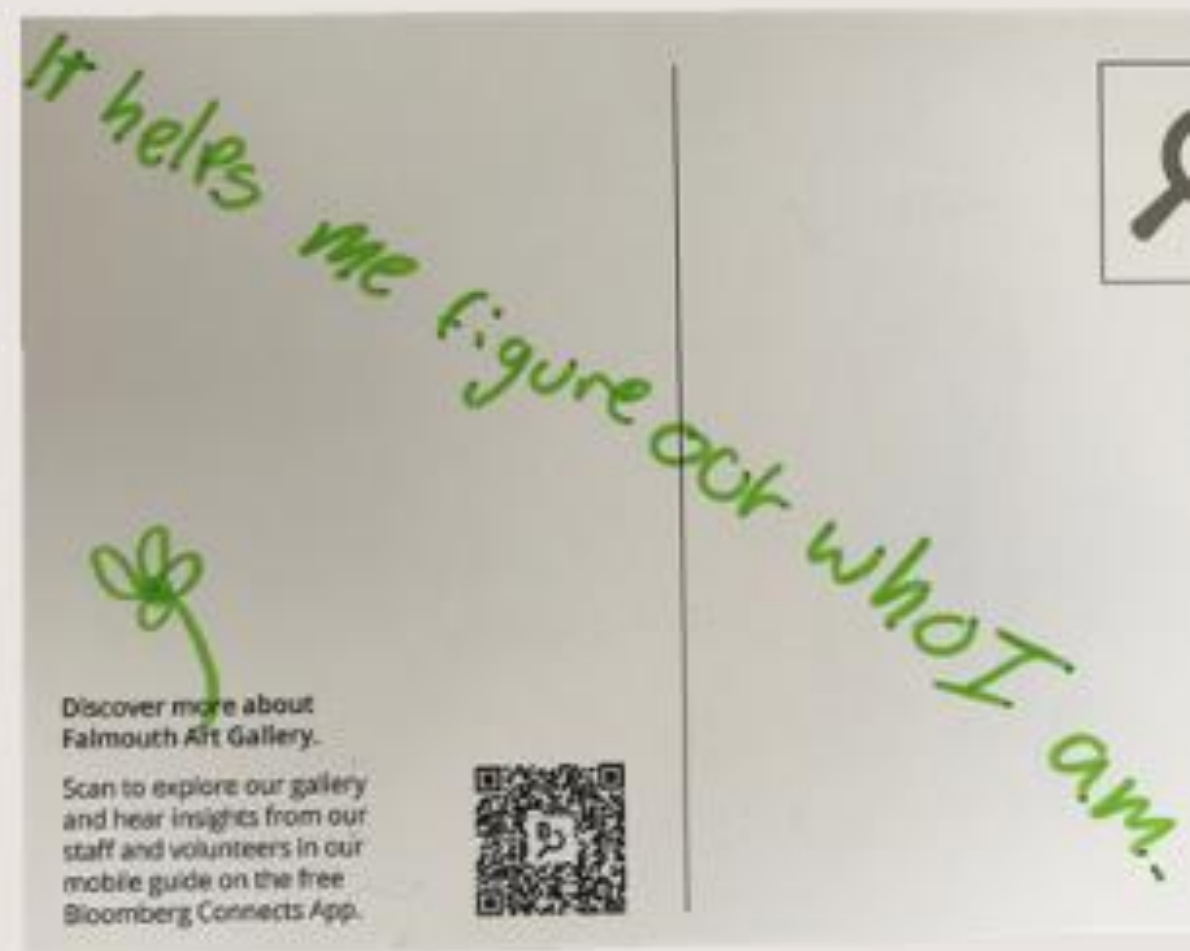
The group of 15 participants start in September and then attend regularly through to the end of June. The last three weeks are held at Loveland, a local community growing space. Once the programme has started for the year no new members are omitted (even if there are dropouts). Through the experience of running Splanna the museum found that anxiety was higher, and participation was lower when new members joined throughout the year. Existing Splanna members get first refusal on a space for the following year up until their 14th Birthday (end of year 9).

Key Activities

1. **Workshops and Creative Sessions:** Splanna hosts regular workshops where participants explore different artistic media, from painting and sculpture to digital art and performance, all with an environmental theme.
2. **Exhibitions and Public Engagement:** The collective organizes exhibitions showcasing youth-created artworks that address climate change, sustainability, and activism.
3. **Collaborations with Artists and Experts:** Local artists are invited to contribute to the project, providing mentorship and expertise.
4. **Community Projects:** Splanna engages with the wider community through participating in environmental events, eco-art installations, and participatory art experiences.
5. **Advocacy and Activism:** The project encourages young participants to use art as a tool for advocacy, whether through protest art, awareness campaigns, or interactive storytelling.



Splanna ~~helps~~
gets me out of the
house every week
and enjoying
some of my friends



Impact and Results

Since its inception, Splanna has influenced both its participants and the broader community. The project has:

- Empowered young people with the skills and confidence to express their climate concerns artistically.
- Increased awareness of climate issues through public exhibitions and campaigns.
- Strengthened community engagement by fostering collaborations between youth, artists, and environmental organizations.
- Created a lasting dialogue on the role of art in climate activism.

The Splanna project at Falmouth Art Gallery stands as a testament to the power of art in climate activism. By nurturing creativity and fostering dialogue, it equips young people with the tools to make a difference in their communities and beyond. As the project continues to grow, its influence will undoubtedly extend further, inspiring new generations to address the climate crisis through artistic expression and activism.



Image credits:

p. 13 Poster for Roll the Dice exhibition

p. 14 Splanna group in the gallery

p. 16 Splanna group holding an outdoor workshop

p.18 Participant feedback cards

p. 19 Participant feedback card

All images courtesy of Falmouth Art Gallery

Organisational context

Falmouth Art Gallery is a free, dynamic community art space that welcomes everyone to enjoy and create art. The gallery has an outstanding collection of over 2,700 artworks that range from Pre-Raphaelite and British Impressionist paintings to contemporary prints, photography and a children's illustration archive. It also has the largest contemporary collection of automata in a public museum and regularly commissions new ones. As a community focused gallery, it offers a range of participatory workshops and events for the whole community, working with artists to produce high quality learning experiences.

For further information:

Falmouth Art Gallery

www.falmouthtowncouncil.co.uk/falmouthartgallery

Kids in Museums [Youth Panel Tips](#)

MoMA [Messy, Chaotic, and Strange: Understanding the Value of MoMA Teen programmes](#)

For more information about the project contact Sarah Scott

Learning@falmouthartgallery.com

Case Study: Using storytelling to explore climate and environmental responsibility and through the River Wye at **Hay Castle Trust**

Hay Castle was selected as one of the ten host locations for Bath Spa University's StoryArcs residencies known as Story Associates. The project, titled *Tarddle* (meaning "source" in Welsh), sought to explore the intersection of arts and research, with an emphasis on encouraging greater awareness and sensitivity to the impact of human activity on climate and environmental responsibility in the local area. The final work emphasized the dynamic changes happening in the region, particularly how the river and its surrounding environment were being shaped by broader climate challenges.



Insights, challenges and opportunities

- Storytelling is a useful medium to bring together many different and sometimes conflicting views about environmental issues and the impact of climate change in way that is respectful and builds bridges.
- Strong partnerships and a well-crafted project brief were essential to the project's success. Collaborative work between Hay Castle and the Bath Spa University StoryArcs provided the museum with time and resource support to produce something new and different.
- The AHRC's platform for recruiting Story Associates proved to be an effective way to reach a diverse pool of applicants. Focusing recruitment on storytelling, interpersonal skills and an aptitude for building networks helped Hay Castle to appoint an artist/writer with the right skills in community engagement, and ability to connect with local people over environmental issues.
- Awareness of the broader production timelines of all the partners, for example other Hay Castle projects, the book

festival and the amount of time recruitment takes, was crucial for balancing the various stages of the project.

