Natural England and Libraries Connected

Culture Nature England

Programme evaluation report - July 2025

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Evaluation summary

Culture Nature England (CNE) is a research and development (R&D) partnership between Natural England and Libraries Connected to enable delivery of nature connection activities in communities via the public library network.

Delivered as part of Natural England's Protected Sites Strategy, it aims to explore ways to introduce and engage a wide range of people with nature; both for the benefit of people (wellbeing and health benefits of nature connection) and nature (increased awareness and valuing of nature).

The programme has been delivered at scale across England, involving 25 library services serving varied local communities. Participating library services have delivered hundreds of activities, engaging audiences in their thousands - from outdoor walks and sensory sessions to nature-themed story times, community gardening, arts and crafts, and immersive digital experiences - reaching children and adults from diverse backgrounds.

Libraries have used a strikingly wide range of settings, methods and materials to engage audiences, including indoor nature zones, library gardens, outdoor walks and activities, natural crafts, yoga and meditation, and virtual nature engagement. Many combined nature connection with reading, creativity or wellbeing goals. This blended approach supported both library staff confidence in planning and delivery, as well as engagement among audiences who may not normally take part in environmental or nature-focused initiatives.

Public libraries have provided an effective and inclusive delivery network for CNE, offering trusted, accessible, free-to-use spaces embedded in communities. Their ability to blend nature connection with existing literacy, wellbeing, and arts programmes enabled wide reach, especially among under-served groups less likely to engage with traditional environmental settings and activities. Audiences who engaged with CNE activity reported that this had made them more likely to visit the library or take part in library activities in the future.

Libraries have successfully engaged a wide range of audiences, including under-served audiences. CNE participants included children, adults of different ages, people from diverse ethnic and socio-economic backgrounds, and people living in locations ranging from inner cities to rural areas. The programme has included activities targeted to people seeking asylum, ESOL learners, disabled and neurodiverse audiences, and low-income families. Activities delivered in partnership

with trusted community organisations have helped foster inclusion for marginalised groups, while work in partnership with schools has been effective in reaching a young audiences. As outlined in the previous point, delivery via public libraries has supported engagement with more diverse audiences than would typically participate in nature connection-based activities. For example, minority ethnic communities who tend to be under-represented in nature-based activities but who are more likely to engage with public library services.

Partnerships have played a key role in enhancing delivery, particularly in libraries that worked with local Wildlife Trusts, schools, artists, ESOL providers, and charities and community organisations. These partnerships have enabled co-creation, brought in specialist skills, and extended the reach and relevance of activities. Forging these relationships has also proved beneficial to partners, who reported increased appreciation of what the library service can do and how the partnership can support their own organisational goals in the future.

The open, non-prescriptive design of the CNE programme was both empowering and initially challenging for libraries. While some libraries struggled with the lack of a standardised delivery model, particularly at the programme design stage, many more described this openness as enabling creativity and innovation. This flexibility was a core aspect of the CNE programme design, which recognises that libraries know their local communities and are best placed to design activity that works for their needs rather than a centrally imposed model of what nature connection activity should look like. In practice, this flexibility has allowed for meaningful local adaptation to local contexts and audiences, allowing libraries to develop activities that worked for their library space and/or surrounding environment, and for the programme to 'meet audiences where they are' in terms of nature access, nature awareness and curiosity, and wellbeing outcomes.

Library staff participation in the programme has led to renewed reflection on nature's place within the library space and its mission, and many reported noticing nature more in their own environments. Feedback from activity tracker logs, case studies and surveys of library staff show that staff developed a deeper appreciation of the role that nature connection can play in wellbeing and community engagement, and the potential role of libraries in this.

Nature-inspired art activity at Farnworth Library, Bolton
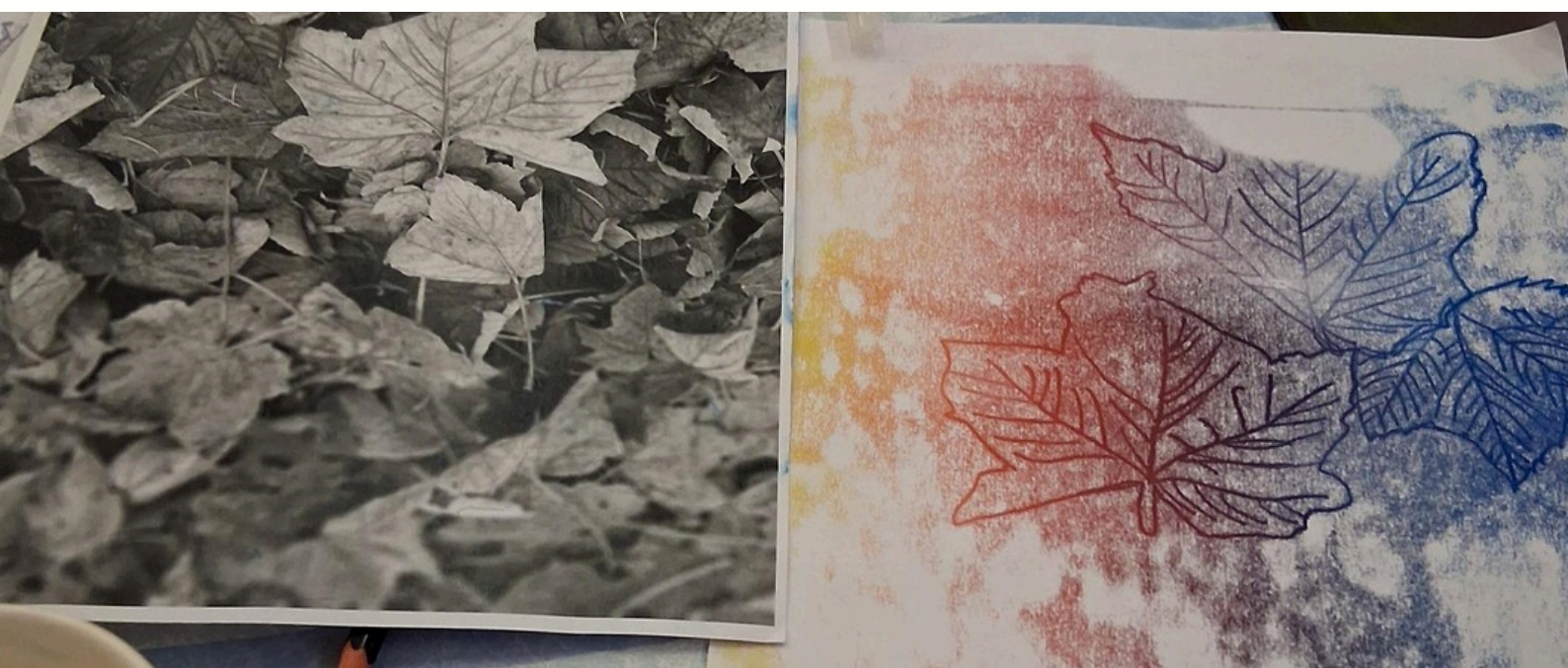
Nature Connection training for library staff was not only a valued and impactful part of the programme but was experienced as more meaningful when paired with CNE active delivery. Nature connection training for library staff was delivered in diverse formats by local environmental organisations and specialists and, particularly when available early in project delivery, helped staff feel more confident about promoting nature connection to audiences, using accessible prompts and sensory approaches that didn't rely on deep ecological knowledge. In some areas, difficulties in accessing training providers, or in accessing training at an early programme stage, limited potential impact of this learning on delivery. However, where training was accessed prior to delivery, its personal and professional impacts for staff were deepened. By programme finish 100% of staff surveyed agreed or strongly agreed that the training had increased their *"appreciation of the value of nature"* and sense of nature connection (both increasing from 67% early in the programme). Importantly, 100% of staff survey respondents felt training helped better prepare them to deliver CNE activity and had *"built confidence in promoting nature connection to library audiences"* (increasing from 76% and 71% early in the programme).

The evaluation data gives a very positive picture of library staff's perception of both the CNE programme overall and the audience outcomes achieved by CNE activity. 97% of library staff who took part in the end of programme survey agreed or strongly agreed that *"programme expectations were realistic and achievable"* and 90% agreed or strongly agreed that *"the programme has worked (or is working) well"* in their library. 97% of activity responses indicated that library staff agreed or strongly agreed that their CNE activity had *"encouraged participants to engage with nature"*. There were also high levels of agreement

with the statement *"the activity seemed to support participants' wellbeing"* (93% agreed or strongly agreed). In library staff feedback at the programme start and end points, there is a shift from a more cautious and varied response profile early on to a much stronger and more unified positive position later, which indicates that library staffs' faith and confidence in the programme increased as they got 'stuck in' to delivering for audiences.

There are high levels of programme audience agreement that participation in CNE supported their nature connection and wellbeing. 84% of the audience members who completed the evaluation's audience survey agreed or strongly agreed that taking part in CNE activity had positively impacted their sense of nature connection. Audiences responded particularly well to the sensory and emotional dimensions of nature connection activities. Participants frequently reported feelings of joy, calm and inspiration, and described increased awareness and 'noticing' of natural elements such as birdsong, plants, or changes in the season.

CNE activities have supported a range of 'soft' wellbeing outcomes for both library staff and audiences. Participants frequently described CNE activities as calming, uplifting, and restorative. For many, engaging with nature - even in small-scale or urban settings - provided a moment of pause, connection, or shared joy. Library staff also noted that staff morale improved through the opportunity to deliver creative, purposeful work that positively affected their communities and met local needs.

Libraries have encountered some barriers to successful CNE delivery. Some of these were very specific to libraries' local contexts, but those which were more generally applicable include late access to Nature Connection training, uncertainty

uncertainty about how to address Protected Sites and environmental issues within programming (see below), library staff capacity constraints, and the challenge of engaging under-served audiences without existing partnerships or when partnerships didn't function as hoped. Some also faced practical limitations such as poor weather impacting planned activity and making participation a 'tough sell' to audiences, or challenges in delivering activity within a limited library space. Despite these challenges, all libraries found creative ways to adapt and deliver meaningful activities.

Some projects have been able to introduce audiences to ideas around environmental pressures and the protection of nature through designated sites. Activities did successfully introduced environmental concerns (e.g. biodiversity loss, climate change), but other projects felt less secure with introducing more formalised and perhaps relatively abstract nature knowledge. Staff also noted that discussions about environmental pressures could risk negatively impacting other objectives of boosting participants' wellbeing, through triggering eco-anxiety (negative emotions linked to fears over harm to natural environments). Library staff would like support on integrating difficult messages about nature at risk with nature-inspired activity to support wellbeing.

It is important to emphasise that the CNE programme was structured as a research and development (R&D) project. This framing is crucial for interpreting these findings, as the programme was designed to test novel approaches, identify challenges, and learn from library partners about what needs to be strengthened for future delivery. In this sense, identification of challenges and barriers should be

Right: Elmdon Park- the focus of CNE activity by Solihull Libraries

viewed as a productive outcome, providing a clear basis from which solutions can now be developed collaboratively with libraries and partners.

Effective practice across the CNE programme has been highly context-dependent, but common features included creativity and bespoke and locally grounded programming, audience responsiveness, and a focus on inclusion and wellbeing. Successful approaches often wove nature connection into existing programmes; expanding and reshaping an existing area of library work rather than creating entirely new ones. Examples included baby rhyme sessions in garden spaces, refugee welcome activities focused on walks and nature-based arts and crafts, and linking local history with exploration of the natural environment.

Through the CNE programme, public libraries have emerged as effective platforms for fostering nature connection and environmental awareness across wide and diverse local audiences. This aligns with both the library sector's 'Green Libraries' ambitions, as well as illustrating how libraries can contribute to Protected Site Strategy goals by enabling community involvement in valuing and benefitting nature - thus helping people "play their part in Protected Site Strategies." The CNE programme's innovative cross-sector partnership model between environmental and cultural sector organisations holds significant potential for replication and development, but requires structured support to continue and scale impact, as initiatives based on library staff volunteerism or short-term piecemeal funding may prove unsustainable.

Spring wreath-making - Retford Library, Nottinghamshire

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1. Introduction

This report details findings of the independent evaluation of the Culture Nature England programme conducted by the **Countryside and Community Research Institute (CCRI)** at the University of Gloucestershire and **EAP Research Consultancy**.

Culture Nature England (CNE) is an initiative for public libraries to help reconnect people with the natural world. The programme is funded and coordinated by **Natural England** and **Libraries Connected** and is a research and development (R&D) project aiming to explore novel ways to introduce and engage participants with nature and its value, through accessible and inclusive nature connection activity delivered in communities via the public library network.

The programme is intended to benefit both people – via the wellbeing benefits associated with accessing nature and experiencing nature connection – and nature – through increased valuing of and appreciation of nature.

The CNE programme recognises the important role of libraries as freely accessible and inclusive public spaces with intergenerational appeal and leverages their central role in communities to promote nature engagement, wellbeing, and environmental awareness among diverse library audiences.

The programme has awarded **25 library services** each up to £6,000 of funding to support projects that foster community connections with nature. Now in its second year, the partnership builds on a successful pilot launched in 2023. Funded libraries are located across England, in locations ranging from major city centres to villages. Libraries received funding in autumn 2024, with the current period of funded activity ending in spring 2025.

Libraries participating in the programme have been given significant flexibility to design a programme of activities which work for their setting and responds to need in their local community. This is a core aspect of the programme design, which recognises that libraries know the communities they serve well and are best placed to design activity that works for their needs rather than delivering a centrally imposed model of what nature connection activity should look like. Consequently, activity within the programme is highly varied as libraries have developed locally grounded activities that worked for both their library spaces and surrounding environment, and local audiences.

Activities include projects to transform library gardens and establish community food-growing areas, guided walks and talks in local green spaces, nature-inspired story times or trails, mindfulness or arts and crafts activities, and digital or Virtual Reality nature engagements. Through these and a host of other activities, libraries participating in CNE are striving to provide accessible ways for people of all ages and backgrounds to connect with nature and

experience the well-evidenced associated wellbeing benefits of this. Alongside this, the programme has aimed to increase library staffs' skills and confidence to be nature connection ambassadors in their communities via nature connection training, and to allow libraries to establish relationships with appropriate local partners for this and future nature connection work. Both these aspects of the programme are intended to support sustainability beyond the current funding period.

This evaluation of Culture Nature England has been carried out by a research consortium comprising the **Countryside and Community Research Institute** (CCRI) at the University of Gloucestershire, and **Expert Academic Partnerships Research Consultancy** (EAP). The CCRI is a globally recognised rural research centre whose expertise spans the social and environmental sciences and four key research themes: culture, nature and heritage; land, water and ocean environments; sustainable food and farming; and rural-urban economies and societies. EAP Research Consultancy specialises in multifaceted, multi-site evaluations, leveraging academic and practical expertise to offer actionable recommendations for sustainable impact for public and third sector clients. The evaluation contract was awarded to the CCRI-EAP research team by Natural England in autumn 2024 following a competitive tender process.

The report continues with a description of the evaluation approach and data collection methods. Findings are then detailed, followed by conclusions and reflections to inform future rollout of Culture Nature England or similar programmes.

Nature-inspired arts and crafts - Barrow Library

2. Evaluation approach

Following inception discussions, four key research questions were agreed:

- How does participation in Culture Nature England (CNE) impact library staff valuing of and connection to nature, their awareness of environmental pressures in the local area, and awareness of pressures on Protected Sites?

- How does participation in nature connection training within the CNE programme build library staff confidence in promoting valuing of and connection to nature to library audiences (including for audience groups identified as new or under-served)?

- How does participation in CNE impact library audiences' valuing of and connection to nature, raise awareness of environmental pressures in the local area, and awareness of pressures on Protected Sites in general (including for audience groups identified as new or under-served)?

- What are examples of effective practice within programme in delivering outcomes around understanding, valuing of and connection to nature, awareness of environmental pressures in the local area, and awareness of pressures on Protected Sites, effective for local contexts and audiences?

2.1. Evaluation design

The evaluation employed a mixed methods research design which collected both programme-wide data and generated in-depth insights from a purposive sample of case study libraries. It utilised the following research tools and approaches which are elaborated in greater detail below:

- Activity tracker completed by library staff
- Audience feedback survey and posters completed by library audiences
- Case studies involving qualitative data collection during in-person visits to seven participating libraries
- Library staff survey, completed by library staff at the start and end of the programme

2.1.1 Activity tracker

The evaluation team provided participating libraries with an activity tracker via MS Forms, which library staff have used to record the individual activities delivered under the CNE

programme within their library setting(s) throughout the funding period. The tracker allowed library staff to enter one response for each CNE activity which took place; describing the activity and its target audience, recording estimated footfall and participation, uploading photographs of activities or changes to spaces, and providing brief reflections on what had worked well or had not worked so well with activities.

2.1.2. Audience feedback tools

Libraries were provided with a range of tools to collect audience feedback on CNE activities. These needed to be adaptable to the different contexts in which libraries were delivering and the type of activity (some based within the library or some going outside or travelling for activities), as well as the variety of audiences engaged (of different ages and with different access needs for feedback materials). The tools provided to libraries included a short online survey via MS Forms which was aimed at library audiences of adults and young

people aged 15+. Libraries were provided with a QR code and URL link for the survey to share with audiences, so that people could either complete the survey via their own or a a library device.

The online audience survey was confidential and collected data on the library where people had attended the activity and the activity type, and basic demographic information of the respondent. Scaled questions were included within the survey to assess outcomes for audience members relevant to CNE programme outcomes, including nature connection; nature knowledge, concern and curiosity; wellbeing; and library engagement. For activities aimed at families or younger children, or for activities where the target audience or the nature of the activity meant it was not practical for participants to complete an online form, an alternative format of feedback posters was provided. Library staff could print these and ask audiences to draw on them or add stickers to indicate their responses. These could also be offered if an eligible audience member did not wish to complete an online survey but may be willing to engage with a quicker and more immediate way of giving their feedback. The posters were designed to be eye-catching and visually appealing and included both text and emoticons in the response columns to increase accessibility.

Measuring nature connection

A key aim of collecting audience feedback was to gauge the impact of participation in CNE activity on audiences' nature connection. A growing body of research has sought to quantify individuals' connection to nature, resulting in a suite of validated scales, each of which have inherent strengths and limitations.

One widely used instrument is the Connectedness to Nature Scale (CNS) developed by Mayer and Frantz,[1] which assesses individuals' affective and experiential connection to the natural world. The CNS has demonstrated good internal consistency and predictive validity, particularly in relation to ecological behaviours. However, it has been critiqued for its conceptual narrowness and insufficient engagement with cognitive or behavioural dimensions of connectedness.[2] The Nature Relatedness Scale (NR) by Nisbet et al.[3] attempts to address this by including subscales for self-identification with nature, perspective-taking, and physical familiarity. Its multidimensionality is a key strength, providing richer insights into the complexity of nature relationships. Yet, its relatively lengthy format may limit applicability in time-constrained contexts and challenge audience engagement levels.[4]

The Inclusion of Nature in Self (INS) scale,[5] based on overlapping circles akin to social identity measures, offers a simple and intuitive visual metric. While efficient and user-friendly, its single-item design limits its reliability and depth, rendering it less suitable for capturing nuanced shifts over time or between populations.[6] Also

[1] Mayer, F.S. and Frantz, C.M. (2004) 'The connectedness to nature scale', Journal of Environmental Psychology, 24(4), pp. 503–515.

[2] Perrin, J.L. and Benassi, V.A. (2009) 'The Connectedness to Nature Scale', Journal of Environmental Psychology, 29(4), pp. 434–440.

[3] Nisbet, E.K., Zelenski, J.M. and Murphy, S.A. (2009) 'The Nature Relatedness Scale', Environment and Behavior, 41(5), pp. 715–740

[4] Tam, K.P. (2013) 'Concepts and measures related to connection to nature', Journal of Environmental Psychology, 34, pp. 64–78.

[5] Schultz, P.W. (2002) 'Inclusion with nature', Journal of Environmental Psychology, 21(1), pp. 61–78.

[6] Martin, C. and Czellar, S. (2016) 'The extended inclusion of nature in self scale', Journal of Environmental Psychology, 47, pp. 181–194.

drawing on identity theory, The Environmental Identity Scale (EID)[1] explores nature as part of self-concept. It is effective in capturing environmental commitment but has been critiqued for conflating identity with behaviour, making causal inference difficult.[2

Alternatives such as the Connectedness to Nature Index for Children[3] and the Nature Connection Index (NCI)[4] aim to improve cultural and developmental sensitivity. The NCI, developed for national-level monitoring in the UK, prioritises brevity and public engagement. While this enhances its policy relevance, it has been argued that this comes at the cost of simplification, and that the measure may underrepresent deeper affective bonds.[5]

Designing audience feedback tools appropriate for the CNE programme

Many of the tools mentioned above are used in research contexts where nature connectedness is expected to change due to interventions - such as outdoor education, conservation volunteering, or green social prescribing. In such cases, a before-and-after data collection design is usually necessary to assess impact.

As such, use of these tools would have been challenging within the CNE project, as feedback mechanisms needed to work for activities which were attended by different people each session or as open 'drop-in' style activities; with libraries

often having little prior idea of how many people might attend or attendee demographics. Few library activities were planned to consistently work with the same group of people over multiple sessions, and early conversations with participating libraries were also useful in understanding that audiences could be reluctant to engage in feedback activities, and that library staff would struggle to incorporate much feedback activity into CNE sessions due to time and staffing constraints. It was felt that a before and after measure would be impractical for most and that one feedback point at the end of the session was the approach which would most likely lead to audience engagement with feedback.

For these reasons, nature connection or wellbeing scales which require a before and after measure were not practical in this context. Consideration was also needed of the wide variety of audiences that libraries' CNE activity would engage. As such, a flexible and 'light touch' approach which allowed library staff to collect data in the way that worked for their activities and their audiences was essential.

In parallel to the development of the nature connection scales outlined above, Richardson and colleagues proposed the **Pathways to Nature Connection** framework, identifying five experiential routes to deepening nature connectedness: contact, emotion, meaning, compassion, and beauty. Although not a

[1] Clayton, S. (2003) Environmental Identity: A Conceptual and an Operational Definition. In Clayton, S. and Opotow, S. (eds.) Identity and the Natural Environment. Cambridge, MA: MIT Press, pp. 45–65.
[2] Kaiser, F.G., Byrka, K. and Hartig, T. (2010) 'Reviving Campbell's paradigm for attitude research', Personality and Social Psychology Review, 14(4), pp. 351–367
[3] Cheng, J. and Monroe, M.C. (2012) 'Connection to nature: Children's affective attitude toward nature', Environment and Behavior, 44(1), pp. 31–49.
[4] Richardson, M., Hunt, A., Hinds, J. et al. (2019) 'A measure of nature connectedness for children and adults', People and Nature, 1(3), pp. 390–405
[5] Barrable, A. and Booth, D. (2020) 'Nature connection in early childhood: A quantitative study', Early Child Development and Care, 190(9), pp. 1352–1363.

psychometric tool, it provides an important theoretical lens to guide practice and evaluation by foregrounding the mechanisms through which connection to nature may be cultivated.[1] This framework has been used to inform the design of interventions and activities that promote connection through sensory and affective engagement. It has been influential in Natural England's development of wider programmes of work relating to nature connection and to the Culture Nature programme specifically and had already been introduced to libraries at the outset of the project as part of the programme's introductory materials.

As such, the Pathways to Nature Connection was used to provide the basis for a set of scaled questions within the audience survey. Table 1 shows each of the five pathways as described in this framework,[2] along with the corresponding statement for each pathway designed for the Culture Nature programme audience feedback survey. Survey participants were asked to indicate their agreement with each statement along a five-point scale (strongly disagree, disagree, don't know, agree, strongly agree) based on their experience of the activity.

Table 1: Survey statements adapted from five pathways to nature connection

Pathway to nature connection	Description	Adapted statement for CNE audience survey
Contact	'Explore, take a closer look and get in touch with the natural world. Engage with nature through the senses for pleasure e.g. listening to birdsong, smelling wildflowers, watching the sunset.'	**During the activity... What I saw, heard, smelt, touched or tasted helped me feel close to nature**
Beauty	'Take time to appreciate the beauty of Mother Nature. Engage with the aesthetic qualities e.g. appreciating natural scenery or connecting through the arts.'	**During the activity... I noticed and enjoyed the beauty of nature**
Meaning	'Consider what nature means to you. Using natural symbolism (e.g. language and metaphors) to represent an idea, thinking about the meaning and signs of nature, e.g. the first swallow of summer.'	**During the activity... I thought about what nature means to me**
Emotion	'Find happiness and wonder. Find an emotional bond with, and love, for nature e.g. talking about, and reflecting on your feelings about nature.'	**During the activity... I felt positive emotions (such as wonder or happiness) inspired by nature**
Compassion	'Think about what you could do for nature. Extending the self to include nature, leading to a moral and ethical concern e.g. making ethical product choices, concerned with animal welfare.'	**During the activity... I felt like I wanted to help take care of nature**

Figure 1 (next page) shows the equivalent questions in the feedback poster format provided for libraries to print out.

