The Children and Nature Programme 2019-2022

Learning Report

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Report details

Author(s)

Dr Rowena Passy – Visiting Research Fellow. Plymouth Institute of Education. University of Plymouth, UK.

Dr Roger Cutting – Visiting Research Fellow. Plymouth Institute of Education. University of Plymouth, UK.

Natural England Project Manager

Catherine Whitehead

Martin Gilchrist

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The authors of the insight and evaluation reports:

- Wavehill Social and Economic Research
- Outrageous Impact Ltd
- Dr Carly Wood, Dr Jo Barton and Claire Wicks. Green Exercise Research Team. School of Sport, Rehabilitation and Exercise Sciences. University of Essex.
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Foreword

The purpose of this report is to share learning and highlights from the Children and Nature programme. It can be used to inform work that aims to benefit children through engaging them with nature, and is intended for those working in the environment, education and health sectors. It draws on 11 documents (see Appendix 1) that reported on the processes, outcomes and learning from the three different Children and Nature programme areas. Each report has been given an identifier according to its type (e.g., D1, IR1, IE) so the reader can recognise the source of statements and quotations. Please see the Appendix for full details.

- Seven of these documents were written by and submitted by the project delivery teams (delivery reports, e.g., D1). We call these teams 'providers' throughout the report.
- Three insight reports (e.g., IR1) were commissioned by providers or Natural England to provide more in-depth understanding into the three different programme areas.
- The one independent evaluation (IE) was commissioned by DEFRA to report on the largest programme area, the Nature Friendly Schools project.

Different approaches were taken in each of the individual project reports. There was no standardised monitoring across the projects, and each provider designed their own data generation, analysis and reporting processes. This overarching programme report seeks to bring them together in one synthesis, identifying the emergent themes.

The methodology for this report was a documentary analysis of the eleven reports arising from the programme. The first stage was a content analysis that had the objective of establishing the aims, activities, participant numbers, outcomes and learning from each project. The second stage was a thematic analysis, which identified patterns across the reports and recorded them, with relevant report page numbers, in a synthesis matrix table. This process allowed detailed interrogation of the reports and enabled a thematic summary that brought together the project outcomes, findings and learning.

Natural England commission a range of reports from external contractors to provide evidence and advice to assist us in delivering our duties. The views in this report are those of the authors and do not necessarily represent those of Natural England.

Executive summary

The Children and Nature Programme (2019-2022) successfully achieved the aims of first, supporting schools in disadvantaged areas to bring children closer to nature and secondly, supporting an expansion of care farming, but at a significantly reduced scale due to the decreased levels of funding and delivery challenges arising from the Covid-19 pandemic.

Working in disadvantaged areas and with disadvantaged groups, the school-based projects Nature Friendly Schools (NFS) and Community Forest and Woodland Outreach (CFWO) engaged approximately 53,000 children and young people with outdoor learning (OL) in 270 schools. The Growing Care Farming (GCF) project raised the profile of care farming, increased levels of knowledge and understanding of the sector and supported the increase of available annual care farming places in England from approximately 438,600 to approximately 675,000. These programme outcomes are significant in demonstrating the demand for nature-based and outdoor learning in schools and other settings.

Programme projects were awarded via competitive tender. The total value of the programme was initially £10m, a sum that included an allocation for evaluation. Funding was reduced and timescales shortened in response to the challenges presented by the Covid-19 pandemic.

School-based projects

Providers and teachers cited a range of positive outcomes for pupils from the school-based projects. These included improved student engagement and attendance, increased self-esteem and confidence, improved health and wellbeing and an improved relationship with nature. Across the projects, staff reported greater confidence in and enthusiasm for delivering OL.

Challenges

- Recruitment: all providers underestimated the length of time, the amount of effort and the cost of this phase of the project.
- Project set up in schools depended on the priorities, OL experience and location of each individual school.
- Engaging secondary and special schools: special schools needed more time and support to plan for OL for children with different types of condition.
- General challenges included schools' lack of funding, difficulties accessing training, unsuitable pupil clothing, lack of access to green space, lack of time for teachers to engage with and plan for OL, and low levels of parental support.

Motivation and models

- Schools had a range of motivations for joining the project that programme reports linked to school priorities. These included supporting outcomes for children; learning how to use OL across the curriculum; creating new teaching spaces within school grounds; and developing teachers' confidence in using OL.
- Delivery models generally followed the format of provider delivery, followed by teacher-provider co-delivery, followed by teacher-only delivery.

