Green Space for Health 2021/22 Evaluation Report
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With special thanks to Vicki Brown, Miriam Dobson, Karen MacKelvie, Fiona Megarrell, Phoebe Webster, Ginnie Abubakar, Esther Coffin-Smith, Lucy Raven, Paula O’Malley, Michéal Connors, Karen Steven, Ellen Bramhill and Rebecca Jenkins.

Cover photo: Staff at Mount Vernon Cancer Centre, photographed by Vicki Brown.

In 2021/2 the Centre for Sustainable Healthcare’s Green Space for Health programme received funding from the Government’s Green Recovery Challenge Fund. The fund was developed by Defra and its Arm’s-Length Bodies and delivered by The National Lottery Heritage Fund in partnership with Natural England, the Environment Agency and Forestry Commission.

The Centre for Sustainable Healthcare (CSH) inspires and empowers people to transform healthcare for a sustainable future. CSH runs the NHS Forest – a network of NHS sites working to develop their green space for the benefit of patients, staff and the wider community.

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1. Introduction

In late 2020 the Centre for Sustainable Healthcare (CSH) was awarded a grant of £544,565 from the Government’s Green Recovery Challenge Fund for its Green Space for Health programme. The grant provided a year of funding for three workstreams.

1. Revitalisation of the NHS Forest network – a network for NHS sites working to improve green space at their sites for the benefit of patients, staff, and the wider community and for biodiversity. This included relaunch of the NHS Forest website, holding a conference and engaging with NHS sites about their green space, including an outreach programme to plant 10,000 trees funded through the project at an estimated 50 NHS sites.

2. A project embedding three Nature Recovery Rangers at five NHS sites (three main locations – Liverpool, London, and Bristol) where they worked with existing green space leads to take forward multiple small-scale on-site nature conservation activities, engaging staff, patients and the wider community. As part of this project, we also employed ranger interns and ran student placements.

3. A staff wellbeing project offering outdoor wellbeing sessions at five NHS sites for up to 60 NHS staff at risk from workplace stress, and subsequent training for two staff at each site to run further sessions internally.

An evaluation plan for the project was devised in consultation with our academic adviser, Valerie Gladwell, then at the University of Essex, now at the University of Suffolk.

For the revitalisation of the NHS Forest network, we collected data on the number of trees supplied through the scheme and the number of NHS sites receiving these, the area covered by trees, and the number of volunteers involved in tree planting, as well as reporting on the number of NHS sites in the network.

For the Nature Recovery Ranger project, we monitored the number of activities run and the number and duration of participant sessions. We ran two evaluation surveys to be completed by activity participants. At two points in the project, we collected reflections from NHS partners on the impact of the rangers at their sites and what had been learnt.

For the outdoor wellbeing project, we surveyed course participants before the course began, after course completion and a month later, to assess the impact of the course. We also surveyed staff who had received training to deliver these sessions themselves.

This report sets out results of our evaluation and outlines the legacy plans for the project.
2. Revitalisation of the NHS Forest network

Overview

Established in 2009, the NHS Forest network is an alliance of healthcare sites that are working to develop their green space for health, wellbeing, and biodiversity. Each year we offer NHS organisations free trees to plant at their sites during the tree planting season, along with stakes, guards, and planting advice. The network is served by a regular newsletter, a yearly conference, and an award scheme.

Our grant from the Green Recovery Challenge Fund has enabled us to hugely strengthen this learning network and its communications infrastructure. Our new website, launched in March 2022, now provides an inspiring and contemporary showcase for innovative green space work at a wide variety of NHS sites. Over the year, our team made 12 case study visits to sites across the country, facilitating information gathering and contributing to a newly established photo and video archive. The network also benefited from the introduction of new customer relations software and the redesign of the NHS Forest logo and newsletter. Our grant enabled us to purchase more trees than ever before, and throughout the year we successfully promoted this offer to NHS sites building up orders in advance of the 2021/22 tree planting season. Our advice offer is supported by a new NHS Forest Tree Planting Guidance Pack, developed through the project.

In October our annual NHS Forest conference was held online for the first time, with the theme of ‘an equitable recovery for people and nature’, and a keynote address by Judy Ling Wong, Honorary President of the Black Environment Network. The conference showcased both the Nature Recovery Rangers and the outdoor wellbeing work, highlighted innovative green space work at a range of NHS Forest sites, and provided a platform for the NHS Forest awards.

As well as strengthening our network through communications and outreach, the expansion in our team has enabled us to engage more actively in policy work, contributing to green space fora and key initiatives, such as the Nature for Everyone campaign and the Tree Equity Index, and generating many new policy insight pieces for our website. The website is also home to a comprehensive library of research evidence from studies exploring connections between green space and health – a valuable resource for our network members and many others.

The website’s primary target audience is NHS staff, and the team’s main aspiration for the site is that it should inspire green space enhancement and engagement at NHS sites. We were very encouraged then, when on the day the website went live, we were copied into an email from an NHS service manager in North London enthusiastically proposing to
colleagues that they review and address green space at their health centre, and giving nhsforest.org as a source of inspiration:

“This is being driven by wanting to enhance the wellbeing of staff (through horticulture and providing a rest space/ space to breathe), provide an opportunity for the health centre staff to mix with each other (often stay within their own teams) and being inspired by the NHS forest (https://nhsforest.org/).”

Key milestones

- March 2021: employment of Outreach Officer
- March 2021: completion of deliveries for 2020/21 tree planting season
- April 2021: employment of Communications and Engagement Officer
- April 2021: Green Space for Health training day for NHS staff
- May 2021: established NHS photograph library on Flickr
- June 2021: appointment of web design agency following tender
- July 2021: NHS Forest award nominations invited
- May – November 2021: case study visits to NHS Forest sites
- September 2021: established customer relations management database
- October 2021: held NHS Forest conference online
- October 2021: launch of new NHS Forest logo
- November 2021 – March 2022 delivery of trees to sites for tree planting season
- January 2022: Green Space for Health training day
- March 2022: launch of new NHS Forest website
- May 2022 publication of new NHS Forest Tree Guidance Pack.
- June 2022 rebrand of NHS Forest Newsletter.

Key metrics

Trees

During the 2020/21 tree planting season, the NHS Forest supplied 4,474 trees (whips, stakes and guards) to NHS sites. This included 2,277 trees supplied through the Green Recovery Challenge Fund (GRCF) to nine NHS sites. From April 2021 onwards our newly employed Outreach Officer developed and promoted our offer of trees and planting advice.

The NHS Forest tree planting season 2021/22 was our largest to date. We planted a total of 15,721 trees at 83 different sites in England, Wales and Scotland. Of these, 9,288 trees were sponsored by GRCF at 44 sites.

In total, over the two tree planting seasons covered by the grant, GRCF have sponsored 13,762 trees for the NHS Forest, at 48 sites, substantially exceeding the original target of 10,000.
Healthcare sites signing up to the NHS Forest network are added to our map and given a dedicated profile page to feature their green space work. In the course of the last year the number of sites in the network has grown from around 200 to 270 in April 2022. During this time we have engaged well over 100 sites in scoping conversations on tree planting and biodiversity issues with interest increasing over time. In the first week of December 2021, for example, 22 sites contacted us for advice.
Conference

In October 2021 the NHS Forest conference attracted 350 attendees. These included health staff, outdoor charities, and local authority staff. ‘Uplifting’ and ‘Inspiring’ were commonly used words in the feedback received from delegates. On Twitter we had over 60,000 impressions, 111 mentions and gained 126 new followers.

Communications

In the course of the project, we have sent out five NHS Forest Newsletters and a conference newsflash. Distribution has increased from 1,580 (April 2021) to 1,893 (March 2022). The average opening rate is 29%, with click rates increasing over time. We have produced seven short videos about our work for use on our website.