[1] Richardson, M., Passmore, H.A., Lumber, R., Thomas, R. and Hunt, A. (2020) 'Moments, not minutes: A narrative approach to nature connectedness', Journal of Ecopsychology, 12(2), pp. 84–93.
[2] Lumber R, Richardson M, Sheffield, D (2017) Beyond knowing nature: Contact, emotion, compassion, meaning, and beauty are pathways to nature connection. PLoS ONE 12(5): e0177186
[3] As summarised in: Richardson, M (2017) 5 ways to be closer to nature. https://www.derby.ac.uk/blog/5-ways-closer-nature/

Figure 1: Audience feedback poster provided to libraries, based on the five pathways to nature connection

A further scaled question within the survey captured data on CNE programme outcomes related to audiences' awareness of nature and local green or blue spaces, awareness of pressures on nature and curiosity to engage more with nature, as well as audience perceptions of the influence of the CNE activity on their wellbeing. A separate question asked audiences about their previous library usage and whether they thought taking part in the CNE activity would make them more likely to come back to the library - relating to the goals of Libraries Connected for the programme to help promote the value of public libraries as community resources for a range of activities and encourage participation in libraries from new and under-served audiences.

Figure 2 shows the equivalent version of questions relating to nature and green/blue space knowledge, engagement and curiosity in the feedback poster format.

Figure 2: Audience feedback poster provided to libraries relating to nature awareness, engagement and curiosity

Finally, the feedback tools incorporated the Inclusion of Nature in Self (INS) scale, first developed by Schultz,[1] which asks respondents to choose from seven pairs of circles - one representing the 'self' and the other representing 'nature' - which gradually increase in overlay from completely detached to completely 'at one' with nature. Despite the limitations with offering this scale as a single-point rather than repeat measure, it was offered as it had already been introduced to participating libraries as part of introductory webinars with Natural England. Natural England were additionally keen that the evaluation include a scale validated for use with children and young people who were a target audience for several libraries' CNE activities. The set of images associated with the INS and developed by Kleespies and colleagues[2] as their illustrated extension of the scale were included in the online survey aimed at adults and young people aged 15+.

The version of the INS used in the equivalent feedback poster made available to libraries utilised Beery et al.'s [3] recent adaptation of the illustrated extension of INS. This replaces the featureless figure in Kleespies et al.'s illustrated scale with a child-sized figure, and switches the mountainous landscape to a more 'everyday' depiction of grass and trees – with these changes designed to improve the relatability of the scale's images for younger children.[4] It was explained to libraries that the feedback poster featuring this scale (Figure 3) may be particularly appropriate for activities involving children, and several libraries opted to use it in this way. While most libraries printed off the poster and asked children to add dots or stickers, others took a more creative approach – one for example, attached each image to a flowerpot and asked children to add a pebble to the pot with the image they most identified with after the activity.

Figure 3: Audience feedback poster provided to libraries, using Beery et al.'s adaptation of Kleespies et al.'s INS illustrated extension

[1] Schultz, P. W (2002) Inclusion with Nature: The Psychology of Human-Nature Relations, in Schultz, P. W (ed.) Psychology of Sustainable Development, Boston, MA: Springer. pp. 61–78.
[2] Kleespies, M.W.; Braun, T.; Dierkes, P.W.; Wenzel, V. (2021) Measuring Connection to Nature—A Illustrated Extension of the Inclusion of Nature in Self Scale. Sustainability 13: 1761. Your paragraph text
[3] Beery, T. et al. (2024) 'Connectedness to nature: a tale of three scales', Environmental Education Research, 30(10), pp. 1783–1805. doi: 10.1080/13504622.2024.2320342
[4] Although the depiction of the figure as a white, standing child raises other questions about relatability for ethnically diverse audiences and some disabled audiences.

As outlined above, the context in which libraries were delivering CNE activity meant that it was not practical to conduct these scales as a before and after measure or over a prolonged period of repeat engagement with programme activity. As such, we are not able to isolate the effect of participation in CNE activity from other factors that may have impacted an audience members' sense of nature connection or wellbeing. Instead, this data offers a snapshot of audiences' responses to the CNE activity in which they participated. The survey also invited audiences to expand on their responses to the scaled questions via free text boxes. While not all respondents completed these questions, those who did offered valuable insights into the specific effect of CNE activity, and this qualitative data is discussed alongside the quantitative data from the scaled questions in the relevant findings section of the report.

Offering a range of tools allowed libraries to select those that worked best for their setting, the activity being delivered and the audience(s) engaged. As such, libraries used the tools in different ways and varied their use of the tools across their programme of activities; with some offering only the survey, some offering audiences the choice of the survey or the feedback posters, and some using one or more of the feedback posters only. While this presents challenges in terms of data comparability, it was essential that libraries had this flexibility in order to enable them to complete data collection with audiences.

A few libraries made the decision not to use any of the tools to collect feedback, as they felt that none of the options worked well for their audiences. This included a library who were working with an ESOL group with no or very limited English language ability, and a library which was working with people seeking asylum. In the latter case, language was also a challenge, but the organisers additionally felt it was important that people could engage with the activity without the expectation of having to give anything in return. In these cases, library staff submitted brief summaries of verbal feedback they had received from participants or their impressions of audiences' experience of an activity, via the activity tracker.

2.1.3. Library case studies

Complementing the programme-wide data of the activity tracker and audience survey, the evaluation has also included in-depth insights from case studies of CNE activity from seven participating library services - purposively sampled to include different areas of England and to reflect variety across the CNE programme in terms of participating library types (central, town or neighbourhood library[1]) and location, activity type and target audience.

To achieve this, a secondary data analysis was undertaken which collated data on participating libraries' key local area demographics (ethnic diversity, deprivation and age profile). These were compared to the English average, with libraries' local areas categorized as above average, average (within < or > 5% of the English average) or below average for ethnic diversity[2] and deprivation,[3]

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[1] Central library – the primary library within a library network. Usually, but not always located in a town/city centre location; Town/Village library – the sole or main library in a smaller settlement; Neighbourhood library – local neighbourhood branch of a larger urban library network
[2] % of the population who belong to ethnic groups other than white British compared to the English average. For Neighbourhood libraries, ward-level data is used. For Town and Central libraries, built-up area-level data is used.
https://www.ons.gov.uk/visualisations/customprofiles/draw/
[3] % of households deprived in two or more IMD domains compared to the English average. For Neighbourhood libraries, ward-level data is used. For Town and Central libraries, built-up area-level data is used.
https://www.ons.gov.uk/visualisations/customprofiles/draw/

and younger than average, average (within < or > 5% of the English average) or older than average for population age profile.[1] This profiling of libraries also included their local area's position within the Rural-Urban Classification which places all lower tier local authority districts within England on a continuum from predominantly rural through to urban with major conurbation[2], as well as the local surrounding area's measure within the Friends of the Earth Access to Green Space mapping tool. This analyses data from the Office of National Statistics on local prevalence of household private gardens, together with data on publicly accessible green space. Areas are scored A – E, with E rated neighbourhoods the most deprived of green space, whereas A rated neighbourhoods have the highest green space availability.[3]

The secondary data for each library was then overlaid with information from libraries' CNE funding applications on their planned activities and target audience(s). Activity types were grouped into categories, and target audience(s) were categorised as either the general population, work targeting children and/or young people, work targeting older adults, and work targeting potentially vulnerable groups within the adult population - for example, people seeking asylum or people with specific wellbeing needs relating to health or disability.

This exercise resulted in the selection of seven case study locations(Table 2).

Right: The dense, urban setting of Pancras Square Library, Camden

[1] Age distribution compared to the average distribution across England. For Neighbourhood libraries, ward-level data is used. For Town and Central libraries, built-up area-level data is used.https://www.ons.gov.uk/visualisations/customprofiles/draw/
[2]https://geoportal.statistics.gov.uk/datasets/f9fdc3adbc234f8eacee7c2b62274632/about
[3] The score for each library was generated using the library postcode and a visual analysis of the immediate surrounding area via the online interactive map tool – where there was a difference in scores given to immediate surrounding areas, a mid-point score was recorded. https://friendsoftheearth.uk/nature/access-green-space-england-are-you-missing-out

Region	Library/Libraries	Library type	Target audience(s)	RUC2011	Deprivation	Ethnic diversity	Age distribution	Access to green space
LON&SE	Camden (Pancras Square)	Neighbourhood library	Children	Urban with Major Conurbation	Average	Above average	Younger than average	E
SW	Somerset (Taunton, Bridgwater, Glastonbury & Minehead)	Town libraries	General local population, children and young people	Urban with significant rural; Mainly rural; Largely rural	Average or above average	Below average	Average or Older than average	B, C, D
WM	Solihull (Hobs Moat and The Core)	Neighbourhood library and Central library	Children and young people	Urban with significant rural; Mainly rural; Largely rural	Average	Average	Average	A
E	Suffolk (Lowestoft)	Town library	Families, older people	Urban with significant rural	Above average	Below average	Older than average	D
NE	Gateshead (Gateshead Central Library)	Central library	People seeking asylum	Urban with significant rural	Average	Average	Younger than average	D
NW	Bolton (Farnworth)	Neighbourhood library	General local population, lower income families, ESOL community	Urban with Major Conurbation	Above average	Above average	Younger than average	C
EM	Nottinghamshire (Retford and Kirkby-in-Ashfield)	Town libraries	General local population, mental health service users	Largely rural; Urban with City and Town	Average (Retford); Above average (Kirkby-in-Ashfield)	Below average	Average	B, D

Table 2: Case studies with key characteristics

Each case study was visited once to coincide with CNE programming, with the researcher either observing or joining in with the activity as appropriate. Alongside observation the researcher also conducted interviews with library staff and local delivery partners. Interviews covered:

- Motivations for applying for CNE funding and perception of the local need(s) the programme addresses
- Effectiveness of the activity in reaching target audiences – including audiences identified as new or under-served; and the impact of mode and timing of delivery on uptake and engagement
- Library staffs' and partners' perspectives on the effectiveness of activities in increasing audiences' nature connection (and associated wellbeing benefits), awareness of environmental pressures in the local area, and awareness of Protected Sites
- Perspectives of recipients of nature connection training on the effectiveness of the training and its impact
- Libraries' experiences of local network-building and partnership working
- Overall experience of the CNE programme and support received from Natural England and Libraries Connected.

Case study visits also included data collection from audiences engaging with CNE activity. The format for this varied depending on the activity type and the audience, but most commonly involved researcher conversations with audience members during or after activities, covering:

- *A*udiences' feedback on the activity- had they enjoyed it and found it engaging?
- Audiences' views on how easy or difficult it was to access nature and/or connect with nature in their day to day lives and local environments

- Audiences' view on the impact of taking part in the CNE activity for them – in terms of nature connection, wellbeing and/or other outcomes
- Audiences' prior engagement with the library service, and the impact of CNE activity on their likely future engagement

Summaries of CNE activity within each case study library/library service, and reflections on outcomes and impacts, enablers and challenges, are featured throughout the report as 'boxes'. Anonymised data from the case study visits is also incorporated – along with surveys and activity-tracker data – into the main findings sections of the report.

2.1.4. Library staff surveys

An online survey of library staff involved in delivery across the CNE programme took place at the early stage of libraries' delivery of programme activity, and again towards the end of the programme. These surveys included closed and open-ended questions on:

- Perception of their own valuing of nature and nature connection
- Awareness of environmental pressures in the local area, and awareness of pressures on Protected Sites
- Reflection on the nature connection training received and its impact
- Reflection on the CNE programme delivery and activity (including experience of application and programme development, of working with local partners, accessing nature connection training, audiences reached, and successes or challenges with activities delivered)
- Perception of the impact of CNE activity on audiences' valuing of nature and nature connection, awareness of environmental pressures in the local area, and awareness of pressures on Protected Sites

- Ranking of top 5 local outcomes at different stages of programme delivery (using the nine CNE programme outcomes).

The late-programme survey repeated some of the questions in the early-programme survey, allowing analysis of 'distance travelled', but also included some unique questions inviting respondents to reflect on their delivery of and experience of the CNE programme overall and learning for future activity. Questions which allow analysis of 'distance travelled' or consistencies or changes in library staff's perceptions of CNE across the programme's life must be interpreted with the following essential caveats:

- While both surveys were sent to the same participating library services (via the named CNE contact person at each service), the respondent groups are not matched (for example, less respondents competed the end-point survey), and individual-level changes cannot be tracked.
- Differences between the early and late results should therefore be read as indicative of group-level shifts, not definitive evidence of distance travelled by the same individuals.
- Sample sizes are modest, and respondents were self-selecting, which introduces the possibility of response bias (e.g. more confident or engaged staff may have been more likely to complete the late survey).

That said, where patterns are consistent and directional across multiple measures, they can offer a meaningful signal about how the programme has been experiences by the wider library staff cohort over time.

In both surveys, most respondents identified as library staff members - 93% (37 of 40) in the early survey, and 100% (29 of 29) in the late survey. No

library volunteers or external delivery partners completed these forms.

When asked about their involvement in CNE delivery (multiple responses allowed), the early survey shows an even split: 42 % reported direct delivery, and 42 % reported supervisory or strategic roles, with 16 % indicating other involvement. By the late survey, this balance shifts slightly: 54 % now report overseeing activity, compared to 41 % directly involved, with just 5 % selecting "other." While differences are modest, they may reflect maturing programme roles, with more staff moving into coordination and oversight as local delivery becomes embedded and is handed over to contracted partners.

2.1.5. Research ethics

Ethical clearance for all empirical work packages was initially obtained via the CCRI's ethics approval process (audited by the University of Gloucestershire) in November 2024, allowing the use of the survey instruments and case study interviews for participants aged 18 and over.

Reflecting some of the libraries' activity working with children and young people, and with potentially vulnerable groups within the adult population (for example, mental health service users and people seeking asylum), additional approval was secured via the University of Gloucestershire's Research Ethics Committee in January 2025. This extended permission for the use of the research instruments independently by young people aged 15 and over, or by younger children or young people with parental/guardian support. This additional clearance also assessed and approved the suitability of the instruments for use by potentially vulnerable members of the adult population.

2.1.6. Summary of data collected

Data collection point	Data collected
Early-programme survey of library staff	40 returns across 23 library services
Activity tracker completed by library staff	262 returns across 25 library services
Online audience feedback survey	154 returns across 15 library services
Paper-based audience feedback posters/sheets provided for use in libraries	Five Pathways to Nature Connection: 413 responses Nature knowledge-awareness-curiosity: 22 responses Inclusion of Nature in Self: 403 responses
Library case studies	x7 library visits - including researcher observation of CNE activity, interviews with library staff and delivery partners, and conversations with participating audiences
Late-programme survey of library staff	29 returns across 21 library services

The following sections present findings drawing from the data sources outlined above. We begin with data relating to CNE's overall programme performance, including an overview of the scale and range of CNE programme activity, library staff feedback on nature connection training and the management of the programme by Natural England and Libraries Connected. We then move to evaluation of programme outcomes across nature connection; awareness and curiosity; wellbeing, and library engagement, before considering factors that have enabled success or posed challenges within the programme.

3. The Culture Nature England programme: What, where and who?

The CNE programme has provided funding to 25 library services across England (Table 3). There are funded library services in all but one of the English regions, with the only region where a library service is not in receipt of funding being the South East.[1]

Library service	Region	RUC2021 (District or Unitary level)	Delivery mode
Blackpool	NW	Urban: Majority nearer to a major town or city	Single library
Bolton	NW	Urban: Majority nearer to a major town or city	Single library
Bradford	Y&H	Urban: Majority nearer to a major town or city	Single library
Brent	LON	Urban: Majority nearer to a major town or city	Single library
Bristol	SW	Urban: Majority nearer to a major town or city	Libraries
Camden	LON	Urban: Majority nearer to a major town or city	Single library
Cornwall	SW	Majority rural: Majority further from a major town or city	Single library
Doncaster	Y&H	Urban: Majority nearer to a major town or city	Single library
Gateshead	NE	Urban: Majority nearer to a major town or city	Single library
Hartlepool	NE	Urban: Majority nearer to a major town or city	Single library
Kingston upon Thames	LON	Urban: Majority nearer to a major town or city	Single library
Manchester	NW	Urban: Majority nearer to a major town or city	Libraries
Middlesborough	NE	Urban: Majority nearer to a major town or city	Single library
North Tyneside	NE	Urban: Majority nearer to a major town or city	Libraries
Northumberland	NE	Intermediate rural: Majority nearer to a major town or city	Single library
Nottinghamshire	EM	Intermediate rural: Majority nearer to a major town or city	Libraries

[1] A library service in the SE region did successfully apply to be part of the CNE programme but was unfortunately unable to take up the funding due to internal issues within the local authority.

Plymouth	SW	Urban: Majority nearer to a major town or city	Single library
Rotheram	Y&H	Urban: Majority nearer to a major town or city	Single library
Solihull	WM	Urban: Majority nearer to a major town or city	Libraries
Somerset	SW	Intermediate rural: Majority nearer to a major town or city *and* Majority rural: Majority further from a major town or city	Libraries
Stockport	NW	Urban: Majority nearer to a major town or city	Single library
Suffolk	E	Intermediate rural: Majority further from a major town or city	Single library
Warrington	NW	Urban: Majority nearer to a major town or city	Single library
Warwickshire	WM	Intermediate urban: Majority nearer to a major town or city	Single library
Westmorland and Furness	NW	Urban: Majority further from a major town or city	Single library

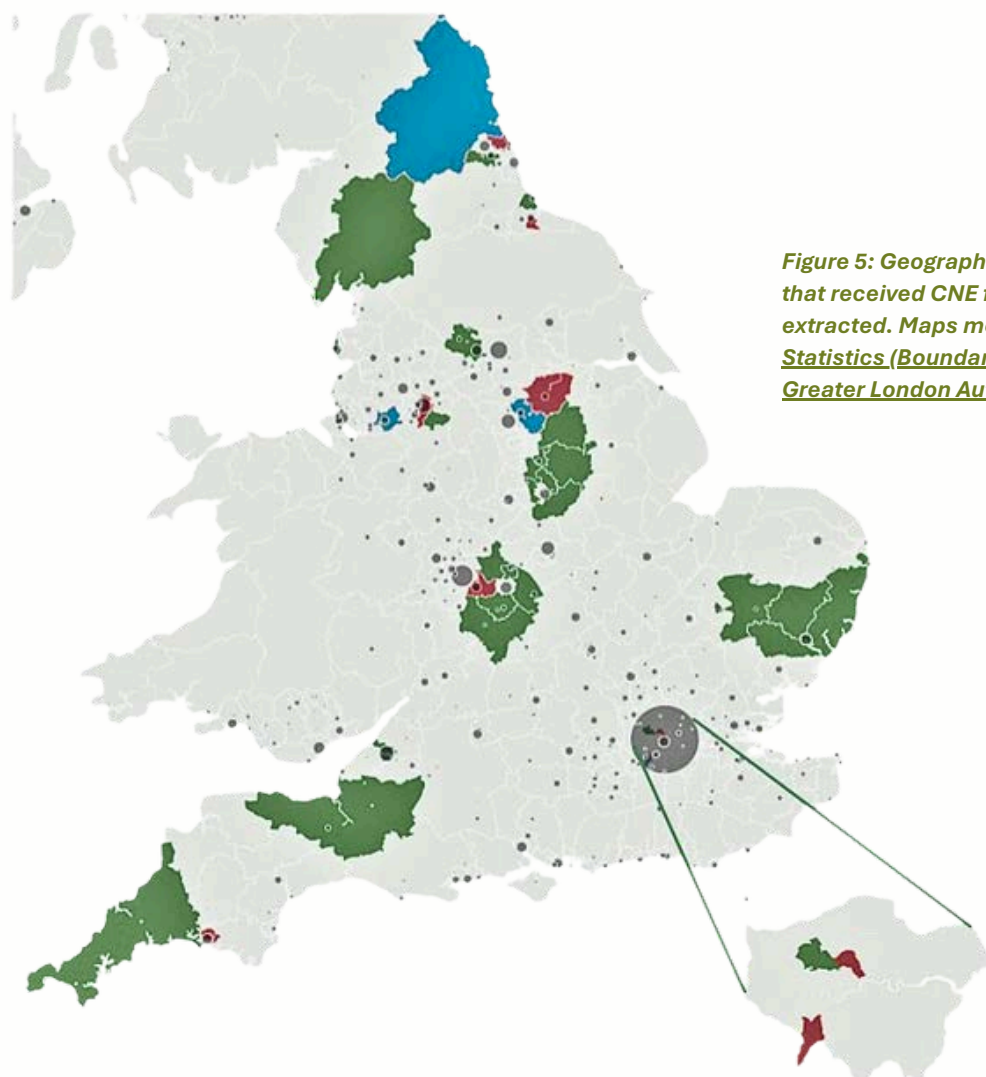*Table 3: CNE-funded library services' name, region, RUC2021 classification and delivery mode*

Figure 5: Geographic distribution of library services that received CNE funding, with Greater London extracted. Maps modified from Office for National Statistics (Boundaries), Simple maps (Points), Greater London Authority

3.1. Activity delivered

The funded cohort includes both CNE activity programmes delivered in one specific library branch within a service, through to activities delivered via multiple library sites. The programme incorporated a huge range of activities. There were 262 responses to the activity tracker completed by library staff – with each of these responses representing a single CNE programme activity or session. A few activities were represented more than once, as more than one of the library staff members involved in session planning and/or delivery completed the tracker. The responses came from 32 individual libraries across all 25 library services in receipt of CNE funding. However, the responses across the programme were uneven. Libraries with the highest number of responses were Hexham, Northumberland (30 responses), Retford, Nottinghamshire (27), Farnworth, Bolton (22), Kirkby-in-Ashfield, Nottinghamshire (22) and Warrington (17). In contrast, some library services only completed the tracker once or twice, meaning that not all their CNE delivery is included in the dataset.

Library staff were asked to record the type of activity they delivered using categories derived from initial analysis of successful library services' applications for CNE funding. As sessions/events often comprised more than one of these activity type, libraries were able to select more than one category, so this means that the below results should be interpreted as overall occurrence of an activity type across the programme rather than examples of discrete sessions. The most frequent types of activities were arts and crafts which were delivered in 110 CNE sessions. The second most frequent were learning a skill through a workshop (recorded for 93 activity logs), then in order of frequency of delivery: exploring a green space or going for a walk (61), spending time in an outdoor

space at the library (56), a wellness activity such as meditation or yoga (56), learning about a topic through a talk or discussion (45), or working on creating an outdoor space at the library, such as a library garden (14). Activity recorded under the 'other' category included theatre or poetry performances, nature-themed rhyme-time or story-time, creation of materials for a community exhibition, STEM and coding activities for children and Forest School sessions.

● Arts or crafts	110
● Bringing nature into the library - e.g. though a display or audio/video	49
● Exploring a local green space or going for a walk	61
● Learning a skill through a workshop	93
● Learning about a topic through a talk or discussion	45
● Spending time in an outdoor space at the library - e.g. a library garden	56
● Wellness activity - e.g. meditation or yoga	56
● Working on creating or improving an outdoor space at the library - e.g. a library garden	14
● Other	36

Figure 6: Types of activities delivered (activity tracker)

Library staff were also provided with an open text box where they could say more about what audiences were invited to do during an activity. A very wide variety of individual activities were provided by libraries, and the most frequently reported involved nature related activities. For example, some audiences participated in guided explorations of a local wild space/park, with a chance to reflect upon and discuss what they had noticed and/or how this had made them feel:

"*What I liked, is when he [a duck] dived and the ripples came out around him*" (Primary-school-age child following a nature walk – case study observation)

"*[it was] wonderful to have some time for me - stepping out of a busy life*" (adult participant in group walk to park – audience feedback survey)

Other activities bought nature themes into the library space. As described above, a large variety of nature-themed arts and crafts-based activity took place within library settings, and there was also a focus on meditation and mindfulness. For example, one library reported that;

"*Participants put on a VR headset and took a guided meditation in a nature scene of their choice (beach, mountains, wildflowers, lakes, etc.).*" (Activity tracker)

Other activities included (but were not limited to):
- wreath-making with locally foraged materials
- exploring nature from multicultural perspectives
- yoga and breathwork
- seed swaps
- studying historic maps of local landscapes
- nature-themed mandala and rangoli making
- bird watching
- building bug hotels, feeders and birdboxes
- pond-dipping and bug safaris
- creating 'explorer backpacks' of nature spotting equipment for library loan
- leaf collecting and collaging
- planting a library garden and edible planting
- creating a guided trail
- learning about local wildlife and biodiversity
- upcycling second-hand clothes

Right top: Yoga session - Kirkby-in-Ashfield Library, Nottinghamshire.
Right below: Natural craft activities - Retford Library, Nottinghamshire

From the qualitative descriptions of CNE activity provided in the activity tracker and via case studies, what is striking is the **huge variety of creative ways in which library staff designed activity which was able to contribute to CNE's programme outcomes, engage a wide variety of audiences and work effectively in a range of settings**. These activities run the gamut from creative adaptations of activity types with which libraries were already familiar and regularly delivering (for example, story-times or arts and crafts sessions) through to bold innovations which were complete departures from usual ways of working. In some cases, libraries were able to draw on existing specialisms and interests of staff and adapt these to a nature connection focus – for example, Solihull Libraries' work with an existing young person's archaeology club initiated by a history-enthusiast librarian, which found creative ways to explore the natural environment in concert with local heritage and social history (see Box i).

