

Coventry UK City of Culture 2021

How successfully has the environmental theme been integrated into UK City of Culture 2021?

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EXECUTIVE SUMMARY

Introduction

This focus study examines how appreciation for the natural environment was integrated into Coventry UK City of Culture 2021 (UK CoC 2021). This is the first time that there has been an explicit and sustained focus upon the natural environment within a UK City of Culture programme of activities. Data, which indicates low levels of engagement between the population of Coventry and its green spaces, emphasised the imperative to use the City of Culture programme as a catalyst for change. The onset of the COVID-19 pandemic only served to heighten that imperative.

The Coventry City of Culture Trust commissioned four focus studies to contribute to the wider Performance Measurement and Evaluation (PME) process.¹ This study is based upon the original question posed during the commissioning of the research:

In what ways has cultural programming and other Trust activity increased awareness of environmental responsibility and increased engagement with the natural heritage and natural landscape areas of the city?²

Using the UK CoC 2021 Theory/Story of Change logic model as a guideline, this focus study examined the following key questions which collectively enabled the research team to tackle this overarching question:

- (i) how did the natural environment become an explicit focus within UK City of Culture 2021?
- (ii) how were environmental issues embedded within the overarching planning, governance and organisational delivery of UK CoC 2021?
- (iii) how did people experience and practise the environment through UK CoC 2021's activities and events?
- (iv) how were the behaviours of organisations, communities and individuals, influenced and changed during UK CoC 2021?
- (v) what factors affected the delivery of the Green Futures³ programme within UK CoC 2021?

Methodology

The research deployed a mixed method approach to collect the data required.

Secondary data were collected via key documents, such as different iterations of the initial UK CoC 2021 bid document. Analysis of social media outputs was undertaken to assess levels of engagement with environmental events and activities.

Key informant interviews were undertaken with a range of stakeholders, including those involved in planning and delivering the programme, external partners and members of the public who attended events. Qualitative methods were used to reveal Coventry citizens' environmental concerns, expressions of responsibility, consideration of the importance of green spaces and understanding of the City of Culture in relation to its green themes. A participatory methodology was employed, which involved people collating and discussing pictures of actions taken to minimise their impact on the environment and the green spaces considered important. Event participants' perspectives on issues related to nature and

the environment at UK CoC 2021 sites, projects and events, were collected using methods such as 'walking and talking tours', focus groups and questionnaire surveys. A Nature Connectedness Index (NCI),⁴ which focuses on people's affective and experiential relationship with nature, was used to analyse participant responses. The NCI consists of six statements relating to pathways to nature connectedness: emotion, beauty, contact, meaning and compassion. The researchers attended events and activities within the Green Futures programme, as well other events within the broader creative programme in order to examine how environmental themes were being incorporated.

Key findings

The original bid document submitted to the Department for Digital, Culture, Media and Sport (DCMS) in the competition to host City of Culture 2021 made little reference to the natural environment in its stated objectives and projected programme. Once the city of Coventry had been awarded the 2021 title there followed an engagement with the National Lottery Heritage Fund, a major funder of the programme, that wished to see Natural Heritage incorporated into the programme. This supported the creation of a strand of activities under the banner of 'Green Futures' with a dedicated producing team within the Coventry City of Culture Trust. In practice this has resulted in activities that have focused upon encouraging people to engage with their local area and its green spaces. Facilitating engagement by people and groups who have previously not visited the green spaces of Coventry and its environs has been a particular focus. The Climate Change agenda gained increasing prominence within public discourse during the development and delivery of the City of Culture programme due to the release of stark Intergovernmental Panel on Climate Change (IPCC) reports⁵ and the hosting of COP26⁶ in the United Kingdom. Not surprisingly climate change, as a global concern which resonates locally, also featured within planned activities. Promoting a sense of personal agency and local engagement was the priority for the Green Futures programme. Therefore, the main emphasis was upon encouraging people to engage with nature and environmental issues in a personal, localised way. Explicit activism found expression in events such as the Walking Forest, which drew attention to the impacts of HS2.

The Green Futures programme included a wide range of activities culminating in the 'Our Wilder Family' event on the 15 May 2022, which drew 27,000 people to the War Memorial Park to enjoy a spectacular drone display focusing on nature and climate change action. This finale reflects the extent to which Green Futures gained increasing prominence in the later stages of the programme and how it became the focus of the ongoing legacy programme.

A Green Code was devised by the Green Futures team which laid out environmentally friendly principles to be followed by those delivering events. Whilst the Code represents an excellent starting place for mainstreaming positive behaviours it has not been implemented with the consistency or rigour that might have been expected, with some event partners expressing limited awareness of its existence. Equally, there were concerns expressed that the Green Code had not been sufficiently embedded within the wider operations of the Trust.

Our data collected at Green Futures events shows that UK CoC 2021 has acted as a vehicle for re-focusing individuals' and organisations' attention on nature and green-related issues across the city. There have been strong positive outcomes in terms of facilitating participants' connection to nature. Furthermore, there are indications that participants appreciated the impact that the connection with nature had on them (such as benefits to their mental health) and their families. The data illustrates the critical importance of working with, and in, local communities to facilitate access to the outdoors. Local groups are best placed to understand the dynamics of communities and the factors that will support engagement. An inclusive approach is central to improving access and/or experience of the environment. UK CoC 2021 demonstrated how a community-focused approach supported by adequate resources and co-operation between local communities, green and/or environmental organisations and key local decisions makers can increase engagement in nature and wider green issues.

Our interviews with local citizens indicated that UK CoC 2021 was successful in connecting people with local green spaces in Coventry and helped to challenge perceptions of the city as a car dominated 'grey' space. People also reported that participation in activities and events in green spaces had helped to engender a sense of community. However, people also stated that their experience of UK CoC 2021 did not always resonate with their own environmental priorities, such as the impact of the climate crisis and perceived poor decision-making by local and national level politicians in relation to the environment.

Green Futures events delivered learning opportunities and encouraged people to get involved, make new connections and engage directly with nature and the environment. These events ignited personal interests and raised people's awareness of a wide range of environmental issues. Participants made pledges, verbally and at some events in writing, on what they would do differently, shared their intentions to revisit nature sites regularly, and take up a new activity such as foraging wild plants in their local area or growing fruits and or vegetables. Importantly, there was a new-found willingness amongst environmental and other local organisations to be open to forging partnerships with the creative and cultural sectors.

Whilst there was a strong feeling that the Green Futures programme has ultimately been successful, many stakeholders made it clear that the journey had been beset by difficulties, partly triggered by the COVID-19 pandemic but also by strategic and managerial problems embedded within the Trust. The relatively late addition of the environmental strand into the wider programme has proven problematic in terms of integration. Some respondents stated that environmental activities felt like a 'bolt-on' to the more traditional arts and

culture events, especially in the early stages of the year. It was only in the latter stages that the Green Futures strand took a place at the centre of the overall programme. Organisational challenges within the Trust, such as slow issuing of agreements, contracts and payments, negatively affected the development of relationships with partners. This was especially unfortunate given the need for partners to be responsive and co-create events with the Green Futures team. The creation of the Nature Working Group has been a positive step which sets a strong basis for the legacy stage, but its effectiveness was hampered by the inefficiency of the mechanisms for formalising relationships.

Overall, UK CoC 2021 created an opportunity to foreground a 'Green Agenda' for the city, linking communities with nature and the environment creating hope that the City of Culture experience would leave an enduring Green legacy.

Key recommendations

- It is important that cultural events ensure that environmental governance and programming are built-in from the very start.
- Objectives in relation to environmental goals need to be clearly defined and articulated from the outset.
- Overarching environmental tools, such as the Green Code, need to be mainstreamed within the practices of the programme management body.
- Continuity of staffing within the overarching delivery body is vital.
- If behavioural change is an objective, then clear pathways for influencing attitudes and behaviours need to be developed and implemented.
- The programme could have better reflected the full remit of the environmental concerns and interests held by local citizens.
- Key partners need to be identified from the outset and relationships nurtured. The implementation of smooth and efficient administrative processes for formalising partnership arrangements are critically important.
- Activities should be promoted outside existing environmental networks.
- It is vital that integrated and timely marketing strategies are implemented.

¹ <https://express.adobe.com/page/sASTB8sZIBfJX/> (accessed 10 December 2021)

² Op cit.

³ Green Futures was a programming theme within UK City of Culture 2021 focusing upon the environment.

⁴ <https://research.childrenandnature.org/research/the-nature-connection-index-can-be-used-with-adults-and-children-to-identify-changes-in-nature-connectedness-for-individuals-and-groups-of-people/> (accessed 23 November 2022)

⁵ <https://www.ipcc.ch/reports/> (accessed 19 August 2022)

⁶ <https://www.un.org/en/climatechange/cop26>

1. INTRODUCTION

Background

In December 2017, the Department for Digital, Culture, Media and Sport (DCMS) awarded Coventry the title of UK City of Culture 2021 (UK CoC 2021). UK City of Culture is a designation given to a city (or local area) in the United Kingdom for a period of one calendar year, during which the successful bidder hosts a range of cultural activities. The designation is awarded every four years through a competitive process. The vision for Coventry UK CoC 2021 stated:

We will reimagine the role of culture in a diverse, modern Britain, demonstrating that culture is a force that changes lives, moving Coventry and the region forward.⁷

Built, awarded and delivered through an extensive partnership between public, private and civic, higher education, place-defined stakeholders and citizens, UK CoC 2021 ended in May 2022 (following a delayed start due to the COVID-19 pandemic).

In seeking to meet its vision, UK CoC 2021 publicly set out the four impacts within its Theory/Story of Change⁸ by which its success and legacy would be assessed.⁹ These impacts set out how place-based cultural investment driven by the year was expected to support and deliver city-based democracy, social prosperity and well-being, environmentalism, economic development and innovation, and place-based globalism.

To support assessment of and learning from UK CoC 2021, the Monitoring and Evaluation team put in place a Performance Measurement and Evaluation Strategy (PME).¹⁰ This has framed a substantial range of research, evaluation and data collection to investigate and evaluate the research hypotheses, impacts and learning that has materialised through UK CoC 2021.

As part of this programme of research activity, four focus studies were commissioned by the Coventry City of Culture Trust and awarded through competitive tender across Coventry University and the University of Warwick.

This focus study

The national perception of Coventry in the last half century has tended to be framed by its status as a de-industrialised city, famed in popular culture as a 'Ghost Town' and 'Concrete Jungle' thanks to the music of local ska band The Specials.¹¹ Such external perceptions have been reinforced by the city's infamous ring road and brutalist architecture. Natural England survey data¹² indicates that Coventry's communities suffer from relatively low levels of engagement with the natural environment. In this context the integration of an environmental strand into UK CoC 2021 programme could be seen as a welcome move, especially given the rapidly increasing media and political attention being given to human impacts upon biodiversity and climate which was feeding into the agendas of Coventry City Council and the bid partners.