Throughout 2021/22 we used the NHS Forest Twitter account, @NHSForest, to share news and project updates; connect with our network, and amplify their own news and stories; promote new research and relevant articles on green space and health; run mini campaigns on topics such as No Mow May, National Tree Week, tree sponsorship etc; and promote the NHS Forest Conference, award scheme, newsletter, and Green Space for Health training course. Interacting on Twitter almost daily, we now post around 30 tweets a month, and more frequently when there are specific events or promotions. Our @NHSForest Twitter account has over 3,600 followers, (typically increasing by more than 50 new followers monthly). Importantly, we have several targeted followers including various NHS trusts. Likes, retweets and comments by popular accounts greatly boost our profile and help us reach more of our target audience. From April 2021 - March 2022 the NHS Forest averaged 21,743 monthly tweet impressions.
3. Nature Recovery Rangers

Overview

Our Green Recovery Challenge Funding enabled us to start a completely new green space initiative, with the appointment of three Nature Recovery Rangers, employed by the Centre for Sustainable Healthcare, but embedded at NHS sites: Southmead Hospital in Bristol, Aintree, Broadgreen and Liverpool Women’s Hospitals in Liverpool, and Mount Vernon Cancer Centre in Northwood, London. The rangers’ remit is to engage people – patients, healthcare staff and community members – in nature-related activities, while also improving the biodiversity of hospital grounds.

Following their appointment in April, all three rangers quickly became an energetic and inspiring presence at their sites, and strong advocates for nature. An early win was the promotion of No Mow May, the national Plantlife campaign, which led to the creation of extensive wildflower meadow areas at each location and was rewarded at Broadgreen Hospital with the unexpected appearance of bee orchids, marsh orchids and pyramidal orchids (this last, a first record for Liverpool). Ranger activities have included wildlife-friendly gardening, food growing, nature walks, wildlife home construction and ecological surveys. There have also been substantial green space enhancement projects. In Bristol, the ranger worked with volunteers and nursing staff to develop a therapeutic space for neuropsychologic patients at Southmead Hospital. In Liverpool, the ranger engaged children excluded from school and their staff, to revive a courtyard wildlife garden at Broadgreen Hospital. At Mount Vernon Cancer Centre in London, the ranger oversaw completion of a green space enhancement programme initiated by CSH, that included an accessible ‘woodland walkway’, and a newly refurbished garden for the chemotherapy suite with a specially designed wooden shelter where chemotherapy patients can spend time outdoors. Our London ranger also initiated a very successful site-wide gardening competition, involving more than 100 staff in nurturing and bringing to life green patches close to their work areas.

Because of Covid restrictions it was at first difficult to bring external volunteers on to the sites, but over time the rangers involved a variety of local community groups. These have included, for example, members of local community parks groups from across Bristol and students excluded from school in Liverpool. We were also able to extend our programme to include two interns, supervised by the Bristol ranger, a Kickstart apprentice, supervised by the Liverpool ranger, and two healthcare students on a weekly day placement, supervised by the London ranger. We have been excited by the success of the ranger project in engaging staff and delivering biodiversity improvements on the ground, as well as moving green space and nature higher up the agenda at the hospital sites. Each of our partner NHS trusts is keen to retain their rangers beyond the life of the current project, and two have
already secured charitable funding to do so. Moreover, we have plans to expand the programme further, with new rangers already secured for 2022.

Key milestones

- March 2021: employment of Partnerships Manager
- April 2021: employment of rangers at three NHS site locations
- April 2021: completion of ranger work plans
- August 2021: opening of Woodland Walkway at Mount Vernon
- September 2021: prize-giving for site-wide gardening competition at Mount Vernon
- October 2021: launch of ranger video at NHS Forest conference
- October 2021: employment of first intern at Southmead
- November 2021: employment of second intern at Southmead
- November 2021: opening of Fern Garden at Mount Vernon
- January 2022: employment of Kickstart apprentice in Liverpool

Key metrics

Ranger activities

Over the year the rangers between them ran 274 activities, providing 1863 sessions for participants, and generating 4,843 hours of participants’ engagement. Activities, which changed according to the season, were at their most intense in the summer quarter (July – September, 2021), when the rangers between them ran 114 activities, providing 843 participant sessions and generating 1,889 hours of engagement.

There was not always a direct relationship between the number of activities run and the number of participants engaged. For example, in northwest London the ranger ran several major events – to launch newly enhanced green spaces and to award prizes for the site-wide gardening competition – which attracted large numbers of staff.

<table>
<thead>
<tr>
<th>Location</th>
<th>No. of activities</th>
<th>No. of participant sessions</th>
<th>No. of hours of engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bristol</td>
<td>133</td>
<td>606</td>
<td>1033.5</td>
</tr>
<tr>
<td>Liverpool</td>
<td>66</td>
<td>389</td>
<td>1012.5</td>
</tr>
<tr>
<td>London</td>
<td>75</td>
<td>868</td>
<td>2797</td>
</tr>
<tr>
<td>Totals</td>
<td>274</td>
<td>1863</td>
<td>4843</td>
</tr>
</tbody>
</table>

Table 3.1: Ranger activities April 2021 – March 2022

Note: owing to staff sickness, Liverpool data does not include the project’s final quarter.

Covid restrictions on volunteers, ensured that at the outset of the project ranger activities focused largely on hospital staff. This was seen by our NHS partners as a valuable contribution to staff wellbeing, and one which was especially welcome given the stress of the pandemic. We have also seen from our own research that NHS clinical staff experience barriers to engaging with nature at their sites. However, the project also aimed to engage
local community groups from outside the hospital, and this involvement built over time as restrictions eased. From October 2021, rangers were asked to record whether each activity, where it was not targeted at staff, was targeted at an under-represented group of people who were otherwise less engaged with nature. For October – December 2021, 12% of activities run, fell into this category, while for January – March 2022, this was true for 37% of activities run.

**Green space improvements**

Each of our rangers has been able to record green space improvements at the sites where they work. The area sizes given below are estimates.

At Southmead Hospital, Bristol:

- Meadow restoration leaving grass unmown, with benefits for grass eating butterflies – 18 acres.
- Garden restoration with bulbs and plants and removal of invasive species – 4.5 acres
- Drought tolerant planting – 16m²
- Roof terrace restoration – 350m²
- Creation of allotment raised beds for allotment with flowering planting – 13m²
- Creation of wildflower meadow area with flowering planting – 62m²
- Orchard planting – 2,500m²
- Green roof creation with flowering planting – 60m²
- Flower bed creation at Rosa Burden garden – 35m²
- Hedge planting – 10m²
- Creation of planted willow structure – 2m²
- Creation of insect hotel – 2m²
- Creation of allotment paths – 26m
- NHS Forest trees planted in 2021/2 season – 18.

At Aintree Hospital, Liverpool:

- Meadow restoration leaving grass unmown, with benefits for pollinators – 12 acres
- Woodland restoration, with planting of trees, garlic and bluebell bulbs – 19.7 acres
- Garden restoration – 0.3 acres
- NHS Forest trees planted in 2021/2 season: 1,100.

At Broadgreen Hospital, Liverpool:

- Meadow restoration leaving grass unmown, with benefits for pollinators – 2.9 acres
- Development of therapies garden, with benefits for biodiversity – 0.8 acres
- Creation of insect hotels – 2m².

At Mount Vernon Cancer Centre, Northwood, London:
• Meadow creation, including 2,500 plug plants, and sowing of native perennial wildflowers on scarified soil – 1 acre
• Garden cultivation and food growing – 0.27 acres
• Pond restoration – 2m²
• Creation of invertebrates and hedgehog homes – 2m²
• Creation of bird and bat homes – 1m²
• Creation of a small wetland area – 4m²
• Creation of a living wall – 4m²
• Creation of raised flower beds – 7m²
• Creation of Woodland Walkway with trail signs – 0.41km
• Creation of garden shelter for chemotherapy patients
• NHS Forest trees planted in 2021/2 season: 183.