Others saw the funding as an opportunity to sustain or develop existing programmes of library work around, for example, childhood literacy, welcoming ESOL communities and refugees, or providing activities supporting mental health and wellbeing. In these cases, nature connection providing a new or alternate entry point to progressing these aims. In one case study for instance, the library service had been exploring ways to support mental health and reduce social isolation through informal, low-barrier programming, and CNE has presented a timely opportunity to deepen this work through environmental themes.

For some libraries the programme offered an unusual opportunity to invest in a neglected or underused space within the library or its grounds, through the development of library gardens, planters or nature-themed artworks:

"We wanted to make better use of the courtyard – it had potential, but it was just sitting there, not doing anything for anyone" (Library staff interview).

Each of these pathways are valid and have resulted in strong outcomes across the programme. This **flexibility in allowing libraries to design programmes that are achievable within their setting and their communities and best address local needs, is a significant strength of the CNE programme.**

3.2. Audience numbers and demographics

The number of participants engaging in each activity was most frequently between 6 and 10, suggesting that most activity involved focused work with a relatively small group of people. However, 67 activities were attended by more than 20 people – and in the case of libraries who offered drop-in community days or events this number could be significantly higher - for example, the Spring Equinox festival held by Kirkby-in-Ashfield Library in Nottinghamshire (Box ii) and other similar examples across the programme. The Year of the Snake celebration at Warrington Library, for instance, attracted over 400 people over the course of the day's activities. As the activity tracker question on participant numbers asked for a range rather than a figure, it is not possible to give an exact number of CNE participants across the programme but based on the responses from those libraries who completed the activity tracker, we can estimate that **overall audience participation numbers were, at a minimum 2,800, and up to 3,400 based on the 262 activities recorded in the tracker.** The actual figure is higher as a number of libraries did not complete the activity tracker for all of the CNE activity they delivered.

Box i: Solihull Libraries – Hill of the Elms

Hobs Moat is a branch library within the Solihull Libraries network, located close to Birmingham airport at the Solihull Borough border. The library is in a busy residential area, near to several schools and the expansive green space of Elmdon Park (the focus of the library's Culture Nature project). The park includes a local nature reserve (managed by Warwickshire Wildlife Trust), as well as sports pitches, playground and a lake. Created a public park in 1944, the site was historically park and farm land for a now-vanished Georgian manor.

"Without the history, the park is just some grass and some trees, and how easy is it to build on some grass and some trees?" (Library staff interview)

The library was motivated to apply to CNE for 'Hill of the Elms' as an opportunity to capitalise on and strengthen library links between the Young Archaeologists Club (YAC), the Solihull Tree Wardens and local historians. The project also leveraged staff members' existing skills and interests in archaeology and landscape documentation, with one team member also the council's Archivist and always thinking about adding to the archives *"for the future"*.

In the context of high local development pressures, the project drew on these sets of relationships and skills to encourage exploration and documentation of the current park landscape. The project explored the impact of human interaction with this environment over centuries and community valuation of local green spaces and their history.

Audiences for the activity included young people aged 8-16 (YAC members) and local community members accessing project outputs. Activities included guided walks; young people learning non-invasive archaeological techniques including drone surveys, LiDAR, and resistivity methods and practicing these in Elmdon Park; a multi-platform

community exhibition held at the borough's central library; and a short film documenting the project. Staff saw the CNE programme as an opportunity to **test a new approach to nature programming in urban settings** through this innovative combination of natural environment discovery, local history, technical skills development, and community resource creation.

The activity attended by the evaluation team was a guided walk around Elmdon Park for the YAC, accompanied by local history experts and a tree warden. The facilitators skilfully combined insights into local heritage and social history with observations of the landscape and natural environment. This included discussing how to measure the age of a living tree via trunk circumference; observation of the recolonisation by nature of the manor's walled garden and labourers' cottage sites; and pointing out the enduring presence of the Sequoias (left) and Monkey Puzzle trees introduced as exotic specimens by the 18th century estate owners and spread via wildlife activity. There was also discussion of wider environmental issues such as the role of mature trees in managing impacts of climate crisis.

While the participating young people and their families seemed to be coming to the activity from a relatively high starting point of nature connection and awareness, they spoke to researchers about the positive influence of walking the familiar space of the park at a slower pace, guided by experts, and being encouraged to stop and notice things they might *"otherwise just walk past"*.

The library has already developed learning and solutions concerning some of the challenges faced, including flexible scheduling and contingency planning in relation to poor weather, which impacted project delivery. They also struggled to find a nature connection trainer but encouraged and paid a local organisation to deliver it, which has now developed into an ongoing local training offer.

In Solihull, CNE has strengthened connections with partners, and a key legacy of the project is partners' enhanced understanding of library capabilities - supporting future collaboration.

Other outcomes include new resources for ongoing archival work, and staff development through raised understandings of nature connection possibilities and confidence in urban nature programming.

Box ii: Inspire: Culture, Learning & Libraries (Nottinghamshire) - Places to Connect

Kirkby-in-Ashfield Library is located within a town centre precinct, and serves a community marked by significant social and economic disadvantage. Library staff identified high levels of mental ill-health, social isolation, and low confidence among residents as significant barriers to participation in both cultural and environmental activity. The library team saw the Culture Nature programme as an opportunity to reactivate a disused library courtyard - offering a calm, nature-inspired space that felt safe, welcoming, and easily accessible.

Staff observed participants lingering in the space after the structured elements had ended, using the seating and planting informally and returning across multiple sessions.

The project helped normalise the idea of public nature space as something familiar and usable, not remote or exclusive.

The project focused on transforming the library's courtyard into a creative, sensory-rich space through a series of informal, drop-in activities. These included planter-building, bug hotel construction and seating installation, alongside other nature-themed craft and wellbeing-focused activities. Local artists and volunteers collaborated with staff in shaping the sessions, while Inspire's internal cultural programming team supported delivery and design. While there was no formal environmental partner, staff embedded nature connection through craft, planting, and gentle ecological themes, creating a blend of creativity and nature that suited the library setting.

The activities engaged a broad cross-section of the community, with particular success in reaching families and individuals with lower social confidence. The drop-in format allowed people to participate independently, without pressure or commitment. Parents appreciated the availability of free, creative activities, and children responded well to the hands-on, sensory nature of the sessions as well as opportunities for less structured exploration of the new space.

For the library staff team, the project was energising and affirming. It demonstrated that library staffs' existing facilitation, communication and informal engagement skills could be readily applied to nature-based activities and build on their existing commitments to enhancing community wellbeing. The experience also strengthened collaboration across roles and encouraged staff to experiment more confidently with creative health concepts. The work helped position the library more clearly as a space that supports wellbeing and social connection, as well as its more traditionally understood role in literacy and digital access.

The scale and layout of the courtyard made it ideal for relaxed, manageable delivery. Its visibility from inside the library created a natural flow, and the enclosed setting reassured participants who might have found a more exposed space overwhelming. The informal approach to delivery, focused more on hosting than instructing, was a key factor in the project's success. Challenges included staff capacity, as delivery relied on a small team fitting the work around their usual duties. There are also questions about how to maintain the space long-term, and discussions around balancing open social use of the courtyard with curated activity.

The courtyard remains in use and is now regarded as a key aspect of the library's offer. Staff expressed a clear intention to continue using the space informally and to include it in future bids and partnership work. Elements of the approach have already influenced programming elsewhere in the Inspire network, and the project has helped make the case for more creative and wellbeing-focused library activity.

The Kirkby-in-Ashfield experience shows that nature connection does not require wild landscapes or ecological expert-led programming. With creative delivery and a focus on inclusion, libraries can generate powerful local outcomes. Supporting staff to work relationally and flexibly, and permitting them to try new things, proved as crucial as any specific content or design.

Library staff were asked to use the tracker to indicate the target audience for an activity, with categories again derived from initial analysis of the target audiences indicated in successful libraries' applications for CNE funds. Again, as many activities were targeted to multiple groups, respondents could select more than one answer to this question, so the data should be seen as an indication of prevalence of target audience across the CNE programme. 56% of the 262 activities recorded in the tracker included targeting of the general population as indicated by 147 activity responses, whilst the next highest focus were families (104), then primary school-age children (96), and then older people (59). The least prevalent focus for activities were refugees or people seeking asylum (27), secondary school-age children and young people (35), and people from minority ethnic backgrounds (36). Please see Figure 7 for full comparative breakdown.
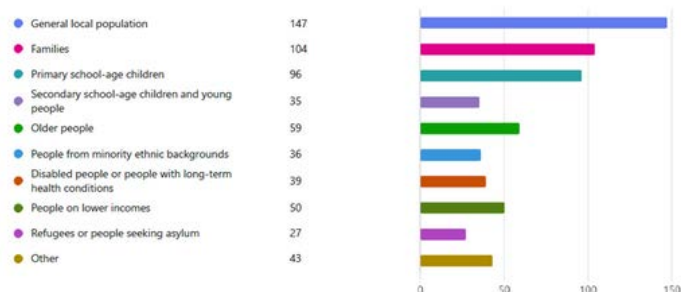
Figure 7: Targeted audience type for activities delivered by libraries

The audience feedback survey requested basic demographic information from respondents as a voluntary question, so is utilised here as reflection on the demographic of CNE programme participants. However, this is presented with the caveat that not all participating libraries used the online survey with their audiences, so this data reflects only CNE participation in those libraries which did encourage audiences to submit this data and is not necessarily reflective of the demographic breakdown of participation across the programme. In particular, it does not capture

the large number of children and young people aged 14 and under who we can surmise took part given the prevalence of activity targeting younger children and families, including via partnership working with primary schools This is because the online version of the survey was open to people aged 15+ due to research ethics compliance, with younger audience members instead invited to complete the 'lighter touch' feedback sheets/posters, which did not request demographic information.

154 people completed the online audience feedback survey following participation in a CNE activity. There is not an equal spread of responses from participating libraries across the programme, with some libraries in particular returning a large proportion of the responses while others returned very few or none – this likely reflects the nature of the activity or the audiences engaged with in libraries' CNE delivery and/or library staff's willingness to promote the online survey option to their CNE audiences.

Age
Of those CNE audience members who completed the survey, 142 answered the question on age. Most visitors who completed this question (37 / 26%) were in the late middle-age bracket, between 55-64, but this was closely followed by those in the 45-54 age bracket (31 / 22%) and in the 35-44 age bracket (28 / 20%). There were relatively few younger visitors, with only 21 (15%) in the three age categories between 15 and 34. There were also very few visitors over 75 years of age who completed the online survey (4 / 3%) (Figure 8).

Gender
144 visitors answered the question on gender. A striking majority of these library visitors were women (116 / 81%), whilst 25 (17%) were men and one individual said they were non-binary. Two other

individuals preferred not to answer this question (1%). There was no transgender individuals represented in this survey sample (Figure 9).

15-17	3
18-24	6
25-34	12
35-44	28
45-54	31
55-64	37
65-74	21
75 or olde	4

Figure 8: Audience age distribution (audience survey)

Woman	116
Man	25
Non-binary	1
Transgender	0
Prefer not to say	2

17%
81%

Figure 9: Audience gender distribution (audience survey)

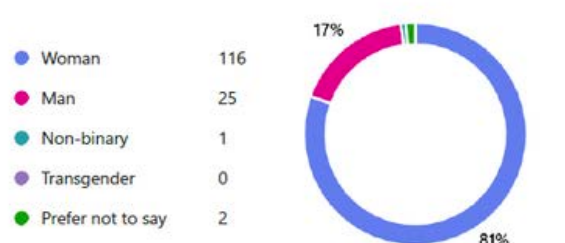The gender imbalance reflects recent research which has shown that gender plays a role in shaping participation in informal nature-based activities, as well as community arts (the activity-type most reported as forming part of libraries' CNE delivery via nature-inspired participatory arts and crafts), and the use of public libraries in general in the UK. Arts Council England[1] reports that women consistently make up the majority of attendees and participants in arts and cultural activities. Similarly, the 2019 DCMS Taking Part survey[2] has shown a persistent gender gap in library use, with women more likely to visit public libraries than men.

Participation in nature-based activities presents a more complex picture. Research by Natural England[3] finds women participate more in informal nature engagement (such as walking or gardening), while men are often more involved in structured outdoor recreation such as fishing or adventure sports. Gender norms and unequal caregiving responsibilities are cited as factors influencing these patterns,[4] but given the clear evidence of gender disparities in public library usage, we can assert with some confidence that the CNE programme's public library setting and emphasis on informal nature engagement, resulted in increased participation for women. A further factor could be that 42% of respondents to the audience feedback survey indicate that they were primarily engaging with the activity to support a child's participation. Given the evidence of a persistent gendered imbalance in childcare responsibilities,[5] the orientation of a significant amount of CNE activity towards younger children and families may also have resulted in higher levels of participation from women.

Disability

151 audience members answered the question about whether they considered themselves to have a disability or long-term health condition, and the majority did not (76%). As above, this must be caveated with recognition that this is a limited sample from a small selection of the participating libraries, but does broadly align with overall UK population statistics which state that 24% of the population has a disability.[6] As such, disabled people do not appear to be underrepresented within the CNE programme, but given the broader body

[1] Arts Council England (2020) Equality, Diversity and the Creative Case: A Data Report 2018–19. London: ACE.

[2] DCMS (2019) Taking Part Survey: 2018/19. London: Department for Digital, Culture, Media and Sport

[3] Natural England (2020) Monitor of Engagement with the Natural Environment: The national survey on people and the natural environment – Headline reports and thematic findings.

[4] Bell, S., Phoenix, C., Lovell, R. and Wheeler, B.W. (2022) 'Green space, health and gender: A review', Geoforum, 133, pp. 1–10

[5] For example: Kuang, B., Perelli-Harris, B., Berrington, A. (2024). Do flexible hours and working from home allow parents to more equally share childcare tasks? ESRC Centre for Population Change and Connecting Generations Working Paper Series, 107. University of Southampton.

[6] House of Commons Library (2024). UK disability statistics: Prevalence and life experiences. https://researchbriefings.files.parliament.uk/documents/CBP-9602/CBP-9602.pdf

of evidence on the significant challenges people with disabilities face in accessing natural environments,[1] this is a group that future iterations of the CNE programme may wish to consider how to further proactively engage, particularly as this aligns with public libraries' mission to improve access and inclusion for both people with physical disabilities and neurodiverse audiences.[2]

There are examples of good practice within the programme in enabling nature connection for people for whom disability or mobility issues may pose barriers to actual physical engagement in natural environments. These include projects to develop a library garden as an accessible nature-friendly space within a community, alongside a range of activities which sought to 'bring nature in' to the library and to library users. This includes activities such as Somerset Libraries' use of Virtual Reality (VR) headsets through which participants could experience immersive film of local nature sites (Box iii), while several library staff also expressed (via interviews and the case study tracker) that they felt some CNE sessions had been particularly effective in engaging and providing a welcoming space for neurodiverse audiences.

Ethnicity

149 visitors were happy to report their ethnicity via the online audience survey, which utilised the same broad ethnicity categories as the 2021 England and Wales Census. Of these respondents, the vast majority were White - English/Welsh/ Scottish/Northern Irish/ British, who represented 119 (80%) of the total respondents. The next highest ethnic representation was those who

described themselves as White – other White background, of which there were 17 (11%). The percentage of responses for all other ethnicity categories was much lower. There were 6 Asian / Asian British visitors (4%), 2 from Mixed/Multiple Ethnic Groups (1%), and one each from the Arab and Black/African/ Caribbean/ Black British communities (.5%). Three participants (2%) preferred not to reveal their ethnicity. (Figure 10).

Arab	1	
Asian/Asian-British	6	
Black/African/Caribbean/Black British	1	
Mixed/Multiple ethnic groups	2	
White - English/Welsh/Scottish/Northern Irish/British	119	
White - other White background	17	
Prefer not to say	3	
Other	0	
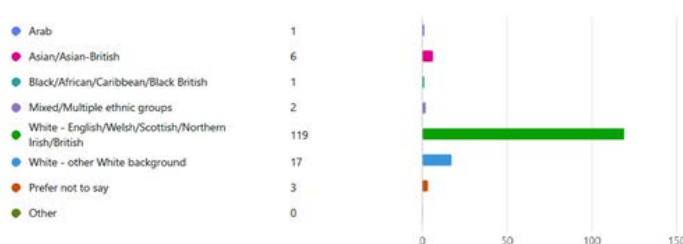
Figure 10: Ethnicity distribution of CNE audiences (audience online survey)

While the impression given by this bar chart is low participation from ethnic minority audiences, the relatively low proportion of the overall CNE audience who participated in the online survey, and the high representation of particular libraries/library services within the sample means we should be cautious of interpreting the data in this way, as this breakdown may be a reflection of local population profiles in the areas where libraries were able to encourage higher levels of participation in the online survey rather than an indication of programme participation as a whole.

For example, a high level of responses to the audience survey (24% of the overall responses) were received from audiences who had participated in CNE activities at Forest Hall Library in North Tyneside. Local population statistics show that 92.7% of Forest Hall ward's population are in he White - English/Welsh/Scottish/Northern Irish

[1] Bhakta, D. and White, M.P. (2022) Included Outside: The benefits of engaging disabled people with nature. Natural England. of evidence on the significant challenges people with disabilities face in accessing natural environments,[1]
[2] Department for Digital, Culture, Media and Sport (DCMS) (2018) Evaluation of the Libraries: Opportunities for Everyone Innovation Fund. London: DCMS. Available at: https://www.gov.uk/government/publications/evaluation-of-the-libraries-opportunities-for-everyone-innovation-fund/evaluation-of-the-libraries-opportunities-for-everyone-innovation-fund

/ British category, closely aligned to an overall population share across the North Tyneside local authority area of 92.5%.[1] As such, we would not expect to see a high level of ethnic diversity in audiences participating in CNE activity in this library as this would not reflect the catchment community. The high level of audience responses received from this particular library thus skew the overall picture.

The influence of library catchment demographics is also supported by looking more closely at the library with the second highest number of returns to the online audience feedback survey – Eccleshill Library in Bradford (13% of total returns). This is an area with a much larger ethnic minority population than Forest Hall, with 75.5% of the population in Eccleshill ward identifying as White and the next largest category being those identifying as Asian/Asian British at 17.9%, against an overall Bradford local authority area profile of 61.1% White and 32.1% Asian/Asian British.[2] This is reflected in the audience demographics captured in the online survey from Eccleshill Library's CNE audiences. 64% of the audience identify as either White - English/Welsh/Scottish/ Northern Irish/ British, or White – other White background, while 26% identify themselves as Asian/Asian British. This suggests that in this library there was a healthy level of participation from ethnic minority audiences which broadly reflects what we would expect to see given the local population profile.

The third highest number of online audience feedback responses were received from Doncaster Danum and Retford (Nottinghamshire) libraries (11% each). Doncaster and Retford have a White British population share of 93.1%[3] and 96.7%[4] respectively and ethnic minority population shares which are significantly lower than the national average, and these local population profiles are broadly reflected in the ethnicities of those who completed the audience survey in these locations.

We should also consider that several libraries worked with people from migration backgrounds (including people seeking asylum) and ESOL groups, who are more likely to be from minority ethnic backgrounds and were less likely to complete the online audience survey due to language barriers.

Situating this within the broader context and existing evidence base, UK-based research over the past decade has highlighted persistent ethnic disparities in participation in nature-based activity - with ethnic minority groups, particularly Black and Asian communities, underrepresented. According to Natural England's People and Nature Survey,[5] individuals from White ethnic backgrounds are more likely to visit natural spaces regularly compared to those from ethnic minority groups, with barriers including perceptions of exclusion and safety concerns,[6] as well as the greater concentration of ethnic minority

[1] North Tyneside Council (2023) Ward profile for Forest Hall ward.
[2] City of Bradford Metropolitan District Council (2023) 2021 Census: Population, ethnicity, religion and households at ward level. https://ubd.bradford.gov.uk/media/1692/2021-census-ward-level-data-for-population-ethnicity-religion-and-household-composition.pdf
[3] City of Doncaster Council (2024) Facts and Figures about Doncaster. https://www.teamdoncaster.org.uk/facts-and-figures-about-doncaster
[4] City Population (2023) Reford (Nottinghamshire) – Built-up Area. https://www.citypopulation.de/en/uk/eastmidlands/nottinghamshire/E63001487__retford/
[5] Natural England (2021) People and Nature Survey: Key Findings 2020/21.
[6] Boyd, F., White, M.P., Bell, S.L. and Burt, J. (2018) 'Who doesn't visit natural environments for recreation and why: A population representative analysis of spatial, individual and temporal factors among adults in England', Landscape and Urban Planning, 175, pp. 102–113

populations in urban neighbourhoods with limited access to quality green or blue spaces.[1] Studies have also emphasised structural and institutional factors, such as the underrepresentation of minority voices in environmental organisations and a relative lack of culturally relevant programming.[2]

In contrast, recent patterns of public library usage in the UK tends to show more balanced participation across ethnic groups, with libraries widely perceived as inclusive and accessible community spaces. The Taking Part survey[3] found that people from ethnic minority backgrounds are more likely than White British individuals to use public library services. As outlined above, it is impossible to make assumptions about the overall breakdown of audience participation across the CNE programme from the limited sample represented by the online audience survey. However, the Bradford example discussed, as well as anecdotal feedback from libraries via case study interviews and qualitative reflections within the activity tracker and the library staff surveys, suggest that **in those areas where there is a significant ethnic minority population, these groups were successfully engaged**.

As such, while the delivery of CNE via public libraries may have reinforced gendered participation trends, it may conversely have challenged inequalities of access in terms of ethnicity. **By delivering the CNE programme via public libraries, which, evidence suggests, are spaces that people from ethnic minority backgrounds tend to feel comfortable visiting, participants have been given opportunities to engage in nature-based activities which they may have encountered inequalities and barriers in accessing in other ways.**

[1] Friends of the Earth (2020) England's Green Space Gap.
[2] Bhatti, M., Church, A., Cloke, P. and Matless, D. (2015) Nature: A Social and Cultural History of the British Countryside. Abingdon: Routledge.
[3] DCMS (2019) Taking Part Survey: 2018/19.

Rewilding Rangers Club - Tolworth Library, Kingston upon Thames

"We had a wonderful session at the library in collaboration with the Women's Interfaith Group. Together we offered a "Sound & Create" workshop for girls, with a primary focus on young girls from the local Muslim community. To ensure a comfortable space, we kept this session exclusively for girls." (Activity tracker response)

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Box iii: Somerset Libraries - Celebrating Somerset

Somerset's network of libraries serves a diverse community, incorporating hub towns with large rural hinterlands, areas of high socio-economic inequality, and ageing populations. While Somerset is a nature-rich county, the Culture Nature project aimed to address barriers to engaging with nature locally. This included limited knowledge of where to access green spaces and protected sites and how to visit and enjoy these places, as well as accessibility challenges for people with restricted mobility and/or low incomes.

Somerset Libraries were motivated to apply to the Culture Nature programme to strengthen informal connections and ad hoc collaborations with nature partners - including Somerset Wildlife Trust and Exmoor National Park - through more structured partnership working. Another factor was the presence of staff members and volunteers with relevant skills and interests, providing both capability and capacity that could be deepened through the project, and work to the longer-term benefit of libraries' local communities.

The programme included nature-focused events within libraries where audiences were invited to move through varied activity stations. These included hands-on creative activities such as nature journaling, storytelling and crafts, alongside specially created digital and audio content. Audiences listened to natural environment soundscapes, took part in immersive experiences via Virtual Reality headsets (left) and watched filmed visits to local protected sites, guided by experts from partner nature organisations. The films aimed to 'demystify' these spaces and encourage audiences' future engagement.

The library service aspired to run inclusive and free activities that would engage a range of audiences - spanning children and families (including via targeted work with local schools), young adults, older adults, carers, disadvantaged people in high Index of Multiple Deprivation areas, and people with restricted mobility.   The programme of activity **engaged with around 300 people across five events** with resultant upticks in library membership.