In previous UK City of Culture programmes an explicit focus upon the natural environment was largely absent. Indeed, there was little reference to natural heritage or green issues in the original bid document for UK CoC 2021. However, in the period after Coventry won the opportunity to host UK CoC 2021 steps were taken to incorporate the environment into the planning for the programme of cultural activities as well as the overarching governance and reporting. The natural environment was therefore granted an explicit position within the cultural spaces of the event, whilst the environmental impacts of running individual activities also came into focus.

Through the formal PME processes for UK CoC 2021 four focus studies were commissioned drilling down into key themes of interest to the Trust.¹³ This report contains the findings of the research undertaken for the focus study exploring the following question set by the Trust:

In what ways has cultural programming and other Trust activity increased awareness of environmental responsibility and increased engagement with the natural heritage and natural landscapes areas of the city?

The PME process utilises a Theory/Story of Change logic model¹⁴ which stipulates the following with the respect to environmental outputs and outcomes:

⁷ <https://governance.wmca.org.uk/documents/s6541/City%20of%20Culture%20Trust%20-%20IB%20Board%20-%2014th%20February%202022.pdf> (accessed 24 August 2022)

⁸ <https://coventry21evaluation.info/evaluation/> (accessed 19 August 2022)

⁹ Neelands Jonathan, Henry Nick, De Souza Valerie, Beer Haley, Evans Samantha, Anzel Andrew, Healey Tim, Chun Lam Si, Scott Mark. *Coventry City of Culture 2021 Performance Measurement and Evaluation Strategy 2019 – 2024 V2*. Coventry: 2020. p. 9. URL: https://coventry21evaluation.info/wp-content/uploads/2022/06/city-of-culture_pme-strategy_jan20.pdf (accessed 19 August 2022)

¹⁰ Neelands et al. 2020. op cit.

¹¹ <https://www.theguardian.com/travel/2021/may/28/coventry-2-tone-ghost-town-uk-city-of-culture> (accessed 19 August 2022)

¹² <https://defra.maps.arcgis.com/apps/MapSeries/index.html?appid=2f24d6c942d44e81821c3ed2d4ab2ada> (accessed 19 August 2022)

¹³ <https://express.adobe.com/page/sASTB8sZIBfJX/> (accessed 10 December 2021).

¹⁴ Neelands Jonathan, Henry Nick, De Souza Valerie, Beer Haley, Evans Samantha, Anzel Andrew, Healey Tim, Chun Lam Si, Scott Mark. *Coventry City of Culture 2021 Performance Measurement and Evaluation Strategy 2019 – 2024 V2*. Coventry: 2020. p. 9. URL: https://coventry21evaluation.info/wp-content/uploads/2022/06/city-of-culture_pme-strategy_jan20.pdf (accessed 19 August 2022)

Outputs:

- Environmentally responsible programming.

Outcomes:

- Cultural sector activity makes a significant contribution to the economic, environmental, social, health and wellbeing targets for the city and region.
- Cultural programming is environmentally responsible and promotes environmental awareness.

As a result, the PME programme has collected a set of quantitative measures on a range of environmental indicators related to the delivery of the programme; for example, number of carbon offsetting initiatives by the Trust, number of events in green and blue spaces, and number of participants at events in green and blue spaces (Trust 2020).¹⁵

The purpose of this study is to provide more qualitative insights into how the integration of the environment into UK CoC 2021 has been experienced by different stakeholders and with what outcomes and impacts.

By tackling the key research questions outlined below, we aim to answer the overarching question set by the Trust (see above) when they commissioned this focus study:

- (i) how the natural environment became an explicit focus within UK City of Culture 2021
- (ii) how environmental issues have been embedded within the overarching planning, governance and organisational delivery of UK CoC 2021
- (iii) how people have experienced and practised the environment through UK CoC 2021's activities and events
- (iv) how behaviours of organisations, communities and individuals have been influenced and changed during UK CoC 2021
- (v) how certain factors affected the delivery of Green Futures within UK CoC 2021.

Structure of the report

Section 2 of the report provides details of the study methodology which involved especially the use of multiple qualitative methods.

Section 3 reveals our findings which are articulated against each of the five research questions listed above. By considering each of these questions we are able to understand the processes by which the natural environment came to be integrated into UK CoC 2021; how this played out in terms of embedding the environment within the delivery of the programme; and how communities and individuals engaged with, and were influenced by, the programme. We also consider the constraints and problems which affected the delivery of the environment-orientated aspects of the UK CoC 2021 programme.

Section 4 steps back and considers the findings directly against the desired outputs and outcomes articulated in the PME strategy and the overarching question set by the Trust for this focus study. Recommendations for the successful integration of environmental themes into future cultural events and festivals are then provided.

¹⁵ Neelands Jonathan, Henry Nick, Scott Mark, de Souza Valerie, Bharatan Ila, Beer Haley, Tomlins Richard, Healey Tim, Lam Si Chun, Truslove Jo, Jezierski Jakub, Edwards Daisy, Sambhi Baljit (2021) *Performance Measurement and Evaluation Progress Report Six*. Coventry. [online] URL: https://coventry21evaluation.info/wp-content/uploads/2022/07/6_progress_report_6.pdf (accessed 20 June 2022).

2. INTEGRATING THE ENVIRONMENT INTO UK CITY OF CULTURE 2021

Research approach and methodology

The research was undertaken by a team of established researchers from Coventry University's Centre for Business in Society¹⁶ and Centre for Agroecology, Water and Resilience.¹⁷ The methodology was founded upon the principle of community participation in recognition of the diversity of stakeholders targeted by UK CoC 2021. Our assessment draws together a 'top-down' perspective, evaluating the programme's management and delivery and a 'bottom-up' perspective focusing upon the programme's impacts upon the environment and people's lived experiences.

A combination of qualitative methods was used to collect primary and secondary data which engaged with different stakeholder groups across the City of Culture and its environmental programming. The research methods were reviewed and approved by the Coventry University ethics process.

Secondary data collection: Secondary materials including key documents, such as bid materials, PME surveys and City of Culture Trust reports, and online materials such as social media posts and blogs were collected. This enabled the journey whereby the environment came to be part of Coventry's City of Culture programme to be tracked and the drivers for its incorporation to be understood. Such data also facilitated understanding of how the environment was embedded within the programme as a whole.

Levels of social media engagement with Green Futures events, focusing upon Facebook, LinkedIn, YouTube and Twitter were quantified in order to understand UK CoC 21's wider reach. Facebook and LinkedIn posts were collected from the official City of Culture pages that included the Green Futures theme and the number of shares, likes and comments were recorded. Similarly, for YouTube, where there was a video posted on the City of Culture webpage that was relevant for the Green Futures theme, the number of likes was recorded. The facility to comment on these videos was disabled so the number of comments could not be recorded. For Twitter an advanced search was conducted that required the inclusion of the @Coventry2021 official Twitter account and the mention of #GreenFutures. Data were collected for the duration of the City of Culture 15 May 2021–31 May 2022.

Primary data collection: Semi-structured interviews formed an important component of the methodology. Seventeen semi-structured interviews (typically an hour-long, conducted between January and June 2022) were undertaken with 15 key stakeholders, including Green Futures managers, producers, funders, partner organisations and environmental organisations involved in organising and/or delivering community facing events. Two stakeholders were interviewed twice in order to capture their insights at different stages of the programme's delivery. Seventeen members of the public were recruited via social media groups focusing on environmentalism based in Coventry. This sample comprised people with the following characteristics: 8 male, 9 female; 7 were aged 18-40, 6 were aged 40-60 and 5 were older than 60; 14 graduates and 3 non-graduates; the 17 were distributed across the postcodes CV1 to CV7. These people, some of whom had attended UK CoC 2021 events and others who had not, were interviewed in order to assess their engagement with environmental issues in their daily lives and how UK CoC 21 contributed to this engagement.

After the interviews, the 17 members of the public were asked to collate and discuss pictures of actions taken to minimise their impact on the environment, green spaces in the City that they considered important and their participation in Coventry City of Culture. The participants then discussed their choice of pictures. A map of green spaces and parks was shared with participants who then identified the areas in Coventry that have most importance to them. Participants were asked to share their perceptions and experiences of UK CoC 2021 and the extent to which the environmental dimensions had resonated with them.

A further range of methods were used to gain additional insight about the integration and reflection of nature, green and wider environmental issues into Coventry UK City of Culture 2021 from the perspective of those participating in Green Futures events/activities. Researchers attended 21 in-person and virtual events (see Appendix 2 for a list of events attended), engaged with participants (attendees) using 'walking and talking' methodologies to capture their stories, perspectives and experiences digitally (3 audio-recordings, 203 pictures and 9 videos) and by taking notes of observations and discussions. These 21 events included a mixture that took place outside in green or blue nature spaces¹⁸ (i.e. in-person, physical events),

¹⁶ <https://www.coventry.ac.uk/research/areas-of-research/business-in-society/> (accessed 19 August 2022)

¹⁷ <https://www.coventry.ac.uk/research/areas-of-research/agroecology-water-resilience/> (accessed 19 August 2022)

¹⁸ The terms green, blue and grey spaces are used to refer to different types of environments. Green spaces are areas dominated by plant life, blue spaces are areas comprising water (fresh or marine) and grey spaces are dominated by human construction, particularly buildings and roads.

inside buildings or online. Most of the events were part of the Green Futures programme of UK CoC 2021, but others were 'green' events supported as secondary events by UK CoC 2021 and funded and delivered independently by organisations.

The recently developed and validated scale for measuring Nature Connectedness (Nature Connection Index) was used as the analytical pillar for these methods.¹⁹ This Index aids evaluation of the ways in which people are 'connected' with nature through the analytical application of six statements to people's comments.

Changes and challenges

The COVID-19 pandemic posed various challenges to the delivery of the methodology:

- The disruption to the programme made it difficult to plan exactly when research activities could take place.
- Attendance at events and engagement with participants in the earlier stages was also challenging for researchers due to the need to maintain social distancing.
- Researchers experienced problems in gaining permission from event producers to conduct surveys at some events.
- The perceived burden, experienced by those planning and delivering events, of other PME processes being delivered through the Trust discouraged engagement with supplementary research activities such as this focus study.

¹⁹ Richardson M, Hunt A, Hinds J, Bragg R, Fido D, Petronzi D, Barbett L, Clitherow T, White M. 2019. *A Measure of Nature Connectedness for Children and Adults: Validation, Performance, and Insights*. Sustainability 11:3250.

3. RESEARCH FINDINGS

Research Question 1: How did the natural environment become an explicit focus within UK City of Culture 2021?

The original bid document submitted to the Department for Digital, Culture, Media and Sport (DCMS) in the competition to host City of Culture 2021 made little reference to the natural environment in its stated objectives and projected programme. Once the city of Coventry had been awarded the 2021 title there followed engagement with the National Lottery Heritage Fund, a major funder of the programme, allied to a push from the City Council, which resulted in Natural Heritage being incorporated strongly into the programme. A strand of activities under the banner of 'Green Futures' were created driven by a dedicated producer team within the Coventry City of Culture Trust. Ultimately the Green Futures programme came to the forefront of activities in the latter months of UK CoC 2021 and is at the core of the legacy strategy.