**Evaluative surveys**

To evaluate the impact of the rangers’ sessions we ran two slightly different types of electronic survey, both of which were distributed by the rangers themselves. The first of these was an ‘activity survey’ which was sent out on a rolling basis to people who had recently completed a ranger-led activity. The second was a ‘participant survey’, sent out in the autumn to participants that the rangers had listed as taking part in the programme. These respondents were more likely to have been regular participants. We conducted both surveys because each offered a different opportunity to collect feedback and was thought likely to reach different programme participants. The results are reported in turn below.

**Characteristics of respondents to the ‘activity survey’**

The activity survey was completed in full by 64 participants. These were aged from 23 to 76 years, with a mean age of 43. Most surveys were from participants at Southmead Hospital in Bristol (65%) although there was also considerable representation from Mount Vernon Cancer Centre in London (22%), with smaller numbers from Aintree Hospital (6%) and Broadgreen Hospital (3%), both in Liverpool, and Frenchay Hospital in Bristol (2%).

Most respondents completing the ‘activity survey’ were non-clinical staff (72%), while 11% were clinical staff, 10% people living in or visiting the area, 5% friends or relatives of patients and 2% patients themselves.

**Activities attended by respondents to the ‘activity survey’**

As can be seen in Figure 3.1, gardening and guided walks each accounted for 21% of the activities participants attended, followed by a wellbeing activity (14%), habitat creation (10%) and wildlife surveys (9%). However, 25% of activities attended fell into the category of ‘other’. These included a range of activities such as allotment sessions, pumpkin carving, meadow identification and wreath-making.
Outcomes from taking part in the activity identified in the ‘activity survey’

We wanted to explore how far the activities were realising outcomes we had set out in our original project proposal, namely that people would gain a greater understanding of the natural environment; that there would be benefits for wellbeing; that the activity would inspire them to take further action to protect the environment elsewhere or at other times; that they would find the sessions enjoyable; and that the activity would make the area a better place to live, work and visit.

Respondents were asked whether they agreed with statements to this effect. The results are shown in Table 3.2, where it can be seen there was agreement or strong agreement with all these statements. Most respondents strongly agreed that they had found the sessions enjoyable, and that the activity was making the area a better place to live, work or visit.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree %</th>
<th>Agree %</th>
<th>Neither agree nor disagree %</th>
<th>Disagree %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taking part in the activity increased my understanding of the natural environment</td>
<td>28.6</td>
<td>51.7</td>
<td>17.9</td>
<td>1.8</td>
</tr>
<tr>
<td>Taking part in the activity benefited my wellbeing</td>
<td>48.2</td>
<td>48.2</td>
<td>3.6</td>
<td>0</td>
</tr>
<tr>
<td>Taking part in the activity inspired me to take further action to protect the environment elsewhere or at other times</td>
<td>22.8</td>
<td>47.4</td>
<td>28.1</td>
<td>1.8</td>
</tr>
<tr>
<td>I found this activity enjoyable</td>
<td>61.4</td>
<td>35.1</td>
<td>3.5</td>
<td>0</td>
</tr>
<tr>
<td>The activity is making this area a better place to live, work or visit.</td>
<td>57.1</td>
<td>34.4</td>
<td>8.6</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 3.2: Agreement/disagreement with outcome statements (activity survey)
Respondents were also asked whether taking part in the activity had taught them new skills. A large majority, 79%, replied yes while 21% said no. The survey went on to ask what skills had been learnt from taking part. The skills most reported were ‘skills to support my wellbeing through nature connection’, followed by ‘meadow creation and care’ and ‘wildlife identification’.

![Figure 3.2: Skills respondents reported they had learnt from taking part in ranger activities](image)

Respondents were also asked which of a series of possible outcomes they most valued about the activity. The outcome most valued was ‘being in a natural environment’, followed by ‘learning new things’, ‘increasing my wellbeing’, and ‘spending time with others’.

![Figure 3.3: Outcomes respondents said they most valued from taking part in ranger activities (activity survey)](image)
**Proposed changes to activity suggested in the ‘activity survey’**

We asked if there was anything respondents would change about the activity. Several participants noted practical resource issues such as being given instructions, extra kits, or knowledge of suitable clothing to bring. Respondents also said they would like the activity to be extended to other people and have more people engage with the programme.

**General comments from respondents to the ‘activity survey’**

When asked if there was anything else they would like to tell us about the activity most of the responses expressed appreciation and enjoyment, commenting that those leading the sessions were knowledgeable and enthusiastic and the activities well organised:

“Enjoyable, interesting and led by knowledgeable enthusiastic guides”

“Very informative and learnt a lot from it. Will most likely engage more into nature on my future walks”

“I really enjoyed making my wreath! The kit contents were fantastic - such a lovely range of foliage, seed heads, berries etc”.

**Participant survey**

The second survey used to evaluate the ranger programme followed a broadly similar format to the ‘activity survey’ but differed in that it was sent out on a one-off basis in the autumn to participants whose contact details the ranger had collected during the programme. This survey asked questions about participants’ experience of engaging with activities across the programme rather than focusing on a specific activity session.

**Characteristics of respondents to the ‘participant survey’**

The ‘participant survey’ was completed in full by 49 participants. These were aged from 19 to 66 with an average age of 40. Most respondents were from Mount Vernon Cancer Centre in London (84%) with the remainder entirely from Southmead Hospital in Bristol (16%). Of the respondents, 60% were clinical staff, 32% non-clinical staff, 5% people living in or visiting the area while the remaining 3% were ‘other’. There were no patients.

**Activities attended by respondents to the ‘participant survey’**

Survey respondents had attended up to 10 sessions, with the mean number of participants attending 2.3. The time spent on each session was between 0 and 90 minutes, with an average of 16 mins 15 seconds.
As can be seen above, the activity most often attended was the site-wide gardening contest (45%), which took place at Mount Vernon Cancer Centre. Allotment gardening accounted for 15% of activities attended; meadow creation and maintenance for 14%; gardening for 7%; ranger-led wellbeing walks for 6%; nature surveys for 4%; and woodland management for 3%. This reflects the high proportion of respondents from Mount Vernon, as well as the popularity of Mount Vernon’s site-wide gardening contest in which 25 teams and over 100 staff took part.

**Outcomes from taking part in sessions identified in the ‘participant survey’**

As in the ‘activity survey’, we wanted to explore how far participation in the programme was realising the outcomes we set out in the original project proposal: that people would gain a greater understanding of the natural environment; that there would be benefits for wellbeing; that the activity would inspire those taking part to take further action to protect the environment elsewhere or at other times; that they would find the sessions enjoyable; and that the activity would make the area a better place to live, work or visit.

As can be seen in Table 3.3, there was a high level of agreement with all these statements. Most survey respondents ‘strongly agreed’, with others ‘agreeing’, that taking part in the sessions had benefitted their wellbeing; that it had inspired them to take further action to protect the environment; that they had found the sessions enjoyable; and that the sessions were making the area a better place to live, visit and work. The majority agreed (53.7%), and more than a third strongly agreed (39%) that the sessions had increased their understanding of the natural environment.
Taking part in the sessions increased my understanding of the natural environment.

<table>
<thead>
<tr>
<th>Statement</th>
<th>% Strongly agree</th>
<th>% Agree</th>
<th>% Neither agree nor disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taking part in the sessions increased my understanding of the natural environment.</td>
<td>39</td>
<td>53.7</td>
<td>7.3</td>
</tr>
<tr>
<td>Taking part in the sessions benefited my wellbeing.</td>
<td>58.5</td>
<td>36.6</td>
<td>4.9</td>
</tr>
<tr>
<td>Taking part in the sessions inspired me to take further action to protect the environment elsewhere or at other times.</td>
<td>53.7</td>
<td>39</td>
<td>4.9</td>
</tr>
<tr>
<td>I found the sessions enjoyable.</td>
<td>65.9</td>
<td>29.3</td>
<td>4.9</td>
</tr>
<tr>
<td>These sessions are making this area a better place to live, work or visit.</td>
<td>75</td>
<td>25</td>
<td>0</td>
</tr>
</tbody>
</table>

**Table 3.3: Agreement/disagreement with outcome statements (participant survey)**

Asked whether taking part in the sessions had taught them new skills, 73% of respondents said they had, while 27% said they had not.