Challenges included high ambitions but limited staffing capacity, gathering evaluation feedback within a 'drop-in' format, delivering in the winter when engagement and enthusiasm for outdoor nature activities may have been limited, and awareness barriers whereby perhaps adults still don't connect libraries with *"fun stuff"* or nature learning, suggesting ongoing need for perception change.

Somerset Libraries report a range of important outcomes of the project, alongside those of addressing participants' needs. These include **network strengthening through cross-sector working with diverse partners to deliver specialised programming.** Local schools, for example, increasingly recognise that Somerset libraries can deliver high-quality educational experiences, creating a foundation for future collaboration and visits. Work with environmental partners is also continuing - for example, through delivery of nature-themed activity as part of the Summer Reading Challenge.

There is also an equipment and content legacy. The VR content loaded on library devices can enable future similar events, as well as the ten short films presented by nature partners and providing an accessible introduction to Somerset's many natural spaces.

Short films showcasing Somerset's wild spaces, produced in partnership with nature organisations
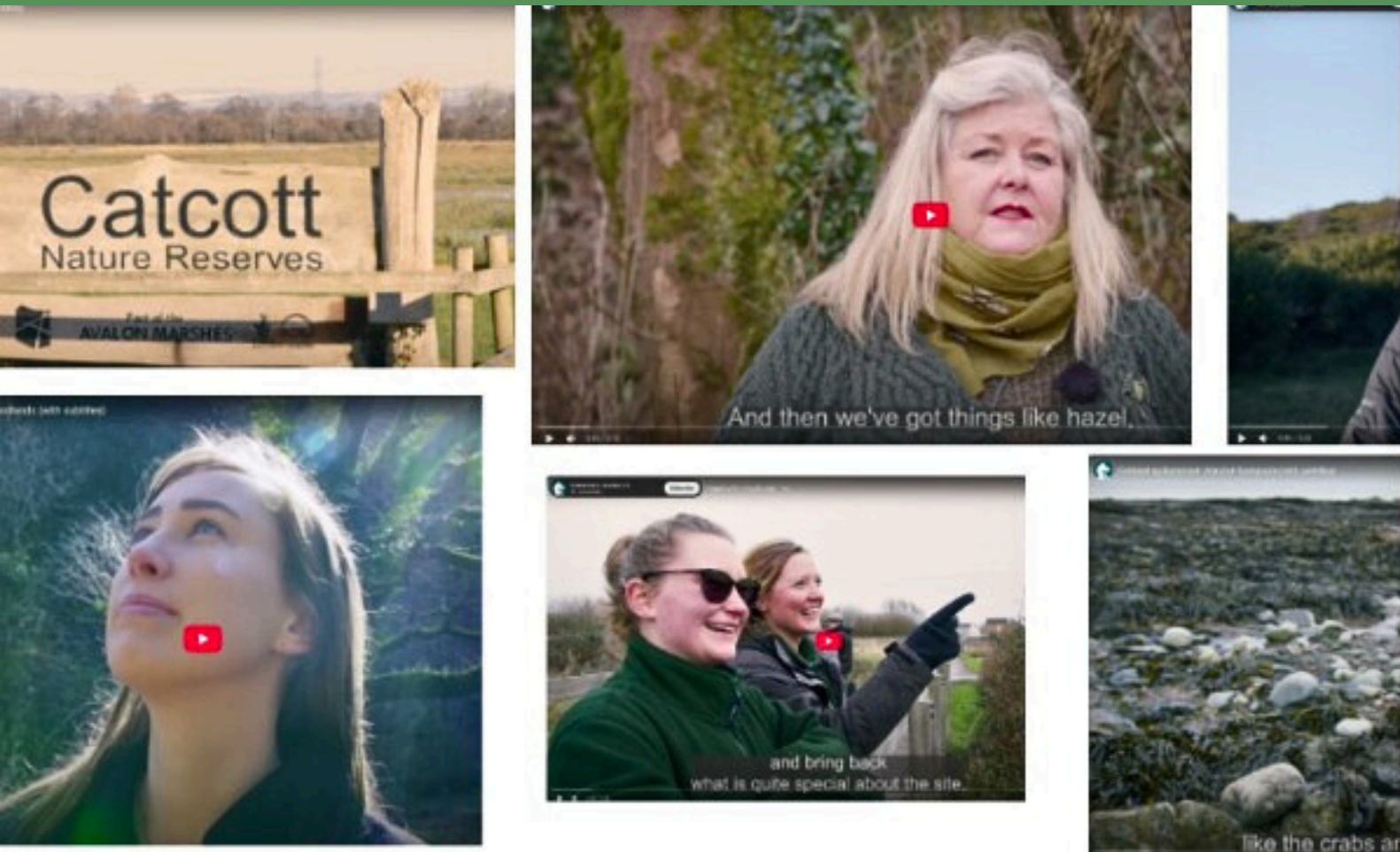
3.3. Libraries' experience of the CNE programme

3.3.1. Nature Connection training

In both the early and late point programme surveys, library staff were asked: 1) if they had completed the nature connection training funded via the CNE programme, and 2) if so, for their feedback on the training.

In the early survey, 18 of 40 respondents (45%) had completed training, with another 3 (8%) partially completed. A further 13 (33%) reported that training was organised but not yet undertaken, and 6 (15%) said it was not yet organised. By the late survey, 26 of 29 respondents (90%) confirmed they had completed the training and provided feedback (either in the early or late survey), with only 3 (10%) indicating no completion. Taken together, these results show a clear increase in training uptake across the delivery period, reflecting a normal pattern of phasing as participants join and engage with programme elements over time. While this high level of take-up by the point of the late programme survey is encouraging, an area of potential concern is activity tracker data indicating that 17% of the activity reported was delivered without library staff having received nature connection training. This reflects difficulties experienced at the early-mid stages of the programme with libraries sourcing and securing a suitable training provider independently, and/or securing spaces on the online training sourced by Natural England. Library staff who has found arranging the training challenging, spoke about this in terms of difficulties in finding a suitable local provider, the high costs of training quoted by some organisations, or training offers that would have required an untenable time commitment from busy library staff.

Library services engaged with a diverse range of organisations as their Nature Connection training

provider, including local wildlife or nature trusts, local authority green spaces teams, third sector or community environmental/conservation organisations, teams or individuals employed by historic parklands or gardens, forest school/outdoor learning providers, and individual environmental/conservation consultants. A significant number of libraries who had struggled to source their own local training engaged with the online training organised by Natural England and Libraries Connected, although there was disappointment at how quickly these sessions became booked up.

However, it is important to note that all library staff who expressed an interest were ultimately able to access training by the end of the programme, and library services were encouraged at the outset to flag any difficulties in sourcing training so that additional support could be provided. Libraries were also asked to list potential delivery partners in their initial applications, enabling Natural England and Libraries Connected to suggest possible local training providers and to support this process where needed. This approach, rather than centrally imposing training provision, was designed to encourage local partnership-building and capacity development as part of the programme's objectives.

Positively, for those who had completed the training at the point of an activity, a majority (68%) felt the training had helped them in delivering that activity (activity tracker).

The library staff early point and end-point surveys additionally included a series of eight Likert scale statements designed to assess both the impact of participation in Nature Connection training on library staff's own sense of nature connection, and the extent to which library staff felt the training had supported their confidence in CNE programme

delivery and in promoting nature connection to library audiences. While agreement was already evident in the early survey, the late survey shows a consistent increase across all items.

- The proportion of respondents who agreed or strongly agreed that the training *"increased their appreciation of the value of nature"* rose from 67% (early) to 100% (late).
- *"Feeling of connection to nature"* also increased from 67% to 100% (agree/strongly agree combined).
- *"Helped me feel better prepared to deliver CNE activity"* went from 76% to 100% (agree/strongly agree combined).
- *"Built confidence in promoting nature connection to library audiences"* rose from 71% to 100% (agree/strongly agree combined).
- *"Encouraged me to consider how nature could support my wellbeing"* reached 100% agreement in the late survey (agree/strongly agree combined)
- Other items - such as motivation to spend time in nature, desire to learn more, and confidence in reaching under-served audiences - followed a similar upward trend.

These findings point towards a pattern where real-time involvement in CNE delivery may have sharpened staff appreciation of the training's value, enabling them to reflect more confidently and positively on its relevance and application. While the sample sizes are small and the groups are not directly comparable, the consistency of improvement across all items suggests a credible trend. The increase in agreement, especially in items related to confidence and preparedness, supports the view that training was not only well received but also experienced as more meaningful when paired with active delivery.

Qualitative comments (via case study interviews and text-based survey questions) on the Nature Connection training are positive – notwithstanding the difficulties outlined above that some libraries experienced in sourcing appropriate training. There was a clear sense that library staff felt they lacked

Nature connection training with Warrington Library staff

opportunities for CPD given their busy roles and budgetary restraints within local authorities, so this funded training was welcomed and enthusiastically engaged with by most participants:

"It's one of the most engaged kinds of training that I've had for a long time. With everyone bringing something to the table and really enjoying it" (Library staff interview).

Particularly positive comments were given about training which took place in person and at a natural sites – for example, training delivered by Wildlife Trusts at local reserves – with typical comments including that this form of training was hands-on, engaging and fostered confidence in understanding and talking about nature in inclusive ways.

Across in-person or online delivery, library staff valued training that was not overly abstract or technical, instead appreciating training which felt applicable to their delivery in their library setting, and which gave them simple frameworks and prompts that they could adapt for use with audiences – for example, encouraging children to observe insects or prompting discussion about urban biodiversity:

"members of staff who attended Nature Connectedness training feel more confident and motivated to bring nature into the library and to take the library outside" (Library staff survey)

"the training gave me the inspiration and the confidence to make the activities more informative/educational and to trust that participants would enjoy the opportunity to learn more about nature" (Library staff survey)

There were also benefits to multiple staff members within a library service being able to access the training, and one library reported that this had a "ripple effect" with staff reporting feeling more confident integrating nature-based language and ideas into other programmes and activities (Library staff interview). Another example of this wider impact of the training is shared below:

"Our nature connection training had a whole section on how to reach under-represented audiences from an experienced practitioner so that was really helpful. We had some great reflections come out of this training which actually ended up influencing our team strategy which is really meaningful and exciting" (Library staff survey)

3.3.2. Programme clarity and support
The library staff early-point and end point surveys asked both quantitative and qualitative questions intended to assess how clearly participating library staff understood the CNE programme and its priorities, and how realistic and applicable they felt programme outcomes were to their library setting. These surveys also included questions relating to the funding application process (in early-point survey only) and programme support.

Comparison of the Likert scale responses to these questions between the early-point and end-point surveys are shown in Figure 11. In the late survey, agreement was consistently high across all statements, in all cases, representing an increase in positive responses than provided in the early-point survey:

- 97% of late-point survey respondents agreed or strongly agreed that *"programme expectations were realistic and achievable."*
- 90% felt they were given the information and support needed to deliver CNE.

- 90% understood what was expected of them.

The data shift suggests movement from a more cautious and varied response profile early on, to a stronger and more unified position later in the programme.
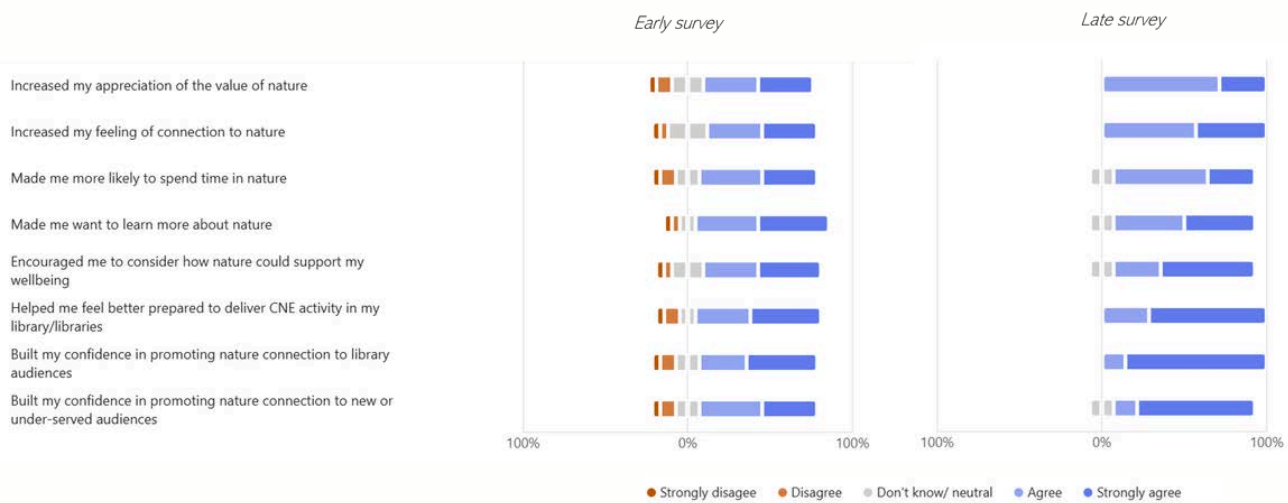

Figure 11: Comparison of early and end-point library staff survey responses on programme clarity and applicability

The end-point survey also contained an additional question asking participants to reflect on the success of the CNE programme in their library overall, with **90% agreeing or strongly agreeing that *"the programme has worked (or is working) well"* in their library/libraries.** These findings point towards an overall sense of clarity and competence emerging as the CNE programme matured. Staff appear to have moved from tentative optimism at the outset, to a more assured, experience-backed confidence in both delivery processes and programme impact. Most comments framed the programme's openness and flexibility as a strength, with these respondents appreciating that CNE wasn't overly prescriptive and allowed for local interpretation and adaptation. This created space for staff to embed the work in a way that reflected their own context and capacity, as well as best meeting the needs of their served communities: *"we shaped it around what we knew would work here"* (Library staff interview). The lack of rigid templates also encouraged creativity and gave permission to experiment, and this is reflected in the varied ways that libraries designed their programmes of activity - reflecting the CNE programme's R&D goals.

There were concerns expressed by a minority of library staff about programme clarity, and this is a useful learning point for future programme development. Some library staff would have welcomed more guidance around delivery expectations – in particular, on the extent to which the full range of programme outcomes needed to be embedded within the programme design. In part, this is an issue that seems to have resulted from the use of specialist sector language deriving from CNE's funding and situatedness within Natural England's Protected Sites Strategies programme. The use of the conservation sector terminology of 'Protected Sites' in CNE programme objectives and publicity materials prompted anxieties among some libraries about the extent to which their planned activity should incorporate formal emphasis on this theme.

In one case study for example, interviews and conversations with library staff indicated that they had a practical grasp of the CNE project's core aim, to connect people with nature in a way that felt inclusive, every day, and locally grounded. The team understood the opportunity to bring environmental themes into their work through

community creativity, informal social space, and small-scale environmental change, and these outcomes were seen as broadly compatible with existing priorities (particularly around wellbeing, social connection, and creative programming) and thus achievable. However, staff acknowledged that some of the language in the early programme guidance didn't feel as well connected to a library context, and that further development and translation, particularly around what nature connection might look like in a library context, and how much to emphasise what might be described as 'formal' nature knowledge (how nature is at risk and how it is protected, for example).

These uncertainties reflect the challenge of embedding environmental aims into non-environmental settings – which is exactly the kind of novel, cross-sector-partnership-driven approach that the CNE programme aimed to test via an R&D approach. These learning points highlight the need for clear, accessible framing that connects policy and ecological ambitions with the everyday realities and practices of library (or other public-facing or community-based partners') delivery. Importantly, this feedback offers a valuable opportunity for refining guidance and support materials in future iterations of the programme, **ensuring that language and expectations resonate clearly within library contexts while maintaining the programme's wider strategic aims.**

Overall, participating libraries were very happy with the support that they received from Natural England and Libraries Connected throughout the programme, and staff from both organisations were personally signalled out for praise for their approachability, their understanding of the challenges of delivery in a library context, timely and helpful responses to concerns and queries, and *"inspirational"* and *"positive"* attitudes towards the project. There were some concerns about the timeliness with which the project had been able to get started after funding proposals were agreed, particularly as the overall delivery timescale was tight. Library staff also reported that they valued connecting with other library services delivering CNE activity via the online webinars and would have appreciated more opportunities to do this at an earlier stage of the programme to share practice and spark ideas – there were suggestions that more structured opportunities for peer-to-peer learning would have been useful. There were mixed views of the project's use of Basecamp as a communication tool and resource hub, with some valuing its facilitation of quick questions and responses, while others found the platform hard to navigate.

Bird box installed outside Ealing Road Library, Brent

4. Programme outcomes

The CNE programme has 9 stated programme objectives:

- *Increase people's connection to nature*
- *Raise awareness of Protected Sites*
- *Improve people's wellbeing*
- *Improve the environment around the library*
- *Increase social cohesion and pride of place*
- *Improve library staff skills and/or confidence*
- *Provide CPD for library staff*
- *Reach underrepresented audiences*
- *Increase people's understanding of environmental sustainability or climate issues*

In making their applications to CNE funding, library services were asked to choose and rank the top 5 outcomes that their programme of activity would deliver – encouraging libraries to consider these outcomes at the early stage of their programme design. This exercise was repeated in both the early-point and end-point library staff surveys, with the end-point survey shifting the wording so that respondents were encouraged to reflect on which 5 outcomes their CNE programme had made the most progress towards. As such, the data reflects not abstract importance, but the on-the-ground priorities perceived as emerging during delivery.

In the early survey, the standout priority was "Increase people's connections to nature", included in the top five by 16 of 40 respondents (40%), with many ranking it first. "Improve people's wellbeing" and "Improve the environment in and around the library" followed closely, cited by 34% and 30% respectively. By contrast, outcomes such as "Provide CPD for library staff" and "Improve staff skills and confidence" were rarely selected

early. This likely reflects staff viewing professional development as a means to an end, not yet having had time to reflect on their growth during early delivery, or not yet understanding the training and development opportunities the programme may represent.

By the late survey, the picture has shifted both in scale and emphasis:
- *"Improve people's wellbeing"* was cited by 28 of 29 respondents (97%), and *"Increase people's connection to nature"* by 27 (93%), cementing these as the programme's most tangible achievements.

- *"Increase social cohesion and pride of place"* rose sharply, cited by 23 respondents (79%), suggesting growing visibility of CNE's community-building effects.

- *"Improve staff skills and/or confidence"* also jumped to 20 respondents (69%), which may reflect deeper retrospective recognition of the

programme's professional development impact.

The shift in outcome priorities from early to late programme-stage (Figure 12) suggests a deepening and broadening of perceived impact. Early on, the programme was strongly associated with nature connection and environmental presence. By the end, staff also recognised its effects on community cohesion and their own professional growth. The data reflects a maturing programme whose influence expanded beyond initial expectations into both the personal and institutional dimensions of library life and libraries' role in their local communities.
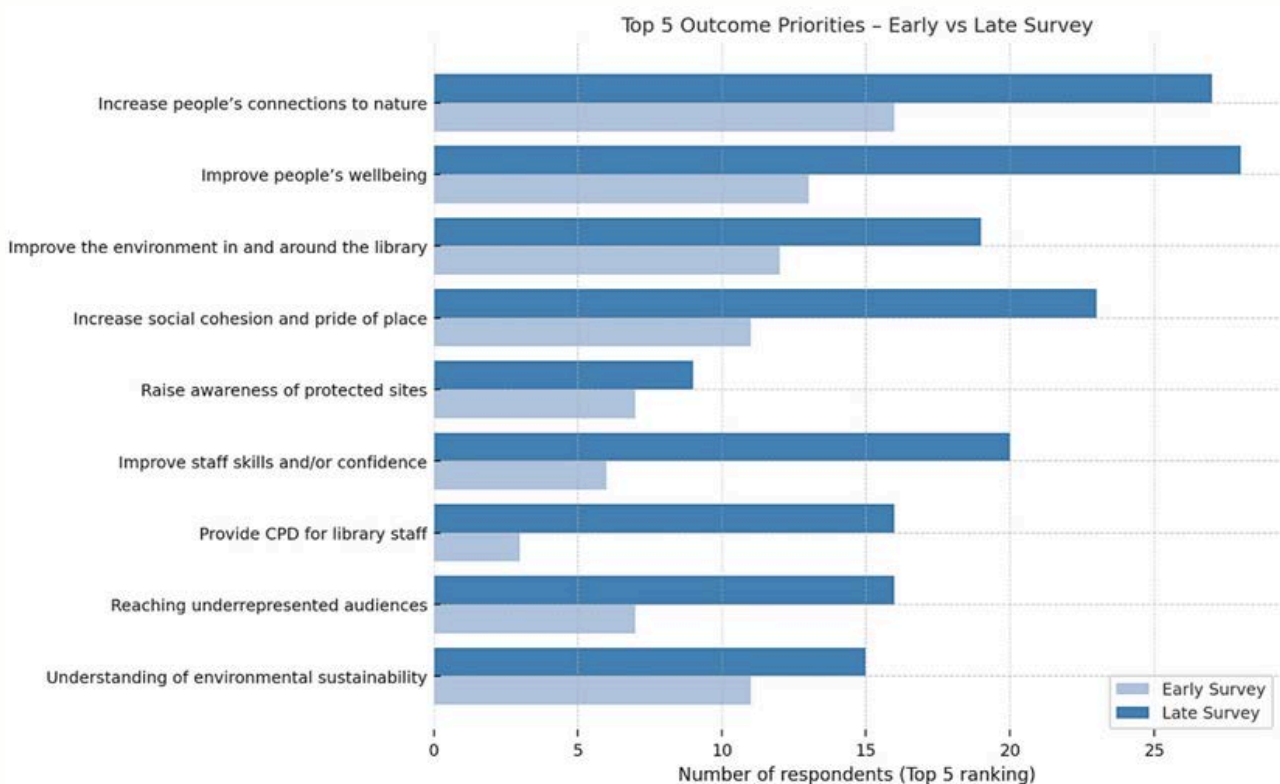
Figure 12: Comparison of early and end-point library staff survey responses on top 5 programme outcomes

Sustainability and policy-linked outcomes such as "Raise awareness of protected sites" remained less frequently selected, with 9 respondents (31%) choosing it as a top 5 priority outcome in the late survey.

These findings are largely replicated in responses to the late programme survey question which asked library staff to reflect back on their overall CNE programme activity and indicate to what extent they felt they had achieved each of the nine CNE programme objectives (Figure 13). Here, the **top three outcomes were "Improved people's wellbeing" and "Improved people's connection to nature" with 100% of respondents agreeing or strongly agreeing that their CNE activity had achieved these goals**, and "improved staff skills and/or confidence" which attracted 96.5% agreement or strong agreement. "Providing CPD for library staff" also received a strongly positive response, although there was also a higher prevalence of "not sure" for this statement.