- Access to digital equipment and resources (the tools needed for digital storytelling) was made possible by partnering with the local university.
- Future projects could benefit from more validated evaluation methods to capture audience feedback and measure the impact more comprehensively.

Project background

In the heart of Hay-on-Wye, the "town of books", near the border of Wales and England, Tom True, Executive Director of the Hay Castle Trust, sought to explore new ways of storytelling that would resonate beyond the traditional book-focused narrative. True was inspired to create a fresh interpretation of storytelling that could deepen the connection between people, their community, and the world around them.



To bring this vision to life, True collaborated with Bambo Soyinka, the Professor of Story and Director of TRACE (The Research Centre for Transnational Creativity and Education) at Bath Spa University. Professor Soyinka leads StoryArcs, an AHRC (Arts and Humanities Research Council) programme which is conducting a deep exploration into the nature of storytelling skills, seeking to engage communities through creative residencies.

The StoryArcs programme funded ten residencies, known as Story Associates. The focus of the project was to highlight the challenges of isolated rural communities, with an emphasis on contemporary rural life. Hay Castle was selected as one of the ten host locations for the Story Associates, thanks to its commitment to bringing arts and research together and its focus on raising awareness of local issues including the environment.

Story Associate selection and project focus

Tom Bullough, a writer and storyteller, was chosen as the Story Associate for Hay Castle. The initial creative idea driving the recruitment process was to find an exceptional storyteller working in any medium to experiment and develop original ideas rooted in the exploration of contemporary rural life. The desired outcomes

were to improve cultural understanding of rural lifestyles and ways of living, and to influence change by sharing and tackling problems in rural contexts.

The brief said: “Who we’re looking for: An Expert Storyteller with strong interpersonal skills, aptitude for building networks and connecting people and a community focus. You may have traditional storytelling skills (for example, writing). But, equally, we are open to applicants from visual and/or multimedia storytellers.”

Bullough's approach was to travel from the source of the River Wye, interviewing locals to uncover the hopes, concerns, and stories of the communities along its banks. His work emphasized the dynamic changes happening in the region, particularly how the river and its surrounding environment were being shaped by broader climate challenges.

The project resulted in a high-quality documentary-style film production, featuring balanced, principled journalism and blending responses from various stakeholders—environmentalists, poultry farmers, and others—reflecting on the

shared experiences and concerns that connect the community linked to care for the environment. It beautifully showcased how local issues intersect with global environmental challenges, all while emphasizing the deep connection the people have with the land they call home.

Project structure and funding

This project was part of a larger initiative funded by the AHRC, with Cardiff Metropolitan University acting as the mentoring institution. The University supported Hay Castle with mentoring services and access to resources, including editing, photography, and other production tools. As a host, Hay Castle did not receive any funding directly but contributed through in-kind donations such as space and staff time.

As part of the project, Hay Castle received:

- A fully-paid Story Associate for one year, part-time
- The opportunity to work on a project/scheme of their choosing, so long as it related to story

In return, Hay Castle contributed funding in-kind as a partner and agreed to:

- Develop a project brief in discussion with the AHRC Story programme Director
- Sit on the Story Associate interview panel
- Provide the Associate with project feedback at agreed points
- Take part in entry and exit interviews
- Deliver a training workshop
- Deliver an exhibition

The AHRC budget was held by the University and primarily covered university overheads and production costs. This collaboration enabled the project to thrive, with strong academic and creative support driving its success. The project partners were Story Associate – Tom Bullough; Story HQ – Bath Spa University; Host – Hay Castle Trust; Academic Mentor – Cardiff Metropolitan University.

Timeline and implementation

The project spanned approximately 18 months, from initial approval to completion. The recruitment and approval phase took six months, while Tom Bullough's active work as Story Associate took place over 12 months. The timeline was flexible, allowing for adjustments based on personal circumstances and the scheduling of other Hay Castle events. Post-production work followed the main project phase, and the final presentation of the project took place at the beginning of the following year.

The planned timeline was:

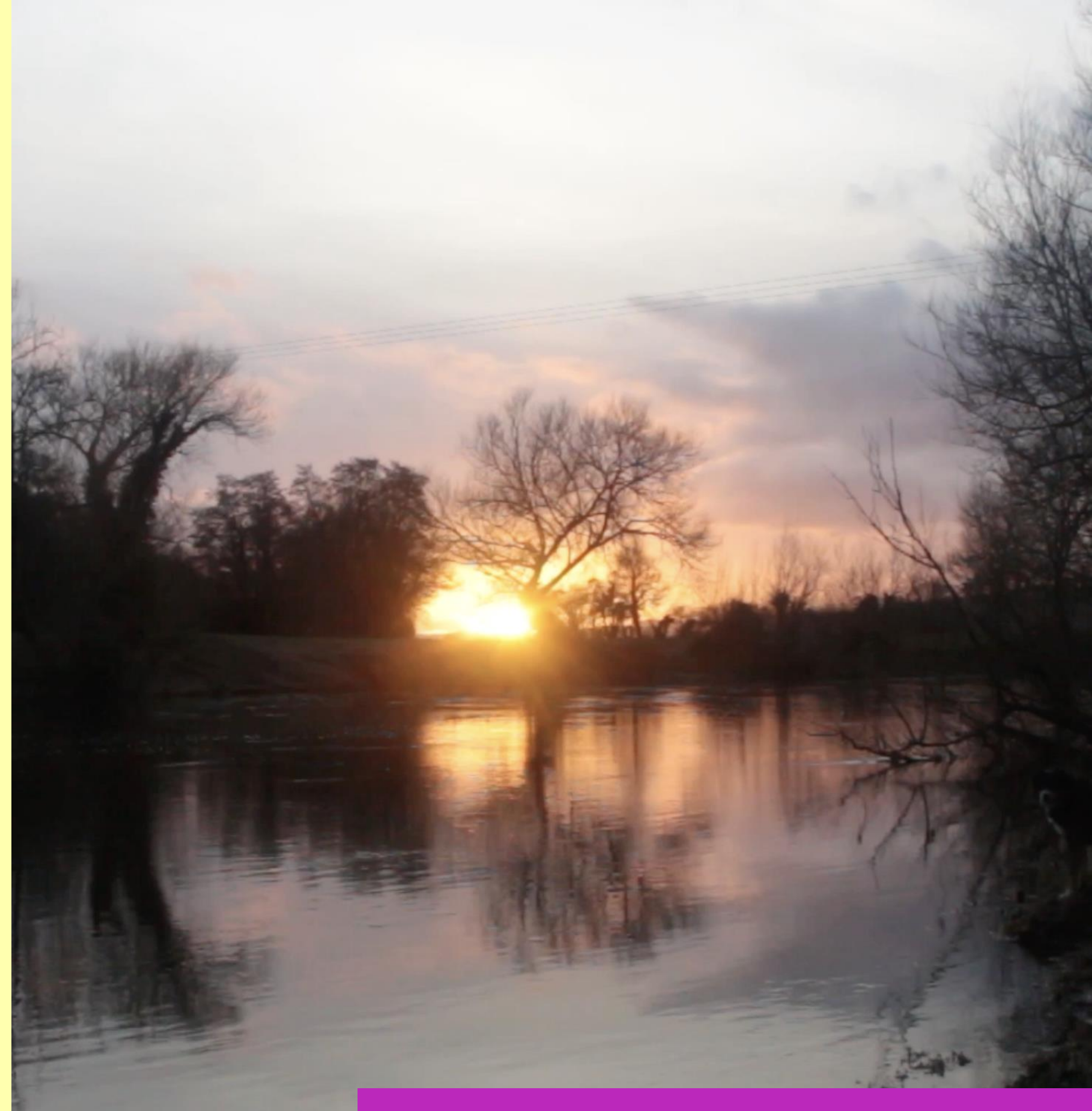
- Return Host Project Brief
- StoryArcs Campaign goes live: w/c 24 April 2023
- Story Associate Interview Week: 5 – 9 June 2023
- Announcement of successful Story Associates 17 June 2023
- 6 and 12 month placements begin July/August 2023

Tom Bullough began in September 2023 and concluded in November 2024 with the project launching at the Hay Festival Winter Weekend that month.