In December 2017 it was announced that Coventry would host the 2021 City of Culture. In the final bid document there existed minimal reference to environmental issues. The word 'green' does not appear at all in the document whilst 'environment' only appears on three occasions in reference to the built environment or an institutional setting. 'Natural heritage' is mentioned once.

Many cultural activities are referenced in the document but the only ones with an explicit focus on the natural environment are litter picking and garden tidying. References to green spaces are also limited (War Memorial Park and Coombe Abbey) with the vast majority of venues and event locations being of built form. Equally, none of the delivery partners named in the document had an explicit environmental focus.

Yet, the final month of events within the main programme in 2022 featured a range of high-profile activities with an environmentally dominant focus. Furthermore, it was decided that the CoC21 legacy programme would focus upon the natural environment and green issues with the Green Futures programme becoming the central focus:

From June 2022, the Trust will move into a new phase as it commits to supporting the delivery of ambitious, engaging, interactive and playful events and activities with a climate focus.²⁰

So, how did this transition occur from the natural environment being beyond the margins of the programme to becoming front and centre?

There was some awareness within the Trust that the environment was an increasingly important theme meriting recognition within the UK CoC 2021 programme and key partners, such as the City Council, were pushing environmental issues within their policy agenda. These strands of interest were given a major boost, which ultimately catalysed a significant change in the programme's focus, by engagement from the National Lottery Heritage Fund (NLHF), who were the largest single funder in the overall programme with a commitment of £3 million.²¹ In order to secure these funds, the UK CoC 2021 organisers were required to produce a new submission detailing how the NLHF's requirements would be met. It was at this point that environmental issues were brought to the fore. Natural heritage had played a relatively minor role in the previous UK City of Culture event hosted by Hull in 2017 – a situation that the NLHF wished to change in 2021.

The NLHF was now foregrounding natural heritage into the objectives they wished to see fulfilled via their financial support, as detailed in the following extracts from their solicitation brief:

To enable the people of Coventry to develop an emotional connection to nature through creative programming, leading to greater understanding and appreciation of nature on a city scale.²²

To contribute to improved outcomes for nature in Coventry, now and in the future, through reconnecting people in the city with nature.

By *nature* we mean the landscapes, habitats and species of Coventry and the surrounding area; by *creative programming* we mean any creative activity inspired by nature, undertaken by professionals or communities; by *city scale* we mean having an impact across communities in Coventry.

The solicitation brief goes on to detail the types of creative programming that could be appropriate, the importance of engaging with a wide range of communities, especially those who face barriers to engagement and the need to enhance partnership working within networks within and beyond the city.

The initial response from UK CoC 2021 presented a narrow vision of the environmental possibilities, focusing, for example, upon green energy. Following the appointment of a specialist environmental officer, supported by an external consultant, the second iteration broadened the focus to include land and nature. Our interviews with representatives from the NLHF described how there had been a need to shift mindsets within the UK CoC 2021 team. As informant #7 states:

²⁰ <https://coventry2021.co.uk/news/coventry-looks-towards-a-greener-future-to-secure-a-sustainable-legacy-for-uk-city-of-culture/> (accessed 22 April 2022)

²¹ <https://www.heritagefund.org.uk/blogs/green-future-finding-out-what-nature-means-coventry> (accessed 24 August 2022).

²² National Lottery Heritage Fund (2019) *Coventry UK City of Culture 2021 Cultural Programme – Solicitation Brief*. Coventry. P.1.

it probably wasn't falling on terribly receptive ears at that point, because they couldn't see what we could potentially see. And they and they weren't from that background. So inevitably, you're starting off on a in a position where you're trying to convince somebody you should do something that they're maybe not over keen on doing, and they've got a ton of other stuff they want to do.

Informant #8 outlines how important it was to bring a community perspective to bear upon the emerging environmental theme at this stage of its development:

But also, very key for City of Culture is, how did you leave room for communities to bring their stories, their ideas to respond to nature? How do you actually get them to co create co design that cultural democracy? How do you hold that whilst also getting buy-in from a major funder?

Ultimately the environment, specifically a desire to engage people with local green spaces and nature, became integrated

into the overall programme via a specific thread entitled 'Green Futures'. This programme had its own team of producers within the Trust who were to work with a range of partners from the cultural and environmental sectors to deliver this programmatic strand. A Nature Working Group was set up to facilitate co-creation and partnership working. The Green Futures programme aimed:

to ignite social activism, connecting and reconnecting communities to nature and heritage and prioritising issues that most directly affect them. The ambitious programme will unearth stories to inspire a modern, diverse city to reimagine its 'Green Future' for wild and human life.²³

The documentation stated that:

through the Green Futures programme, Coventry will become the greenest and most environmentally conscious UK City of Culture to date.²⁴

Research Question 2: How have environmental issues been embedded within the overarching planning, governance and organisational delivery of UK CoC 2021?

There was a strong focus on activities that encouraged people, especially those with little prior history of visiting the green spaces of Coventry and its environs, to engage with their local area. Not surprisingly climate change, as a global concern which resonates locally, also featured within planned activities. Promoting a sense of personal agency and local engagement was the priority for the Green Futures programme. Therefore, the main emphasis was upon encouraging people to engage with nature and environmental issues in a personal, localised way. Explicit activism found expression in events such as the Walking Forest, which drew attention to the impacts of HS2. A Green Code was devised by the Green Futures team which laid out environmentally friendly principles to be followed by those delivering events. Whilst the Code represents an excellent starting place for mainstreaming positive behaviours it has not been implemented with the consistency or rigour that might have been hoped.

Natural heritage – keeping it local

A focus on the natural environment can be interpreted and practiced in many different ways. The notion of 'the environment' practiced in UK CoC 2021 can be seen to have its origins in the NHLF statement that 'natural heritage' should be a significant focus of the City of Culture programme. UNESCO defines natural heritage as the:

natural features, geological and physiographical formations and delineated areas that constitute the habitat of threatened species of animals and plants and natural sites of value from the point of view of science, conservation or natural beauty.²⁵

The key embedding process was the development of the Green Futures programme, which emerged as the detailed plan was created for the NHLF. The environmental officer worked with partners across the City region to create a structure through which Green Futures could be delivered, informant #8 describes the underpinning principles which drove that process:

²³ <https://coventry2021.co.uk/explore/green-futures/> (accessed 19 August 2022)

²⁴ Ibid.

²⁵ Pessoa José, Deloumeaux Lydia (2009) *The 2009 UNESCO Framework for Cultural Statistics (FCS)*. Unesco Institute for Statistics, Montreal.

Heritage takes a very particular sort of skill. But finding heritage people that also understand contemporary art and diverse communities is like a unicorn. So, I wanted to make sure that that team was embedded and also, I chose regional people or local people to work in that team, because I wanted to make sure of the skills exchange of what we can leave behind in enabling people to work more in environment and cross these boundaries.

Through this collaborative consultation process Green Futures was divided into four strands which sought to build a critical mass of human connectivity to nature, reflecting Coventry's long-term aspiration to become a National City Park. These strands were:

Growing – building interest, capacity and skill across local and diverse communities in native species and all things horticultural.

Forest – a multi-layered programme exploring social, cultural and ecological relationships to the natural world and green spaces.

WILD-Life – exploring biodiversity and climate change in relation to both local and global environments.

State of Nature – Coventry State of Nature report to be produced by Warwickshire Wildlife Trust (WWT) and a Coventry Nature Summit.

Box 1 below provides examples of events that took place as part of the Green Futures programme. This cross section from the programme illustrates the range of activities that occurred and the different ways in which partners and participants were involved.

Box 1: Cross section of events from the Green Futures programme²⁶



Down to Earth Woodland Wellbeing Sessions

Wednesdays 6 October–8 December 2021. Wyken Croft Nature Park

These weekly sessions were targeted at participants experiencing mental health challenges such as anxiety, low mood and depression. The workshops explored a variety of creative approaches to discover how physical and mental health could be enhanced both through connecting with nature and other members of the community. The Starfish Collaborative designed the workshops; topics included 'Bend little willow – exploring resilience', 'Gratitude and transitions' and 'Planting ideas for the future'.



Observations on Being

15 August 2021, 19.00. London Road Cemetery

This exhibition featured seven immersive artworks that challenged ideas of life, death, and nature. The multi-sensory journey fused together audio and visual art installations for the audience to explore their relationship with the natural world.

Guided by the Marshmallow Laser Feast, the artists collaborated with ecologists and influential scientists including the Fraunhofer Institute for Digital Medicine MEVIS, to give Coventry's Charterhouse Heritage Park a new perspective. The exhibition was produced in partnership with York Mediale, working closely with the Friends of London Road Cemetery, Historic Coventry Trust, Warwickshire Wildlife Trust and Coventry City Council. The production was funded by the National Heritage Fund and supported by The Garfield Weston Foundation.

²⁶ All images used in this illustration were taken from the UK City of Culture 2021 website. <https://coventry2021.co.uk/what-s-on/> (accessed 24 August 2022). The attribution for all images is not available, although the Pirates of the Canal Basin photograph was taken by Nicola Cashin and the Our Wilder Future image is by Jamie Grey.

Box 1 continued



Pirates of the Canal Basin

21–24 April 2022, 20.00. Coventry Canal Basin

A historical pirate village was created in Coventry’s Canal Basin with props including a ship and a Pirate Court of No Appeal. The Ego Performance Company alongside the NoFit State Circus built a 60+ community ensemble that brought to life characters such as Dr. Zoran who ‘has magical portions and healing powders for your ailments’, and Longbottom and Forsythe. A repertoire for musical pirates, including acrobatics, was created for families as they walked through the village. The event was funded by Arts Council England, Canal & River Trust and National Express.



Coventry Biennial 2021: Listening to the Anthropocene

8 October 2021–23 January 2022. Coventry Cathedral

‘Listening to the Anthropocene’ was originally the title of a significant lecture by artist-geographer AM Kanngieser, which mapped the range of recent ‘eco-acoustic practices’ – an interdisciplinary science that investigates natural sounds and their relationships with the environment over multiple scales of time and space. This major exhibition, hosted in the Coventry Cathedral, displayed work created by international artists with relationships to locations that have been affected by climate change. It was introduced by two guided tours led by Biennial producer Emily Gardner and Dr Michael Pigott, Coventry Biennial’s Curator & Audio-Visual Director.

The exhibition and tours were supported by UK City of Culture 2021, Arts Council England, Coventry City Council, Art Fund, Coventry Cathedral and the University of Warwick



Our Wilder Family

15 May 2022. War Memorial Park

This spectacular drone show became the longest drone display in the UK. Held live from the War Memorial Park and streamed to families by Limitless Broadcast, this 16-minute show, inspired by the beauty of nature all around us, aimed to raise awareness of climate change and encourage action. Created by the world-famous activists Celestial, and supported by the National Lottery Heritage Fund, the visual show in the sky was accompanied by poetry from local artists in the Coventry City Voices and music created from collaboration with local communities. Dan Jones and Guy Hughes worked alongside Warwickshire Wildlife Trust and together with 7- to 10-year-old pupils at local primary schools to create the sound score music.