Aligning with their lower prioritisation in libraries' ranking of the CNE objectives most relevant to their

delivery, the objectives which libraries felt they had made the least progress towards achieving across the programme were "Increased people's understanding of environmental sustainability or climate issues" and "raised awareness of protected sites".
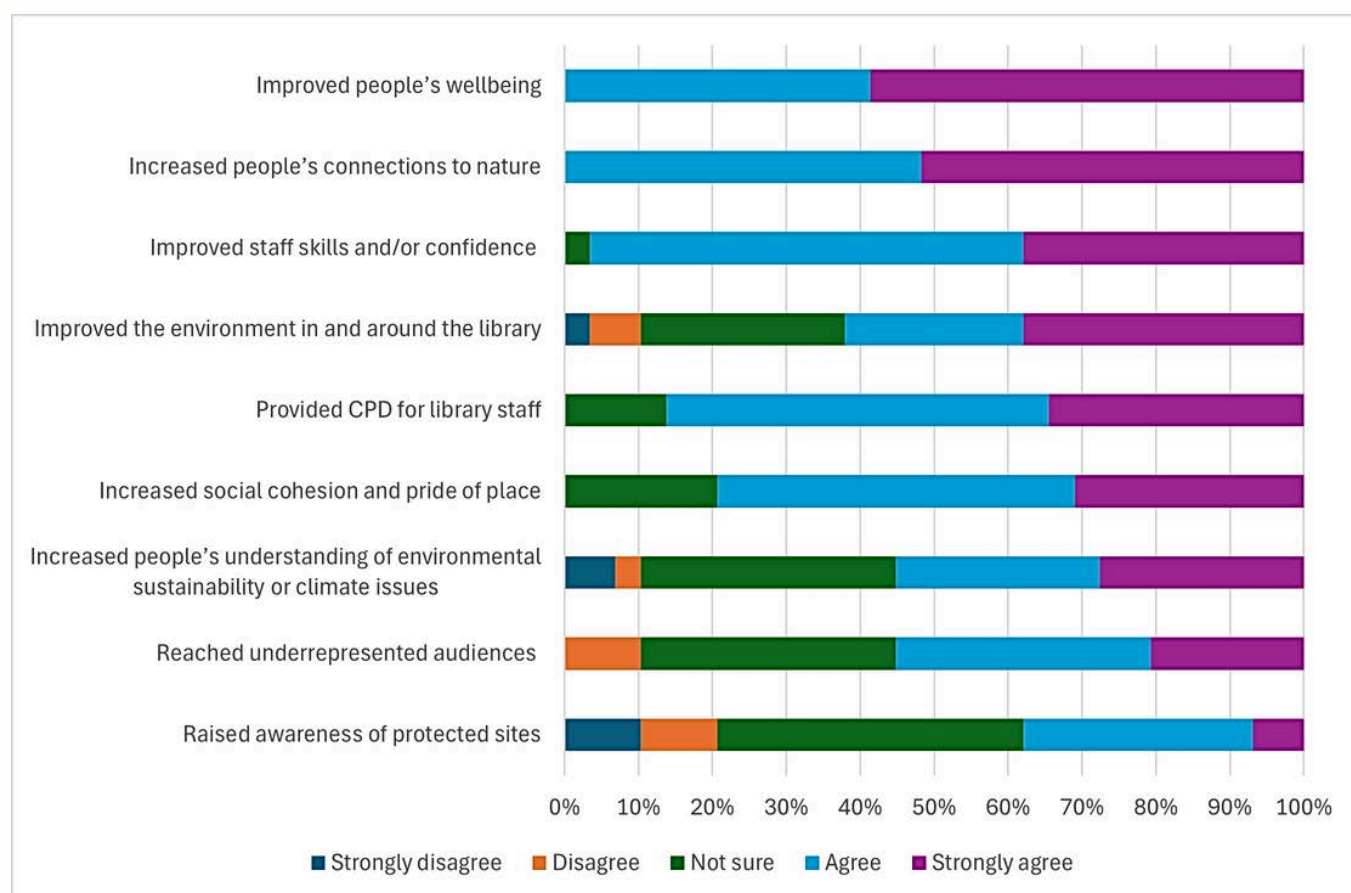
Figure 13: Library staff's views of outcomes achieved at programme's end-point

This data does not imply failure in achieving these outcomes, but rather, may suggest a longer lead-in time or less obvious visibility within day-to-day library CNE activity. **Recognition of audiences' increased sense of nature connection resulting from the project as 'planting the seed' for greater valuing of and care for nature at a range of scales is also important.** While library staff may not as readily have recognised their work as contributing to awareness or knowledge-based outcomes, by promoting nature connection they are building towards this with audiences in incremental steps, bearing in mind the 'entry-level' point of many audiences who had little to no experience of nature connection activity. The relatively low selection of these outcomes by library staff may also reflect their relative comfort with delivering more 'formal' nature knowledge in comparison with activity focused on encouraging nature connection. The second of these tasks, which the CNE programme posits as foundations for knowing and valuing nature, appears to have been a stronger fit with what staff felt to be their existing competencies and expertise.

4.1. Opportunities to strengthen CNE delivery and outcomes post piloting phase

It is important to emphasise that the CNE programme was structured as a research and development (R&D) project. This framing is crucial for interpreting the barriers and challenges outlined below, as the

programme was designed to test approaches, identify challenges, and learn from libraries and partners about what needs to be strengthened for future delivery. In this sense, **the identification of barriers should be seen as a productive outcome, providing a clear basis from which solutions can now be developed collaboratively** with libraries and partners.

While most of the feedback from library staff is positive, the evaluation established several factors that could be focused on to assist successful future delivery. Some of these are specific to a particular library's context – for example, the breakdown of a partnership due to internal issues within organisations. Others have more general applicability and are summarised below:

Late or inaccessible training provision
Some library staff were unable to access nature connection until CNE delivery was already well under way. In some cases, this limited their confidence and capacity to integrate nature themes meaningfully into their programming, and the lack of a universally accessible and early training offer led to some unevenness in library staffs' experience of the programme.

Further clarity around Protected Sites and environmental messaging
As above, Library staff sometimes reported uncertainty about how to engage audiences with more 'formal' nature knowledge concepts like Protected Sites or environmental pressures, particularly in urban or deprived areas, or in activities working with vulnerable or marginalised communities, where such themes could feel particularly abstract or potentially alienating. There was also hesitancy about introducing ecological content in 'fun' or wellbeing-focused sessions, and further guidance or examples on how to achieve this would be welcomed.

Initial uncertainty about programme expectations
The open and flexible design of CNE, while highly valued overall, initially left some library staff unclear about what kinds of activity were most appropriate. This ambiguity sometimes led to cautious interpretations or delays in delivery as teams worked out how best to proceed, although it should be noted that most valued the programme's openness and flexibility for adaptation to local library contexts and audiences.

Capacity and resource constraints
Smaller libraries with limited staffing seemed to find it more difficult to initiate partnerships, adapt spaces for nature-based use, or develop bespoke activities. Competing priorities also limited the time some teams could devote to CNE planning or evaluation, as even when resource was used to 'buy-in' external specialists to deliver activity, library staff still had to invest time in the event.

Engaging new or under-served audiences
While many libraries achieved success here, others found it challenging to identify or build relationships with under-served groups without prior links or community partners. In some areas, language barriers or differing cultural perceptions of nature added to the complexity, although finding ways that nature connection could 'bridge' to these differences was also highly rewarding.

Weather and infrastructure limitations
The programme was delivered across an autumn and winter season that was particularly wet and stormy, and activities that relied on outdoor spaces were sometimes hindered by poor weather. Some services lacked suitable garden or courtyard areas to support year-round programming meaning they were reliant on external sites, while some faced limitations within their library building itself; for example, due to co-location with other public services or situation in a non-traditional space.

4.2. Outcomes for audiences

Conclusions on outcomes for audiences are derived from several data sources:

- Library staff and delivery partners' perceptions of outcomes for audiences; including reflections submitted to the activity tracker, and via case study interviews with library staff and partners.

- Audiences' own perspectives of the outcomes they experienced; including responses to the online audience survey, feedback completed on paper feedback sheets/posters, and researchers' conversations with audiences during library case study visits.

Key to achieving planned audience outcomes is, 1) reaching a workable audience size for an activity, and 2) reaching the target audience for whom the activity and its intended outcomes have been designed. Responses to questions within the activity tracker on library staffs' perception of activity outcomes, show that there was widespread agreement that activities had attracted their target audience(s) (95% agreed or strongly agreed). **The delivery of the CNE programme via public libraries was viewed by staff as significant to audience engagement, given libraries' status as local social infrastructure, and as inclusive and free-to-access spaces which audiences may already be familiar with and feel comfortable accessing (right).**

In terms of libraries' strategies for engaging audiences, around half of activity tracker returns stated that CNE activity had been promoted via library services' social media channels, although printed leaflets, posters or emails, word of mouth and direct communication with schools and and community groups were also used. Several

Planting activity - Barrow Library

"A lot of our users don't have easy access to nature, and this was a way of bringing it to them, in a place they already felt comfortable." (Library staff interview)

responses reported that audiences had come into the library to do something else (for example, use a computer) and had spontaneously joined in with the CNE activity that happened to be taking place at the time, following staff encouragement:

"All of today's participants were regular library customers - one of them typically only comes to use the computers. It was lovely to see him engage in a more sociable activity and to hear him reveal that he only has a small outdoor space and had never done any gardening before, so our event was his introduction to the world of gardening" (Activity tracker)

"All of the participants seem to have come to the library for other reasons and then joined in the bulb potting when they saw it was available" (Activity tracker).

Partnerships have been key for libraries seeking to engage specific audiences, and several library services had partnered with primary schools in order to reach pupils, or with outside-school clubs for children and young people such as Brownies or Beaver Scouts. Partnerships have seemed particularly crucial in encouraging participation from underrepresented groups or people who may face barriers in accessing services and opportunities. Across the programme, this has included work with community-based ESOL groups, groups supporting people who are seeking asylum or who are refugees, organisations supporting people with mental health needs, and grassroots charities working with low-income families (Box iv). While this partnership working appears to have generally been effective in engaging target audiences, a few library staff commented that there had been miscommunications with delivery partners,

meaning that an activity had not been effectively promoted to the group's members or service users, or that internal problems with funding or capacity within smaller or community-based partner organisations had affected engagement.

There was a still positive, but more muted, response to the question of whether activities had attracted the number of participants expected, with 77% of activity responses indicating agreement or strong agreement with this. A lack of expected numbers was a common comment in the activity tracker when library staff were asked if anything had not gone so well with an activity.

Qualitative data in the activity tracker and the library staff surveys suggest a range of reasons that not all activities reached the audience numbers library staff hoped for. This included bad weather on the day of a planned outdoor activity which may have put audiences off, and was a recurrent issue given the very wet and windy autumn/winter of 2024/25. Staff comments suggest that activities which moved between indoor and outdoor activity (for example a walk, followed by an activity within the library) were better able to navigate this challenge than activities which relied wholly on being outdoors, as activity was easier to adapt if the weather was very poor. Other challenges in generating audience engagement were more specific to a library's context, audience and, sometimes, its delivery partners in ways that were outside the library staff's control.

The following section (continued after Box iv) looks specifically at audience outcomes achieved across three (interrelated) domains of the Culture Nature programme:
- **Nature connection**
- **Nature awareness and curiosity**
- **Wellbeing**

Box iv: Bolton Libraries - Culture Nature Farnworth

Farnworth is a branch library serving a community in south east Bolton, bordering Salford. Located near a shopping precinct and opposite a park, it has an annual footfall of around 37,000. The surrounding area is ethnically diverse and includes pockets of social and economic deprivation, and some residential areas are densely packed with limited green space. Library staff highlighted that some local residents, particularly ESOL communities and lower income families, face barriers to accessing nature and inclusive opportunities for outdoor engagement.

Participants have included ESOL learners, older residents, parents and children, and individuals with additional needs.

Many had not previously engaged with library activities, while others joined spontaneously after visiting the library for other reasons.

The Culture Nature programme was seen as a chance to address some of these community needs while contributing to the library's broader ambition to become a hub for environmental awareness and wellbeing. As part of the national Green Libraries initiative, Farnworth Library has aimed to use the programme as a stepping stone for embedding nature-connectedness into their offer for local residents.

The programme has consisted of a three-phase series of creative and sensory outdoor and indoor activities, tailored to ESOL groups, the general public, and families. Activities have included nature walks, mindful sensory grounding exercises, mono-printing using natural forms, crafts and making, and edible planting. Visual displays (left) and nature-themed book collections have also been used to raise awareness and curiosity of local green spaces and protected sites, and broader nature themes.

Partners have included a Church-based community hub working with ESOL groups, the TCV (The Conservation Volunteers) who delivered training, and Groundwork, who supported one of the nature-based sessions.

Familiar faces returned for multiple sessions, helping to build a feeling of community and connection, and participants described increased appreciation for local green spaces and heightened awareness of nature in their daily lives. Some spoke of taking more notice of their environment and valuing the opportunity to engage in tactile, creative practices. Facilitators noted improved confidence among participants and a willingness to try new things, with some proud to share or take home the work they created in the programme's making-based sessions (left).

The programme has strengthened Farnworth Library's capacity to deliver nature-connected activities and helped integrate environmental themes across its service offer via strengthened connections with environmental organisations. It has reinforced the site's contribution to the Green Libraries agenda and equipped staff and volunteers with new skills and confidence. Staff felt increasingly capable of embedding nature into programming in meaningful ways.

Challenges have included the unpredictable nature of drop-in attendance which could make planning and resourcing difficult, difficulties in sustaining engagement due to external organisational challenges, and the winter weather limiting some outdoor elements.

The programme has reinforced Farnworth Library's continued commitment to nature-connectedness and community wellbeing. The library has acquired permanent resources that will continue to be used beyond the programme, and staff are planning to expand environmental programming through partnerships and wider borough-wide library initiatives.

The work is contributing directly to Bolton's emerging Green Libraries Manifesto, and illustrates how activity emphasising sensory, creative, and mindful interactions with nature — rather than technical or knowledge-based approaches — are accessible to a wide range of participants, including under-served audiences. Flexibility in delivery, supported by motivated staff, volunteers and partners, can open up powerful experiences that deepen people's connection to their environment and to one another.

4.2.1. Nature connection

The activity tracker data gives a very positive picture of library staff's perception of the audience outcomes achieved by CNE activity. **96.8% of activity responses indicated that library staff agreed or strongly agreed that their CNE activity had "encouraged participants to engage with nature".** Audience feedback on nature connection outcomes was also very positive, across both the online audience feedback survey (open to audiences aged 15+), and via the feedback sheets/posters.

As outlined earlier, the survey and feedback sheets/posters included a Likert scale question with statements based upon each of the Five Pathways to Nature Connection. Within the online audience survey, **over 84% of respondents agreed or strongly agreed with statements, that during the CNE activity:**

- *'What I saw, heard, smelt, touch or tasted helped me feel closer to nature'*
- *'I noticed and enjoyed the beauty of nature',*
- *'I felt positive emotions inspired by nature',*
- *'I thought about what nature means to me'*
- *I felt like I wanted to take care of nature'.*

Indeed, very few visitors answered that they were not sure or disagreed with each statement, suggesting a very positive overall audience outcome from the programme in terms of self-perception of nature connection.

This positive picture is also seen in the responses to the same question received via the feedback sheets/posters provided to libraries for use with audiences aged under 15, or when the activity or audience type made the completion of an online survey impractical. Across the CNE programme, 413 responses were received via the feedback sheet/poster featuring statements based on the

Five Pathways to Nature Connection, with most respondents agreeing or strongly agreeing with each of the five statements (Figure 14).
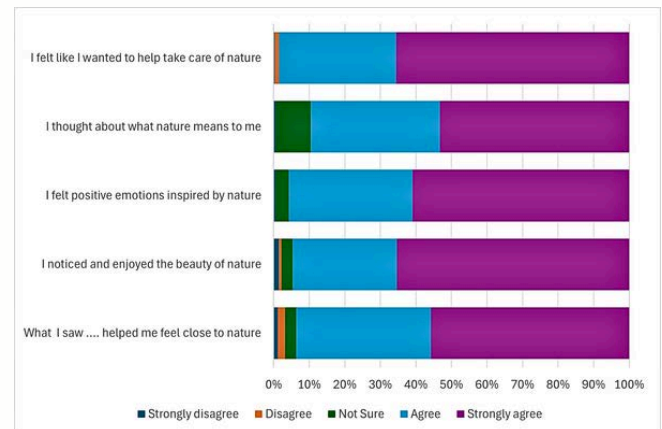
Figure 14: Audience feedback via paper sheets/posters: Pathways to nature connection-influenced questions

Qualitative comments via case study interviews and conversations, the audience survey and the activity tracker commonly focus on the sensory aspects of the CNE activities as something that audiences particularly enjoyed or found engaging:

"I loved hearing the birds singing and hearing the wind whistling through the trees" (Audience survey).

Children who the research team met during a case study visit spoke about the 'ripples' in the water from diving birds, the quiet breeze, and the 'tree smell' during a walk in a small urban nature reserve, and for parents and school staff interviewed during this and other case study visits, physical and sensory engagement with nature felt important given increased screen-based activities for children, both in school and during leisure time.

Conversations with families during a case study visit to a gardening activity found that parents appreciated a no-cost opportunity for their children to engage in tactile and creative (rather than screen-based) play, and this was echoed by teachers and other staff working with children.

Nature-inspired arts and crafts activities conducted within the programme were often highly tactile – for instance, handling and shaping withies and foliage during wreathmaking, or working with clay – while other forms of activity involved collecting natural items on walks or getting your hands in the soil in a planter or a library garden. Audiences frequently commented that they enjoyed these experiences, and, recognising this, library staff designed ways to incorporate sensory elements into a wide range of activities -

"We played nature sounds throughout the painting activity, which added a calming, sensory layer to the experience. We wrapped up with a discussion on how these sounds made us feel and the positive effects they can have on our well-being" (Activity tracker)

- as well as finding means to encourage audiences to have an active, rather than passive engagement with the natural world:

"Giving out the bird feed at the lake was great. All adults and young people got a packet, and it meant that we didn't have a passive interaction with nature but were involved with it. It was raining and muddy, so this felt like a really good, fun way to keep people enthusiastic and engaged" (Activity tracker).

Park walk - Gateshead Libraries

As well as the inherent pleasure in working with tactile materials or engaging with natural sights, smells and sounds, in some activities, sensory aspects also served as a mechanism towards achieving other wellbeing outcomes – for example, social connection.

This was exemplified in one library case study visit, where people seeking asylum attended an artist-led session where they rolled, shaped and embellished clay into hanging ornaments to decorate the library garden (right). Most participants had little or no common language with one another or the facilitators. The atmosphere was happy and relaxed with long periods of companionable silence, and attendees clearly took pride in their creations and enjoyed admiring the work of others:

"You can just see people really enjoyed the clay … People want to do stuff with their hands, and especially when there isn't a language in common, it's taking the pressure off a conversation happening, and letting people interact in other ways" (Artist interview).

Another key theme in audiences' qualitative feedback on CNE activity is the power of 'being still', 'noticing' and 'looking closely' which, again, has clear links to the Pathways to Nature Connection statements. Audience conversations with both adults and children/young people during case study visits included repeated comments on the sense of peacefulness or calm that people had derived from activities, or that activities had left people feeling more energised, while others spoke about the activity in simple terms of **a moment of 'pause' from life's pressures and strains**. These comments are echoed in numerous qualitative data within the audience survey (examples - right).

"The walk took me to places at a pace that made me see my natural environment in new ways, without any distractions"

"It's taught me to really take notice of just how wonderful the world is, to be still, quiet, listen and lose myself in my surroundings, to feel peacefulness and serenity, contentment within myself"

Like the observation above on tactile arts and crafts activities, audience members also found benefits in communal activity, such as walking and observing nature, which did not have an expectation of conversations, but rather just 'being' together in a natural space:

"Companiable silence, I loved that, just not feeling the pressure to talk, and really enjoying that space ... I'm going through some personal stuff around grief ... I knew this would be helpful - really grounding" (Verbal audience feedback shared via activity tracker).

Audience members also spoke about how activities had **inspired them to take action for nature** outside of the CNE activity, for example, by adding nature-friendly features to their own outdoor spaces:

"It definitely gave me thoughts to install something in my garden for birds and butterflies" (Audience survey)

Both the online and poster-based versions of the Inclusion of Nature in Self (INS) scale also returned positive results (Figure 15), with most respondents across both feedback formats choosing the images which represented a closer connection between self and nature (E, F, G). There are higher levels of identification with image G (closest connection to nature), as well as slightly higher response levels to the options indicating less connection with nature (A, B, C) in the paper versions of the feedback sheets, which are more likely to include children among the respondents. There were some comments from library staff via the activity tracker that they did not feel all children fully understood what they were being asked to do with this feedback tool, although the scale is validated for use with children, so this is a consideration when interpreting these differences between the datasets.
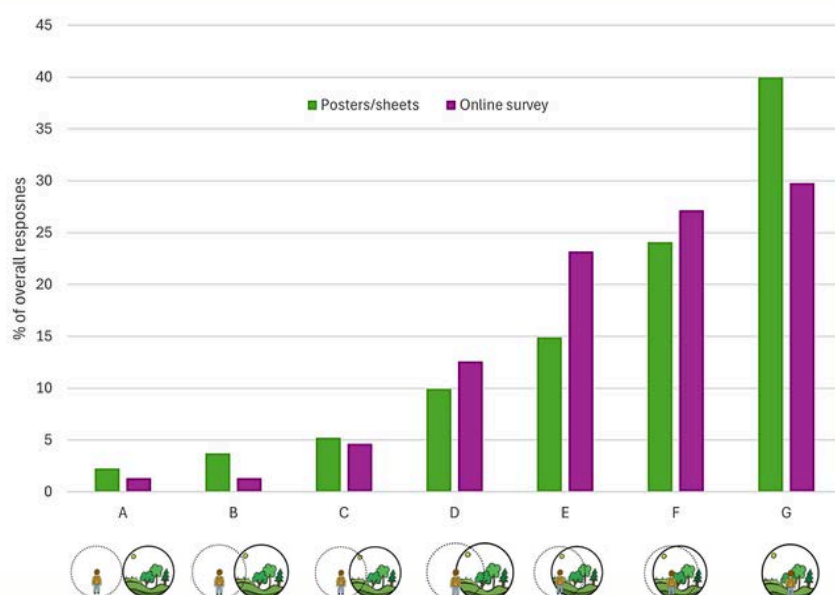
Figure 15: Responses to INS scale across online and paper feedback formats

As explained, practical considerations around the delivery of the CNE programme and library staff's capacity to collect audience feedback, meant that a before and after measure was not included for either the Five Pathways to Nature Connection-based scale or the INS. This means that it is not possible to isolate the impact of CNE participation on audience's nature connection level (i.e. they may have started from an

existing high level with the activity having negligible impact). To address this limitation, a question was included in the online audience survey asking people if they felt more connected to nature following the CNE activity than they had before. The response to this was positive, with **84% of the 148 audience members who completed this question agreeing that the CNE activity had positively impacted their sense of nature connection.**

Impact of audience demographics

The demographic data collected in the online audience feedback survey allows some comparison of responses by participants' demographic profile. There was insufficient variation in responses across ethnicity and age categories to do this, but it is possible to compare responses across gender and disability characteristics looking at the Pathways to Nature Connection-inspired scale. The table below summarises the percentage responses to each Likert statement, split according to gender. There were no significant gender differences in responses across several questions, although it can be noted that women were almost twice as likely as men to strongly agree with the statement: *"What I saw, heard, smelt, touch or tasted helped me feel closer to nature"*.