Respondents were asked to say which skills they had learnt from the sessions.

![Figure 3.5: Skills learnt by respondents from taking part in the sessions (participant survey).](image)

In this survey the skills most cited (Figure 3.5) were gardening skills (21), probably reflecting the large number of participants taking part in the site-wide gardening contest, followed by vegetable growing (13) and wildlife identification (9).
Participants were also asked to say which of a series of outcomes from the sessions they most valued, choosing no more than three. As shown in Figure 3.6, the outcomes most chosen in order were ‘being in a natural environment’ (22), ‘learning new things’ (20), ‘spending time with others’ (13), and ‘increasing my wellbeing’ (12). Notably these four outcomes were the same as those prioritised by respondents to the ‘activity survey’.

![Figure 3.6: Outcomes respondents said they most valued from taking part in ranger sessions (participant survey)](image)

**Proposed changes to the sessions suggested in the ‘participant survey’**

When asked if there was anything they would like to change about the sessions, several respondents gave answers that reflected their enthusiasm for taking part – for instance including more sessions or taking part more often.

Some participants noted that they would like the sessions to be included as part of their workday as they had issues with fitting them into their work schedule. For example: “I only wish my lunch break was longer so I could always attend these sessions.” One participant stated that sessions “could be more structured”.

**General comments from respondents to the ‘participant survey’**

When asked if there was anything else they would like to tell us about the sessions, respondents expressed their appreciation of both the initiative and the ranger:

“Very inspiring”
“I think it’s a very positive step on behalf of NBHT to invest in staff well being”

“Very flexible which works well with my shift patterns.”

“It’s fantastic and we only need more and keeping our nature recovery ranger”.

One member of staff touched on several aspects they valued:

“It is great to see the variety of sessions you provide and how they all allow to spend time outdoors. It's been great to be able to meet other staff members during these workshops and soak in the sun and fresh air. Thank you!”

Finally, respondents to the ‘participant survey’, were asked for three words to describe how they felt about the sessions they took part in. The resulting word cloud is shown below and demonstrates how positively the sessions were received by the participants.

Figure 3.7: Word cloud showing words that describe how respondents felt about the sessions they took part in (participant survey).
Note: words which are larger were stated more frequently.

Conclusions from both ‘activity surveys’ and ‘participant surveys’

Our two separate surveys drew on distinct groups of respondents: the ‘activity survey’ was largely completed by non-clinical staff, while in the ‘participant survey’ clinical staff
predominated. The skills learnt also appear to be distinct with skills to support wellbeing and meadow creation, reported more frequently in the ‘activity survey’, while skills in gardening and vegetable growing were reported more frequently in the ‘participant survey’.

Despite these differences, the other results from the surveys are remarkably consistent. Both surveys confirm that the outcomes set out in our original proposal have been met, since in both there was agreement or strong agreement that the sessions had benefitted respondents’ wellbeing; had inspired them to take further action to protect the environment; were making the area a better place to live, work or visit; had increased their understanding of the natural environment; and were enjoyable. In both surveys, more than seven out of ten participants said they had learnt new skills.

It is also interesting that despite differences in the activities that survey respondents were reporting on, there is considerable consistency in the aspects of taking part that were most valued: being in a natural environment; learning new things; spending time with others; and increasing wellbeing. The value of the sessions for the wellbeing of those taking part is also evident in the consistently positive words put forward by respondents to the ‘participant survey’ to describe the programme, of which the most frequently used was “happy”.

Feedback from green space leads

In addition to collecting surveys from people engaging in ranger activities, we collected feedback from NHS partners – the ‘green space leads’ within the NHS trusts hosting the rangers. Their views on several questions were sought via email in September 2021, and again at the end of 2021.

Benefits and drawbacks of having a Nature Recovery Ranger on site

The main benefits of having a ranger identified by green space leads were the additional capacity and skills they brought to the site, making it possible to progress existing projects faster and to initiate completely new areas of work. Our partners commented both on the impact of this on their sites’ green spaces and on the rangers’ ability to engage and enthuse different stakeholders in these initiatives.

“not only have we been able to continue with all our existing activities but having the dedicated resource ... means that we can push on in areas that we had not been able to make progress on or which had not occurred to us to even consider, especially the community-related outreach (Brownies, Cubs, local GPs, Parks volunteers etc.)”

“The unique skills of the Nature Recover Ranger has meant that the approach to all of the above initiatives has involved a great deal of staff engagement, partnership working, engaging the local community, building stakeholder relationships, increasing personal
ownership, maintaining excellent networks and ensuring the best specialist advice informs the projects, upskilling of staff, partners and stakeholders – all of which has helped ensure successful initiatives are launched, which increases impact and will help with the long-term sustainability of the project.”

“There has visually been a real change, with so much more biodiversity. This in itself is really beneficial and demonstrates to staff and patients the importance of our green spaces.”

When asked to identify any drawbacks the green space leads made some suggestions for the smooth running of the programme – for example, that it might be helpful if meetings between the CSH line manager and the ranger were also attended by the green space lead, as the on-site line manager, so that the NHS manager could more actively support the ranger. Another respondent flagged up confusions that had arisen over timelines, and particularly over what was realistic in the context of NHS processes. In addition, there was concern about the exit strategy and the legacy of the project:

“The only real drawback to the programme is the duration, as we have been limited to projects that we can get going within a year.”

Just five months into the project, all three of the sites were considering how they might find funding to extend the ranger posts at the end of the year.

**Effects of having a ranger employed and supported by the Centre for Sustainable Healthcare**

We wanted to understand the effect of CSH’s own role as an external organisation employing and managing the ranger and asked the green space leads to comment on this. In response our partners identified several benefits from this, including the ease of recruitment; opportunities for the rangers to share good practice and network both with each other and nationally; access to expertise unavailable from the NHS site; additional funding to help with getting initiatives in place; and the additional support of the CSH line manager in guiding the rangers’ efforts and troubleshooting. Another benefit mentioned concerned the more ambitious scope of the project and the credibility conferred by CSH.

“The partnership adds additional credibility, which gains greater acknowledgement from staff and awareness for the project, not to mention the additional support CSH provides. CSH as the lead organisation also increases the scope of project and its aims. Without this a much narrower focus on staff wellbeing for example would have been the result.”

Partners also commented that if they were able to extend the ranger post they would ideally like the relationship with CSH to continue:
“We are very keen to keep the ranger and would like to keep the partnership with CSH should this be an option.”

“If the role can continue with CSH support then that would be perfect as it works really well.”

“Ideally I would wish to continue in partnership with CSH as I feel this support is fundamental at this stage.”

**Learning from the ranger project**

Our second round of email feedback, elicited in December 2021, focused on what had been learnt from the project. In response the green space leads reflected again on the benefits of the project. All three commented on the level of staff enthusiasm for the green space work. They also pointed again to the impact of the project in improving biodiversity and in moving biodiversity higher up the agenda of senior management.

“For a good proportion of staff, enjoying the beauty and variety of nature is incredibly important and interacting with the natural world can be a hugely motivating factor. Staff have responded well to opportunities to learn about biodiversity on site and how this can be improved as well as getting involved in activities aimed at achieving this. As the importance of improving the environment and improving biodiversity remain an issue in the public domain, staff interest in this area is only likely to increase.”

“Having the Ranger and the projects she has run has also shown us the level of interest from our staff, patients and community. This has provided a real justification for green space and biodiversity to be higher on the agenda within our sustainability work. The Ranger has brought expert knowledge in conservation, enabling us to adjust our existing site maintenance schedules and ensure future planting on site includes the best species and techniques to maximise biodiversity.”

There was strong appreciation of the value of the project in engaging a wider range of stakeholders; the fact that skills within the trust could help to forge closer relationships with strategic partners; and that the project was helping fulfill the trust’s commitment to acting as an ‘anchor in the community’.