In practice, the Green Futures programme focused strongly upon increasing individuals' engagement with, and appreciation of, nature within their local environment. In this sense engagement was designed to be of a very personal nature. One informant expressed this:

our main areas of impact have been getting people out into green spaces and to build their confidence that the green spaces are their local green spaces. So, it isn't about taking them far away from where they live. It's about them opening their door and being able to walk to a green space that is close to them that they can gain association with through positive experiences. That means that when they walk there on their own or they take their family there, they can remember that they had these nice times and they feel ownership. (Inf#5)

This approach reflects the importance of encouraging people to connect with their local environment. As Natural England surveys²⁷ establish, Coventry communities demonstrate a relatively low base for engagement with nature. From our research, one informant described how some young people have very little engagement with nature in their day-to-day lives,

they don't see the world in layers of nature. They just see grey spaces. Even if they're surrounded by trees, they don't see the trees. It's not something that they registered to. It's not something that's ever part of their vocabulary. (Inf#1)

Facilitating small steps which develop people's recognition of the natural world around them, and their responsibility for it, was seen as a key focus of the programme.

Activism and the bigger picture

The primary focus of Green Futures was to encourage people's engagement with, and understanding of, the natural world around them. This process in turn can lead to an enhanced sense of responsibility which can lead to changes in daily behaviour (and even activism) for a minority. Some events were more explicitly activist in their approach.

UK CoC 2021 coincided with a significant increase in public awareness of the impacts of climate change as IPCC reports²⁸ were published which made clear the incontrovertible impacts

of human activity upon the stability of the global climate. The staging of COP26²⁹ in Glasgow in November 2021 also attracted significant amounts of citizen attention around the world. One of the Green Futures programme events captured this moment particularly effectively. The 'Walking Forest'³⁰ event involved a range of activities including a group of women carrying a tree felled in the construction of the HS2 railway line around Coventry on 20/21 October 2021. The group also attended COP26 in Glasgow. This event was seen by Green Futures producers as an excellent example of activism and transformative engagement with committed individuals during UK CoC 2021:

Walking Forest was amazing. This group of women went from a sort of outdoor residential in a Midlands woodland, to coming up with the idea of having a two-day event which talked about the demise of trees that were going to be felled because of HS2. And then the second day was all about the hope from new tree planting and then the good that that would do. (Inf#1)

More broadly, UK CoC 2021 encouraged a longer term, gradual transformational approach to engagement with the nature and environmental issues within Coventry's communities. One respondent explained this approach as follows:

Climate change is a very depressing thing. It's pointless to think about the bigger picture, because actually, it just puts a barrier, a bigger barrier up and then leads to blame. And actually, what we need is some that some positive nature connection, so that at least generations that are coming through have an understanding of the natural world... and that they want to look after it. (Inf#1)

Embedding environment within the wider programme

Environmental issues were foregrounded in exhibitions throughout the City of Culture programme encouraging visitors to reflect upon ecological issues. Examples include Marshmallow Laser Quest's work 'The Tides within Us'³¹ displayed at The Reel Store (see below) and 'Salmon: traces of escapees'³² at the Turner Prize exhibition which provoked thoughts about the environmental impacts of intensive salmon farming in Scotland.

²⁷ <https://defra.maps.arcgis.com/apps/MapSeries/index.html?appid=2f24d6c942d44e81821c3ed2d4ab2ada> (accessed 19 August 2022)

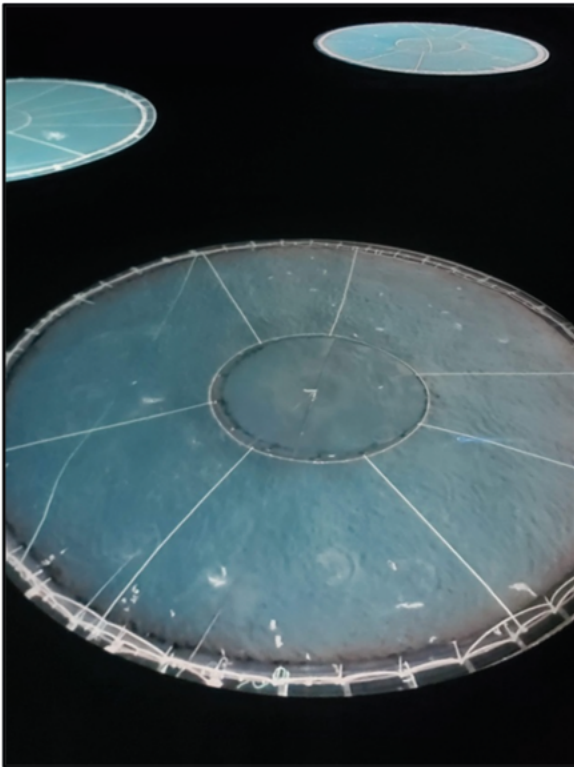
²⁸ <https://www.ipcc.ch/reports/> (accessed 19 August 2022)

²⁹ <https://ukcop26.org/> (accessed 22 August 2022)

³⁰ <https://coventry2021.co.uk/explore/walking-forest/> (accessed 19 August 2022)

³¹ <https://coventry2021.co.uk/the-reel-store/> (accessed 24 August 2022)

³² <http://cooking-sections.com/Salmon-Traces-of-Escapees> (accessed 24 August 2022)



Salmon: Traces of Escapees

2021 Turner Prize Exhibition

The Herbert Art Gallery & Museum, Coventry

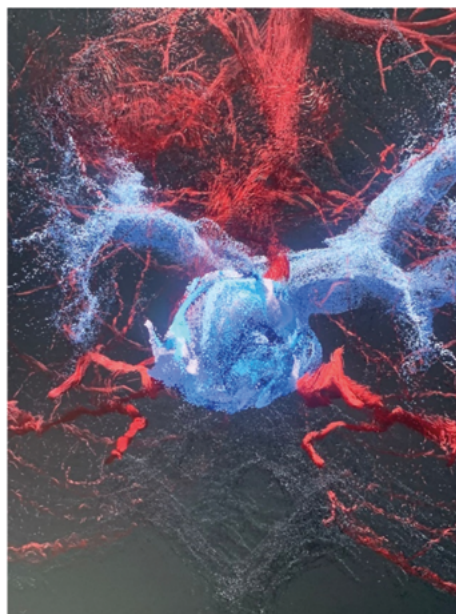
29 Sept, 2021 - 12 Jan, 2022

A performative installation that explores the gap between the appearance and the reality of salmon—their inability to escape intensive farms. *Salmon: Traces of Escapees* is the second chapter of a trilogy around food production based on extractive systems that push the environment to the verge of collapse. The audio and film installation explores the environmental impact of salmon farms in Scotland, which can be traced far beyond the circumference of open-net pens. Excrement, drugs, synthetic colour, and parasites billow out, polluting the surrounding waters. But even if the nets break, farmed salmon remain captive; they can no longer escape their own modified bodies. *Salmon: Traces of Escapees* is a recognition that nothing can be removed without leaving traces, no divestment can be disassociated from extractivism, and no domestication comes without the colonisation of the gut.

The installation continues Cooking Sections' long-term body of work *CLIMAVORE*, questioning how to eat as humans change climates. Originated and based in the Isle of Skye since 2016, the project works with communities towards ocean regeneration, promoting alternative ingredients such as seaweeds, sea vegetables and bivalves, which improve soil and water quality, while cultivating marine habitats.

Salmon: Traces of Escapees is shown as part of *Becoming CLIMAVORE*, a UK-wide project in which museums are removing farmed salmon from the menus of their cafes and restaurants and introducing *CLIMAVORE* dishes.

Figure 1: Salmon, Traces of Escapees exhibit at Turner Prize Exhibit



There have been up to ten mass extinction events in the Earth's history. Nearly all have been caused by an imbalance between oxygen and carbon dioxide: too much oxygen and things get too cold; too much carbon dioxide and things get hot. In an age where excess carbon dioxide is fuelling climate change, the simple act of breathing can engage us with this cycle in an intimate way, and in doing so help us reflect on our dependence and responsibility to the organisms we share the planet with.

It may also re-engage us to the 2700 litres of oxygen laced blood that circulates our body each day - and to the indebtedness we owe to the fallen autumnal leaf.

THE
REEL
STORE



Figure 2: Marshmallow Laser Quest's exhibition at the Reel Store, explicitly integrating environmental philosophies

However, some of our respondents stated that the late addition of an environmental strand to the programme resulted in key activities and organisations not being embedded from the start. This resulted in a sense that the environment had been ‘bolted-on’ and therefore often did not fit well with the events and activities that had already been planned. It took time for the programme to evolve to the extent that Green Futures was able to establish a clear identity. Furthermore, the lack of a champion for environmental dimensions at the top of the UK CoC 2021 structure has been seen as problematic.

One partner expressed frustration that environmental partners seemed to be getting a raw deal when compared to others in the overall programme:

It’s been quite strange and frustrating on our part to see international artists coming over from Brazil, and doing something and that all working fairly smoothly. And then us still saying, well, we gave you this information 18 months ago, and we are no further forward. It’s been frustrating. (Inf#7)

This point is reinforced by another informant:

And in as much as the City of Culture Trust did a brilliant job of going off, and finding a huge range of artists to work up ideas to co-create amongst themselves, but in all honesty, with very, very little input from the existing environmental sector, within the city. And that’s, been a bit of a disappointment. (Inf#6)

Governance tools: the green code

An important aspect of instilling environmental behaviours with the Trust, its event partners and the City of Culture was a Green Code devised by the Green Futures team to promote environmental awareness and responsible practices in the planning and execution of activities during the UK CoC 2021 programme. It set out the minimum standards expected of freelancers, suppliers, co-producers and others engaged in UK CoC 2021. These are summarised below.