Nature Connection Statement	Group	Percentage of Responses per Likert Item (Females = 116, Males = 25)				
		Strongly Disagree	*Disagree*	*Don't Know*	*Agree*	*Strongly Agree*
What I saw, heard, smelt, touch or tasted helped me feel closer to nature	Female	1%	1%	4%	45%	47%
	Male	-	-	16%	60%	24%
I noticed and enjoyed the beauty of nature	Female	1%	-	1%	45%	51%
	Male	-	-	4%	51%	64%
I felt positive emotions inspired by nature	Female	1%	-	3%	35%	59%
	Male	-	-	-	48%	52%
I thought about what nature means to me	Female	2%	-	8%	41%	52%
	Male	-	4%	4%	60%	32%
I felt like I wanted to take care of nature	Female	1%	2%	3%	43%	53%
	Male		4%	8%	44%	44%

Table 4: Comparison of responses relating to Pathways to Nature Connection categorised according to Gender

Wider research suggests that women may report higher levels of emotional or relational connection to nature compared to men, although the evidence is mixed. The UK-wide People and Nature Survey for England found women were more likely to say they felt "very connected" to nature than men.[1] Qualitative

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[1] Natural England (2021) People and Nature Survey: Key findings 2020/21.

studies reinforce this, showing that women more often describe nature as a space for emotional wellbeing and social bonding.[1] However, other studies argue that connection to nature is shaped more by life stage, socio-economic status, and cultural background than by gender alone, highlighting the need for more intersectional research in this area.[2]

To look at whether the presence of a disability or long-term health condition impacted visitor's appreciation of nature during CNE activity, the responses per Likert item were spilt into two groups; No Reported Disability / Health Issue, and Presence of Disability / Health Issue. This data is presented in Table 5 below, and there were no clear and observable differences in responses between the groups, suggesting that **the CNE programming reflected in the audience survey was inclusive and effective for people with disabilities or health issues who took part.**

Nature Connection Statement	Do the Visitors have a Disability or Health Issue?	Percentage of Responses per Likert Item (No Disability / Health Issue = 115, Presence of Disability / Health Issue = 28)				
		Strongly Disagree	Disagree	Don't Know	Agree	Strongly Agree
What I saw, heard, smelt, touch or tasted helped me feel closer to nature	No	2%	1%	7%	46%	42%
	Yes	-	-	7%	46%	46%
I noticed and enjoyed the beauty of nature	No	2%	-	1%	46%	50%
	Yes	-	-	4%	46%	50%
I felt positive emotions inspired by nature	No	2%	-	3%	35%	59%
	Yes	-	-	7%	32%	61%
I thought about what nature means to me	No	2%	1%	7%	41%	47%
	Yes	4%	-	4%	46%	46%
I felt like I wanted to take care of nature	No	2%	1%	4%	41%	58%
	Yes	4%	7%	4%	43%	46%

Table 5: Comparison of responses relating to Pathways to Nature Connection categorised according to Disability/ No Disability

[1] MacBride-Stewart, S., Gong, H. and Antonsich, M. (2016) 'Engaging with nature and the meaning of outdoor spaces: Exploring the gendered experiences of health and wellbeing', Health & Place, 40, pp. 123–129.
[2] Richardson, M., Passmore, H.A., Lumber, R., Thomas, R. and Hunt, A. (2020) 'Moments, not minutes: The nature-wellbeing relationship beyond visits to green spaces', Ecopsychology, 12(2), pp. 116–126

4.2.2. Nature awareness and curiosity

Both the online audience survey and the feedback sheets/posters included Likert scale questions relating to CNE programme outcomes around increased awareness of nature and local green spaces and of pressures facing nature, and curiosity to engage further with nature. While audience responses to these outcomes are still very positive, they are more 'muted' than the nature connection responses, with a higher number of participants stating they are 'not sure' or 'disagree' with statements across both the online (Figure 16) and paper-based (Figure 17) audience data. For example, 25% of audience members who took part in the online survey were not sure if the programme had 'Increased my knowledge of pressures on nature', and similarly, 20% were not sure if the programme had 'Increased my knowledge of nature in my local area'.
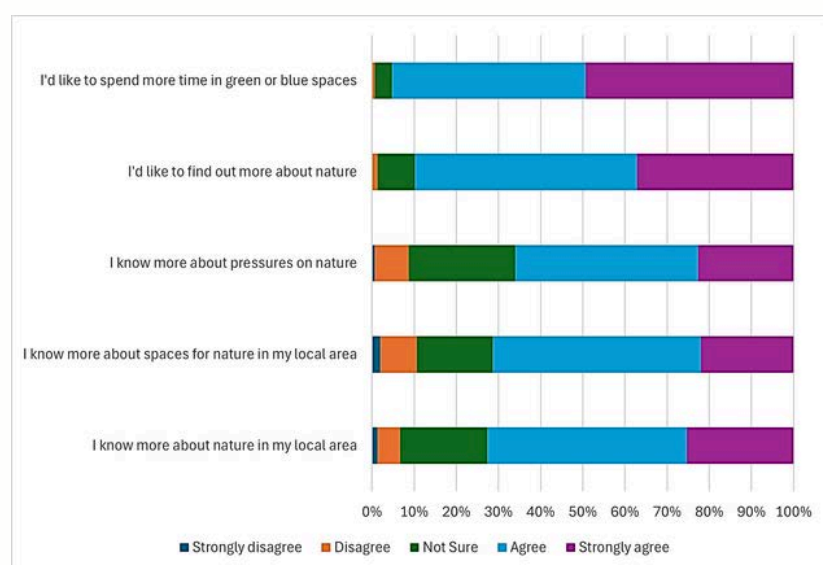
Figure 16: Audience feedback via online survey: Nature awareness-curiosity questions
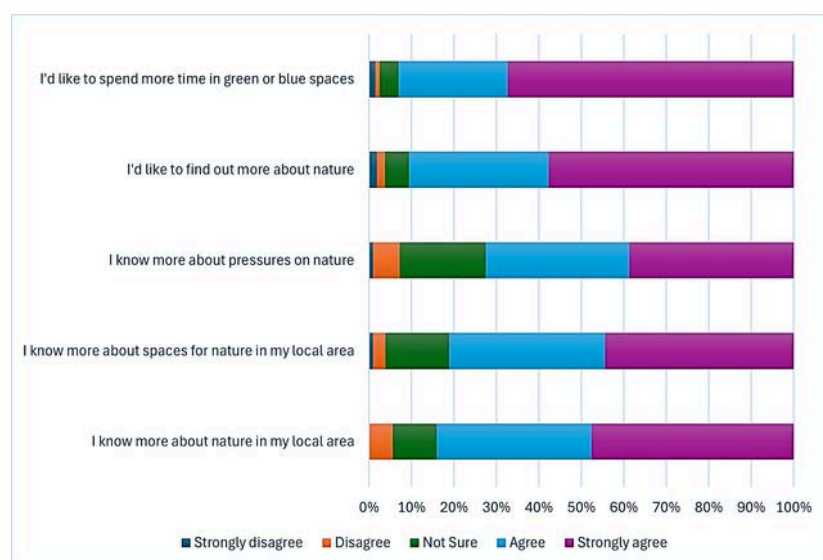
Figure 17: Audience feedback via paper sheets/posters: Nature awareness-curiosity questions

A potential explanation is that some audiences may already be familiar with nature in their local area, and of the pressures on nature. Therefore, they did not obtain any or much new knowledge on these topics via participation in CNE activity. This interpretation is supported by some of the qualitative comments in the online audience survey which indicated that some audience members were engaging with CNE activity from an already high start point of nature and green-space awareness and confidence. This was also encountered

during case study visits in Solihull and Somerset, where some audience members told us that they already felt that accessing nature was a big part of their lives. Nonetheless, even for those participants who said that they were already familiar with and regularly accessed natural spaces, most said it was good to be reminded via the library displays of what other sites were out there. In the Solihull Libraries case study, the young people we spoke to from the Young Archaeologists Club already seemed to spend a lot of time in nature and doing outdoor activities, but still found benefits in engaging in the CNE programme as it had given them and their parents/guardians a "fresh perspective" on a familiar space:

"it's great having so many kinds of experts on the different areas, trees and local history. Just kind of pointing some things out. We'd otherwise just walk past, I think" (Audience member interview).

Other aspects of the activity had encouraged participants to think about nature in different ways – for example, visiting an oak tree that had stood in Elmdon Park since Tudor times (right) and reflecting on the span of history that the tree had 'witnessed' was a striking experience for some of the young people who attended the guided walk. The activity tracker entry for the follow-on activity shows that the young people retained and were keen to share newly acquired knowledge:

"The children had attended the previous week's walk with the tree wardens and were sharing their knowledge with other attendees. Specific mentions were made of the veteran tree, and the monkey puzzle trees with the children pointing them out to each other and their parents" (Activity tracker).

Some of the audiences we met during case study visits were also already knowledgeable about pressures on nature and talked confidently about both specific pressures in their local area (for example, removal of

mature trees in a county traversed by HS2, habitat loss due to a local large-scale housing development, and increasing local flooding) as well as broader ecological concerns – for example, the importance of trees and urban green spaces in mitigating the impacts of air pollution and solar gain. As such, for this sub-section of audiences, while they had enjoyed and valued the CNE activity, they did not feel it had particularly increased their awareness.

Interestingly, the levels of strong agreement with awareness-curiosity outcomes increase in the paper-based version of the audience feedback question. This form of feedback was more likely to have been completed by children, so we can perhaps surmise that CNE activities targeting children or families with younger children may have more firmly embedded awareness-curiosity based outcomes within the activity in a way that was recognisable to activity participants, compared to more adult-orientated activities where these outcomes may have been less prominent or more subtly expressed. During a case study visit to Camden Libraries for example, primary-aged children were read Yuval Zommer's picture book *The Wild*, which explores the dangers of over-exploitation of nature in an age-accessible way (below). They were then able to make links with this theme during a visit to a local nature reserve; talking about the importance of a protected wild space in the midst of a city where nature faces multiple pressures.

It is also possible that the more muted audience responses to these outcomes reflects the type of activities that library staff felt more confident in designing and delivering. There was not an expectation from programme leads that Protected Sites Strategies should be at the forefront of activities, with Natural England,

rather, understanding gains in community nature connection as **foundational steps towards greater valuing of and care for nature.** But, as outlined earlier, this messaging had not landed as effectively as needed for some library staff who reported that they had remained unsure of the extent to which these programme outcomes should be directly incorporated into delivery. Library staff also reported practical issues with producing the poster-sized GIS map of local green spaces and protected sites which libraries were asked to display in libraries, and which may have formed a significant aspect of increasing audiences' awareness of these spaces had it been successfully realised across the programme: *"It was difficult incorporating the map into our Library display through the website. It was very time consuming trying to capture images from the interactive map into a printable format."* (Library staff survey)

Successful approaches to awareness-curiosity outcomes included linking a learning aspect to a nature connection-focused activity. For example, activities such as the tree walk outlined above, and the expert-led 'stork walk' run from Tolworth Library in Kingston upon Thames (below, left):

"It was amazing to see so many people interested in the project, which is only a five-minute walk from the library … Participants explored this exciting rewilding project while learning about the fascinating ecology of storks. We talked about how these iconic birds are symbols of ecological recovery, and our hopes that they will one day thrive alongside us in urban areas like Tolworth." (Library staff comments via email)

"The walk was really informative. I learned so much about storks and why they're important for the environment." … "I really enjoyed learning about the ecology of storks and the plans for the future. It gives me hope for urban rewilding" (Audience members' feedback via Activity tracker).

Other approaches included arts and crafts sessions which combined informative content or 'fact-finding' missions about species or habitats, with creating a collage, painting or puppet to take home (below, right).

In some libraries, staff felt that there was potential misalignment between activities which raised awareness of pressures on nature and activities that promoted nature connection for wellbeing. One case study library, for example, worked with a vulnerable and socially excluded population with limited English language capability, and here it was felt that language barriers prevented incorporation of some awareness-curiosity based outcomes, but that they also risked detracting from the activities' emphasis on fun and relaxing activities – going for a gentle walk, doing nature-inspired arts and crafts, or just being outside together.

This speaks to an interesting tension within the CNE programme in **aiming to deliver both wellbeing outcomes and outcomes relating to participants' increased awareness and curiosity of environmental pressures**. Recent research highlights the psychological impact of climate anxiety, particularly among young people. Vercammen et al.[1] found that around 10% of UK residents aged 16–24 experience high levels of climate distress, often characterised by feelings of worry, guilt, and frustration at inaction. Similarly, a survey by the British Psychological Society[2] reported that 29% of young adults in the UK felt their mental health had been negatively affected by concerns about climate change. Whilst climate change is perhaps the best understood source of negative eco-emotions, other research has suggested this can also be linked to fears around local habitat loss and change due to development pressures, with anxieties attached to a perceived lack of influence over such transformations.[3]

It may be that some library staff, consciously or unconsciously, felt that messaging around pressures on nature could diminish audiences' engagement and enjoyment of CNE activity through triggering eco-anxiety, dampening wellbeing benefits. However, it is important to note that the same research shows that climate/ecological distress is not solely debilitating; it is also associated with greater likelihood of pro-environmental behaviours and engaging in climate activism, suggesting that anxiety may function as both a burden and a motivator towards constructive responses.

A suggestion for future iterations of the CNE programme is to provide resources that equip libraries with approaches and language which frames content on pressures on nature as an empowering call to action rather than a cause for despair. This could also offer an approach to accessible inclusion of protected sites-related awareness and curiosity given that **protected sites offer an important example of how nature-rich space is being actively protected in the face of environmental pressures.**

Other libraries spoke about a fear that learning-focused activities, particularly those aimed at young people could "feel too much like school" (Library staff survey), although were pleasantly surprised by audiences' reception to awareness-curiosity based activities when these were offered:

"The nature connection training gave me

[1] Vercammen, A., Lawrance, E., Thompson, R., Fontana, G. and Jennings, N. (2023) 'Psycho-social factors associated with climate distress, hope and behavioural intentions in young UK residents', PLOS ONE, 18(8), p. e0289233. https://doi.org/10.1371/journal.pone.0289233

[2] British Psychological Society (2021) BPS survey highlights eco-anxiety in UK youth. Available at: https://www.bps.org.uk/news/bps-survey-highlights-eco-anxiety-uk-youth

[3] Goodenough, A., Urquhart, J., Morrison, K., Black, J. E., Courtney, P., Potter, C. (2024) 'Using a socially-engaged arts approach to explore how diverse socio-cultural groups accessed, valued, engaged with and benefited from an urban treescape during the COVID-19 Pandemic.' Urban Forestry and Urban Greening. 98

the inspiration and the confidence to make the activities more informative/educational and to trust that participants would enjoy the opportunity to learn more about nature, and that turned out to be exactly the case …

The high levels of engagement during our events and the positive feedback afterwards demonstrates that many people are eager to explore and discover more about nature, and that learning really is fun for people when they're encouraged to ask questions and to relate what they're learning to their own lives" (Library staff survey).

As outlined above, although some CNE activities engaged audiences for whom accessing nature was already part of their lives, for others, **a lack of access to nature in the local area or practical or attitudinal barriers to accessing nature were key areas of local need that libraries aimed to address using the CNE funding, with a view to increasing people's awareness of these spaces and their curiosity and valuing of the nature found within them.**

For example, in a case study interview in the coastal town of Lowestoft which has high levels of social need, a member of library staff explained there was a lack of high-quality local nature spaces, and (as they perceived) a growing sense of psychological and cultural distance from 'nature' as a concept. While the wilder parts of the coast and nearby marshes are technically accessible from the town where the library is located, staff and families consistently pointed to barriers such as unreliable public transport, physical mobility limitations, and cost. Moreover, nature engagement was often perceived as something for others - for those with time, private gardens, or a car. The library's garden space constructed via the CNE programme, was therefore framed

deliberately as an 'everyday nature' zone - visible, walkable, and co-created and co-owned by the community (Box v).

In another library in a socio-economically disadvantaged community, library staff talked about the challenges of encouraging people to access nature given the other stresses present in their lives:

"There's a lot of people here who are isolated or struggling, and they're not going to go off to the countryside - it needs to be on their doorstep." (Library staff interview).

Here and in comparable CNE activity programmes, library staff highlighted the importance of providing space and activities that felt familiar and manageable, particularly for those who may not readily engage with formal services or structured group activities. In the case study in Kirkby-in-Ashfield in Nottinghamshire, the renewed library courtyard has provided an opportunity to offer a nature-based experience within a civic, town-centre setting that could be accessed casually and without stigma. There was also recognition that existing library users often lacked confidence in outdoor or creative environments.

By bringing nature into the library's grounds, staff in this, and similar CNE projects, hoped to encourage gentle participation and offer a stepping stone toward broader engagement with wellbeing and nature-focused activity.

This was especially relevant for people managing anxiety, low mood, or long-term health conditions. Staff noted that many CNE participants were already familiar with the library or passed its central location regularly as

part of their daily routine, which helped reduce the psychological barrier to participating. The setting felt safe, informal, and familiar - key factors in engaging people who might be anxious about trying something new or joining a group of people they didn't know. Another approach was taken by Somerset Libraries, who created immersive visuals and 3D walkarounds of local nature sites to 'demystify' them and build audience confidence in accessing spaces independently.

As well as bringing nature to the library in various forms, other projects addressed barriers in accessing nature by facilitating visits to natural or green sites through guided walks or group outdoor activities, or supported independent access via tools such as explorer packs and trails (below example from Headland Library, Hartlepool) . These approaches helped audiences understand where sites were and how to access them, while activities such as group walks also helped address the (often gendered) barrier of apprehensions around safety – one library for example, offered a group walk for women: "*to have the chance to go to [a park] which we wouldn't normally go to on our own due to safety issues*" (Verbal audience feedback).

We also heard comments in several case study areas that were specifically about **nature deprivation in childhood**; that children had 'lost' their aptitude for being in nature and playing freely outside. Library staff stated that they were surprised at the amount of 'scaffolding' that children needed for nature-based play and exploration, rather than the open and inquisitive approach they had anticipated, and for some this was a key learning point that would inform future delivery of child or family-focused nature activity.

Headland Nature Trail

There's lots of nature to look out for.
Did you spot any of these along the trail?

1.5 miles from the library on Old Cemetery Road

Spion Kop Old Cemetery Road
Here you can find:
– Nothern Brown Argus Butterfly
– Common Fragrant Orchid
– Grasshopper
– Skylark Bird

Common birds can also be seen throughout the area such as Herring Gull and Kittiwakes.

Heugh Battery Moor Terrace
Here you may find:
– The Duke of Argyll Tea Tree (non-native) also known as the Himalayan Goji Berry plant.

Rockpools
Here you can find sea life in the rockpools during low tide, such as:
– Urban Lichen on rocks
– Seaweed
– Shells such as cockles, muscles, limpets, periwinkles & crabs
– You may also spot seals or dolphins in the local area; seal species include the Common Harbour Seal and Grey Seal.

You Are Here
Headland Library
Middlegate

St Hilda's Graveyard
ST Hilda Crescent

The Fish Sands
Town Wall

Croft Garden

Remember rockpools can be slippery.
Always stay alert and follow safety guidelines when near the sea.
All children should be accompanied by a responsible adult.

Illustrated by Lizzie Lovejoy

Box v: Suffolk Libraries - Nature Nurture

Lowestoft Library, situated in one of the UK's most economically deprived coastal towns, has used the CNE programme to respond to intersecting local needs of poor health outcomes, economic hardship, and limited access to green space. The team wanted to create an outdoor library space that supported community wellbeing while strengthening their growing work around environmental engagement and creative health.

Activities were deliberately designed to be low-pressure and drop-in, combining outdoor work to develop the garden space with indoor creative activity. This made the project accessible to many participants, including families who had not previously used the library.

As a National Portfolio Organisation and signatory to the Greener Libraries Manifesto, the library had already begun thinking more seriously about its ecological role. CNE provided the platform to make that ambition visible and tangible.

The project transformed a previously underused area at the front of the library into a small garden space designed to be both functional and symbolic, and co-created with the local community. Working with Suffolk Wildlife Trust (SWT), the library team have delivered bug hotel workshops, sapling planting, gabion seating construction, and hand-painted signage. SWT also provided staff training at nearby Carlton Marshes, which shaped the design and tone of the activities. A local ecologist offered informal support during delivery, advising participants and promoting awareness of the nearby protected landscape.

The site's highly visibility at the front of the library has been an important asset, drawing in passers-by and encouraging spontaneous participation. The blended indoor-outdoor format supported intergenerational activity, and the creative

elements have invited a sense of ownership. Audience feedback suggests that the open format, visible location, and relaxed atmosphere have helped participants feel comfortable engaging. Families described the opportunity to work on the garden as a welcome alternative to screen-based leisure.

For library staff, the project has proved personally and professionally rewarding. **It has boosted staff confidence around outdoor delivery and confirmed that existing skills - in facilitation, creativity, and community engagement - translate well to informal, environmental activity.** The work has also strengthened internal collaboration, with different teams coordinating across programming, logistics, and engagement. The partnership with SWT will likely continue, and the garden is now considered part of the library's core identity. Staff also noted therapeutic benefits for themselves and spoke positively about the emotional impact of co-creating the space with the community. Challenges have included concerns about antisocial behaviour and questions about long-term upkeep. While the garden was praised for its accessibility and welcoming feel, some staff reflected that future iterations might benefit from a more ecologically wild or experimental aesthetic.

The work has left a clear legacy. The garden is now used regularly and has influenced the design of future programming. Staff are exploring new ways of linking the space to creative health pathways, and green social prescribing offers. There is also interest in creating light-touch peer groups for libraries undertaking similar projects for sharing best practice.

Key learning from Lowestoft is that visible nature embedded within a civic space can reshape how people engage with the environment and the institution every day.

Even with modest resources, libraries can create powerful spaces for well-being, social connection, and low-barrier environmental participation.

Ensuring library staff have time to reflect and share this work across sites could strengthen its impact across the wider sector.

Across all these findings, there is a sense that a key strength of and learning point from the CNE programme is the importance of **meeting people where they are** though a flexible and responsive understanding of what a positive programme outcome looks like. For the young people from Solihull Young Archaeologists Club, who already regularly engaged with nature and the outdoors, an outcome around nature awareness-curiosity may look very different to that of someone living in a highly-nature deprived setting and who lacks confidence to access local green spaces.

This is exemplified in comments from the Gateshead Libraries case study (Box vi) which has worked with people seeking asylum who are temporarily housed in a local hotel. Here, staff and partners stressed that simply providing a calm, welcoming environment for someone to spend time in respite from the challenges of their daily life was often "enough"; with anything else a bonus in terms of nature connection or social connection-related outcomes. Someone could come to a session and not really engage with the activity or speak to anyone - or could even just sit with headphones on. Objectively, that looks like a lack of engagement, but for that particular person, on that particular day, it is a *"a massive win"* (Library staff interview) that they have come out of their room at the hotel and got on the minibus to come along to the library or to the park.

4.2.3. Wellbeing outcomes
In the activity tracker competed by library staff, there were **very high levels of agreement with the statement *"the activity seemed to support participants' wellbeing"*, with 93% agreeing or strongly agreeing).**

As with the nature connection scales discussed earlier, practical considerations of how libraries were delivering CNE activity and the likely level of staff and audience engagement in feedback processes meant that many established wellbeing measures would have been impractical to implement within this project. Within the case study data and tracker/survey data collected from library staff, qualitative comments on wellbeing outcomes tended to focus on the extent to which the CNE programme appeared to have met the varied wellbeing needs of different local communities and engaged groups.

Library staff are clearly aware of the well-evidenced relationship between nature/green space-access and wellbeing.[1] As outlined in the previous section, many responses, and in particular those from libraries in urban and/or economically disadvantaged areas, talked about community nature deprivation and/or barriers to accessing nature, and the CNE programme's role in increasing audiences' contact with nature in order to progress towards the associated wellbeing benefits.

Pride in place
There were also reflections on the wider connection between place and wellbeing, which includes not only access to green spaces, but a wider sense of emplacement and belonging, and of being able to take pleasure and pride in your local environment.[2] CNE projects which improved a local space and/or increased its usability - such as the planting of a library garden, the introduction of nature-friendly features (for example bee hotels or birdboxes),

[1] Jabbar, M., Yusoff, M.M. & Shafie, A. (2022) Assessing the role of urban green spaces for human well-being: a systematic review. GeoJournal 87, 4405–4423.https://doi.org/10.1007/s10708-021-10474-7
[2] McElroy, E., Ashton, M., Bagnall, A.M. et al. (2021) The individual, place, and wellbeing – a network analysis. BMC Public Health 21, 1621). https://doi.org/10.1186/s12889-021-11553-7

outdoor seating, or introducing nature-themed public artworks - all supported this agenda, and again, seem to be viewed as particularly significant where library catchments were economically disadvantaged and/or subject to urban decline. **In one case study for instance, library staff reflected on their CNE activity as a form of quiet resistance to decline. In a town centre often defined by vacancy and neglect, the planting of wildflowers and the presence of handmade signage represented care for and an investment in public life**. While, unfortunately, a few of the additions to public spaces made via CNE have been subject to vandalism, library staff and partners have felt it is worthwhile persisting:

"Some of our [nature trail] signs were vandalised soon after installation. That's the opposite of social cohesion really, BUT, the local community on Facebook and reaching out to local councillors showed many people were dismayed and had found the trail a lovely thing to be proud of and happy about in their local park" (Library staff survey)

Wellbeing benefits linked to individual pride and accomplishment were also evident. During case study visits involving arts and crafts or other forms of making, audiences were clearly proud of their creations, and this is also reflected in activity tracker data. For example:

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"I have loved doing this craft. I was a bit apprehensive at first because I'm not the best at doing crafts, but I loved doing it. The pressed flowers were lovely. I'm going to put in my kitchen window so I can see it when I'm washing the dishes!" (Audience feedback via Activity tracker)

Right, above: Story trail, Stockport Libraries
Right, below: Kirkby-in-Ashfield Library's bug house

Park walk with ESOL group - Farnworth Library, Bolton

During case study visits, and through staff and audience reflections, it was clear that nature was a **facilitator of social connection** which could overcome other barriers.

Social connection

A further key wellbeing benefit identified in qualitative comments from both library staff/partners and audiences was increased social connection, with nature-focused activity highlighted as a powerful means to achieving this: *"nature has been a great tool for people to connect"* (Library staff interview). Comments in case study interviews and in the activity tracker suggest that this is an area of wellbeing-focused work that library staff felt quite comfortable delivering as it speaks to their existing skillset in people-focused roles. The CNE programme offered library staff a new set of tools to encourage social connection.

An example is language barriers. Library staff and partners in case study libraries delivering activity with ESOL groups and people seeking asylum described how nature observations during walks, or activities involving natural materials, were an effective gateway to communication and connection across these barriers. During guided walks in local green spaces, participants tentatively spoke about whether common birds and animals sighted had equivalent species in their home countries, and in an arts and crafts session which used herb cuttings as materials, participants taught each other the names of the plants in their language. Similar themes of connection forged via nature were also apparent in activity tracker descriptions of activities targeting ethnic minority groups or migrant communities. For example:

"We explored participants' first memories of nature - the sights, sounds, and feelings associated with those experiences. It was fascinating to hear how many of the girls had grown up in different countries, and how their stories of foraging and the impact of weather on their landscapes differed from what we might experience in the UK".

For libraries whose CNE programme had created or transformed a library space or garden, these spaces could additionally function as a new or renewed aspect of local social infrastructure; enabling increased social connections between community members. In Kirkby-in-Ashfield for example, the library's courtyard had become a space where library visitors lingered to chat or explore, while in Doncaster, the 'yarnbomb' decoration of the library's outside space had become a local talking point and drew people to visit:

"The project has brought joy to many people ... Now the yarnbomb is in place it is attracting people to come into the building to visit the garden" (Activity tracker)

"We have seen many more visitors using the garden especially families. Our own staff have been spending lunch breaks in there and even having outdoor meetings. We have seen teams from the Council Office that looks over the garden coming over to use the space too" (Library staff survey).

These 'softer' forms of social connection, enabled by the creation or reinvigoration of library spaces, were seen by staff and audience members as especially valuable for individuals experiencing isolation or low mood through offering a low pressure pathway to participation and connection.