Enablers

Providers found a flexible approach that was tailored to school priorities and linked schools to appropriate local expertise was the most successful when setting up the project. Project reports observed that local delivery partners, who were knowledgeable about OL practice and understood the local environment, were important project enablers. Providers also reported that:

- Developing a whole school approach was the most effective way of embedding sustainable OL into everyday school life.
- Enabling access to green spaces, either on or off the school site helped staff to take learning outside easily and safely
- Training for teachers and support staff, built confidence and expertise in OL.
- Investing in teaching resources helped schools to deliver their priorities, which included curricular learning, holistic child development and a focus on children's health and wellbeing.
- The school-based projects were delivered in disadvantaged areas where children often lacked appropriate wet weather clothes. Investing in these ensured all pupils could access the outdoors once teachers were ready to take their lessons outside

The projects demonstrated the desire from schools, teachers and pupils to engage more regularly and consistently with the natural world through OL activities. They showed that there is not one approach to delivering OL activities but a host of different ways to engage young people with the natural environment and support their wellbeing and development.

Growing Care Farming

Growing Care Farming was a successful project that brought momentum to the care farming sector by raising awareness of care farming among national and regional organisations and supporting farmers at all stages of the process of engaging with care farming. The project feedback data, analysed by the Green Exercise Research Team at the University of Essex, found high levels of satisfaction with the project.

- A major challenge for this project was enabling care farmers to engage with commissioners. Networks were set up to develop effective routes for this, but the project had insufficient time to resolve this issue.

- Training and qualifications were regarded as an essential part of giving referrers confidence in the sector. Survey feedback reported high levels of satisfaction with the training. Online delivery helped to increase its accessibility.
- Care farmers reported that they had developed new ways of working and communicating with service users during the pandemic.

The project legacies of a bank of digital information and training resources and a strengthened Code of Practice, now known as the Green Care Quality Mark, provide a foundation for future development of the sector.

Contents

1. Introduction

1.1 The programme

Children and Nature (C&N) was a programme funded by the Department for Education (DfE) and the Department for the Environment, Food and Rural Affairs (DEFRA), and administered by Natural England. It was underpinned by HM Government's (2018) 25 Year Environment Plan, which pledged to improve children's physical and mental health by bringing them 'close to nature, in and out of school [1]'. The key commitments within the Children and Nature programme specification [2] were stated as:

- '*Providing support for schools in our most disadvantaged areas that wish to create nature friendly grounds and to design and run activities that support pupil's health and wellbeing through contact with nature.*
- *Making it easier for schools and Pupil Referral Units* [now Alternative Provision Institutions] *to take pupils on trips to natural spaces on a regular basis where they can combine learning with feeling healthier and happier.*
- *Supporting the expansion of school outreach activities delivered by community forests.*
- *Supporting a national expansion of care farming by 2023, trebling the number of places to 1.3m per year for children and adults in England'* (italics in original).

The programme ran from September 2019 to March 2022 and consisted of three projects.

- **Nature Friendly Schools** (NFS) was a school-based project run by Resilience Through Nature, a consortium led by The Royal Society of Wildlife Trusts. The project offered resources and support for schools to create and embed outdoor experiences for pupils in everyday school practice. It provided these experiences to approximately 48,000 children in 179 schools.
- Five separate **Community Forest and Woodland Outreach** (CWFO) projects were delivered by five different provider groups who engaged a total of 91 schools. These projects implemented a variety of approaches that aimed to increase and sustain community forest and woodland outreach activities in schools. They provided woodland experiences to approximately 5,000 pupils.
- **Growing Care Farming** (GCF) was run by the partnership of Social Farms & Gardens and Thrive, worked with care farmers, potential care farmers and commissioners from education, health and social care to:
    - raise the profile of care farming
    - build capacity in the care farming sector
    - provide training for care farmers and potential care farmers
    - maintain a consistent standard of service delivery from care farms.

The GCF project lead partner Social Farms & Gardens run a separate annual care farming survey. This suggests that during the project lifetime there was a 54 per cent increase in care farming places per year in England from 438,656 to 675,296 (D7, p.24).

Natural England and Defra have worked with the Department for Education to build on the learning from the Children and Nature Programme and support the ambition in the Environmental Improvement Plan [3] to increase the number of children connecting with nature through school.

In this report, we **define outdoor learning (OL)** as practical learning activities taken outside in school grounds and other locations such as parks, forests, residential camps and centres, or on expeditions; activities can be curricular or non-curricular, focus on different areas of cognitive, social, emotional and moral development, and be related to indoor learning. These activities may take place during curricular time or outside school hours [4]. Outdoor learning is therefore an approach to learning rather than a subject and can be incorporated into all aspects of school life.