Travel	<ul style="list-style-type: none"> Limit flights on UK mainland Pro-public transport Recognise wider benefits of active travel options
Procurement	<ul style="list-style-type: none"> Buy local where possible Avoid single use plastics FSC approved timber products Purchase recycled products where possible Prioritise sustainable purchasing options Use bio-degradable or compostable packaging where possible.
Event delivery	<ul style="list-style-type: none"> Use permanent power supplies and sustainable energy sources where possible Avoid chemical toilets Provide recycling options at events and follow ‘zero waste to landfill’ policy Recycling options available at rehearsal and production sites
Debrief	<ul style="list-style-type: none"> Debrief every event with reference to Green Code adherence Calculate carbon footprint of production transport for reporting

Table 1: Behaviours promoted in the Green Code. Source: Coventry City of Culture Trust³³

³³ <https://coventry2021.co.uk/about/our-green-code/#:-:text=This%20code%20expands%20on%20the.conscious%20City%20of%20Culture%20programme> (accessed 20 June 2022)

Producers and partners spoke positively about the potential of the Green Code but felt that its implementation could, and should, have been more robust. Awareness of the existence of the Green Code was not universal amongst those interviewed, and a substantive understanding of its content was not evident. Awareness amongst UK CoC 2021 producers beyond the Green Futures team was lacking, whilst processes for verifying that the Code had been followed were also largely absent. Our interviews with employees of the Trust indicated that the Green Code had not been mainstreamed across the organisation. As one producer explained:

What's the importance? There was never really a session or an explanation on 'Why are we doing this?' We're developing a Green Code, why are we not explaining that, organisationally, to all of our colleagues and to all of our team members? Why is it not part of your induction pack? (Int#2)

Positive practices including offering recycling facilities for plastic cups sold at venues (figure 3). Whilst contradictory examples included the use of a large area of plastic grass, a landscaping practice that is roundly critiqued by sustainability experts,³⁴ laid out as the flooring at the Assembly Gardens (figure 4). Informants pointed to the impacts of the pandemic, which led to all efforts being focused on delivering the core programme and the relatively short timeframes of UK CoC 2021, as being factors which stymied efforts to embed the Green Code. Resource constraints were also noted, with greener options often being perceived as costing more, especially if the individual producer needed to undertake the work to identify and cost out different options.

Some interviewees expressed pleasure that the Green Code will be focused upon in the legacy phase of UK CoC 21 as part of the ongoing Green Futures theme:

Or it didn't feel to me as though it was as much of a core priority, as maybe it seems it is now. And obviously, I'm delighted that is becoming, you know, a core of the legacy. (Int#7)



Figure 3: Cup drops to limit plastic waste at Assembly Gardens, Coventry



Figure 4: Large area of plastic grass flooring at Assembly Gardens in Coventry

³⁴ <https://www.theguardian.com/cities/2019/aug/02/turf-it-out-is-it-time-to-say-goodbye-to-artificial-grass> (accessed 19 August 2022)

Research Question 3: How people have experienced and practised the environment through UK CoC 2021's activities and events

Our research indicates that many of the environmentally themed events programmed during UK CoC 2021 were successful in encouraging people to connect with nature and recognise the benefits it has had on them, their families and their lives. People engaged with nature and environmental issues, at the macro level, such as climate change, and the local level such as appreciating the wildlife in their own gardens. These findings were confirmed by our research using the Nature Connected Index method which indicated that people were benefitting from engagement with nature. In contrast, participants also reflected on contradictions in the messaging of UK CoC 2021, such as public transport during big events, use of confetti balls and the deployment of artificial grass at Festival Gardens.

Overall, there were some successes in terms of introducing a greater proportion of the community to think about environmental issues, but there were also concerns that perhaps the reach into communities was not as deep as might have been hoped.

Increasing awareness of nature and environmental issues among participants

The observational protocols from all of the events that we engaged with indicated clearly how the environment and wider environmental issues had been successfully integrated into these events and were promoted with clear messages, resulting in increased awareness of a wider range of environmental issues among participants. This applied to the in-person, physical events taking place in green/blue nature spaces or indoors, as well as to the online events. From visiting the 21 events a range of activities were seen to raise awareness and engagement with the environment (see Table 2).

Event in green space	Raised awareness of small pockets of green nature in the city; the benefits of plants to the local environment e.g. reducing impact of air pollution, supporting bees and other pollinators; the benefits of using environmentally friendly techniques for managing green spaces in the city, (awareness of detrimental impact of using herbicides), importance of waste recycling (detrimental effect of littering)
Event in green space	Raised awareness about seeds and value heritage seeds, of growing food, growing organically, and stimulated debate about the challenges of the current food systems and policies around agriculture in a global context
Event in green space	Increased knowledge and awareness of the benefits of and how to grow food and garden using organic management techniques, biodiversity and seasons, saving seeds and growing heritage varieties, composting and recycling, minimising the use of plastic, eating plant-based diets, environmental challenges related to current food system, heritage pottery, value and benefits of being in nature for my own mental and physical health
Event in green space	Raised awareness of the value of social relationships than can be built in nature and how we can help and support each other
Event in green space	Learned about agroecology, organic gardening, how to take cuttings of a perennial plants, nature-based crafts, awareness of benefits of organic management techniques, global issues regarding our food systems, the climate crisis, the importance of healthy soils, importance of preserving peatbogs and using alternatives to peat

Event in green space	Raised awareness about nature in the park; awareness and knowledge of plants trees, insect and birds
Event in blue/green space, outdoors and indoors	Raised awareness of wide-ranging aspects of the aquatic nature environment, from local waterways to global oceans
Event in blue/green space, indoors	Raised awareness of climate change issues and how individuals can take action
Activity in green space supported online	Increased awareness of garden wildlife. Learnt to identify and recognise the creatures and learned how to make the garden even more wildlife friendly
Physical event indoors	Raised awareness of sustainability issues related to the fashion industry and the value/benefits of swapping and re-using clothes
Physical event indoors	The performance portrayed the relationship of the Gaels with their environment as they journeyed from Africa to Ireland and the transitions in their lifestyle across land and water
Physical event indoors	Raised awareness of fashion made from recycled and upcycled materials, textiles to create a fashion show. The diversity of the show, performances and spoken words portrayed the thread that connect people, places, and the planet. It highlighted the connections of culture, Coventry's diversity, environmental consciousness, and the power people hold to making environmental change in their everyday relationship and lifestyles. The messaging of the performance also portrayed the impact of collective action in making environmental change
Online event	Raised awareness of how to change lifestyles and promote circular economy at household levels
Online event	Raised awareness and stimulated debate on wider sustainability issues, including how to embed sustainability within the curriculum and to get students to think about sustainability
Online event	Raised awareness and created debate about environmental and social governance in the context of businesses, helping students to scale up in their future careers as 'environmentally and socially responsible entrepreneurs'
Online event	Informed about the statistics related to climate change but minimal details about the different and embedded impacts of climate change
Online event	Raised awareness of environmental sustainability in relation to employability and placements, supporting students in developing employability skills.

Table 2: Examples of how different types of events engaged people with the natural environment and raised awareness of environmental issues

Encouraging people to connect with nature and green spaces

Seventeen local people drawn from across the City were included in our sample and their engagement with the environment in Coventry was analysed, especially their

interactions with green space, and then asked whether City of Culture had been successful in providing opportunities for them to further their connections with local green spaces. Table 3 below, summarises why people feel that green spaces are important and how UK CoC 2021 has enabled them to connect with these spaces:

Importance of green spaces	Explanation	How UK CoC 2021 has enabled connections
Sense of community	A space to meet friends. A social setting for interactions. An important space for maintaining community connections.	Emphasis on the social value of green spaces. Environmental events are not just about experiencing 'nature' but have an important social side.
Important for the environment	Green spaces are important for biodiversity, in terms of fauna and flora.	To support residents to realise Coventry's green spaces as an asset.
Good for mental health	Positive mental impact of green spaces. Promotes relaxation, feeling happier and more peaceful.	No significant comments from participants.
Contrasts with the industrial 'grey' landscape of Coventry	Green spaces contrast with the city's perceived 'grey' infrastructure.	Events have helped to celebrate Coventry's green spaces.

Table 3: How and why local people value the city's green spaces and how UK CoC 2021 has enabled them to connect with green spaces

As outlined in Table 3, the first way in which these 17 respondents highlighted the importance of green spaces was through the ways that they provide a sense of community. Participants such as Inf#28 noted the 'sense of community about them' and how they would say hello to people they would not normally. Green spaces were important for drawing people together through UK CoC 2021.

Secondly, the respondents highlighted the importance of biodiversity within green spaces, with flowers and trees making these spaces desirable. People noted that UK CoC provided some opportunities for such connections but felt that green spaces were not fully promoted as assets during the programme. Participants noted that more could have been made of the varied nature of the natural resources within the green spaces in Coventry.

Thirdly, respondents described how green spaces, and the activities they undertake within them, are important for mental health. Inf#24 for example explained how their local park is a space 'you can just go there with a book and just forget everything else around you'. They spoke about green spaces as places that make them feel happier, lifted their mood and helped them feel more relaxed, all points well supported in academic research.³⁵

The final way in which the sample explained the importance of green spaces were comments about the contrast with the grey infrastructure that features in Coventry, such as the ring road. Inf#36 noted green spaces as 'looking natural and pretty instead of just roads and flats.' This differentiation between city landscape and green space helped to celebrate green spaces in Coventry. Therefore, the focus upon local green spaces in UK CoC 2021 events was important for reinforcing the importance of these localities for local people.

The research team also collected evidence of people's engagement using Observational Protocol techniques at 21 events (see Appendix 2). As well as observing people's behaviours at events taking place in green/blue nature spaces and sometimes online, the researchers collected comments from participants as they took part in the activities. In order to evaluate whether these participants 'connected' with nature we analysed their observations and statements against the recently developed and validated scale for measuring Nature Connectedness (Nature Connection Index), which aligns people's observations with the following six statements: 'I always find beauty in nature'; 'I always treat nature with respect'; 'Being in nature makes me happy'; 'Spending time in nature is important to me'; 'I find being in nature really amazing; I feel part of nature'.³⁶

³⁵ Callaghan, A., McCombe, G., Harrold, A., McMeel, C., Mills, G., Moore-Cherry, N. and Cullen, W. (2021) *The impact of green spaces on mental health in urban settings: a scoping review*, *Journal of Mental Health*, 30:2, 179-193, DOI: 10.1080/09638237.2020.1755027

³⁶ Richardson M, Hunt A, Hinds J, Bragg R, Fido D, Petronzi D, Barbett L, Clitherow T, White M. 2019. *A Measure of Nature Connectedness for Children and Adults: Validation, Performance, and Insights*. Sustainability 11:3250.

The complete dataset of the observational records included many statements indicating that the events have given the participants the opportunity to connect positively with nature. Examples of participant responses are presented in table 4 below:

Connection with nature statement	Participant comment
Being in nature makes me happy	<ul style="list-style-type: none"> • feelings of being happy by being in, and actively engaging with, nature in the gardens • enjoying being in the beautiful, calm, green surroundings, breathing the fresh air talking to other participants • happy to talk with each other and appreciate the outdoor environment • enjoying being in the outdoors
Feeling happy and enjoying the beauty of nature	<ul style="list-style-type: none"> • feeling good about experiencing (seeing, smelling, touching, and tasting) the nature space, the beautiful blossom on the trees, the emerging green vegetation and eating some of the produce grown at the site • enjoyment of seeing and connecting with the 'pockets of green nature' in this otherwise very urban/concrete environment
Being in nature is important to me	<ul style="list-style-type: none"> • recognising the area and to feeling a sense of ownership of the space and pride in what they have achieved
Feeling a sense of amazement with nature, treating nature with respect	<ul style="list-style-type: none"> • the activity had made them connect with their garden in a new way: 'It was fascinating watching the wildlife in the garden and interesting to note where in the garden the wildlife was most present/active, which plants attracted pollinators and which features provided good habitats for the creatures' • shared information about the increasing diversity in bee species in his garden across the years; the participant and his mother had recorded more than twenty species

Table 4: Participant's connection with nature

Expressed impacts

The observational protocols at the 21 events (see figure 5 below for an illustration of an event) also showed that in addition to giving participants the opportunity to connect with nature there were indications as to how they realised/appreciated the impact/benefits that the connection with nature had on them and their families. The observations recorded include:

- A child's behaviour and confidence had improved considerably and was more able to connect with other children in the outdoor nature space.
- The events had helped an individual to build confidence and to address personal issues such as anxiety and mental health issues.
- Events helped people feel connected with nature and to build positive relationships and support groups, and this had had a positive impact on their wellbeing.
- Spending time on the allotment had impacted positively on a participant's mental health by being outdoors and engaging with the environment by growing food, and the satisfaction derived from eating the food. Opened up her world to a diverse group of people and making new connection with people in her local community.
- A participant stated that growing food and changing her diet had a positive impact on her physical health.