The project faced several challenges, with rural transport and connectivity being one of the most significant hurdles. Travel expenses were high due to the remote nature of the project's location. Additionally, finding the right person for the role of Story Associate was critical and potentially difficult to replicate for future projects. The lack of physical accommodation for a residency was also a consideration that required creative solutions. Camera and sound recording equipment was provided through mentor university and AV equipment provided by the Hay Castle Trust for the installation.

Project outcomes and impact

The primary aim of the project was to strengthen the relationship between people and their environment, particularly in relation to the River Wye. Anecdotal feedback suggested that many participants felt deeply moved by the experience – and Hay Castle proved to be a valuable place to hold public conversations around sustainability which represented a wide spectrum of local stakeholders.



The film was trailed at Hay Castle, during the Hay Festival Winter Weekend, which took the form of a discussion with the Executive Director and Tom Bullough, screening extracts from the project and considering the role of story in addressing the climate and nature emergency.

The project was showcased during the Hay Festival, allowing it to reach a broad audience. A multi-art opening event featuring local artists, singers, and painters helped to create a rich and immersive experience that was both locally relevant and deeply connected to the project's themes. The exhibition comprised of two screening per day in the Clore Learning Space at Hay Castle.

The digital nature of the final output ensured easy access and long-term archiving of the project. The project links to other exhibitions on the Wye around the castle and to the broader programming theme of exploring the role of the arts in raising awareness and sensitivity to our natural and environmental context.

The impact of the project was mostly on those who saw the film. The nature of the impact was around strengthening emotional

connections to our river, raising awareness of its plight, and concluding that we have a shared purpose, across all community groups, to protect and champion their local river.

Undertaking the project gave the Hay Castle Trust confidence as an organisation in holding public conversations about climate change and the environment through the lens of the arts. Research-led arts projects honour the remit of the Hay Castle Trust as an arts centre, while demonstrating how valuable the arts are in strengthening emotional connection to the environment. These emotions are the basis for positive action.

Overall, the *Tarddle* project showcased the power of connecting local communities with their environment through storytelling. It highlighted the importance of using storytelling to bring together a range of views on local environmental issues, while celebrating a deep connection to place, alongside the productivity which is made possible through collaboration with other local institutions and festivals for sharing resources and increasing audience reach.

Context

Hay Castle Trust is a centre for arts, literature and learning in the historic Welsh market town of Hay-on-Wye on the border with England. Hay Castle Trust is a registered charity that was formed in 2011 to preserve the historic site and provide a future of cultural enrichment, educational opportunities and community enjoyment. The vision was to renovate the building and make it safe and useable for current and future generations, creating a cultural space in the Book Town of Hay on Wye. Hay Castle sits in the centre of the town with its busy, creative and entrepreneurial community which is also home to the Hay Festival. They aim to offer a welcoming and open space for people to enjoy the heritage and culture of the area and to support the community and visitors to continue bringing art, literature, heritage and culture to this amazing part of Wales.

For further information:

Hay Castle Trust <https://www.haycastletrust.org/>

Film [Tarddle/Source - a Journey up the River Wye by Hay Castle Storyteller in Residence, Tom Bullough](#)

<https://storyarcs.com/>

TRACE (The Research Centre for Transnational Creativity and Education) at Bath Spa University <https://tracestories.com/>

For more information about the project contact Tom True, Executive Director of the Hay Castle Trust tom.true@haycastletrust.org or info@haycastletrust.org