The London green space lead, who had formerly taken part in CSH’s *Space to Breathe* research, reflected on the role of the ranger in overcoming barriers to the use of green space by staff that had been identified through that study. In particular they argued that ranger activities had helped in tackling issues (described as the seven ‘p’s) related to proximity and time, privacy and protection, permissions/promotion, perceptions of site conditions, and the provision of convenient and popular activities.
They also talked in broader terms about the impact of the project on the wider culture of the organisation, and its potential going forwards:

“We have been talking more to people, we have been consulting more with people... so I think it’s widened our horizons. I think we have only tapped the surface of what we could do by using our outdoor space in terms of developing it into something that delivers on all sorts of levels. So whether it’s delivering spaces that we can practically use, or whether it’s delivering initiatives that help staff and wellbeing, physical activity as well, there’s so much more we could do.”

Support that would be helpful to trusts in improving the biodiversity of healthcare sites

To inform our own legacy planning, we asked the green space leads to say what support they thought would be helpful to trusts, going forwards, in improving the biodiversity of their sites. In response two of the green space leads focused primarily on the value of the ranger as a trusted source of knowledge in this area.

“We have learnt that changes in the way we manage our grounds do not have to be large or costly to have a positive impact on biodiversity. The Ranger has been the conduit to sharing knowledge and introducing new approaches, engaging staff from across the organisation in the process.”

The Bristol green space lead suggested that it would be valuable for trusts to have support in creating Biodiversity Management Plans/action plans to get board approval for the management of green spaces, and that these would tie in with Trusts’ Green Plans and support an area of non-net-zero work that was otherwise omitted from the guidance on these. She thought trusts would benefit from help in linking in with related local authority proposals, such as green infrastructure strategies and ecological emergency strategies. She also suggested that it would be helpful to have more support for non-tree elements of biodiversity enhancement, such as wildflower seeds, bird/bat boxes and insect hotels. The Liverpool green space lead, similarly, thought it would be useful to have “a few national projects or schemes that trusts can follow and implement”.

Conclusions from feedback from green space leads

The comments provided by our green space leads indicate the transformative nature of the ranger posts in providing the capacity to take forward site projects that trusts had previously struggled to pursue. They also emphasise the value of the ranger’s green space work in providing specialist knowledge, achieving visible ecological improvements at the site and reaching new stakeholders, as well as the popularity of the initiative with staff. They point to the value of support from CSH in managing the rangers and providing peer networking opportunities and access to national networks.
Feedback from ranger interns and placement students

An important component of the ranger project was the employment of interns and placement students under the rangers’ supervision. Feedback from those who took on these roles indicates the value of the scheme in providing experience to help with their future employment. Through the project, the two Bristol interns and the Liverpool apprentice gained access to Forest School training and learnt skills such as event planning, tree surveying, staff engagement and costing and sourcing good quality native plant species.

One of the Bristol interns commented on the programme:

“This internship is an invaluable incubation period and context for me to explore how my previous and varied experience (in community engagement, sustainability, architectural design and market gardening) can combine in a meaningful way, to propel me towards an emerging career in the field of therapeutic horticulture and outdoor education. It has provided me with unprecedented access to key trainings and opportunities to gain practical experience in areas that I was previously lacking, which will leave me incredibly well-resourced and able to move forward with confidence in myself and my chosen path.”

At Mount Vernon Cancer Centre in London, two healthcare students recruited from a college of further education, commented on the benefits of their involvement:

“I have gained the ability to work with people on a daily basis”

“I have gained communication and teamwork skills during this placement.”

As far as longer-term relevance is concerned, one of the students said: “I feel as if sustainability will become a topic which is more looked at in society. I also feel as if people will start asking themselves on how they can lead a sustainable life. The role shows you on the different ways we can help; the planet and help battle climate change.”

The college’s Partnerships Liaison Manager monitored the placement and made a site visit to see the students at work. She told us that the students benefitted hugely from being able to work in a healthcare environment and particularly enjoyed meeting the nurses. This was especially relevant to one of the students, who is hoping to go into adult nursing. In addition, she thought they had gained significant employment skills. She mentioned particularly communication skills, collaboration and teamwork and fundamental working skills, such as being on time and prepared with the right equipment and clothing for the role.
4. Outdoor wellbeing sessions

Overview

Our 2020 research study, *Space to Breathe*, supported by the Health Foundation, explored health staff’s experience of green space at their sites, and its influence on wellbeing. This found that most staff would like to spend more time in green space at their sites than they currently did, and that regularly spending time in green space was associated with higher levels of reported wellbeing. Our grant from the Green Recovery Challenge Fund enabled us to build further on these insights by commissioning the social enterprise Natural Academy to deliver a short programme of nature-based wellbeing sessions – called ‘NatureWell’. These were run at five healthcare sites: Aintree Hospital, Liverpool; Chailey Clinical Services, Lewes; Mount Vernon Cancer Centre, London; Southmead Hospital, Bristol; and St Martin’s Hospital, Canterbury. In 2021, when our programme commenced, we were especially pleased to be able to offer these sessions to NHS staff, given the highly stressful impacts of the Covid-19 pandemic. The programme was overseen by our Partnerships Manager.

Natural Academy’s NatureWell course offers a variety of skills and techniques to facilitate participants in connecting with nature. These include nature-based mindfulness techniques, such as ‘grounding’; changing breaths and other physical relaxation techniques; gratitude practices involving appreciation of self, other people, and nature; sharing with others the personal meaning drawn from nature through the use of narratives and metaphors; and understanding how the five pathways to nature connection can facilitate nature connectedness and wellbeing.

To join the courses health staff were released from their normal duties. While our partner sites were happy to do this, they were not able to release staff during the summer holiday period – when the weather was at its best for the outdoor sessions. This was an unforeseen constraint that had to be overcome through a tight delivery schedule in the weeks before and after this.

In addition to commissioning the sessions we also commissioned Natural Academy to provide Level 2 Nature and Health Facilitator training for two staff from each site, to enable them to run NatureWell sessions themselves, thus giving the project a long-term legacy. Trainees included nursing staff and allied health professionals. Both the sessions and the training were enthusiastically received.

Key milestones

- April 2021: appointment of social enterprise Natural Academy following tender
- June – October 2021: running of NatureWell courses at five NHS sites (though suspended in holiday period)
• October 2021: presentation about the project at the NHS Forest conference
• September – November 2021: running of Nature and Health Facilitator training online and face-to-face in London.

Key metrics

A total of 51 health staff from our five partner NHS trusts took part in the on-site NatureWell sessions delivered by Natural Academy (slightly less than the original target of 60 due to some drop out). Each NatureWell course involved an initial registration process, followed by three group sessions (each three hours) and a final one-to-one session.

As planned, 10 staff (two from each trust) undertook legacy training to gain a Level 2 qualification as Nature and Health facilitators, which in each case involved six days of training (of which two were in person) with tutorial support.

Surveys to evaluate outdoor wellbeing sessions

To evaluate the impact of the NatureWell wellbeing sessions, participants were asked to complete surveys before starting the course, immediately after completing the course, and approximately a month later. The surveys explored participants’ experience of the sessions, and whether they had made use of what they had learnt. They also investigated changes in wellbeing and nature connectedness. At baseline, 48 participants completed the ‘before’ survey, 30 participants completed the survey immediately after the course, and 31 participants completed the follow up survey, with 24 participants completing all three.

Respondent characteristics

Survey participants were mostly female (87.5%), aged from 23 to 68 with an average age of 44, and mostly white (93.8%). The most common occupational group was allied health professional, or support to allied health professional (38%) followed by registered nurse/midwife (15%), healthcare/nursing assistant (14%) and other (14%), indicating that the initiative was successful in reaching clinical staff as primarily intended. Prior to starting the programme, 64.6% of respondents said they had felt unwell because of work-related stress within the last 12 months. This compares with 44% in the NHS Staff Survey 2020, (NHS, 2021) indicating that, as intended, the initiative was successful in reaching staff at risk from workplace stress.