In one of the 21 events, a participant offered observations which indicated a more negative impact/reflection in terms of the connection with the natural environment, reporting that the participant ‘felt unsafe and vulnerable’. This occurred during one of the audio guided walks (Walk with me³⁷) in Coventry, for which the participant recorded:

Although the area is described as ‘one of Coventry’s oldest and most diverse neighbourhoods’, it seemed as if the organisers had focused more on the history of the area over its current reputation and more recent history (including both race and gender-based issues and violence). Not only was the walk along a route of a number of busy roads with heavy traffic and roadworks, the tour also led walkers halfway up a narrow, blocked-in passage-way (surrounded by high walls/gates – like an unsafe back alley), up an industrial estate to the River Sherbourne (which was full of car garages and cars parked/pulling out everywhere), and through a council estate (where the foot path was surrounded by two-storey flats, most looked derelict and empty, with sheets of metal over the windows and doors). Although following the river was nice, there were some interesting bridges along the way, and the history of the area and the tour’s audio was very interesting and exciting, the area didn’t seem as ‘family friendly’ as it was advertised to be, and there were a number of areas that felt unsafe and unwelcoming (the locations along the walk and the people in those spaces), especially for those doing the walk alone or with any other vulnerabilities. Although the music and sound effects audio did make the tour more interesting by successfully setting the scene and making the area come to life, the constant use of music and sound effects on top of the audio, made it hard to stay aware of the

surroundings while walking and made walkers feel vulnerable in some situations where they are completely distracted from the real world – in a public place and around people/an area you don’t know.

Analysis of engagement on social media

The overall levels of engagement on social media were limited. Although organisers uploaded many posts to the Facebook,³⁸ Twitter,³⁹ YouTube⁴⁰ and LinkedIn⁴¹ platforms these channels were used predominantly to disseminate information about events rather than engage with audiences. Engagement with the Green Futures theme and environmental issues increased as the City of Culture progressed, and particularly towards the end there was a greater range of events that had links to environmental themes. The appointment of a Website and Social Media Manager once the UK CoC 2021 year started was beneficial for increasing visibility and engagement.

The average number of views for environment themed videos on YouTube was 570. The events that were most prominent related to environment themes were ‘Our Wilder Family’ with four related videos being viewed over 2,500 times. The Opening Ceremony, ‘Coventry Moves’, which traced the route of the River Sherbourne through the city, saw one element of the event receiving over 5,000 views. Other events typically received between 100–200 views at the time of this study; for example, Walking Forest: Why We Walk, received 193 views, Becoming Fungi, Becoming Forest received 123 and Haus of Kraft: Behind the Science received 193. Disabling of comments on these videos meant it was not possible to gauge views on their content.



Figure 5: Song and Soil event-connecting with nature at the allotment; growing food, sharing knowledge about food growing, building new relationships and eating the food produced.

³⁷ <https://coventry2021.co.uk/what-s-on/walk-with-me/> (accessed 25 August 2022)

³⁸ <https://www.facebook.com/coventry2021/> (accessed 1 June 2022).

³⁹ <https://twitter.com/coventry2021> (accessed 1 June 2022).

⁴⁰ https://www.youtube.com/channel/UCIpBngO0nn6_2NHH7HAjreg (accessed 1 June 2022).

⁴¹ <https://www.linkedin.com/company/coventry2021/> (accessed 1 June 2022).

Reach into communities

Natural England data indicates that people in Coventry typically engage less with the natural environment than the UK average. The reasons for this are unclear but are likely to include, real and perceived safety fears and lack of easy access to attractive green spaces. UK CoC 2021's focus on Green Futures created an opportunity to both improve the quality of green spaces and also increase community engagement with these spaces. Informant #3 captures shifts that occurred following the onset of the pandemic:

I know that the household survey, for example, didn't show the huge jump in use of green spaces that it did in other cities during (*the first months of*) COVID. And that doesn't really surprise me because there are so many barriers to the green space access within a city like Coventry and that's a lot to do with poverty. It's a lot of culture. It's a lot to do with access, that physical access, it's a lot to do with crime. The Canal Towpath is a perfect example, there was not an increased use'.

But we are now starting to see the footfall figures within the canal basin and on the Canal Towpath in the last year, have double or tripled. And we are successfully managing it through a multi-agency approach.

However, respondents expressed reservations about the breadth of participation that has been achieved both in terms of overall numbers and the diversity of participants that have been reached.

A counter view was that the quality and profound character of the experiences enjoyed by those who had engaged had been very important. 'Walking Forest' is seen as an example of a project with a profound, if narrow, impact. A respondent captures the challenges as follows:

I think that some of the work that was produced was never going to engage to a wide audience in Coventry. I'll give Sirens Crossing as an example, a beautiful piece of work, incredible engagement with amazing artists, but the audience was predominantly white and female and between the ages of 40–60. And, yeah, I think we probably would have known that at the start. I think it's the sort of work that if you had two years' worth of investment, you probably would have been able to disseminate that better and find different points of engagement and different points of learning. It's a genuine learning within that sort of work exists better in a longer programme. And that isn't against the work at all. It's a beautiful piece of work. It's just, you know, did it reach the young people of Coventry? No, it didn't. Did it reach a diverse audience? No. Inf#3

It is too early to judge what the full impacts of UK CoC 2021 will be upon individuals, communities and organisations. There is evidence that some of the in-person events have had positive impacts upon participants, especially where 'actions' were explicitly built into the event activities. UK CoC 2021 has provided a timely opportunity for organisations to consider how the arts can be embedded within 'Green' initiatives and become a staple tool for raising awareness of 'Green' and wider environmental issues and initiatives across, and beyond, the city.

Research Question 4: How behaviours of individuals, communities and organisations have been influenced and changed during UK CoC 2021

Creating impact and intention of pro-environmental behaviour change

Encouraging local people to attend events and enjoy engaging with the local environment was a clear objective of the Green Futures programme. For many event organisers there existed a further challenge, as explained by informant #12:

The Green Futures environmental events were lovely events, but they didn't necessarily give people an action to take home. It was just a lovely event... And so, I don't know if

people made that connection. ...whenever I'm doing an event, I always think what's my take home message, what do I want as an end result of this? Do I want people to just have a nice time?

For some of the events, primarily the in-person physical events held in green/blue nature spaces, the data recorded in the observational protocols provided indications of participants actively making pledges or asserting their intentions to take 'green actions', both new and further actions. The observations recorded included:

- participants (children and adults) wrote pledges on what they would do differently with the waste that goes through the toilet, sink and drains to minimise pollution of the waterways and oceans
- asserted intention to make their garden more wildlife friendly e.g. planting more flowering plants for pollinators
- expressed intentions to revisit the site on a regular basis, intention to do more foraging of wild plants in their local area
- intention to manage their own gardens/spaces using environmentally friendly ways (not use herbicides), allow some weeds to grow for foraging and to support pollinators
- expressed intention to walk or cycle in the city centre rather than use the car to take more notice of green spaces
- intentions of greater engagement in gardening, use organic growing techniques and to do more nature-based activities
- intention to revisit the site on regular basis as a way to proactively manage their mental health and wellbeing.

In the 17 interviews with Coventry citizens, some people highlighted how the UK CoC 2021 events had helped to draw attention to local environmental issues. Whilst some of these were positive outcomes, such as re-thinking Coventry as ‘the city of the car’, others were more negative in terms of increasing awareness of the environmental problems. These included issues caused by the refuse collection strikes in Coventry that occurred during UK CoC 2021; adequate cleaning up during and after popular events; and the messiness of some green spaces in the city. In turn, these realisations prompted some people to state that they were becoming more active in challenging the problems and finding solutions.

Comments from these interviews suggested that during the course of the City of Culture period, citizens considered whether their actions were helping to mitigate environmental concerns. A number of different actions were mentioned and explained through photographs from reducing plastic use, to making more environmentally friendly decisions about travel, such as walking, cycling or avoiding flying. Respondents also discussed choosing to lead a vegetarian diet, participation in environmental activism and to take action in the workplace.

Despite the negativity expressed around the refuse crisis, recycling was the most frequently mentioned action taken to mitigate environmental impacts. People explained the importance of recycling, separating waste so that materials can be re-used (Inf#18, Inf#21). Important comments were made around how change is only possible through larger scale action, with UK CoC 2021 being highlighted as a vehicle through which environmental concerns can be raised and the importance of green spaces in the city reinforced.

However, the research also found that citizens in Coventry are doubtful that their actions are having an impact. Respondents explained that often their actions ‘felt like a drop in the ocean’ (Inf#21, Inf#28) and that ‘I don’t really feel that anything I’m doing is going to be significant’ (Inf#22).

Organisational learning and inspiring future action

The stakeholder interview data pointed to Coventry CoC 2021 leaving a legacy amongst ‘Green’ and environmental organisations it engaged with. Interviewees spoke about how UK CoC 2021 encouraged them to re-think ideas around how key environmental messages were shared, but also how organisations approach engaging diverse communities in environmental and ‘Green’ issues.

UK CoC 2021 was an opportunity for organisations to reflect on their ways of working, be open to new ways of working and relationships and, afford consideration to how the arts can be embedded within ‘Green’ initiatives and become a staple tool for raising awareness of ‘Green’ and wider environmental issues and initiatives delivered across the city.

I think the legacy for us is that it’s a window into the world of the creative world, which is not something we were tapped into particularly before little bits here and there, but not in the way that it has been through City of Culture. So, we’ve been able to work with. ...people who are doing theatre workshops, people who are doing art things. (Inf#12)

So, there’s been a lot of different people that we’ve been exposed to be able to see what they’re doing in a way that we just simply wouldn’t have had that access to. And we’ve been able to engage with people that we don’t normally engage with because people are coming to the event. (Inf#12)

And just looking at what other people are doing and taking those ideas and taking that inspiration and moving forward as well as the people and the contacts that I’ve made this year and going forward. ...we’re doing things differently now and we’re looking to engage with different audiences. (Inf#12)

I think, for what City of Culture have done, because that’s going to exist forever, it might take some maintaining, but a lot of the heavy work is done so that will still exist in the city even after they’ve gone. Some of the development they’ve done around the city in terms of like, green spaces kind of looking tidier than they ever have before, hopefully, ...they’ve left people with the knowledge of how to maintain these spaces I think, that’s what I’d be looking for from City of Culture. (Inf#13)

Research Question 5: What factors affected the delivery of Green Futures within UK CoC 2021?