Tarddle / Source

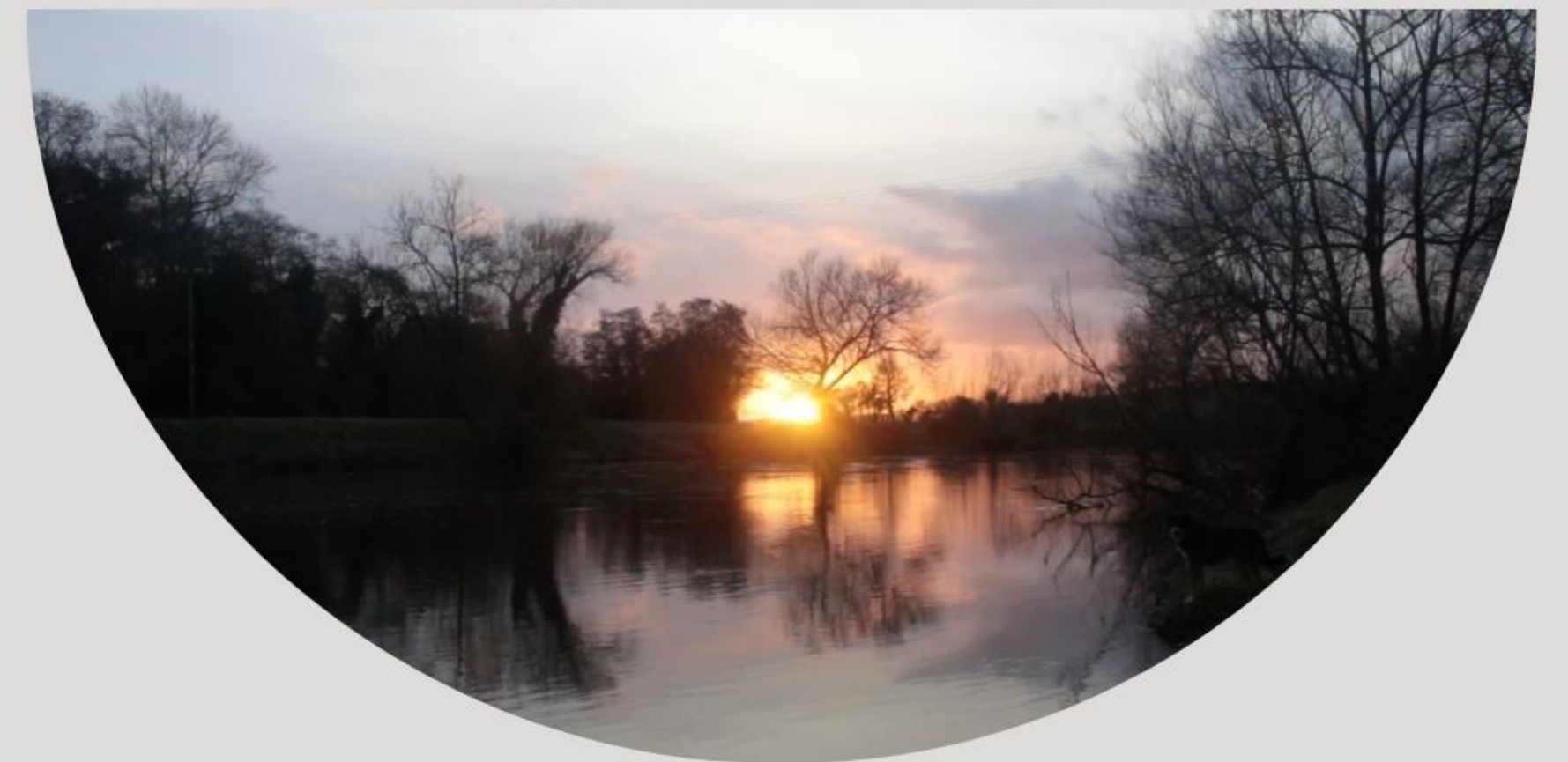


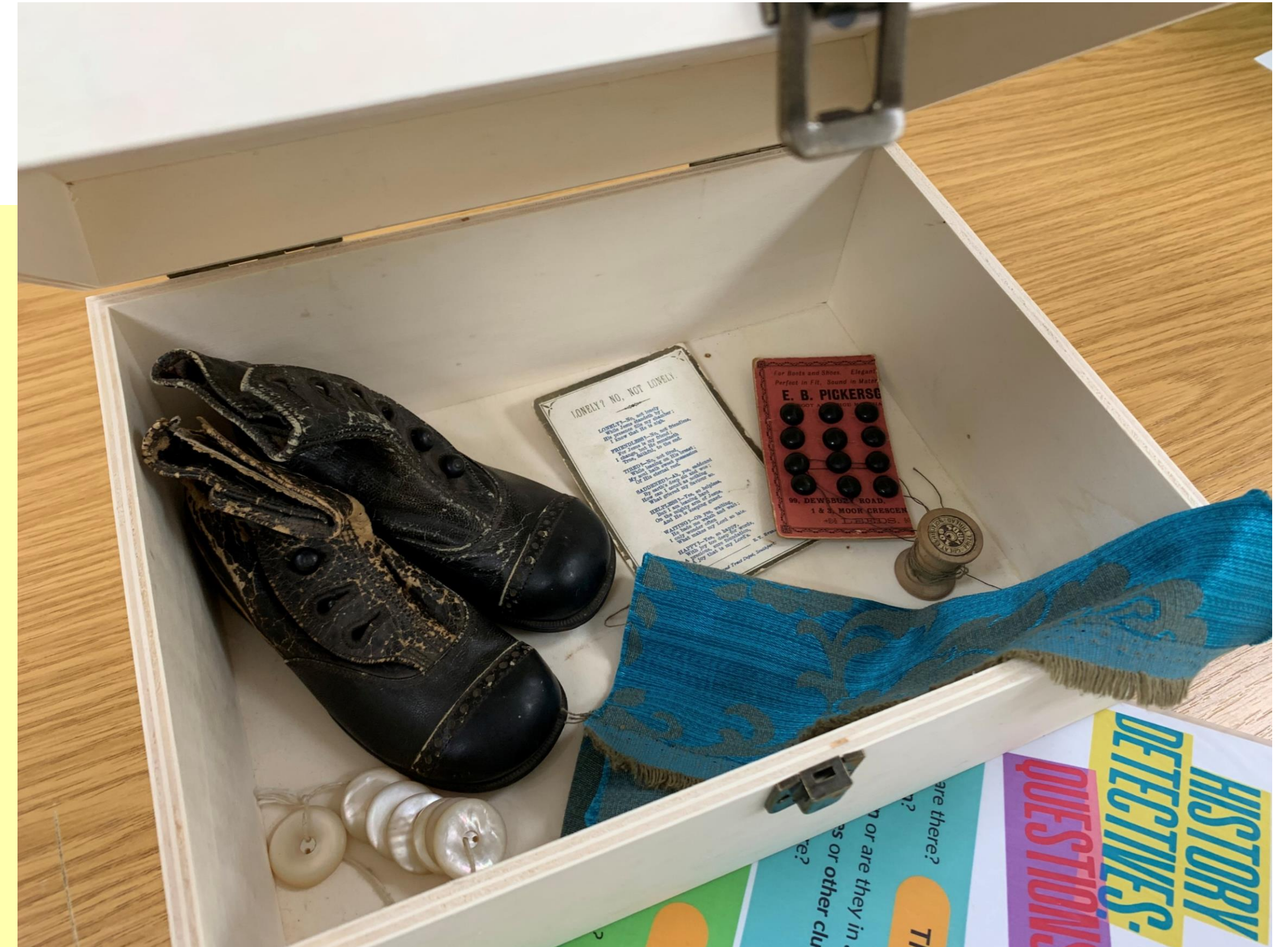
Image credits:
p. 20 Tarddle screening © Tom Bullough
p. 22 & 25 images from Tarddle (cropped) © Tom Bullough
p. 27 Tarddle © Hay Castle Trust

Case Study: Environmental Sustainability and Schools Engagement at Herefordshire Museums & Galleries

Herefordshire Museums & Galleries is undertaking a major capital redevelopment project to transform Hereford Museum and Art Gallery, with a strong focus on environmental sustainability, engagement with local schools and immersive learning experiences. This case study highlights their approaches to educational programming, resourcefulness and commitment to reducing waste, while fostering meaningful connections between visitors and the county's rich heritage.

Museum on the Move

While the museum is closed for redevelopment, a *Museum on the Move* programme will bring exhibits to the community, with learning from this public engagement supporting the development of the new museum offer. *Museum on the Move* aims to be zero waste, using an electric van for transportation and using recyclable or repurposed materials for all activities.



Educational programming

Lara Lourie, the Learning Officer for Herefordshire Museums & Galleries, is responsible for the development and delivery of learning programmes for schools

Creative Use of Resources

Lara champions sustainability by sourcing educational materials from charity shops, local auctions, and natural resources, reducing reliance on new, mass-produced items. For example:

- Hats and vintage toys purchased at the local auction are used for immersive history programmes and workshops.
- Reclaimed tree branches were transformed into a "Herefordshire forest" inside the museum, creating a hands-on environment for children learning about the Stone Age. (The branches were frozen for pest control before being used.)
- Resources are used across various programmes – for instance, wooden boxes that are used in History Detectives are also used for Viking outreach and other family holiday activities - practically nothing is single-use in programming or schools delivery!

History Detectives

One of the museum's flagship programmes, History Detectives, introduces children to the concept of material culture and environmental sustainability through asking children to consider what we consider rubbish and what has value and can be reused. Through hands-on interaction with historical objects—such as bus tickets, wartime leaflets, and Victorian buttons—students discover how everyday items tell personal and social stories. This programme emphasizes:

- The value of objects: Demonstrating that what is perceived as rubbish can hold historical significance.
- Conservation through storytelling: Encouraging children to reflect on the importance of preserving and valuing objects from the past.

Curriculum Integration and Climate Change

While the museum's current school programmes touch on sustainability indirectly, future plans include dedicated climate change programmes. The museum is including Herefordshire's environmental issues in its programming, such as the health of the River Wye.

An oral history project 'Voices of the Wye' captured the stories of 25 people with connections to the river, having lived or worked on the Wye. Clips and quotes from these interviews will be included in the museum redevelopment interpretation.

A second part of the project 'Wye Now' will document the river's condition through community voices and aims to raise awareness about its pollution crisis. Five interviews will be filmed to share the stories of people working to preserve the river today, including lawyers and activists.

Community Collaboration - Teacher Panel and Co-Production

To ensure the museum's learning programmes meet the needs of local schools, Lara has established a Teacher Panel. This group of

educators provides direct input on the design and content of school programmes. The panel represents schools from across Herefordshire, ensuring rural voices are included, and the museum has found that the teachers are more likely to engage with a resource or programme if they know it has been created and delivered with environmental sustainability in mind.

Additionally, the museum is working with co-production groups, collaborating with local organisations to shape exhibits and share diverse community stories.

Rural Accessibility

One of the primary challenges for the museum is transportation costs. Herefordshire's rural nature makes it difficult for schools to afford travel to the museum. To address this:

- The museum offers outreach programmes, bringing exhibits directly to schools.
- Lara is exploring bursaries and travel funds to reduce financial barriers.



Budget

Lara manages the programmes on a limited budget, around £5,000, in 2024. Working sustainably and collaboratively assists with stretching resources:

- Prioritising second-hand materials and reusable objects.
- Offering discounted pilot sessions in exchange for teacher feedback, helping refine new programmes while keeping costs low.