Spaces for respite
From the qualitative data received via open-text survey responses and case study interviews, there is a strong sense that libraries perceived significant wellbeing benefits in CNE activity as simply providing something

Detail of 'yarnbomb' installation at Doncaster Danum Library, Gallery and Museum

'nice' for people to engage with – offering momentary respite from day-to-day stresses and strains. This came through particularly strongly for libraries who were working in local communities or with specific groups that experienced forms of disadvantage or exclusion, as summarised by these quotations from library staff who were, respectively, creating a library garden in an area of high economic deprivation and delivering activities with people seeking asylum:

"Part of it was just wanting to do something for the community that felt, in a way, a bit hopeful. There's a lot of hardship around here, and this gave us a way to make a small change in a visible space.' (Library staff interview)

"In some ways it's just a nice day out. But you just hope that you are part of something that is making people feel more welcome" (Library staff interview)

While these outcomes are difficult to clearly identify and measure, there was a strong sense from audiences', library staffs' and partners' feedback that **there is a quiet power in activity that provides even a modest counterpoint for someone whose life is otherwise too full of hardships or distress.**

Audience data

As outlined above, given the inappropriateness of validated wellbeing measures to the varied contexts of CNE activity, a 'light touch' approach to assessing audience perspectives on wellbeing outcomes was adopted, via scaled questions in the online audience feedback survey which asked whether activity had:

- Allowed participants to spend time with new people (addressing social connection)

- Boosted their mood or their mental health
- Boosted their physical health.

Responses to the statements on social connection and mental health/mood were very positive, with 96% and 98% of respondents respectively agreeing or strongly agreeing (Figure 18), with associated qualitative comments including:

"I was very tired and stressed beginning the session but afterwards I realised how my mindset and energy had changed" (Audience survey)

"[I] really enjoyed today, I felt like it was really beneficial overall to my well-being and my mental health and I felt really good, attuned and in touch with nature." (Verbal audience feedback shared via activity tracker)

"It really helped me to feel more grounded and connected to local nature and a feeling of being soothed and calmed. I'm not feeling very well today, and it really helped me manage that and feel more restored and kinder to myself." (Verbal audience feedback shared via activity tracker).
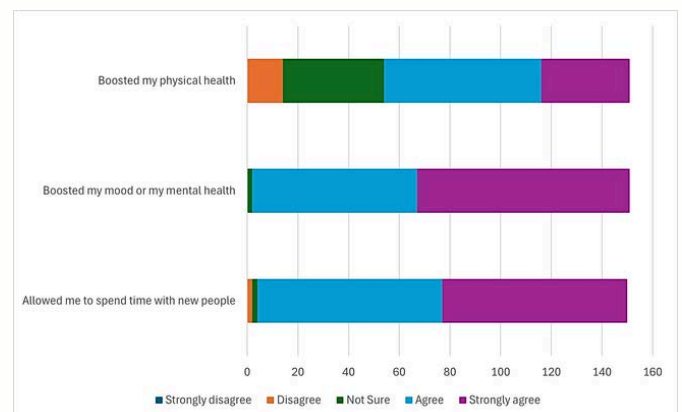

Figure 16: Audience perceptions of wellbeing outcomes (online audiences survey)

There was a more varied response to the statement on physical health, which although still attracting quite high levels of agreement, caused a higher number of respondents to answer, 'not sure'.

These varied results are perhaps unsurprising given the range of activity within the CNE programme. The impact of activity type on responses is suggested by qualitative comments in the audience survey. Activities which included getting outside or going for a walk attracted comments relating to 'fresh air', 'getting the heart rate up', 'bracing' or similar, and seemed to be considered by audiences in terms of both mental and physical wellbeing. Indoor activities which were more stationary (for example, arts and crafts or literary-based activities), while effective in boosting mood and mental wellbeing, were unlikely to be viewed in terms of physical health outcomes. It is also possible that physical health improvements are associated with longer term engagement with activity, whereas much of the CNE activity was experienced by participants on a one-off or relatively short-term basis.

Herb planting - Farnworth Library, Bolton

Box vi: Gateshead Libraries - Welcoming Nature

Welcoming Nature has partnered with a church charity and an artist to work with people seeking asylum who are temporarily accommodated in Gateshead hotels. Participants have taken part in guided walks, nature-inspired art workshops and shared meals – providing opportunities for these new Gateshead residents to gain familiarity with local green spaces and foster social connections.

A key wellbeing benefit has been giving individuals and families a break from the environment of the hotel, where they spend a lot of time in their rooms, are socially isolated from the wider community, and where children have little opportunity for movement and play.

The project has been delivered by Gateshead Central Library. Unusually for a main library, this is not situated in the town centre but in a residential neighbourhood where 37% of catchment residents live in areas within the top fifth of deprivation nationally. The library has a track record of enhancing community access to the outdoors; in 2010 establishing a library garden for use by the local community.

A central aspect of the library's Culture Nature programme has been boosting participants' familiarity with local green spaces as they settle into the area. Walks have included local spaces such as Saltwell Park (left) – which is a 10-minute walk from the library. Alongside this, participants have travelled further afield to sites such as Chopwell Woods – a Forestry England-managed woodland spanning almost 900 acres on the fringes of the borough. These types of visits served different purposes. While it was important that participants were taken to very local spaces that they could visit independently in their day to day lives, the organiser also wanted to offer opportunities to experience the *"wow factor"* of nature in wilder, less accessible places.

Fostering social connections has been an important outcome of the project as people seeking asylum are often very isolated, and *"nature has been a great tool for people to connect"* (Library staff interview). Examples included participants teaching each other the names of plants and animals in their own languages, comparing landscapes and wildlife to that in their places of origin, and children playing together outside:

"Walking together was brilliant, the young people ran around and played whilst the adults were commenting on nature and shared laughter and stories in spite of there being no common language".

Participants had also particularly enjoyed tactile nature-themes craft activities such as clay (below): *"it's taking the pressure off a conversation happening and letting people interact in other ways"* (Artist interview)

Project funds had supported the provision of hot food from a local caterer. Sharing a meal with others and *"having a nice day out"* with people who were kind and welcoming towards them was powerful in supporting the wellbeing of people whose everyday lives can be difficult, monotonous and uncertain, and in a wider social context where people seeking asylum may be on the receiving end of hostility and an overwhelmingly negative media and political narrative.

"[the sessions] have made a significant difference in the mental health and wellbeing of the hotel residents. Many of them have shared how much [the facilitators'] kindness has meant to them"
(Church charity support worker)

The same core group had engaged with most of the activity sessions with a low drop-out rate. Facilitators noted that people who attended multiple sessions had grown in confidence, and that participants were visiting the library independently to engage with other library services. The programme has also allowed signposting to other activities in the local area – for example, the language café at the Baltic arts centre, and Beaver Scouts for a family whose child was particularly interested in outdoor adventures.

Some key challenges included walking in inclement winter weather, which could be a particular problem when participants lacked warm, waterproof coats or sturdy shoes, and the need to adapt flexibly to the unpredictable circumstances of the hotel residents, who could be moved out of the accommodation without much notice and whose lives often felt outside of their own control. While the library staff running the project felt very comfortable with the 'people connection' aspect of activities, they were less confident with nature connection. Nature connection training had helped with this, and they had thought carefully about ways to more directly incorporate nature connection in ways that felt comfortable:

"With the nature stuff, I love it, but I don't have the knowledge. I can't point at a tree and say what tree it is." (Library staff interview)

Working with the right partners has therefore been crucial. Partnering with an artist whose practice is based in nature and who has extensive knowledge of the natural world but is *"brilliant at the people thing as well"* (Library staff interview), has been central to the project's success and to bolstering library staffs' confidence in delivery, while the partnership with the church charity has enabled a relationship of trust with a vulnerable and socially isolated population who face significant barriers to nature access and participation.

The project has built on the library's existing work supporting local asylum-seeking families through an ESOL homework club for teenagers. Strengthening the relationship with Alive Church and their work supporting hotel-based asylum seekers has been an important outcome of the project. **Library staff feel increasingly networked into and trusted by the wider community of organisations supporting asylum seekers across Gateshead, leaving the library service well-placed to welcome and enhance the wellbeing of this vulnerable population.**

Nature-inspired ceramics produced during sessions

4.3. Outcomes for libraries and library staff

When discussing the outcomes of the CNE programmes for libraries and library staff, it is important to consider the starting point from which they were embarking upon the CNE programme. The early-point survey of library staff asked respondents to reflect on their past experience of nature connection activity. 26 out of 40 respondents (65%) said their library had not been involved in this type of work before. The remaining responses were spread across various forms of prior engagement: 9 respondents (23%) indicated their library had delivered nature-connected activity outside of the CNE programme, and 4 (10%) noted participation in a previous iteration of the CNE initiative. A small number had personal experience delivering similar work in other settings (Figure 18).
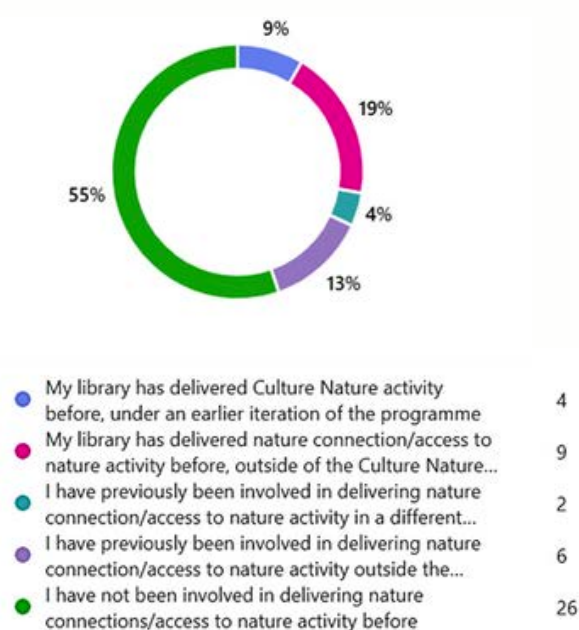

- My library has delivered Culture Nature activity before, under an earlier iteration of the programme — 4
- My library has delivered nature connection/access to nature activity before, outside of the Culture Nature… — 9
- I have previously been involved in delivering nature connection/access to nature activity in a different… — 2
- I have previously been involved in delivering nature connection/access to nature activity outside the… — 6
- I have not been involved in delivering nature connections/access to nature activity before — 26

Figure 18: Library staff previous nature connection delivery experience

This distribution suggests that for most staff and libraries, the CNE programme represented a new area of practice rather than a scaling-up or adaptation of existing provision. This is a helpful reference point for interpreting later findings: when we see increases in staff confidence or enthusiasm, they are likely emerging from a low baseline - not just reflecting existing strengths and orientation.

This also speaks directly to the wider strategic intent of the programme. in laying the groundwork for the future national roll-out of Green Libraries[1] and Protected Site Strategy initiatives. By extending support for nature connection and environmental awareness among library staff, the programme is effectively seeding a workforce that is **confident and ready to act as community anchor points for nature engagement.** As Protected Site initiatives come online, libraries equipped through CNE will be well-placed to serve as trusted local connectors, enabling these initiatives to establish meaningful community links more rapidly and effectively. This was a core rationale underpinning the design of CNE, **positioning libraries not only as delivery points for nature engagement but as essential partners in wider cross-sector strategies to embed nature connection within communities.**

4.3.1. Staff development and wellbeing
As shown earlier, the end-point survey of library staff showed very high levels of agreement/strong agreement that the CNE programme had:

- Improved staff skills and/or confidence
- Provided CPD opportunities for library staff

Library staff had clearly welcomed the (rare) opportunity for CPD offered by the project's funded Nature Connection training, but within

[1] Libraries Connected (2024) Green Libraries. https://www.librariesconnected.org.uk/projects/green-libraries

the qualitative data from case studies and staff surveys, there are also indicators of wider individual and institutional benefits for both library staff and delivery partners.

In one case study for instance, interviews with library staff suggested that **the project had a notable impact on staff confidence, morale, and sense of purpose**. From planning through to delivery, staff showed clear enthusiasm for the work, several described it as energising, and the mood on the activity day attended by the research team reflected genuine pride and investment. There was a shared sense that this was something different: more visible, more collaborative, and more emotionally rewarding than much day-to-day delivery. For these staff members, **the programme seemed to have helped shift internal thinking about what libraries could be,** as places that help shape public life and environmental engagement.

This is not only important at a local level but also supports wider sector change within library settings, demonstrating how the partnership between Natural England and Libraries Connected is actively serving and leading change in this area. Within the case study, the CNE programme formed a bridge between creative programming and wider social aims, and gave staff something tangible to build around, in the form of the library garden created. Collaboration across teams improved, with staff sharing delivery and contributing ideas. This helped break down silos and build confidence, especially for staff who hadn't previously worked on nature-focused or co-designed activity.

The nature connection training funded within the CNE grant added another layer of professional development. Staff said it gave them confidence to talk about nature without needing expert knowledge, using simple, everyday language and observations. For some staff, this had transferred

"It has been a really good project. I feel that we have made a difference to people's wellbeing, and we have proven that there is demand for more activities along these lines - it has moved us in a direction that we probably wouldn't have gone in otherwise" (Library staff survey)

"I think it gave [library staff] a bit of a boost, actually. You don't always get to see the difference your work makes straight away" (Library staff interview)

Nature scavenger hunt - Gateshead Libraries

into other areas of their work, from children's sessions to informal conversations with service users around wellbeing and everyday reflection. There was also a strong emotional component. One staff member described the new library garden as *"an antidote to the high street"*, something hopeful, public, and visibly cared for, and staff expressed pride in being part of something that felt tangible and meaningful.

In another case study, we heard a similar message, that while the CNE delivery had proved challenging at times given the constraints of a small and busy library team, overall, the project gave staff a renewed sense of purpose and confidence. Although some were initially unsure how nature connection would fit into a library setting, the delivery process, particularly through hands-on making, painting, and sensory sessions, helped staff recognise the value of slower-paced, creative engagement. The project confirmed that their **existing strengths in relational work and creative facilitation could translate easily into wellbeing and environmental programming.** Library staff described the sessions as energising and morale-boosting. The visible transformation of a library

space within the programme gave the team something to be proud of, a tangible sign that the library could offer more than traditional services. It also helped prompt new ways of thinking about the library's role in community health, particularly as a space where people could connect quietly and without pressure.

The experience also encouraged stronger internal collaboration, with staff stepping across roles to coordinate sessions and manage the logistics of outdoor activity. Although the work required juggling planning and delivery alongside other duties, it created a sense of shared ownership and team identity. Importantly, staff reported that the learning and confidence gained influenced their work in other linked libraries within the county's library network. Ideas around informal social interaction, nature-themed craft, and relaxed wellbeing prompts (such as quizzes and chat-based seating zones) had been trialled elsewhere. **The project became a catalyst for adapting library environments in small but meaningful ways beyond the original site of funded CNE activity.**

Activities in the library garden - Kirkby-in-Ashfield, Nottinghamshire

Other case study interviewees and survey respondents similarly talked about the sense of renewed meaning they had derived from the CNE work given, in some cases, its tangible impact on library or local community spaces, as well as the clear enjoyment and engagement of audiences. In a third case study area, library staff described delivery of the CNE programme as "joyful", and this assessment was shared by the artist partner who had found renewed enthusiasm for their own community arts-based practice:

"sessions have felt easy. Sometimes trying to deliver arts sessions in the community can feel like hard work. These sessions have never felt like hard work. People are so ready to give it a go" (Artist interview).

Library staff also said that the CNE programme had left them feeling better connected to the communities they served, with some reporting that the activities had enabled them to have longer conversations and build a more meaningful connection with library users with whom they usually had only fleeting encounters, and building a wider set of community connections:

"one of the things I've enjoyed is that I'm seeing familiar faces. People are going to go "this is definitely worth my time., and it's definitely going in my diary". That's what you want to see ... that's a really strong element. Getting to know the kind of community and what is available in the space; being able to point people in different directions. Seeing people within that group as well; frequent flyers and people who've come for the first time, making connections between themselves." (Library staff interview).

For some staff, this sense of renewed and

deepened connection included partner organisations with whom they had worked on CNE delivery, with a library staff member in another case study area reporting that the programme had left them personally much better networked and feeling *"like a really known and trusted person"* in the wider local system of charities and community organisations working to support vulnerable groups:

*"**On the back of this project I was invited to multi-agency meetings working to support asylum seekers, such as the refugee planning committee/Schools of Sanctuary Network. It is brilliant that these relationships have been formed and will allow the library to continue creating exciting projects"*** (Library staff survey).

4.3.2. Reaching new library audiences
Figure 19 shows responses to Likert scale statements in the activity tracker around library footfall and encouragement of new library audiences. While there is reasonably positive agreement with both statement there is also some ambivalence, as indicated by the relatively high number of 'not sure' responses as compared to the other indicators measured in the survey.
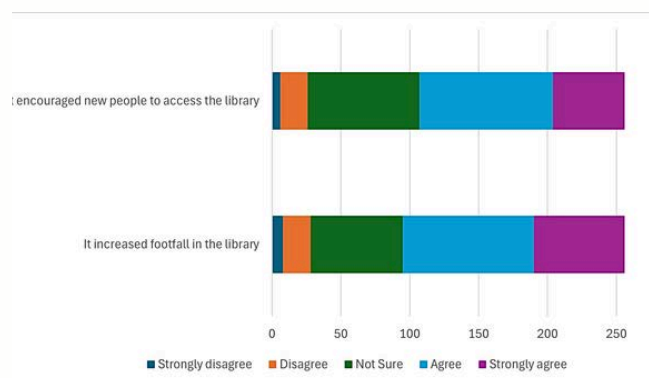

Figure 19: Library staff views on increased engagement with the library

Data collected from audiences can add further insights. There was an almost even split between online audience survey respondents who described themselves as 'frequent' or 'occasional' visitors to the library, and those who 'rarely' or 'never' visited. Across these groups, a strong majority (89%) said that taking part in the CNE activity had made them more likely to visit the library in the future (Figure 20), so overall a more positive picture than the impression gleaned by library staff themselves.
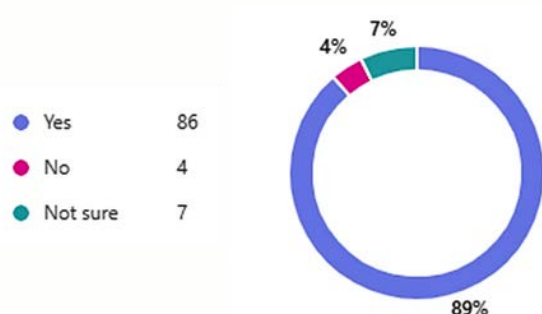

	Yes	86
	No	4
	Not sure	7

Figure 20: Audiences' intentions of future library use influenced by CNE participation

Qualitative comments relating to this question within the audience survey, focus on the influence of the CNE activity as a positive, fun or rewarding experience within the library space, the friendliness of staff, and new audience awareness of the range of activities on offer (right).

There is also evidence of CNE activity influencing increased library engagement among audiences in the case study data. In Gateshead, for example, people seeking asylum who had come to the library to attend CNE activities had been signposted to other library services, with some going on to visit the library independently. In Camden (Box vii), a focus of the library-based aspect of the primary school visits, along with a nature-themed story time, was informing the children about the library and what it offered, and all children were given a leaflet to take away and share with their parents

Gateshead Central Library

"I found the library staff very welcoming, helpful and friendly. The library environment is very pleasant to be in and there are good facilities. There is more going on here than I thought"

"My son enjoyed the activities. He was able to look through a few books after the session too. After the session he said he enjoyed himself, so we will be back"

"It's a bit out of the way for me, but this talk made me want to check what other sorts of activities they host"

or guardians which explained how to join the library. In conversations with the children following the CNE activity, most of the children who were not already library members were enthusiastic at the prospect and intended to ask their parents/guardians to sign them up. In Nottinghamshire, the renewed library courtyard at Kirkby-in-Ashfield Library was important not only in providing opportunities for nature engagement for existing audiences, but for enabling new library participants. The space was seen as a way to invite those not already using the library to do so, creating a visually welcoming and informal point of entry that didn't require a prior relationship with the service.

4.3.3. Developing partnerships

For some libraries, accessing funding to either sustain existing partnership working or to develop new partnerships was a key motivation for applying to the CNE programme. One case study library service, for example, saw the funding as a means of supporting and expanding their existing priority around increasing primary-aged children's engagement with the library, in a borough where an elevated level of children are below the average attainment levels in literacy. The library service already worked with local primary schools on childhood literacy initiatives and viewed the CNE funding as an opportunity to expand this work and engage with schools in a different way via a nature connection focus.

Primary school workshop - Barrow Library

Box vii: Camden Libraries and Camley Street Natural Park

Adjacent to Kings Cross Station, the concrete and glass surroundings of Pancras Square Library (Camden) appear a nature-depleted environment. But the nearby Camley Street Natural Park, a designated local nature reserve, is a green oasis. A former coal drop between the railway and the Regent's Canal, the two-acre site has been recolonised by nature, and includes woodland, grassland, and wetland habitats supporting birds, butterflies, amphibians and plant species. Managed by the London Wildlife Trust and including a Visitor and Learning Centre, the site attracts thousands of visitors per year.

The funding has facilitated a new partnership between the library and the LWT Camley Street team. For LWT, the project offered a chance to explore working with a public library and to work with schools in a different way – with literacy as the starting point rather than science.

Pancras Square Library has used the Culture Nature funding to deliver a nature connection initiative in partnership with the London Wildlife Trust (LWT) and local primary schools.

The library serves a resident community with high levels of socio-economic disadvantage - 1 in 3 children in Camden Borough grow up in poverty. The library service has been working with the Reading Agency and local schools on initiatives to improve childhood literacy and viewed the CNE funding as an opportunity to develop this work with schools through a new activity offer.

Classes from two primary schools in the Somers Town area of the borough have visited the library to take part in a specially curated story-time, to spark curiosity and introduce key themes relating to the natural world – including the importance of protecting nature. These visits also include sharing information with the children about the library service, and how they and their families can join the library, borrow books and get involved in other library activities. Children have then walked the short distance to Camley Street Natural Park, where, guided by LWT outreach

staff, they have explored and collected materials to inspire nature-themed creative writing (left). These activities were highly sensory, with the children discussing objects' colours, scents and textures, as well as describing the bird, plant and insect species they had spotted.

Both the library staff and the LWT team talked about their perception that many Londoners *"don't feel like they belong in nature"*, and the barriers that local children face in accessing nature. A teacher explained that most of the pupils live in flats, and children's local green spaces tend to be highly managed (i.e. football pitches). Some families' circumstances mean they don't often travel to natural spaces for leisure (over 70% of the school's pupils qualify for Pupil Premium), so activities arranged via school were often a unique opportunity that children wouldn't otherwise experience.

Through the visit, the children gained awareness of the Camley Street site, and for the LWT, a key outcome was for the children to have a positive experience and to go away feeling **this was a local place where they were welcome and that they could visit again with their families.**

The LWT team talked about how they used discussions of pressures on this small local site as **representative of pressures facing nature globally** – for example, by encouraging the children to think about how almost all the city around them is designed for humans, and the value of spaces which meet the needs of other creatures. During their guided walk, the children were encouraged to stop, be still and quiet, and notice what was around them, and to closely examine the texture and smells of the natural objects they collected. This sensory engagement was reflected in children's comments to the researchers during and after the activity (left).

"it made me feel very calmed, because there's not that much noise"

"Did you see those birds? They were flying over the water, like [making swooping gesture] whooooosh!"

"I like to see all these trees, all close together. I haven't seen this many trees ever, in my whole entire life"

For the LWT team, working with the library had been a really positive experience and was a natural fit given their aligned inclusion and participation missions and the proximity of the respective sites. Engagement with **the Culture Nature project has encouraged the LWT to explore developing relationships with other London library services** because of the opportunities to connect with a wider range of schools and local communities that this could offer. Library staff and the LWT were actively planning project legacies, including and after school 'bug rangers' club which would involve visits to Camley Street and further engagement with the LWT team.

Pancras Square Library is an interesting case within the CNE cohort, as the library's architecture (located within an office block-style building), co-location with other council services, and wider corporate setting mean that some CNE activities that may have been the most straightforward for other libraries to deliver (for example, nature-themed displays) were challenging here – the library has very limited scope for display stands and staff are prohibited from sticking materials to the windows or walls.

But this collaborative initiative exemplifies how **cultural and environmental organisations can work together to enhance children's connection to nature through storytelling, sensory exploration, and creative expression, and how nature-based activity can support other important outcomes around increased engagement with library services and childhood literacy.**

The library staff end-point survey asked libraries to reflect on the partnerships that they had utilised during the CNE programme and whether these were newly formed or existing partnerships (either working in new, or in established ways). Categories of partner were determined from initial analysis of libraries' CNE funding applications. The results are shown in Figure 21.