Care farming is the 'therapeutic use of farming practices' [5]. Although all care farms are different in their service provision, they offer children, young people and adults with individual needs a range of opportunities for therapeutic and work-based experiences that can include animal care, horticulture, nature conservation, farming and Forest School activities [6]. They provide an environment that gives participants the chance to develop their self-confidence by taking on responsibilities and working as part of a team, and care farms frequently act as a 'bridge' for those who are transitioning out of medical care and who still need support to reconnect with mainstream society [7].

The impact of Covid-19

Projects were established in September 2019 and the Covid-19 pandemic had a substantial effect on their implementation. The Covid-19 lockdowns in March 2020 resulted in all providers temporarily ceasing face-to-face delivery; in the school-based projects, the time taken to recruit schools (see Section 4.1) meant in some cases that providers had not started delivery before these restrictions began (IR1, p.22; D6, p.33). Concerns about transmission continued to change on-site delivery schedules once lockdowns were lifted and caused some attrition among recruited schools. In addition, the disruption caused the planned randomised controlled trial for the NFS evaluation to be re-designed as an implementation, process and outcome evaluation (IE). This was regarded as a substantial loss to the project, as the opportunity to generate validated, longitudinal quantitative data was foregone (D6, p.50). The GCF project experienced similar challenges to project activities, as providers had just launched their suite of face-to-face training and had started to roll out their promotional and engagement work as the first lockdown was announced.

The second major impact of the covid pandemic was a reduction in funding for the programme. This affected the different projects' ability to deliver as originally planned.

School-based project providers responded to lockdowns by expanding or developing their online training offer, thereby enabling training and networking activities to continue. All projects re-shaped their delivery plans further in response to reduced funding and the uncertainties relating to the continuing pandemic (e.g., D6, p.34). The GCF project shifted to a more centralised delivery model, with training and communication remaining online for the duration of the project (D7, p.6). Project reports comment highly positively on providers' adaptability during this period (D6, p.34; IR1, p.8; IE).

The pandemic also brought positive effects. The GCF insight report commented on the increased awareness of the connection between spending time in natural environments and mental health, and how this could provide an opportunity for care farm work in the future (IR3, pp.11-12). School-based project reports argued that the pandemic highlighted the value of natural spaces for children and adults' physical and mental health (e.g., D5, p.18; D6, p.50; IE), and the following quotation from the CWFO insight report exemplifies the point:

> "All the schools were so needing the outdoor learning after [Covid-19]. They were really keen. The children who stayed in schools [children of key workers] actually were outside more to make sure it was as safe as possible. The uptake afterwards was so good. They were so excited. Schools really valued it and saw the significance of it; the need to get out into nature" (provider, IR1, p.23).

This review

In what follows, we provide a one-page summary of the key learning points from the programme and a more detailed report on the findings and knowledge gained. Quotations are selected as an illustration of points made. Those from project participants in reports *'are in italics'* and those from project report text 'are not'.

2. Key learning points from the Children and Nature programme

There was agreement across the school-based projects Nature Friendly Schools (NFS) and Community Forest and Woodland Outreach (CWFO) on five key points that help schools to embed sustainable outdoor learning (OL) into their practice. These are:

1. **Encouraging a whole school approach**. This requires institution-wide commitment. It involves providers, school senior leaders and teachers contributing to the design and implementation of OL and ensuring that it is tailored to the school's priorities and needs. Involving pupils in decisions related to their learning was found to increase their engagement. Informing parents and local communities about activities could result in contributions of time, resources or both, which helped to embed OL into everyday practices and support its continuation.
2. **Enabling access to green spaces**, either on or off the school site, so that staff can take learning outside easily and safely. Where possible, schools preferred to deliver OL on site, so NFS made funding for 'greening school grounds' a priority in the second year of delivery. Off-site visits were generally within walking distance from the school, with teachers supported by providers' knowledge of accessing local green spaces and managing risk.
3. **Training for teachers and support staff** to build confidence and expertise in OL through the school. Face-to-face and virtual, accredited and non-accredited staff training sessions were key components of all school-based projects. Support from senior leaders in terms of enabling attendance was important, and learning could then be shared across the school. NFS and CFWO projects generally used a model of provider activity delivery, followed by teacher-provider co-delivery, followed by teacher-only delivery. This gave teachers practical on-site training that was complemented by more formal theoretical learning.
4. **Investing in teaching resources to deliver school priorities**. Project reports demonstrated a wide variety of school priorities that included curricular learning, holistic child development and a focus on children's health and wellbeing. An important source of support for busy teachers was access to lesson plans, risk assessment templates and other teaching ideas that provided a starting point for OL activities and reduced planning time.
5. **Investing in wet weather kit and storage facilities**. The school-based projects were delivered in disadvantaged areas where children often lacked appropriate wet weather clothes. Investing in these ensured all pupils could access the outdoors once teachers were ready to take their lessons outside.