Redevelopment and Sustainability Features

Hereford Museum and Art Gallery is currently undertaking a major capital redevelopment project, transforming its space into a modern, energy-efficient, and flexible venue. With sustainability at its core, it will be the first EnerPHit building of its type in the UK, meaning that it meets the "Passivhaus" retrofit standard in terms of energy efficiency

Herefordshire Museums & Galleries have secured £1 million from the government's Public Sector Decarbonisation Scheme. This support will enable the installation of a new low carbon heating

system, as well as improved ventilation and insulation, making the new museum one of the most energy-efficient heritage public buildings in the UK.

In addition, reuse of original architecture elements, such as floors and mouldings, will reduce demolition waste, whilst preserving the building's character. Flexible gallery designs will avoid short life-span finishes, through modular features. This will enable regular display updates, telling new stories and sharing new collections, and minimize future waste during exhibition changes.

Top tips

- **Sustainable programming:** Creative resourcefulness, such as sourcing second-hand items, reduces costs and promotes sustainability.
- **Community-Centric Approach:** Engaging local schools, teachers, and groups ensures that programming is relevant and responsive to local needs.
- **Hands-On Learning:** Immersive, object-based programmes deepen children's connection to history and material culture, making sustainability messages more impactful.
- **Flexibility and Adaptation:** Lara continuously evaluates and refines programmes based on teacher and student feedback, ensuring they remain effective and relevant.



Herefordshire Museums & Galleries showcase how sustainability, creativity, and community engagement can be interwoven into museum programming. Through resourceful teaching methods, low-waste initiatives, and collaborative partnerships, the museum is not only preserving the past but aiming to inspire future generations to value and protect their environment.

For further information:

Herefordshire Council – History lives here:
<https://www.herefordshire.gov.uk/history-lives>

For more information about the projects contact Herefordshire Museums & Galleries: HerefordMuseums@Herefordshire.gov.uk

Image credits:
p. 28 History Detectives box
p. 31 Planning for the redevelopment
p. 33 Museum on the Move activities
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Case Study: Environmental Sustainability and Community Engagement at **Stevenage Museum**

Stevenage Museum tells the story of the town from pre-history to the present day. They recently ran an environmental sustainability-focused programme featuring the *Extinction!* exhibition (from October 2024 to March 2025) and a community *Meet the Craftivists!* event (1 March 2025). The wider programme included themed workshops and activities for families.

Stevenage council declared a climate emergency in 2019, followed by a commitment to working towards net zero. This prompted the museum to consider aligned programming themes, including the *Extinction!* exhibition and THE HERDS programme, alongside staff completing Carbon Literacy Training and signing up to Julie's Bicycle.

“Great to see the “Extinction” exhibition, reminding us of the need to cherish and protect the natural world on which our society is ultimately dependent.”

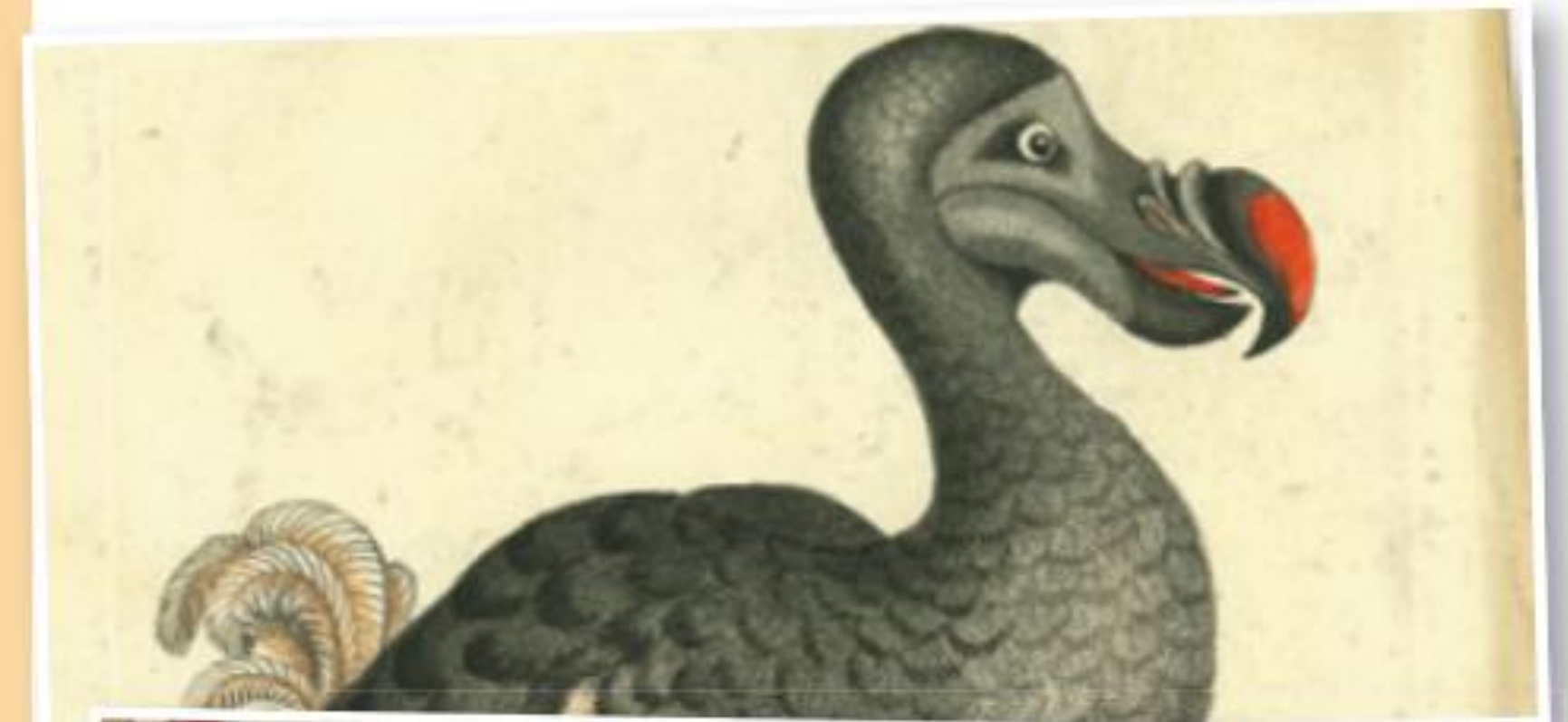
Visitor feedback

Exhibitions

Extinction!

Until 8 March 2025

What is extinction? What happened in previous mass extinctions and are we in the sixth? What can we all do to prevent it?



Insights, challenges and opportunities

- In combination, the Extinction! exhibition, craftivism and other events strengthened relationships with local environmental groups and individuals.
- The museum established new partnerships and broadened its community reach. Partnerships expand marketing reach and foster community ownership of museum programmes.
- The event empowered participants with simple, meaningful sustainability actions, such as repairing old clothing instead of discarding it, particularly with the sewing of positive affirmations about the planet onto the fabric itself.
- The creation of a reusable tablecloth using recycled fabric symbolized the museum's commitment to sustainable practices.
- Their cost-effective mindset resulted in high-impact programming with minimal expenses. Using recycled and low-impact materials reduces costs and aligns with environmental sustainability values.

- The museum received positive visitor feedback through its comments book, indicating the programme's impact.
- External funding gave the team significantly enhanced programming capacity.

Project background

The *Extinction!* exhibition, borrowed from Peterborough Museum, and supplemented with additional loans, was displayed at Stevenage Museum from late 2024 to March 2025. It featured educational content on endangered species and environmental issues, aligning with the museum's broader aim to promote awareness of sustainability.

The museum team planned the exhibition over a year in advance, incorporating it into their annual programming. The space for the exhibition was small but efficiently used to showcase key environmental themes. Animal interaction days and other events enhanced visitor engagement.