The most frequently reported partnership activity was with nature and conservation organisations which was selected by 86% of survey respondents. This was also the most common type of organisation with whom libraries had formed a new partnership under the CNE programme (59% of respondents), rather than leveraging existing relationships. A further 21% had used an existing relationship with an organization of this kind in a new way, suggesting that **this strand of work provided libraries with a genuinely fresh avenue for collaboration, central to the ethos of the CNE programme.**
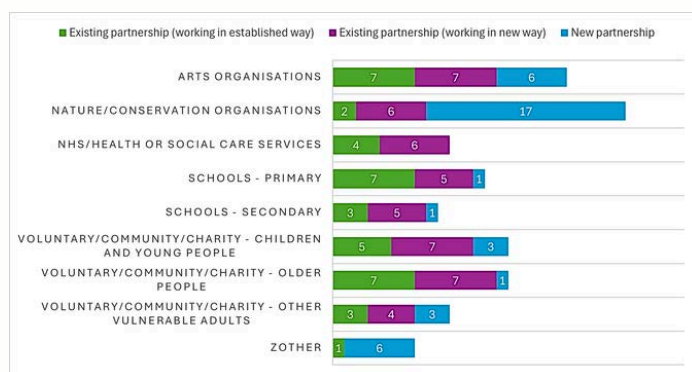

Figure 21: Partners engaged in CNE delivery

Engagement with arts organisations was more evenly distributed: 21% of respondents had formed new partnerships, while 24% had either continued with established arrangements or adapted existing partnerships to work differently within CNE programming. This suggests that **libraries could flex familiar cultural networks to align with the programme's goals** and reflects in the high level of arts and crafts-focused activities delivered across

the CNE programme as an accessible way for libraries to promote nature connection to audiences.

In contrast, engagement with the NHS and social care services was almost entirely through existing contacts. No new partnerships were reported here, but 21% of respondents used established relationships in a new way, and 14% maintained them in their usual form. This likely reflects the challenge of forging new health partnerships mid-programme, and the trust already built in previous community health work. When it came to schools, primary education settings were more commonly engaged than secondary schools. Only 3% of respondents reported forming a new partnership with a primary school, but 24% reported using existing relationships, and 17% had repurposed those relationships for CNE activity. Secondary school links were similar but at slightly lower levels. Partnerships with voluntary and community organisations, whether focused on children, older people, or other vulnerable adults, tended to involve existing relationships rather than new ones. New partnerships in these categories were typically reported by just one or two respondents per group.

Overall, the data suggests that **CNE opened up new territory, particularly in the environmental sector, but it also encouraged libraries to reimagine the potential of existing partnerships. The programme appears to have supported both the expansion and evolution of community relationships, embedding CNE into pre-existing local networks where possible and extending outward into new sectors where strategic alignment allowed.** Finally, there is some additional evidence of added value of CNE activity via the brokering of

relationship between partners with whom a library has worked to plan and deliver activities.

For case study libraries, and for many library staff reflecting on the programme via the end-point survey, the development of new partnerships, or the deepening of existing partnerships had been a significant benefit of participation in the CNE programme. The **development of new relationships with nature/conservation organisations (for example local Wildlife Trusts) had been particularly fruitful, both in terms of supporting successful planning and delivery of nature-focused activities and supporting the possibility of a legacy of future work in this area**. This is illustrated by findings from the case study areas. In one, the library service had an existing relationship with the local Wildlife Trust and collaborated with them previously for one-off sessions. The CNE programme allowed for a more embedded, sustained working relationship. This included bespoke training for library staff, regular in-person support during delivery days, and shared thinking around ecological framing and audience engagement within and beyond the CNE-funded activity. This consistency helped foster trust, both between organisations and with the public. Families attending CNE activities came to recognise the Wildlife Trust's outreach worker as part of the library team, which made environmental conversations more natural and ongoing. Library staff reflected that the partner felt less like a 'guest deliverer' and more like a collaborator in shaping the ethos of the programme.

For Camden Libraries, the CNE funding had enabled the development of a new relationship with London Wildlife Trust (LWT), who manage an urban nature reserve within a short walking distance of the library. This

Hip Hop Garden, delivered in partnership with May Project Gardens - St Paul's Library, Bristol

partnership not only met the libraries' need of accessing nature expertise and specialist programming but **supported the partner's objective of breaking down barriers in access to nature for underrepresented groups within the library's hyper-urban, ethnically diverse and economically disadvantaged catchment area.** LWT already undertake a variety of outreach activities, including working with schools, to raise local families' awareness of the reserve site and encourage access, so the CNE programme offered an alternative avenue for engaging primary school pupils and their families –

"[it's] a nice opportunity to trial something a bit different from the usual way we would work with the schools" (Wildlife Trust staff interview).

Active planning was underway for the partnership between the library and LWT to continue post-CNE via a nature-focused after-school activity club which would utilise both the library space and the nearby reserve site. There was also potentially a wider partnership legacy, with LWT staff stating ambitions for each of their managed sites within the capital to be partnered with a public library, given libraries' potential to support engagement work with communities. There were logistics to work through in achieving this, but **the CNE programme had been a *"really important pilot"* in seeing how a relationship like this could work and had increased staff confidence in pursuing this wider set of relationships** (LWT staff interview).

Similar examples of a partnership or relationship developed via the CNE programme potentially leading to further collaboration between the library and these organisations were found throughout case studies, as well as via qualitative activity tracker and library staff surveys responses (right).

Nature-themed art workshop delivered with Shine Bright mental health charity - Tolworth Library, Kingston upon Thames

"the feedback from the care home wellbeing co-ordinator was that their residents loved it and they're looking for more opportunities to work with us as a result" (Activity tracker)

4.3.4. Project legacy

Data around library staffs' intentions for sustaining activity beyond the funded period of the programme are strikingly positive:

- 83% of respondents (24 out of 29) said they plan to continue at least some aspects of the work they've been doing as part of CNE,
- 17% (5 respondents) said "maybe,"
- none indicated they would not continue.

This suggests that **the programme has achieved both short-term engagement and a meaningful shift in long-term mindset and priorities**. The absence of "no" responses is particularly impactful; given that continuation often depends on factors outside staff control, such as time, funding, or institutional buy-in. The small "maybe" group reinforces a point made elsewhere: that while motivation is high, capacity and structures remain potential barriers. Comments elsewhere point to challenges around staff resourcing and competing demands on staff time within busy frontline library roles, which may be a factor in the continuation of nature connection-focused activity alongside libraries' other varied service offers:

"It's hard to keep something like this going when it's mainly down to a couple of staff fitting it around everything else." (Library staff interview).

There are already some tangible examples of project legacy. For example, the 'You've Got This' programme in the Teesside region, which has drawn on experiences of the CNE programme in leveraging £170k of funding for an active lifestyles programme running across all local libraries and incorporating a getting out in nature element. Across the national CNE cohort, libraries are building on work undertaken during CNE to inform future activities. This includes activities related to the 2025 Summer Reading Challenge which has the aligned theme of 'Story Garden'.

Several libraries report that they are applying for further funding to support the continuation of aspects of their CNE programme having seen the positive impacts of this for both libraries and the community. There were also examples of CNE-initiated activities being rolled out to other library branches within a service; of libraries exploring opportunities to continue to work with organisations with whom they had forged partnerships via the CNE programme; and for those libraries who had used the funding to develop an outdoor library space, to continue to utilise this to the benefit of nature and communities:

"We have used the programme to build a garden for the library. This is a sustainable space which will continue to be used as a community resource and a learning tool. We hope to show our customers and members of the community that a small space can be as valuable as a large one in terms of biodiversity" (Library staff survey).

Others reported that the positive audience response to CNE activities had encouraged them to think about further ways that they could embed nature connection, awareness and curiosity-building activity within their local library offer:

"The positive response to the project demonstrates that library customers are eager for more nature and environment-related activities. We're going to install a permanent eco display at to advertise our future eco activities and to provide customers with info about other local

environmental opportunities, e.g. the established beach cleaning group." (Library staff survey).

This enthusiasm is encouraging, but long-term sustainability across participating libraries depends on both staff resource and volunteer input, and both are finite. While there is goodwill to maintain the spaces created via CNE funding and to continue activity provision, there is not a formal structure or funding in place, at present, to support this in most library services. Staff noted that enthusiasm alone may not be enough to either maintain spaces or manage ongoing programming without additional resource, and without structural support, nature-based library activity may remain piecemeal or reliant on occasional short-term funded projects, meaning that the programmes risk lacking the long-term and consistent input needed to maximise impacts.

Nonetheless, **these findings offer strong evidence of cultural embedding. Staff are not simply finishing a funded project - they are indicating a desire to incorporate nature connection into their core library offer going forward** and comments such as *"it has changed the way we think about the library and the library space"* (Library staff survey) were common. While practical sustainability will depend on national and local policy and funding contexts, the underlying commitment to and recognition of the value of this work as part of the public library offer appears robust.

"I initially thought we would complete this project, it would be a nice thing to do, we'd achieve what we set out in our plan and then that would be the end of it. But through the nature connection training, links made with partners, excellent facilitators and enthusiastic participants there will be a legacy to this project" (Library staff survey)

"[CNE is] a great opportunity to discover what can be possible if you think a little bigger than I feel we are used to doing (which of course is helped by having the funding to make that possible!). I'm hoping that a shift in expectations around what a library is and can be will continue for both staff and the public and that this will be just the beginning of people seeing the library as a key community asset when it comes to all things environmental and nature focused. I am extremely optimistic about the legacy of the project and the willingness of those involved to see it continue. It's also a project that has been well received by other branches in the area, keen to replicate the activity - so hopefully the work will spread, as well as continue in the future" (Library staff survey)

5. Conclusions and reflections

This concluding section presents a summary analysis of the Culture Nature England (CNE) programme evaluation findings, structured around the four core research questions outlined at the outset of this report.

As a research and development programme, CNE was designed to test a novel, cross-sector collaboration between cultural and environmental organisations to support nature connection among diverse communities and audiences. As such, each summary section is followed by targeted recommendations for future iterations of the CNE programme.

Impact on library staffs' valuing of and connection to nature, and awareness of environmental pressures and Protected Sites

The evaluation's quantitative evidence shows that CNE programme participation has deepened library staff's personal connection to nature and awareness of environmental issues in their localities. It is important to note that, like CNE audiences, library staff embarked on this programme from different starting points - both in terms of their prior professional experience of delivering nature-focused activities, but also the role that nature engagement plays in their own lives. Significantly, qualitative data from case studies, the activity tracker and library staff survey responses shows that library staff commonly described a renewed or heightened personal sense of engagement with nature as a result of their involvement in the programme:

"It made me look at the spaces around the library differently; I'd walked past those trees a thousand times and never noticed them like this." (Library staff interview)

The data also suggests that library staff's awareness of environmental pressures in the local area and awareness of Protected Sites also increased. However, this seemed to translate less easily into delivery of CNE programme activity, with only 31% of respondents to the final staff survey ranked raising awareness of Protected Sites among their top five outcomes. Interviews and survey answers suggested that this was due in part to uncertainty about how best to incorporate this theme in an inclusive and locally relevant way or how to engage audiences with such content without appearing overly technical or didactic. These barriers were compounded in disadvantaged or low-nature access contexts, or for library staff working with marginalised groups, where libraries felt such concepts might feel distant or irrelevant to their communities.

Nevertheless, the flexibility of the programme allowed staff to align environmental themes with issues relevant to their audiences, and there was evidence that local environmental concerns -such as littering, biodiversity loss in parks, or extreme weather events - served as entry points for wider

discussion. In one case, a library used a community seed-swap activity to spark dialogue about the impact of changing weather patterns on local growing cycles. In another, a workshop on upcycling linked fast fashion to climate and resource pressures.

Recommendations:

- Develop accessible, visual resources (e.g. posters, leaflets, digital maps) which are easy for library staff to use and share, and which help library staff and audiences identify local Protected Sites and understand why they matter.
- Include a module or briefing in future training sessions exploring how to engage audiences with Protected Sites and environmental pressures in low-barrier. accessible ways.
- Introduce a library-friendly toolkit with activity prompts and examples that illustrate how environmental pressures can be linked to relatable themes such as health, community pride, or local history.

Impact of Nature Connection training on library staff confidence in promoting nature connection to audiences

Nature Connection training funded via the CNE programme was instrumental in building staff confidence to act as facilitators of environmental engagement. When training worked well, library staff credited this with equipping them with simple, adaptable techniques to bring nature into everyday conversations and activities in ways that felt relatable and accessible to a range of audiences. Training which felt abstract or overly technical felt less helpful, and library staff sometimes found it challenging to adapt what they had learnt to work in their context.

Training providers included Wildlife Trusts, Forest School practitioners, and conservation consultants. Libraries that accessed training early in the delivery period were better able to embed insights into their programming, while some struggled due to late or unavailable training.

Nature connection training for Somerset Libraries staff

Library staff reported that the training shifted their perspective on what counted as meaningful nature connection. Many reflected that prior to CNE they had not seen themselves as environmental educators or facilitators, and the training validated everyday experiences of nature (for instance, smelling herbs or listening to birdsong) as entry points for connection and learning. Some also reported a 'ripple effect' within teams - whereby trained staff inspired others to adopt nature-related themes in other programming.

Recommendations:

- Embed minimum training expectations within programme guidance, ensuring all participating staff access at least a baseline session.
- Continue to encourage libraries to explore a diverse menu of local training delivery options (in-person, online, site-based) as a means of local network-building where possible, while encouraging early uptake.
- Create an open-access digital training portal with key materials and best-practice recordings to support library staff onboarding or refresher needs, or to share learning received by library staff from different local training providers.
- Identify (via feedback from libraries) and signpost to training providers whose offer is well-tailored to the library staff audience and who can offer insights that are applicable to library contexts. Where possible include training content specifically tailored to working with under-served groups.

Impact of CNE on library audiences' valuing of and connection to nature

Audience response data strongly supports the conclusion that participation in CNE activities led

Right, above: Library garden - Kirkby-in-Ashfield, Nottinghamshire
Right, below: Nature-themed poetry and walk - Manchester Libraries

to increased valuing of and connection to nature. Across both online survey and poster feedback questions based on the Pathways to Nature Connection, **over 84% of respondents agreed or strongly agreed that they experienced positive sensory, emotional, and reflective engagement with nature through CNE activity.**

Qualitative feedback via the audience survey and case study conversations reinforced these trends. Audience members described their experience of CNE activities as peaceful, restorative, and grounding, and commented extensively on the sensory elements of activities. While the lack of a 'before' measure for reasons of practicality, mean that it is not possible to isolate the impact of CNE activity, importantly, **84% of respondents to the online survey said they felt more connected to nature after the activity than before, with the power of pausing, slowing down and noticing nature a prominent feature in qualitative comments around this data.**

Awareness and curiosity-based outcomes were more mixed. While many participants learned something new about local nature via their CNE

participation, less than 30% reported increased understanding of environmental pressures or Protected Sites. This may be attributed to several factors: some activities were explicitly designed to promote wellbeing and light engagement; others involved very young children or participants with language or access needs. Additionally, some staff were hesitant to address topics like biodiversity loss or climate impacts; feeling that they lacked confidence in addressing these topics or that they may feel abstract or alienating to some audiences.

Recommendations:

- Provide ideas for easily usable materials for libraries to include in activities, such as local maps, photos of nearby habitats, or factsheets on native species to support the incorporation of awareness-curiosity based outcomes into a wider range of CNE activity.
- An enhanced support offer in facilitating connections with regional Natural England offices to access support with Protected Sites content would also be helpful, as a few libraries reported that they had tried to forge this relationship but had not been successful.

Christmas wreath-making - Retford Library, Nottinghamshire

- Encourage gentle integration of awareness-raising content - for example, linking seed planting to pollinator loss – utilising case studies and examples from libraries who trialled this approach.
- Consider developing thematic toolkits for awareness-focused programming (e.g. Climate, Biodiversity, Water) with age-appropriate resources, and which encourage audiences to consider climate or environmental awareness as an empowering call to action, rather than a cause for despair. Protected Sites themselves can play a role here, as examples of active protection of nature and biodiversity in the face of pressures - linking the local and the global.
- Continue to support inclusive, low-barrier formats that allow audiences to access nature on their own terms, as an effective starting point for increased engagement, awareness and care for nature.

Effective practice in delivering programme outcomes in locally responsive ways

The CNE programme produced a rich variety of locally grounded, audience-responsive activities. **Libraries exercised considerable creativity in adapting the programme to their communities' needs, to their library site and context, or to library staff's interests and expertise. The flexibility afforded to do this is a key strength of the programme.** Effective practice examples included: immersive arts-based sessions, such as nature mandalas and seasonal crafts which helped engage people who may not otherwise have participated in a nature-focused activity; partnerships with schools and community groups to reach families and young people; and targeted delivery for groups facing access barriers, such as people seeking asylum, ESOL communities, lower

Nature-inspired crafts - Tolworth Library, Kingston upon Thames
Below: 'Year of the Snake' celebration - Warrington Central Library

income families, and people experiencing mental health challenges.

Libraries used both indoor and outdoor settings creatively - transforming neglected courtyards into gardens, holding Virtual Reality nature immersions, and staging sensory walks in urban green spaces. **These approaches allowed nature connection to feel both possible and immediate, even for those without easy access to wild spaces for either geographical or social reasons.** Some libraries embedded CNE within wider literacy or social wellbeing agendas, using storytelling or social prescribing frameworks to anchor nature engagement in a way thar proved effective in both bolstering staff confidence and encouraging audience engagement.

What underpinned successful practice was flexibility, trust in library staffs' and partners' creativity and local knowledge, and support for contextual responsiveness. While this produced significant variation across the programme, it also enabled high levels of ownership, innovation and the crucial ability to meet audiences where they are given the varying levels of pre-existing nature connection and awareness, and wellbeing levels of the diverse nationwide audiences who engaged with the programme.

While some library staff initially found the freedom they were afforded challenging given their lack of experience of nature-focused delivery, by the time programme delivery was underway, staff consistently reported that the **freedom to shape activities in ways that reflected their own library and local environmental contexts, audience needs, and local priorities made the programme more relevant and sustainable and was key to its viability in their setting.**

*Forest School - Eccleshill Library, Bradford*

Recommendations:

- Preserve and promote the programme's flexible model but enhance it with a bank of case studies illustrating different models of success in order to support those libraries who are less confident in embarking on programme delivery.
- Develop a moderated digital platform for participating libraries to share materials, reflections, and peer feedback. Basecamp functioned in this way to some extent but wasn't perceived as a useful or usable platform by all participants.
- Offer small-scale resource pots to encourage libraries to trial new delivery formats - especially those reaching under-served audiences - and to share emerging learning from these with the wider library community both within and beyond their service area.
- Invest in simple impact measurement tools to help libraries assess audience outcomes and iterate activity design.
- Consider establishing regional support hubs or peer learning clusters to sustain knowledge sharing and mentorship across participating library services.

Closing reflections

The Culture Nature England programme demonstrates the significant potential of public libraries as inclusive, community-based sites of environmental connection and awareness, and shows the value of innovative partnership, such as that between Natural England and Libraries Connected, in providing a national framework within which local partnerships can grow and flourish. Natural England's work to reach across sectors and engage with partners in cultural settings provides new opportunities to reach under-served audiences and those who may face physical, financial or cultural barriers to connecting with nature.

The partnership between Natural England and Libraries Connected has demonstrated how knowledge, organisational cultures and support can be shared effectively to enable local delivery - providing a model for future collaborations between environmental and cultural sectors. To this end, the programme has successfully enhanced library staff skills and wellbeing; widened library staffs', audiences' and partners'

Nature-themed participatory poetry - Retford Library, Nottinghamshire
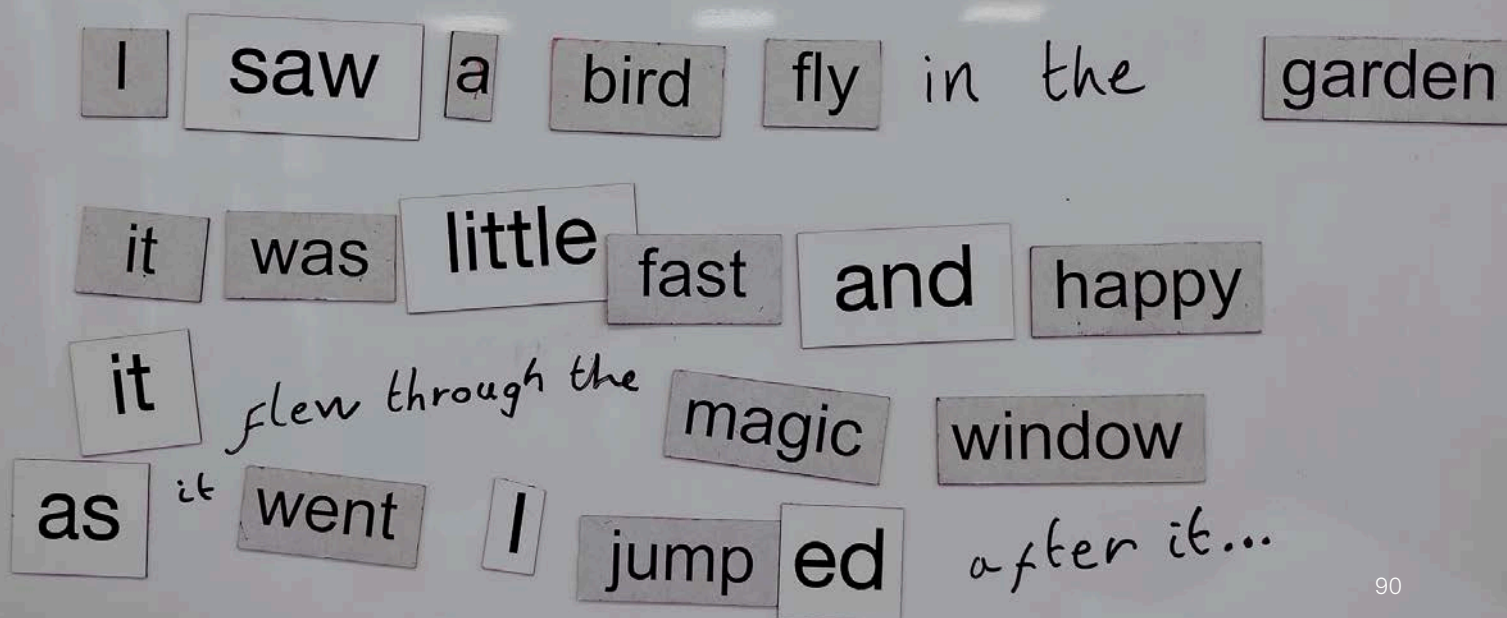
perceptions of the role of libraries; expanded the reach of nature engagement to underrepresented audiences; and generated widespread public enthusiasm for locally relevant, creative environmental activity.

To build on these foundations, future iterations of the programme should deepen its capacity for environmental literacy and ecological awareness, while preserving the gentle, welcoming approach that has made the programme so impactful for audiences' sense of nature connection and wellbeing.

Through the programme, public libraries have proven themselves to be fertile ground for cultivating not only nature connection, but a deeper public conversation about the environment. They have proved to be a highly effective delivery network for Culture Nature England due to their trusted status, community reach, and capacity for inclusive programming. Libraries offer free-to-access and welcoming spaces embedded in the daily lives of local communities, including those less likely to access traditional environmental education or outdoor settings. Their flexibility to blend nature connection with literacy, wellbeing, arts, and social support makes them ideal venues for delivering creative, low-barrier activities that resonate across diverse demographics.

This reach and adaptability has allowed the programme to engage a wide audience, including under-served groups such as people seeking asylum, disabled audiences, and those in urban or low-access areas — at a scale and inclusivity level unlikely to be achieved through more specialist nature-focused networks alone. Library staff have been able to draw on existing relationships with community organisations and audiences, tailoring activities to local needs while embedding nature into familiar formats such as rhyme times, craft groups, ESOL sessions, and literacy programmes.

The CNE programme aligns strongly with the wider library sector ambition of "all libraries being Green Libraries", supporting sector-wide action to ensure all communities have access to nature and environmental awareness opportunities. This wider context illustrates how libraries can contribute to Protected Site Strategy ambitions by enabling community involvement in valuing and benefitting nature, helping people "play their part in Protected Site Strategies."

This novel approach of embedding nature connection within library activities and partnerships represents a significant development in how libraries can act as accessible, trusted gateways for environmental engagement; fostering inclusive, localised pathways to nature connection and awareness, and bringing the well-evidenced wellbeing benefits of nature engagement to a wider range of communities and audience groups.

Acknowledgements

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Back cover image: Women's park walk - Manchester Libraries

Libraries Connected

NATURAL ENGLAND

Culture Nature England, a partnership for People, Libraries and Nature
A Protected Site Strategy Project

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AND COMMUNITY
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