The Green Futures programme has ultimately achieved many successes, although stakeholders made it clear that the journey had been beset by difficulties, partly triggered by the COVID-19 pandemic but also by strategic and managerial problems. The relatively late addition of the environmental strand into the wider programme proved problematic in terms of integration. It was only in the latter stages that the Green Futures strand took a place at the centre of the overall programme. There were organisational challenges within the Trust, such as slow issuing of agreements, contracts and payments and inconsistent event marketing, which negatively affected the development of relationships with partners.

During the research, various themes emerged which provide further light on the ways that Green Futures was integrated into and was affected by the overall management and governance of the wider UK CoC 2021 programme. In this section we reflect upon the different ways that COVID-19 affected the planning and execution of the Green Futures programme and its legacy; the effectiveness of the partnership working model upon which the programme was predicated; and how delivery was affected by the challenges of the year for the management of the UK CoC 2021 Trust.

COVID-19 as a problem

The onset of the COVID-19 pandemic occurred during the final months of preparation for UK CoC 2021 and severely disrupted the planning and delivery of the programme. The impacts upon the delivery teams were considerable and multi-faceted. Working from home mandates altered the dynamic within the Trust's teams and impacted negatively upon relationship development with partners and other stakeholders. Ongoing uncertainty about the future of the programme and the actual timing and organisational requirements of events was also deeply challenging. The net effect was to increase workloads and stress substantially. For Green Futures, which had been added into the programme and the organisational set-up relatively late, the problems were exacerbated as relationships at various levels had not had an opportunity to bed in.

COVID-19 as a driver for the Green Futures programme

Conversely, the pandemic and associated lockdowns reinforced the importance of Green Futures as a component of the overall programme. The fact that many events were outside meant that they could take place when indoor gatherings were still not possible. Indeed, such events assumed a higher degree of importance as they encouraged people to learn more about green spaces in their neighbourhoods and to feel able

to access and enjoy them at a time when daily exercise was a crucial element of coping with lockdowns and the broader stresses of the pandemic. As explained by one interviewee:

So, over the summertime, we managed to do a bit more than maybe thought we could do just purely because a lot of our work was outside. So, we would do loads in the canal basin. And that was really successful. Just because people could move around, and it's a gentle way into coming back to things again. I suppose it feels safe, in that sense that there's a few different things you can do and you're roaming around a space, or you're going to something in the park. (Int#4)

Indeed, one observer posed the thought that the pandemic actually benefitted Green Futures as other activities were having to be put on ice whilst Green Futures work could be prioritised and was clearly meeting a need within the community.

As such the programme became more important within the overall cultural programme:

I think, because of COVID...it's actually become a real fact Green Futures has become a real focus of the project. (Int#6)

Marketing and publicity

Marketing and publicity shortfalls were widely flagged up by interviewees. They pointed out problems with achieving basic communication support, repeated issues with the 'clunkiness' of the City of Culture website, partners not being recognised on publicity materials and failures to target marketing directly to people in a timely manner. The most egregious example was of a comprehensive booklet detailing the programme which arrived on people's doormats after many of the events had taken place:

I think it's been really hard to find what's going on anyway. But again, it's not visible in people's neighbourhoods. So, they have to go and look for it or if it comes through the door, unfortunately the thing that comes through the door is kind of out of date. (Inf#5)

One of the major partners points out that a lack of inter-organisational engagement has been problematic:

we've certainly not promoted them [events] to the level in which we could have done if we've got a better-established partnership at the outset with an effective communication plan and you know, linked our comms team with their comms team. There's never been any discussion between comms teams. (Inf#7)

The fault for such a lack of engagement was not seen to lie purely with UK CoC 2021. External stakeholders noted that some of the partners were not experienced in engaging with arts and culture-based organisations and therefore lacked knowledge about how best to catalyse such relationships. As a representative from an environmental organisation explained:

When we're planning an event, we know what we're planning and we want our outcomes ...right at the end of this project, we want to have achieved this. Whereas the creative world is a lot more fluid and so quite often they'll be like, well, we're just going to do some workshops and some people will come along and we'll just kind of see what comes out of it...And that I think was a real cultural change for us. (Inf#12)

Partnership working and challenges

Developing and embedding a wide range of stakeholder partnerships was a key mechanism for delivering the UK CoC 2021 programme and its legacy. Indeed, multi-scalar partnership working was a core objective being pushed by the NLHF, who wanted to see co-creation between a range of artists and the existing environmental sector in the city. The UK CoC 2021 helped to create opportunities for bringing sectors together from the arts and the environmental arena. A common theme in interviews and in informal and more formal conversations during field research with representatives from 'green' community and larger environmental organisations was a desire to have had the opportunity to be more proactively involved in the City of Culture; to develop and build partnerships, to use local knowledge to inform the events/activities delivered and adopt an inclusive approach to engage positively with communities across the city. One of the mechanisms for facilitating this was the setting up of a Nature Working Group comprised of key environmental stakeholders. This led to cross-fertilisation of ideas and activities through encouraging individuals and organisations to employ alternative methods of raising green and environmental issues by using the arts as a means of programme delivery and to open up ideas for future partnership working. Interviewees expressed the benefits as follows:

We all meet together and it's nice networking because it's like, 'oh, oh, you're doing that project', 'Oh amazing, we're doing this project, maybe we could crossover in some way' ...And that means that we can, again, keep stretching those branches out and reach more people. We've got more time down here for people to come and join us. So, from that aspect, I think the City of Culture funding we've received has been really, really important to us. (Inf#9)

City of Culture has just been like right here are all these creative people...And they're in Coventry already doing things. So, let's work together and it's opened our eyes to a whole range of organisations and individuals, which has been really nice. (Inf#9)

The passion and skills of individuals working within the Trust are commented upon favourably by all observers who all expressed sympathy for people having to work on such a tricky project during an extraordinarily difficult time. Indeed, the professionalism of Trust staff and partners was widely commented upon. One partner noted that the strains upon staff were apparent:

You just worry for people, because it's just such a big thing. Yeah, there were times where it was like, you can see cracks behind the smiles. But, you know, I'm just really happy that it's kind of come together at the end of the year. (Inf#9)

Smaller organisations offer a positive view of their experiences of collaborating with the Trust, emphasising that the reduced bureaucratic burden they faced compared to large organisations has been helpful and that having a swift route to relatively small pots of funding has also been crucial in enabling them to get on with the task of delivering:

our partnership with City of Culture has been really organic. I'm really pleased to say and very authentic. (Inf#7)

However, the journey during UK CoC 2021 was bumpy. Partnership working and stakeholder relationships that were beginning to take root in early 2020 were disrupted by the COVID-19 pandemic. The inability to develop working relations through face-to-face meetings was a considerable challenge. Several interviewees observed that the Nature Working Group lost impetus during the pandemic. Furthermore, there was a high level of staff turnover within the UK CoC 2021 team which had impacts upon the organisation's ability to deliver. For example, there were vacancies in the Green Futures team at the point when the programme was starting to gather momentum, placing a severe burden upon the staff in place, also resulting in a lack of time to induct and prepare new appointees who had to hit the ground running. Finally, the late addition of the environmental theme within the overall programme created challenges for the Green Futures producers.

The net result was that the Green Futures programme struggled to engage effectively with key stakeholders in the early stages of the programme's development. Partners pointed to long delays in receiving agreements and contracts as well as broken commitments.

External stakeholders summarise the problems as follows:

Now, there were issues probably the middle of last year or even earlier. Staff were getting really cheesed off with the Trust and how they were and were not being dealt with and how they were or were not being supported. So, there was a sort of mass exodus of quite a large number of staff who have been around since 2019. Just left and the comms role, for example, was just vacant for ages and ages, so there was no dedicated comms support for any of the programmes, I don't think but certainly not for Green Futures. (Inf#6)

It feels like some people have had things done to them or expected of them without there being consultation around timescales, around capacity levels, and around what's realistic for what level of funding and when does the money arrive to enable this to happen. (Inf#5)

it was just a constant sending emails into the void and trying to set up meetings and I had several meetings with producers, particularly around the Green Futures strand of work and there was some I would call them promises about money, and like project partnership, but nothing ever came to fruition. None of them came to fruition. None of them. I just feel so separate from what has actually happened. (Local Community Organisation).

Producers have come in with...with a mandate to carry out an event or an activity with not enough time, no real understanding of how you engage people who are not the kind of people they're used to working with... no lead in time, and then this sort of anticipation that people will just drop in and get involved... There's no continuation... that's one of the things that I've always found is massively challenging like when you work for a big organisation, but the people don't like being consulted about things are being asked to engage

in process, and then just being left and not knowing what the follow through is. It is a classic mistake that happens still a lot, and I think that's the thing where the community and voluntary organisations can be so useful to these organisations, it's like, we have long term relationships, like we can help you develop how you can do really good quality engagement, and allow people to feed in at a level that is suitable for them. (Inf#14)

It is apparent that the depth and breadth of relationships improved in the latter stages of the programme by which time the second wave of staff members had become embedded, and the lifting of pandemic restrictions enabled momentum to gather within the programme's execution.

You know, it's picked up now. And I think it's forming, but it's a little bit late in the day. And I think some of that now will come through the legacy that they leave rather than the actual event itself. (Inf#6)

4. DISCUSSION AND CONCLUSIONS

In this final section we return to the original question posed by the Coventry City of Culture Trust when commissioning this focus study and the outputs and outcomes proposed in the UK CoC 2021 Theory/Story of Change.

Focus study question:

In what ways has cultural programming and other Trust activity increased awareness of environmental responsibility and increased engagement with the natural heritage and natural landscapes areas of the city?

UK CoC 2021 represented a clear break with the previous iterations of the UK City of Culture as an environmental theme was brought into the planning and delivery of the programme. This resulted from the increasing awareness of the imperative for more sustainable approaches to be adopted within society more broadly and due to the increasing integration of environmental messaging within the creative space, in this case driven by the objectives of a major funder.

The environmental theme was introduced after the original bid had been accepted necessitating a considerable amount of work to bring environmental dimensions into the overall programme. This was achieved with the support of an external consultant and the creation of a dedicated producing team that developed and implemented the Green Futures theme within the overall programme. A Green Code was developed with a view to mainstreaming sustainable practices across the programme as a whole.

The worst pandemic for a century struck causing considerable disruption to the overall programming of UK CoC 2021, affecting the internal operations of the Trust and its partners and, of course, severely disrupting the ability to run events.

Conversely, the onset of the pandemic and the initial lockdowns created opportunities for the environmental dimension to take precedence, as outdoor activities were the only option for events in the early phases of the programme, and people's only outlet was to engage with their local environment.