Changes in wellbeing

Each of the three surveys measured reported wellbeing, using the shorter version of the Warwick Edinburgh mental wellbeing scale which assesses wellbeing through responses to seven survey items. Respondents showed an increase in reported wellbeing from before the
course to after the course, with levels remaining at a similarly increased level in the follow up survey, as shown below.

![Figure 4.1: Levels of wellbeing reported by participants in outdoor wellbeing sessions](image)

Results of a paired sample t-test showed that the increase from the before to the after period was significant ($t(28) = -6.10, p = .001$), as was the increase from the before to the follow up period. ($t(29) = -4.16, p = .001$). This suggests both that the sessions led to an improvement in staff wellbeing, and that this improvement was sustained a month later.

**Changes in satisfaction, happiness and anxiety**

Further questions used in all three surveys explored participants’ levels of life satisfaction, happiness, and anxiety. As shown below (Figure 4.2) levels of life satisfaction and happiness were markedly lower before the course as compared to immediately after the course and one month later. As compared to before the course, levels of anxiety were lower immediately after the course, and one month later, though anxiety was slightly lower immediately after than one month later.

Results of paired sample t-tests showed that the increase in life satisfaction from the before to after period was significant ($t(29) = -5.09, p = <.001$) as was increase in life satisfaction from the before to follow up period ($t(31) = -3.92, p = <.001$). Similarly, the increase in happiness from the before to after period was significant ($t(29) = -3.36, p = .002$), as was the increase in happiness from the before to follow up period ($t(31) = -2.60, p = .014$).

However, whilst there was a decrease in anxiety from the before to after period, this change was not found to be significant ($t(27) = 1.14, p = .26$). Similarly, a decrease from the before to the follow up period was not found to be significant ($t(29) = .75, p = .46$).
Figure 4.2: Levels of life satisfaction, happiness and anxiety reported by participants in outdoor wellbeing sessions
Note: Questions sourced from Office of National Statistics

Perceived improvements in wellbeing and coping with stress

Participants were asked whether they thought that learning wellbeing in nature skills had improved their wellbeing at work and had helped them to cope with stress at work. In both the ‘after survey’ and the one month ‘follow up survey’, the great majority agreed or strongly agreed with both statements.

<table>
<thead>
<tr>
<th>Learning wellbeing in nature skills has helped to improve my wellbeing at work</th>
<th>Strongly agree %</th>
<th>Agree %</th>
<th>Neither agree/disagree %</th>
</tr>
</thead>
<tbody>
<tr>
<td>After respondents</td>
<td>22.6</td>
<td>71</td>
<td>6.5</td>
</tr>
<tr>
<td>1 month later respondents</td>
<td>25</td>
<td>65.6</td>
<td>9.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Learning wellbeing in nature skills has helped me cope with stress at work</th>
<th>Strongly agree %</th>
<th>Agree %</th>
<th>Neither agree/disagree %</th>
</tr>
</thead>
<tbody>
<tr>
<td>After respondents</td>
<td>19.4</td>
<td>64.5</td>
<td>16.1</td>
</tr>
<tr>
<td>1 month later respondents</td>
<td>21.9</td>
<td>59.4</td>
<td>18.8</td>
</tr>
</tbody>
</table>

Table 4.1: Participants responses to questions about improvements in wellbeing and coping with stress

For both statements, participants were invited to describe examples. Several noted that learning wellbeing in nature skills had improved their wellbeing by encouraging them to
take regular breaks from work. For example: "being able to stop, get up and go for a quick walk outside when things are getting stressful has been great." Participants also noted positive effects on their wellbeing from appreciating or spending more time in nature: "I am more aware of the benefits of engaging with the environment - the greenery & wildlife around our hospital. Even if just for a few minutes of mindfulness is beneficial". Some participants noted the wellbeing benefits of exercises they had learnt such as changing breaths, grounding, and putting things into perspective: "Taking time out to breathe and focus on the trees, even for two minutes has really helped to ease my stress and anxiety."

Techniques such as breathing and mindfulness were also mentioned in relation to coping with stress, for example, one participant said they were: "more aware of, and likely to choose to, recognise stress and take changing breaths or take an outdoor break".

Participants also said that visiting nature could help them cope with stress, as well as noting the effects of taking a break and not overworking: "I take my breaks. I use the outside space to take time out from stressful events".

**Changes in feelings about nature**

Each of the surveys explored participants’ feelings about nature, with respondents asked to say how much each of four positive statements described their own experience (from none of the time = 1 to all of the time = 5).

As can be seen in Figure 4.3, in each case, participants identified more strongly with these statements after the course than before the course, suggesting that the course had strengthened their feelings for nature. An increase was also seen in the one-month follow up surveys as compared to the before surveys.

Paired sample t-tests were used to assess statistical significance. For the statement “I notice the presence of nature during the course of my working day”, there was a significant increase in agreement in the after survey, as compared to the before survey ($t(29) = -3.74, p = .001$). Similarly, there was a significant increase from the before to follow up period ($t(31) = -3.52, p = .001$).

For the statement “I feel part of nature”, there was a significant increase in agreement in the after survey, as compared to the before survey. ($t(29) = -3.60, p = .001$). Similarly, there was a significant increase from the before to follow up period ($t(31) = -4.61, p = .001$).

For the statement “Being in nature makes me very happy” there was a significant increase in agreement in the after survey, as compared to the before survey ($t(29) = -2.04, p = .05$). Whilst there was an increase from the before to follow up period, this was not significant ($t(31) = -1.97, p = .06$).
For the statement “I am confident in my ability to improve my wellbeing by connecting to nature” there was a significant increase in agreement in the after survey, as compared to the before survey. \((t(29), = -2.45, p = .02)\). Whilst there was an increase from the before to follow up period, this was not significant \((t(31) = -.95, p = .35)\).

In short then feelings about nature were strengthened following participation in the course. Noticing nature and feeling part of nature was largely sustained a month later, whereas the belief that being in nature made participants happy and confidence in their ability to improve their wellbeing by connecting to nature, had by then tailed off a little.

![Figure 4.3: Feelings about nature reported by participants in outdoor wellbeing sessions](image)

**Figure 4.3: Feelings about nature reported by participants in outdoor wellbeing sessions**

*Changes in visiting nature and taking action to protect the environment*

The surveys also asked people to say how often they had visited nature in the last month and how much action they took to protect the environment. The results are shown in Figure 4.4. It should be noted that, because the sessions were held in nature, it was to be expected that, directly after the sessions, participants would have spent more time in nature in the last month. As can be seen below, participants completing the ‘after’ survey did indeed report more visits to nature than in the survey before the sessions. However, the level of visits is higher still in the follow up survey, a month after the sessions had finished, indicating that the course had led participants to take time in nature more often.

A paired sample t-test showed that, the increase in visiting nature from before to after the course, was significant \((t(29), = -2.62, p = .01)\), as was the increase from before to the follow up survey \((t(31) = -2.88, p = .01)\).

From before the sessions to after the sessions there was an increase in reported environmental behaviour, and this difference was found to be significant \((t(29), = -2.57, p = \ldots)\)
.02). While there was also an increase from before the sessions to the follow up period this was not significant ($t(31) = -.73, p = .47$). This suggests that while the course encouraged action to protect the environment, the effect was not sustained.

![Figure 4.4: Visits to nature and action taken to protect the environment reported by participants in outdoor wellbeing sessions](image)

**Most helpful activities**

We wanted to know whether activities taught on the course had proved helpful. In the ‘after’ survey, participants were asked to say which of a list of activities for nature-based relaxation they had found helpful to use outside of the course. The activities most selected were nature-based mindfulness techniques including grounding (59.2%), gratitude practices of appreciation of self, other people, and nature (51%) and understanding how the five pathways to nature connection help wellbeing (51%).

In the one month ‘follow up’ survey, participants were similarly asked to say which activities they had found helpful since completing the course. The activities most selected were nature-based mindfulness techniques (53.1%), gratitude practices of appreciation of self, other people, and nature (51%) and changing breath and other physical relaxation techniques (46.9%).