Craftivism

To complement the exhibition, the museum partnered with a local craftivist group who had previously used the museum for the creation of a Biodiversity Banner which the museum asked to borrow for inclusion in the exhibition. The panel received positive feedback from visitors, and the museum invited the craftivist group to host a hands-on event with the aim to engage the community in creative activism, raising awareness of sustainability issues through collaborative textile art.

The event was collaboratively planned across multiple meetings, coordinating materials and logistics. The team prepared fabric jigsaw pieces from recycled materials supplied by their partners, which attendees embroidered with environmental messages. The completed pieces were later stitched together to create a reusable tablecloth for future museum events.

Nearly 30 people attended, a higher turnout than anticipated. The group's diversity and enthusiasm exceeded expectations, in particular as a fairly good level of sewing skill was required to participate, demonstrating strong community interest in creative sustainability initiatives.



Animal interaction days

Following the receipt of UK Shared Prosperity Funding (UKSPF) funding the museum held discussions both internally and with local audiences, which highlighted an interest in live animals. Through collaboration with a local provider, learning opportunities were incorporated to create bespoke animal handling days. These events have been successful in bringing new visitors to the museum.

Materials and budget

The museum focused on environmental sustainability by using recycled and low-impact materials for craft activities, including cardboard, paper, and air-dry clay (to avoid kiln firing). The craftivism event relied on donated materials, and required no significant expenses beyond staff time, making it virtually cost-free for the museum. Participants were invited to bring fabric scraps from home.

The exhibition was funded through the museum's general exhibitions budget, supplemented by the UK Shared Prosperity Fund (UK SPF) granted by Stevenage Council.

Conclusion

Stevenage Museum's Extinction! exhibition and craftivism event successfully combined creativity, collaboration, and environmental sustainability. Working with a small team and limited resources, the museum delivered a meaningful programme that engaged the local community and promoted environmental awareness.

“Very informative exhibition. Very much food for thought. Love the material ‘What If’ frieze.”

“Very important to raise awareness of climate change. Everything that we hold dear is totally dependent on a healthy planet. Without a healthy future for our planet nothing else matters. We can all help by simply thinking, talking and acting with a greener mindset.”

Visitor feedback



Image credits:

p. 34 Stevenage Museum publicity using a dodo image provided by Peterborough Museum
 p. 36 What If Craftivists' Biodiversity Banner on display in the museum's temporary gallery
 p. 38 Jigsaw tablecloth event graphic using the Craftivist Collective Handbook by Sarah Corbett
 All images courtesy of Stevenage Museum

Organisational context

Stevenage Museum tells the story of Stevenage from pre-history to its development as the first New Town and on to the present day, using objects (both in cases and on open display to touch and explore), text panels, with (hearing loop) sound summaries of key panels, films, and a variety of hands-on activities and computer interactives. The museum is housed in the undercroft of the parish church of St Andrew and St George.

For further information:

Stevenage Museum www.stevenage.gov.uk/stevenage-museum

<https://whatifcraftivists.wordpress.com/2023/06/28/the-biodiversity-banner-is-finished/>

[UK Shared Prosperity Fund: prospectus - GOV.UK](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/674442/prospectus.pdf)

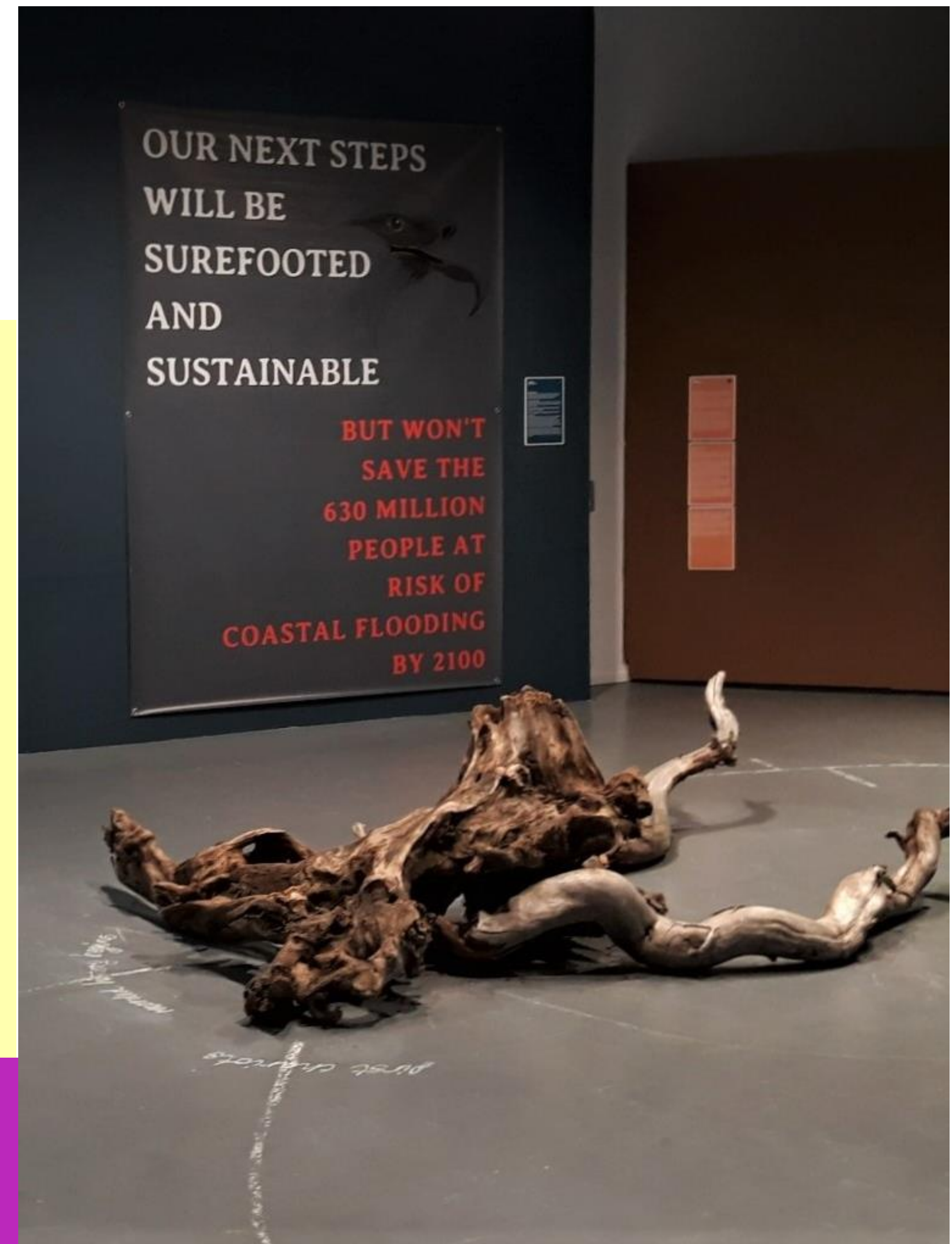
For more information about the project contact Kate Johnston
 Learning Officer museum@stevenage.gov.uk

Case Study: The Turnpike Gallery – Empowering Young Curators through the *Climate. Emergency. Hope.* Exhibition

The Turnpike Gallery's *Climate. Emergency. Hope.* exhibition stands as a powerful example of how arts organisations can engage young people as decision-makers, creating impactful, socially conscious exhibitions with a focus on the climate emergency. By prioritising sustainability and authentic youth involvement, the project not only raised awareness about the climate crisis but also empowered the next generation of creative leaders.

Insights, challenges and opportunities

- Youth involvement in curation around climate and environmental responsibility offers a meaningful platform for authentic expression and skill-building.
- Environmental sustainability in exhibition design can be achieved through practical, low-cost solutions such as using recycled materials and digital displays.



Insights, challenges and opportunities (cont.)