In this sense the focus on environmental programming and local green spaces certainly enabled key contributions to be made to people's wellbeing in line with the outcomes set within the PME Theory/Story of Change model.

Our research indicates that people's engagements with Green Futures activities tended to be very personal in nature whereby participants found their own meaning through the activities they took part in. Most people came away feeling that they had learned something new about green issues and some were keen to integrate aspects of their experience and learnings into their lives going forward. Several of the event organisers we spoke to referred to the overall impact being narrow but deep, in other words whilst the reach was not as high as might have been hoped, the impacts upon individuals were significant. Furthermore, some events took a more activist approach and successfully provided opportunities for Coventry and its people to engage in bigger debates, such as the building of HS2 and the climate emergency.

Coventry's green spaces were better promoted and benefitted from work to improve them. This could also be said of other areas, such as the city centre where the 'grey' environment was upgraded for the benefit of community members and visitors. Parts of the blue environment, such as the Canal Basin were improved too through works to clear up hitherto neglected areas and render them safer and more accessible for local people.

In line with broader trends in the creative arts there were several events and activities which included environmental messaging, such as the Turner Prize exhibit 'Salmon: Traces of Escapees' and the finale event, 'Our Wilder Family', which challenged their audiences to think more deeply about the relationship between us as humans and the natural environments we inhabit. The decision to frame the legacy from UK CoC 2021 around the Green Futures programme can be seen as evidence of the momentum that eventually built up around this vitally important component of the programme.

Overall, there were distinct successes in terms of achieving programming that promoted environmental awareness both in terms of enabling people to connect with local green and blue spaces and to think about overarching environmental challenges at city, national and the global scales. Despite the development of the Green Code there were gaps in terms of delivering truly environmentally responsible programming. Awareness and implementation of the Green Code was much lower than it should have been. Furthermore, there were inconsistencies in the application of sustainable practices within the delivery of events.

A major learning from the delivery of the Green Futures programme relates to the need to establish effective relationships with partner organisations. This report provides details of some of the problems that ensued due to a lack of responsiveness to partner needs. These problems were obviously exacerbated by the pandemic and the strains imposed on all organisations, but other significant issues were more structural such as the processing of contractual agreements and the transfer of funds. These problems significantly undermined the ability of the partnership model to deliver as effectively as it might in the view of many partners.

Overall, UK CoC 2021 has been successful in building momentum in the environmental space and has helped to catalyse collaborative partnerships between creatives, environmental groups and local policymakers. This bodes well for the ongoing delivery of Green Futures in the legacy phase and also for the profile of environmental causes within Coventry. The city's experiences offer insightful lessons for future holders of cultural events as it becomes increasingly important that major event organisers treat environmental objectives as core deliverables rather than as 'nice to haves'.

Concluding comments

The ultimate achievements of the UK CoC 2021 in the environmental space are to be lauded. Coventry hosted UK City of Culture during an extraordinarily difficult period in modern history. The late adoption of a new thematic strand, in the form of the natural environment, was always going to be a difficult task, exacerbated by the onset of the COVID-19 pandemic which imposed a range of challenges and constraints on the

programme organisers. There were many problems along the way but ultimately the programme delivered a number of successful activities, many of which engaged with people on a very personal level and others, such as 'Our Wilder Family', were enjoyed by tens of thousands. The overall impacts upon individual and organisational behaviours are very hard to measure at this stage. Initial assessments indicate that some people have undergone profound experiences whilst others have begun a journey of increased appreciation for their local environment and their sense of connectedness to the wider natural world is being awakened. Cultural events therefore can be seen as important conduits for widening understanding and appreciation for the natural environment and issues of its effective management.

Recommendations

Given the experience of environmental programming in Coventry UK City of Culture 2021 here we offer some recommendations for delivering more integrated environmental themes within future cultural mega-events, such as UK CoC 2021.

- It is important that cultural events ensure that environmental governance and programming are built-in from the very start and the appointment of an environmental champion should be considered.
- Objectives in relation to environmental goals need to be clearly defined and articulated from the outset to avoid contradictions between the underpinning ethos of different programme events.
- If behavioural change is an objective, then clear pathways for influencing attitudes and behaviours need to be developed and implemented.
- Overarching environmental tools, such as the Green Code, need to be mainstreamed within the practices of the programme management body. To be meaningful such codes should be built solidly into assurance systems to encourage deeper and more consistent compliance.
- The effectiveness of tools, such as the Green Code, could be improved by the provision of training for internal and external stakeholders and 'off the shelf' examples of good (and bad) practices that could be picked up by event delivery teams.
- Continuity of staffing within the overarching delivery body is vital (if difficult). Staff turnover is detrimental to the building of effective relationships and the development of social capital, which is essential if such short-term programmes are to achieve their potential.
- The environment is a broad theme and the interests and concerns of citizens are likely to be wide-ranging. Therefore, prior consultation to understand local priorities is important.

- A universal approach is needed to ensure more inclusive engagement with a wide range of socio-economic groups.
- The creation of a forum, such as the Working Nature group, can be a useful way of bringing partners together and sharing ideas. However, such groups need nurturing and sustaining to be effective.
- For programmes to have a wider reach, activities should be promoted outside existing environmental networks.
- Marketing strategies need to use a range of platforms to interact with different communities, organisations and citizens of varying socio-economic status.

Appendices

Appendix 1: Glossary of terms

COP26 – The 26th Conference of the Parties summit

COVID-19 – Coronavirus Disease 2019

DCMS – Department for Digital, Culture, Media and Sport

HS2 – High Speed (railway, line 2)

IPCC – Intergovernmental Panel on Climate Change

PME – Performance, Measurement and Evaluation (of UK CoC 2021)

NLHF – National Lottery Heritage Fund

ONS – Office for National Statistics

UK CoC 2021 – Coventry UK City of Culture 2021

WWF – Warwickshire Wildlife Trust

Appendix 2: Events attended in order to undertake observational protocols

	Event	Date	Organiser / Location	Data Collection
1	City of Horticulture	26.10.21	Ryton Gardens / Coventry University	Digital / Observational / Shared link to survey
2	Beyond the City	01.12.21	Steppers UK / Draycote Waters	Digital / Observational
3	Embedding Sustainability and Climate Education in Teaching	10.02.22	Online	Digital / Observational / Shared link to survey
4	Soil and Song	27.02.22	Food union Allotment	Digital / Observational Interview
5	Planet Market	05.03.22	Fargo Village	Digital / Observational
6	Warwick Sustainability Summit	10.03.22	Online	Digital / Observational
7	Foraging and Folklore	10.03.22	The Hub / Pan Stockman and John Noble	Digital / Observational / Shared link to survey
8	Swap Shop		The Hub / Coventry University	Digital / Observational / Shared link to survey
9	Sustainable Careers Talk	11.03.22	Online / Borden Nahar	Digital / Observational / Shared link to survey
10	Little Acorns	15.03.22	Moat House Park	Digital / Observational
11	Woodland Wellbeing	15.03.22	Moat House Park	Digital / Observational
12	Walk with Me	19.03.22	Spon End, Naul's Mill Park	Digital / Observational
13	Innervation	01.04.22	War Memorial / Artist Rosie Tee and Bryony Rose	Digital / Observational
14	Seed Swap	09.04.22	Food union / Food Union Allotment	Digital / Observational / Interview
15	Turning the Tide	18.04.22	FLOW / Bishop Ullathorne School	Digital / Observational / Interview
16	Milesians	19.04.22	FLOW / Bishop Ullathorne School	Digital / Observational
17	Coventry Creature Count	20.04.22	Coventry	Observational
18	House of Kraft	27.04.22	Coventry Canal Basin / Warwickshire Wildlife Trust	Digital / Observational
19	Growing Jack's Frogs	30.04.22	Coventry Canal Basin / Warwickshire Wildlife Trust	Digital / Observational
20	Our Wild Family	15.05.22	War Memorial / Artist Rosie Tee and Bryony Rose	
21	Discovering Two Rivers: The Atoll and The Sherbourne	20.05.22	Anglican Chapel / Wildlife Gathering	Digital / Observational

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The Centre for Business in Society

Our research

The behaviours of organisations and policy makers impact on individuals, groups and communities, businesses and organisations, nations and global relations. These effects and consequences can be beneficial and enable enhanced social, economic and environmental well-being. However, negative consequences can also arise from business practices and policy makers paying insufficient attention to their corporate responsibilities or their impact on society. Our research aims to understand the role of business in society, to share these emerging insights and to seek a fairer outcome for all.

CBiS's team of researchers has long-established multiple industry and institutional collaborations on a global scale, sharing the benefits of impact-led research. We embrace research methods that are considerate and sensitive to the constantly changing business environment, behaviours, practices and society.

Our core funding stems from EU and government bodies, charities, research councils and local businesses. CBiS has a clearly defined focus within each research cluster as detailed in our Research Brochure.

Core themes


Our mission is to deliver effective solutions to policy makers, businesses and industries that reflect responsible practice. Through understanding the impact of organisations' activities, behaviours and policies, our research seeks to promote responsibility and to change behaviours so as to achieve better outcomes for economies and societies.

CBiS's research themes have now formed the basis of our four research teams which are centred around the following themes:

Sustainable Production and Consumption
Economic Development and Inclusive Economies
Sector, Economic and Financial Studies
Data, Organisations and Society



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The Sustainable Production and Consumption Cluster

Our research is aligned with the UN's Sustainable Development Goal 12: 'Ensure sustainable consumption and production patterns'. The cluster frames its research around a holistic approach to sustainability, whereby true sustainability requires the alignment of social, economic and environmental goals.

Our projects cover areas such as waste reduction, resource and energy efficiency, sustainable community and consumer behaviours, ethical certifications and supply chain governance.

Food futures is a pivotal part of our strategy going forward. Our work spans the issue of food waste at different nodes in the supply chain, to food provisioning for the 'food insecure' in the UK and internationally. This competitive research space is a hot topic nationally (and globally) and is one in which CBiS has a growing presence, impressive networks of practitioners and policy bodies, and success with seeking funding.

Our work is global in nature, reaching out in particular to South Africa, Indonesia and China. The interdisciplinary cluster team generates a dynamic environment for cutting-edge research.

The Centre for Agroecology, Water and Resilience

The Centre for Agroecology, Water and Resilience (CAWR) is driving innovative, transdisciplinary research on the understanding and development of resilient food and water systems internationally.

Food and water security is increasingly threatened by factors such as climate and environmental change, loss of biodiversity, conflict and market volatility. Through its focus on food and water, the Centre's research develops and integrates new knowledge in social, agroecological, hydrological and environmental processes, as well as the pivotal role that communities play in developing resilience. Unique to this Centre is the incorporation of citizen-generated knowledge - the participation of farmers, water users and other citizens in transdisciplinary research, using holistic approaches which cross many disciplinary boundaries. CAWR also aims to advance resilience science through creative work on a new generation of key issues linked to the governance of food systems, hydrological change, urban water, river processes, water quality and emerging pollutants.

www.coventry.ac.uk/cawr