In general, however, as can be seen in Figures 4.5 and 4.6 below, all of the activities listed were reported to have been helpful by a substantial number of participants.
Participants in the ‘after’ survey were asked what they had got out of the sessions, selecting all that applied from a list of anticipated benefits.
Most participants selected ‘Greater appreciation and enjoyment of nature’ (61.2%); ‘Skills for practicing mindfulness in nature’ (59.2%); ‘Greater knowledge of evidence for benefits of nature connectedness’ (59.2%); ‘Ideas for how to use nature to contribute to my overall wellbeing’ (59.2%); and ‘Time away from work to reflect’ (57.1%).

Participants were also asked an open question about any key benefits they had experienced from taking part in the course. Several noted that it had given them time to reflect, for example: “reflection time allowed me to recognise/ deepen nature dimension to my spirituality”. Some of these comments suggest that the course empowered participants to look after their own wellbeing. For example: “feel calmer, and feel that I have permission to take time for myself. To reflect on my work life balance. To take a break and take a breath so that I can be more productive after a break.”

Other benefits noted related to lower stress and being better able to cope with stress. For example: “It made me realise just how stressed I was (I had been ignoring it) and gave me time to reflect and use nature connectivity in a more positive way to enable me to relax and meditate”.

In addition, participants highlighted a stronger connection to and awareness of nature. For example: “I feel more confident that connecting with nature is the best thing for my wellbeing - using nature as a resource will reduce my reliance on other people to support my wellbeing”.

Figure 4.7: What participants got out of the sessions (after survey).
**Drawbacks experienced from taking part in the sessions**

Participants in the ‘after’ survey were also asked about any drawbacks they had experienced from taking part in the course. Several of the comments made by participants only emphasised their positive feelings about the sessions. For example: “I can’t think of any drawbacks other than I wish more staff could experience what we experienced”; and “could not fault the course in any way”. Other comments pointed to difficulties in finding the time to attend the sessions: “It’s a big time commitment so my diary was pretty full on other days to compensate. But I felt it was worth the commitment.”

A couple of comments indicated that participants had wanted more from the sessions: “Touched on the basics but would be nice to delve deeper into mindfulness techniques”, and “felt like I could have learned a lot more with more sessions”.

Other comments related to drawbacks in outdoor conditions: “Being outside when very wet was not such a comfortable experience - especially when I then had half a day of work to do.”; and “The location was noisy with traffic which made it difficult to concentrate sometimes during the session.”

**Length of the sessions**

The high time commitment required of participants was an issue we had been concerned about ourselves when commissioning the course, and we included questions in the ‘after’ survey to explore this further. Despite the comment above, many participants (74.2%) said the length of the course was about right, and none stated that it was too long. A large majority (83.9%) also said the length of each session was about right, and again, none stated that the sessions were too long.

**Changes that would make the course better**

Asked if there was anything that would make the course better several participants noted that they would like more practical exercises and more clear illustrations of how the techniques they had learnt could be used in the workplace. A couple of these suggestions included opportunities to share experience. For example, one participant suggested that they would like an exercise to use in the workplace with an opportunity to feedback on the experience to the group; while another suggested that it would be valuable for the group to meet up after the session. Some participants simply wanted more sessions or longer sessions, and several commented positively. For example: “I have no negatives about the course as it was all fantastic”.

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A few comments related to issues with timing and location. For example, one participant said it would have been better if the course had been closer to their place of work; one would have preferred mornings, while another would have preferred afternoons.

**Participant satisfaction and experience of the sessions**

When asked whether the course had met their expectations, 100% of respondents said that it had, and 67.7% said the course had exceeded their expectations – showing their very high levels of satisfaction.

Participants were also invited to give three words that described the course, and this resulted in the word cloud shown in Figure 4.8.

![Word Cloud](image)

**Figure 4.8: Words used by outdoor wellbeing course participants to describe the sessions (‘after’ survey).**

Note: Words which are larger were stated more.

Finally, participants were asked if there was anything else they would like to tell us about the wellbeing sessions. The comments received were very appreciative, and several participants emphasised the value of the sessions in opening them to new ideas:
“It opened me up to other ways of seeing, feeling, thinking, acting, choices we can make. It’s work in progress but I really hope to be able to channel more of how I felt during the sessions into my everyday life. Thank you for the opportunity and experience.”

“It has opened my mind to different techniques and grounding exercises, including an app on my phone called meditation which I find really helpful.”

“I joined the sessions with a certain amount of cynicism thinking that this was just another wellbeing course jumping on the bandwagon. I’m delighted to say this was completely unfounded - the course was well researched and has had a positive impact on those that attended.”

“I found the final session very inspiring and the images from both exercises made a big impact and have stayed with me”

“I have some knowledge in working therapeutically with patients and outside space and never quite understood how they got better from using this therapy. By experiencing the ‘being in nature’ and being mindful to the pathways, I have experienced the wellbeing benefit for myself. Thank you for this opportunity.”

**Conclusion**

In conclusion, our evaluative surveys show that the outdoor wellbeing sessions were very warmly received by staff, met, or exceeded their expectations, and were valued for providing time to reflect, empowering staff to look after their own wellbeing, and enabling them to connect with nature. After completing the course, the majority of participants said they had gained greater appreciation and enjoyment of nature, together with a greater knowledge about the benefits of nature connectedness and skills and ideas that would help them to use nature to contribute to wellbeing. The majority also reported putting skills they had learnt on the course into practice.

Our surveys show that after completing the course, participants reported significantly higher levels of wellbeing, life satisfaction and happiness, as compared to before the course, and that these higher levels were also apparent a month later. Positive feelings about nature were also strengthened following participation in the course, and both noticing nature and feeling part of nature remained strengthened a month later. A month after the course ended, participants reported making more visits to nature than they had before the course, again suggesting that they had strengthened their connection to nature and that this change was sustained over time. Although participants also reported lower anxiety following the course, and a month later, the change was not marked enough to be significant. However, a large majority of participants agreed or strongly agreed that learning wellbeing in nature skills had helped them to cope with stress at work.
Survey to evaluate legacy training

A separate survey was used to evaluate the Level 2 Nature and Health Facilitator training given to 10 staff to enable them to deliver NatureWell courses to others – an intended legacy of the programme. Six of our trainees completed these questionnaires. These respondents included staff from each of the five trusts participating in the programme.

Motivations for signing up to the training and how far expectations were met

Participant motivations for signing up to the training focused on learning new therapeutic skills and better supporting both patients and staff: e.g. “To improve patient discharge outcomes by using nature with mental health”; “Improving staff wellbeing”. A third of participants said the course had met their expectations, while two thirds said it had exceeded them. The role of these staff at their trusts covered staff wellbeing (2), patient mental health (4) and patient physical health (2), with some participants selecting more than one of these.

Aspects of the course that were valued or would have made the course more valuable

When participants were asked to say which aspect of the course was most valuable to them, they pointed to the practical and experiential nature of the course and the opportunity to spend time with like-minded people, as well as its focus on grounding and mindfulness in nature.

Asked what would have made the course more valuable, half the participants said they would have preferred a larger amount of the course to be face-to-face rather than online. In answer to a subsequent question that specifically addressed this issue, five out of the six participants said there was too much online teaching while only one said the balance was about right. A participant expanding on this preference explained: “Being able to be part of a group and exchange ideas and support one another gave a whole different energy and element to the sessions.” It is important to add that the training was held during the pandemic and would not otherwise have included so much online training.

A further open question asked how the course could be improved. One participant commented that the IT could have been a little better as they had experienced difficulties in accessing Google classroom and submitting coursework. Another suggested giving paperwork in advance with clear expectations.