- Collaboration with artists can foster generosity and support for environmental causes, making impactful exhibitions possible despite budget constraints.
- Ongoing mentorship and support are essential to sustaining youth engagement throughout long-term projects.

Project background

The Turnpike Gallery, located in Leigh, in the borough of Wigan, has long been a hub for artistic engagement and cultural exploration. Under the leadership of Martyn Lucas, Lead Officer for Arts (Turnpike), the gallery undertook an initiative aimed at empowering young people to become curators. The project, centred around the curation of the *Climate. Emergency. Hope.* exhibition (1 April 2023 – 17 June 2023), sought to raise awareness about the climate emergency through artistic expression.

The gallery wanted to create an exhibition involving young people in the curation process that would communicate stories through

showcasing compelling artwork, including artists working nationally and internationally. The goal was to amplify young people's voices and provide them with an authentic platform to express their perspectives on climate change.

Linked to this was the desire to recruit and retain young participants throughout the project's duration. Being a small team at the Turnpike Gallery with limited resources, there were logistical constraints to navigate, not least, sourcing and transporting artwork from international artists while adhering to sustainability principles. The budget for the project was £10k which went on artist fees, technical support, marketing, transport, trips, materials and refreshments.

The theme of climate change for the exhibition was selected by the gallery but with the intention of having young people's voices present throughout. The actual message of the exhibition was to raise awareness of climate change at local and global levels and to highlight how artists are responding and offering some hopeful solutions.

Approach

The project was structured around the following key strategies:

1. Youth-Led Curation

The project placed young people (aged 17 to 25) at the centre of the curatorial process. Working with a freelance facilitator, five young curators were actively involved in selecting, organising and interpreting the exhibition. Together with guidance from the gallery team the group participated in field trips to Manchester Art Gallery and other venues, providing them with first-hand exposure to professional curation practices.

The Turnpike Gallery curator made an initial presentation of artists (living and dead) whose work directly or indirectly addresses climate change and environmental issues. This was compiled by online research as well as an existing knowledge of some artists. The 'buffet' of artists was added to over several weeks as the external project facilitator, the gallery Learning & Engagement Officer and young curators added to the list. This list was further explored, allowing the team to select pieces that resonated with the agreed message. The young curators then

developed the exhibition design using a scale model of the gallery space which enabled them to experiment with layout and placement.

2. Environmentally Sustainable Practices

Environmental sustainability was at the core of the project, and this was reflected in the repurposing of materials, for example, the team reused old paint for the gallery walls and recycled existing timber for plinths . To reduce transportation emissions, certain international artworks were presented digitally, avoiding the need for costly and environmentally taxing shipping. Allied to this, the Gallery used second hand AV equipment sourced from a previous Wigan Council arts project.

3. Mentorship and Facilitation

The project benefitted from the expertise of the external facilitator, Liz Postlethwaite, who specialized in working with young people. Approached by the gallery because of her experience in working



with young people (and artists) and expertise in Permaculture, the external facilitator's role was instrumental in maintaining participant engagement and energy, providing a consistent point of support. This ongoing support was essential to enable the young people to take part. She was responsible for developing a programme of engaging activities and managing the complexities of timetables, limited working hours, and young people.

4. Collaboration with Artists

The gallery secured the cooperation of artists, including international artist David Maisel, who generously provided digital versions of his work, making the exhibition more accessible and sustainable. Local artist Rebecca Chesney gave her time to host a visit by the young curators at her studio in Preston and give valuable insights into her work.

5. An Emotionally Impactful Exhibition Narrative

The exhibition presented a diverse range of artists from different disciplines, all of whom address something of the relationship between people and nature, and how human activity impacts on the environment, which in turn affects human lives, (some more than others). A key strand running through the exhibition was the

voices of young people in articulating their responses to the artists' work and how they engage with the issues presented. The young curators were involved in choosing artworks which highlighted issues around rising sea levels, destructive mining, shrinking glaciers and plastic pollution, alongside those which celebrate conservation of unspoilt natural environments, upcycling and re-knitting, restoration of biodiversity and food justice. Taken as a whole, the exhibition presented visually impactful works in a variety of media, alluding to the complexity of the climate emergency and our responses to it. The gallery wanted visitors not to be bombarded with yet more facts and figures around climate change, but to leave the exhibition with images resonating in their imagination in more evocative, poetic and empowering ways.

Results

The *Climate. Emergency. Hope.* exhibition delivered significant social and educational impact:

Youth Empowerment and Skill Development

Participants gained practical curation skills, including layout

design, artist selection, and interpretation. The project fostered confidence and self-expression, particularly for individuals with personal challenges, helping them to develop a strong sense of belonging.

In terms of gaining skills in confidently communicating around the topic of climate change, the project had significant impact and for one of the young people their involvement and its positive impact was especially profound. As someone with Autism (without learning disability) and anxiety they found a home at the gallery which improved their confidence and communication skills. One of the young curators continues to attend regularly.

Audience Engagement and Impact

The exhibition resonated with visitors by providing an emotional connection to the climate emergency, avoiding information overload with facts and figures. Audience feedback highlighted the emotional and thought-provoking impact of the artwork, encouraging reflection on sustainability issues.

Feedback left in the visitor comments book included:

“Inspiring collection of work - lovely to have young curators involved in the process. The exhibition has left me wanting to go and make new work!”

“Very powerful. Esp that sense of the beauty of nature and 'hope' is so important.”

“A really beautifully considered exhibition. The inclusion of the curators thoughts behind selection is a really lovely layer. It is refreshing to see works spaced carefully with the aim of guiding audiences slowly around.”

“A really interesting exhibition. Well done to the young curators! A good mix of art works, use the space well, and give different views of climate change.”

“A truly wonderful place to relax and educate yourself on the arts and the pure devastation of the climate crisis. It was wonderful to see so many passionate minds taking a stand.”

“A very thoughtful provoking exhibition! Especially the videos about mining + pollution but also the hopeful work is strong.”

“Very interesting exhibits and presentations. Reversing climate change is now critical to the survival of us all and highlighting our current plight is important to re-double our efforts!”

“Fascinating exhibition full of energy, colour, and light. It is hard, but important to look at the destructive images but reassuring to see the solutions offered. It is a brave exhibition and good to see young people making their own choices.”



Lasting Legacy and Future Projects

The project inspired the formation of a Creative Community collective, composed of young people who continue to influence the gallery's programming and decision-making. The success of the exhibition has led to ongoing youth involvement in future curatorial projects, ensuring their voices remain a core part of the gallery's identity.

Context

The Turnpike Gallery is a local authority arts and exhibition space in Leigh, run by Wigan Council. The Turnpike Gallery, Wigan Museum and Wigan & Leigh Archives are all part of Wigan Council's Culture service. The Turnpike Gallery offers free cultural activity for all ages, rooted in the belief that meaningful encounters with art and artists can support wellbeing, open us up to new perspectives and create connections with each other and our environment. They collaborate with their communities,

platform marginalised voices and nurture local artists through their exhibitions and engagement programmes.

The Gallery is based in the Turnpike Centre. The Turnpike Centre is part of the fabric of the town - over the years, its reputation has brought artists, local organisations, and visitors together to shape the cultural offer in Leigh, the Wigan borough, and beyond.

For further information:

The Turnpike Gallery <https://www.theturnpikegallery.org.uk>

For more information about the project contact Martyn Lucas, Lead Officer for Arts theturnpikegallery@wigan.gov.uk

Image credits:

p. 39 C.E.H. featuring Rebecca Chesney, Robyn Woolston, Gregory Herbert, Sophy King

p. 42 Luke and Elisabeth studio visit to Rebecca Chesney

p. 44 C.E.H. featuring Brigitte Jurack and Jane Lawson

All images © Turnpike Gallery and Artists

Case Study: Reanimating the Past – Blending Digital Innovation with Natural Science Education at the **Watt Institution**

The Watt Institution comprises The McLean Museum and Art Gallery, the Watt Library and Inverclyde Archives. The collection represents both a unique record of Inverclyde and broader international heritage embodying some of the most important themes, events, industries and experiences that have helped shape modern Scotland and the world.