Impact of the course on participants’ working practice – now and in future

When asked how much impact the course had had on their working practice (from ‘none at all’ to ‘a great deal’) half the participants selected ‘a lot’, one said ‘a moderate amount’
while one said ‘a little’. The anticipated future impact of the course appeared higher still: when asked how much they thought the training would impact their practice in the next 6-12 months, half the participants said, ‘A great deal’, two said, ‘A lot’ while one said, ‘A moderate amount’, with no one selecting ‘A little’ or ‘None at all’. Perhaps most strikingly, all six participants said they were intending to deliver NatureWell as a structured programme – with five planning to offer this to clinical staff, and one to patients. When asked how confident they felt about delivering the NatureWell training to others, all of the participants said they were ‘very confident’.

**Techniques that participants are using or intending to use**

To assess, in relative terms, the practical value of different techniques taught on the course, we included a question that asked which techniques participants intended to use ‘outside of the context of a complete NatureWell programme’. The techniques most frequently selected from the list presented were ‘Grounding’ and ‘Mindful walk in nature’ (both chosen by six), followed by ‘Relaxation’ and ‘Sense connection’ (both chosen by five), followed by ‘Five pathways to nature connection’ and ‘Gratitude’ (both chosen by four), followed by ‘Restoration’ and ‘Relaxation’, both chosen by three. Other techniques not on our list, but mentioned by respondents were ‘Beauty activities’ and ‘Breathing’ techniques.

When asked whether they would be using NatureWell techniques with staff or patients, five participants said they would be using these with clinical staff, five with patients, and three with non-clinical staff. Asked to summarise what health issues the techniques would be used to address, respondents focused on the management of stress, anxiety, burn out, mental health issues and improving wellbeing.

**Further comments from participants**

Finally, participants were asked if there was anything else they would like to tell us about the training. Responses to this question were highly appreciative and commented on the excellence of the course teachers, who were described as ‘experienced’, ‘instructive’, ‘supportive’, ‘patient’ and ‘understanding’.

**Conclusion**

Though limited to small numbers, our evaluation survey of the training shows that it was well received and can be expected to positively impact on the therapeutic practice of the trainees, and lead to the provision of future wellbeing in nature sessions at the five trusts. All the respondents said they felt ‘very confident’ about delivering the training to others and intended to run structured programmes for staff or patients. Participants especially valued the experiential nature of the course and the quality of the teaching, and favoured face-to-face sessions over online delivery.
5. Conclusions and project legacy

The grant from the Green Recovery Challenge Fund (GRCF) has enabled us to revitalise the NHS Forest network, expanding our tree planting initiative, and taking our green space work in new and innovative directions.

At the end of this year of funding we have re-launched the NHS Forest website, run a well-attended and warmly received national conference and helped 48 NHS sites in England to plant 13,762 GRCF sponsored trees across two tree planting seasons. We have strengthened our communications and outreach infrastructure, for example, building an extensive photograph library and refreshing the design of the NHS Forest brand. All of this has greatly increased our capacity to support NHS sites in realising the potential of their green space for health, wellbeing, and biodiversity.

Alongside the core activities of the NHS Forest, we launched a new and innovative project to embed Nature Recovery Rangers at NHS sites, with a remit to run nature engagement activities and to act as advocates for nature and biodiversity. Our evaluation surveys show that the resulting activities successfully met the outcomes we had anticipated in our original proposal – that they would be beneficial for the wellbeing of those taking part; inspire people to take further action to protect the environment; increase understanding of the natural environment; and make the area where they took place a better place to live, work or visit.

One shortcoming of our evaluation is the lack of survey feedback from non-staff participants, such as members of local community groups. This is probably because the wider participation from community groups only expanded later in the life of the project, once volunteers were again welcomed on to healthcare sites after the worst period of the pandemic. This is something that should be addressed in any future evaluation of the ranger scheme.

The feedback received from our NHS partners – the green space leads at the hospitals where the Nature Recovery Rangers work – shows the transformative effect of employing rangers at these sites. These managers’ comments point to their impact in enabling sites to put in place green space initiatives they had not previously had the capacity to pursue; to reach out to new audiences and engage new stakeholders; and to enhance the sites’ green spaces in ways that were noticeable to staff and positive for biodiversity. The green space leads also emphasise the popularity of the initiative with NHS staff and its success in moving biodiversity higher up the agenda. All the sites were able to report a series of ecological improvements. Internships and placements generated through the ranger scheme provided skills and training that were valued by those taking part and contributed to the success of the programme.
In addition, we worked with the social enterprise Natural Academy to pilot outdoor wellbeing sessions for 51 NHS staff at five sites. Our evaluative surveys, conducted at three points in time, show that, staff taking part in these ‘NatureWell’ sessions reported significantly higher levels of wellbeing, life satisfaction and happiness, as compared to before the course, and that higher levels were also apparent a month later. Positive feelings about nature were also strengthened following participation in the course, and in part remained strengthened a month later. A month after the course was completed, participants reported visiting nature more than they had before the course, again suggesting that they had strengthened their connection to nature and that this change was sustained over time. The course was very positively received, with most participants reporting that it had exceeded their expectations. Words such as calming, refreshing, supportive and enlightening were used to describe the sessions and several participants said that the sessions had opened them to new ideas.

To ensure the long-term impact of the sessions, Natural Academy provided ‘legacy training’, in the form of a Level 2 Nature and Health Facilitator course, to enable staff at each of the participating sites to offer further NatureWell sessions to other staff and patients. These were also very positively received by trainees, who said they felt ‘very confident’ about delivering the training to others and intended to run structured programmes for staff or patients.

**Synergies between the projects**

While our Green Recovery project comprised three distinct workstreams, there have been a great many synergies between them. For example, both the ranger project and the outdoor wellbeing work provided engaging content which we publicised through our communications programme: these initiatives were showcased at the NHS Forest Conference and reported in our newsletters and on our website. Recruiting staff to the wellbeing sessions and the training was noticeably more straightforward at those sites where we had a ranger in place who could assist in promoting the scheme. The NHS Forest offer of free trees was enthusiastically taken up at each of our ranger sites and work at individual ranger sites has been documented in case studies on our website to provide inspiration for others. More broadly, employing rangers on the ground at NHS sites has given the NHS Forest much closer insight into the conditions affecting green space initiatives on NHS land, and is likely to offer new opportunities for piloting activities in future.

**Future plans**

In the light of the success of the ranger scheme we are planning to sustain and build the programme. With permission from the Heritage Fund we were very pleased to extend the
contracts of our rangers by two months, and this has helped to allow time to identify further funding. At the time of writing, two of our partner NHS trusts, have been successful in raising funding at local level to continue employing their rangers – in Bristol for another year, and in London for 18 months. This funding includes oversight by the CSH Ranger Manager. The third trust continues to pursue funding for our Liverpool ranger. In addition, thanks in part to our ranger video, we have had interest in the scheme from other trusts and will be employing new rangers in East London and Newcastle. The funding has come from hospital charities, the Greater London Authority and from the NHS itself. To support this expanding scheme we are extending the post of our Ranger Manager to a fulltime role. We also intend to conduct a further economic evaluation of the ranger scheme, in collaboration with corporate supporters at RSK, which has offered us 10 days a year of pro bono consultancy.

In reporting the positive results of our evaluation of the NatureWell sessions, we hope to encourage other NHS organisations to consider running similar courses for staff.

Finally, we have secured funding for a three-year programme for the NHS Forest, from the Trees Call to Action Fund¹. This will allow us to secure the core posts of our Communications and Engagement Officer, our Outreach Officer, and the Green Space for Health Programme Director, and to build energetically on the success of the last year. An important element of the proposed programme – following suggestions from our NHS partners – is a site-specific advice scheme, to support NHS sites with specialist advice that will help them in improving both the ecological and social value of their green spaces. In addition, we are planning to expand our Green Space for Health training days providing support and encouragement for NHS staff engaging in these initiatives – whether they are enhancing green spaces at their sites or introducing the use of green space in their therapeutic practice.

Throughout this new phase of our work, we aim to further expand the NHS Forest, growing more trees on or near NHS land, and supporting many more NHS sites in unlocking the potential of nature, for their patients, staff, and communities.

¹ The fund was developed by Defra in partnership with the Forestry Commission and is being delivered by The National Lottery Heritage Fund.