The Watt Institution's Reanimating the Past project started in March 2024. At the time of writing (April 2025) the plan was to finish in May 2025. It is a groundbreaking initiative designed to engage the public with natural sciences through the creative use of digital technology.



Insights, challenges and opportunities

- Digitising the museum's historic herbarium and entomology collections has made them accessible and engaging.
- Distributing seed-infused paper sheets featuring plant and butterfly species encourages hands-on learning.
- Creating an AR-enhanced educational resource is teaching schoolchildren about biodiversity and pollination. Involving children in butterfly observation and data collection initiatives promotes sustainability and citizen science.
- Partnering with local ranger service, Clyde Muirshiel Regional Park, and butterfly conservation charities has enriched the educational content of the project. The collaboration involved providing digital 3D scans of butterflies to assist with butterfly surveys submitted to national databases.
- The project resources will continue to benefit schools beyond the project's initial scope, through workshops and resources shared with the schools, fostering long-term engagement with biodiversity.
- Experimenting with various workflows allows for efficiency in 3D-scanning delicate butterflies, which requires time and precision.
- Bringing schools to the museum is complicated by limited transportation budgets. To address this, travel costs were factored into the initial funding proposal.
- The planting phase is determined by seasonal constraints with spring being the optimal growing period for the seed-infused sheets.

Project Overview

The *Reanimating the Past* project is funded by Museums Galleries Scotland (MGS) Development Fund. This fund provides up to £60,000 for Accredited Museums in Scotland to make strategic steps toward resilience. The fund is awarded twice a year, meaning future rounds are possible.

The *HerbARium* project is one element of the wider Reanimating the Past project. With an overall £54,000 budget, the project aims to raise awareness of local biodiversity and promote sustainability by blending digital resources with hands-on educational experiences. These project goals and objectives were set out by the Watt Institution.

Using digitised collections, augmented reality (AR) and seed paper, the project makes collections accessible and educates schoolchildren about biodiversity and pollination.

Images from the historic herbarium collection are used to produce the interactive AR prints. The prints are created using recycled materials from the museum and embedded with seeds. By scanning a QR code on the prints with a phone or tablet either at the museum or remotely, users can bring the plant to life and see in augmented reality the insects which rely on each plant. After enjoying the AR experience, the print can be planted, allowing the embedded seeds to sprout and attract butterflies and caterpillars, turning your garden into a wildlife-friendly space. Through this, the Watt Institution is not only preserving

and digitising its extensive natural sciences collection but also transforming it into an interactive educational resource.

Project Execution and Timeline

The project unfolded in two phases over the course of a year:

Phase 1: Digitisation (Approx. 2 months)

- The team photographed and 3D-scanned the herbarium's 1,000+ plant specimens and a substantial butterfly collection. The Natural Sciences collection includes specimens from around the world. The project prioritised digitising local specimens, particularly the herbarium and entomology collections, to align with local conservation efforts like Peatland Restoration.
- The digitisation workflow was designed in-house, leveraging expertise in photography, 3D scanning, and digital design. The expertise in 3D scanning, photography, and digital design came from the project lead, who has a background as an artist working with digital technology.



Museums without in-house expertise can access free online resources, such as YouTube tutorials and photogrammetry apps, to begin learning. 3D scanning is now widely accessible via mobile devices using photogrammetry. The project lead has previously provided advice sessions to other museum professionals on how to improve their digital offerings and scan collections.

Phase 2: Development and Engagement (Approx. 10 months)

- The digitised collection was transformed into AR resources, with QR codes enabling audiences to view animated plants and butterflies. The AR resource can be accessed anywhere. Users simply scan a QR code, and no app download is required.
- Schools were provided with seed-infused paper sheets, made from recycled museum materials, allowing students to grow wildflowers that attract local pollinators. Children participated in museum workshops and will later plant the seed sheets in their school gardens.

Impact and Results

The project has successfully:

- Engaged multiple primary schools, offering hands-on learning experiences in biodiversity and environmental sustainability. 65 pupils, aged 5 to 11, participated in the HerbARium project. The schools involved had not previously engaged with The Watt Institution. Schools can access the AR resource remotely and moving forward the project will be expanded to more schools. A guide will be developed to help teachers create the resource themselves by making the seed paper. The project has provided blended learning resources, including digital tools and physical experiences, aligning with the school curriculum.
- Contributed to pollinator-friendly habitats in local school gardens, promoting biodiversity.
- Revitalised public interest in the museum's natural sciences collection, which had been largely unseen for over 50 years. The Natural Sciences collection has had over 67,000 views to the Sketchfab page featuring digital models from the Reanimating the Past project. The Watt Institution is updating its Collections Management System (CMS), and once complete, digitised specimens from this project will be available online.



- The *HerbARium* resource will expand to include new plant species and butterflies.
- After the project concludes digital skill-sharing workshops will be developed and delivered in partnership with Museums Galleries Scotland to help other Scottish museums develop digital skills. This aligns with Scotland's Museums and Galleries Strategy, which focuses on improving sector skills, confidence, and knowledge-sharing.

Conclusion

The *HerbARium* project has laid the foundation for future digital and educational initiatives at the Watt Institution. With growing interest from other schools, the museum plans to expand its outreach and offer digital skill-sharing workshops to help other organisations replicate the project model.

The project demonstrates how digital innovation and sustainability can transform museum collections into dynamic, educational experiences. By combining AR technology with hands-on biodiversity activities, the initiative has inspired young

learners, revitalised historical collections, and fostered environmental awareness—leaving a lasting legacy for the museum and its community.

Organisational context

Named after the world renowned inventor and son of Greenock, James Watt, the Watt Institution and its collections are a national treasure and Inverclyde's key heritage attraction. The Watt Institution comprises The McLean Museum and Art Gallery, the Watt Library and Inverclyde Archives. An addition to the earlier Watt Library which opened as a subscription library in 1837, The McLean Museum & Art Gallery opened its doors to the public in 1876. Since the 1970s Inverclyde Council has managed the venue and in 2019, following extensive structural renovations, the venue reopened with its original name, The Watt Institution. The collections which have developed over the years represent both a unique record of Inverclyde and broader national heritage embodying some of the most important themes, events,



Image credits:
 p. 46 HerbARium augmented reality on iPad
 p. 49 HerbARium paper sheet
 p. 50 HerbARium augmented reality on iPad
 p. 52 Reanimating the Past poster (crop)
 All images © The Watt Institution

industries and experiences that have helped shape modern Scotland. Inverclyde Archives holds over 300 years of records, material, ephemera, photographs and items relating to the local history of Inverclyde.

For further information:

The Watt Institution <https://www.inverclyde.gov.uk/community-life-and-leisure/heritage-services>

The Watt Institution's Sketchfab page with digital models <https://sketchfab.com/wattinstitution>

Museums Galleries Scotland Development Fund <https://www.museumsgalleriesscotland.org.uk/funding/museum-development-fund/>

A blog post on Peatland Restoration <https://sway.cloud.microsoft/OgHMEeVmaPMOTtfl?ref=Link>

For more information about the project and plans for digital skills sharing workshops contact the Digital Project Officer, Watt Institution wattinstitution@inverclyde.gov.uk



These case studies have been compiled by Sam Cairns and Vanessa Rayner in collaboration with Art Fund.

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Image credits:

p. 1, 3, 53 and 54

Photography by David Levene, Ant Strack and Hugo Glendinning

Photography features designers Ukwanda Puppets and Designs Art Collective and students of Wimbledon College of Arts, UAL

p. 2 Pangolin puppet, Puppet Designer: Tyson Howard

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