The **Growing Care Farming** project successfully raised the profile of care farming in England and demonstrated the importance of developing a sector that provides for people with a defined health, educational or social need. The project legacies, including a digital resource bank and an improved quality assurance process, provide a strong foundation for future work that could be expanded to the wider green care sector. Project leads

recommended that further investment will be needed to build care farming capacity and embed referral pathways between care farmers and referral agencies and individuals. This will be an important part of ensuring that children who find the school environment challenging and vulnerable adults can also benefit from time spent in the natural environment.

3. The two school-based projects

C&N was funded by the DfE, supported by DEFRA, and administered by Natural England. It was underpinned by HM Government's (2018) 25 Year Environment Plan, which pledged to improve children's physical and mental health by being 'close to nature, in and out of school' [8]; programme priorities were to achieve positive benefits to pupils' health and wellbeing and engagement with school. This section describes the school-based NFS and CWFO projects (2019 – 2022) and discusses their impact.

3.1 Nature Friendly Schools

Delivered by the consortium Resilience Through Nature, NFS was the largest project within the C&N programme.

Resilience Through Nature was led by The Royal Society of Wildlife Trusts and included six regional Wildlife Trusts, Groundwork, The Sensory Trust, Field Studies Council and YoungMinds as delivery partners. The project worked in six DfE commissioning areas of England with 179 schools to support them in embedding OL activities across a typical school week. The project worked with all school types.

The project concept was to provide a blended programme of practical and theoretical training and support for teachers so that they could confidently deliver OL to their pupils, either via on-site activities or through visits to green spaces. The project's long-term aim was to support schools in developing a 'cultural shift … towards outdoor learning and embedding nature connection through curricular and enrichment activities across a typical school week' (D6, p.5).

The project worked with 142 primary, 14 secondary, five alternative provision institutions and 18 special schools in six areas of England: the South-West; West Midlands; East of England and North-East London; East Midlands and the Humber; Lancashire and West Yorkshire; and South-Central England and North-West London. Across the 179 schools, the project engaged with approximately 48,000 pupils and 1,870 teachers.

Community Forest and Woodland Outreach

This part of the programme was designed to increase and help sustain community forest and woodland outreach activities delivered in schools and local woodlands in disadvantaged areas, with the aim of improving pupils' health and wellbeing. It consisted of the following five projects that engaged with a total of 91 schools and provided woodland-based activities for approximately 5,000 pupils:

- **Outside is Fun** was led by The Conservation Volunteers, supported by the Land Trust, and worked with 12 schools. The aim was to establish a rolling programme

that engaged Year 5 and Year 6 pupils (aged 9-11) within walking distance of community woodland sites across Barnsley, Rotherham and Doncaster (D1, p.4).

- **Forest Foxes** was a collaborative project run by partners the National Forest Company, the Forest School Association and Leicester City in the Community. They worked with 30 schools in Leicestershire, Derbyshire and Staffordshire. This project aimed to deliver a range of OL activities for pupils that could be sustained over the long term through supporting and training teachers (D2, p.7).
- **Forest Pathways** was led by Get Out More CIC and worked with 16 schools in the Bradford area. The aim was to support schools in introducing and then sustaining Forest School and OL beyond the project timescale (D3, p.2).
- **Growing Among Trees** was led by Trees for Cities, The Sensory Trust, Nature Nurture Community Interest Group, the Garden Classroom, Green Schools project and Intelligent Health. This project worked with nine schools in London and Reading, aiming to embed low-cost, high impact OL into everyday teaching in urban schools (D4, p.3)
- **Thrive in the Forest** delivery partnership included the Merseyside Forest Partnership and Liverpool John Moores University. Activities were delivered by Grow Wellbeing, Community by Nature and Allium Green Space Community Interest Companies. The project worked with 24 schools in Merseyside and North Cheshire. It aimed to help schools to sustain the use of community forests and woodlands beyond the end of the project by meeting school need, building capacity within schools to continue delivery and promoting a whole school approach to OL (D5, p.3).

The impact of the school-based projects

While the C&N programme priorities were to achieve positive benefits to pupils' mental wellbeing and engagement with school, it had four further target outcomes of improving children and young people's school attendance, behaviour, physical health, and care and concern for the environment [9]. This sub-section outlines NFS and CWFO project impact on these and other areas.

Findings are drawn from all nine documents that reported on the NFS and CWFO projects. Data collection methods for these reports included project monitoring data; end-of-year reviews; observations, interviews, surveys, workshops and focus groups with pupils, teachers and providers; and case studies. The independent evaluation of NFS ran a pre-post pupil outcomes study, adapted from three standardised scales, that measured mental health and wellbeing, connection to school and connection to nature (IE). Further information on project reporting and evaluation methods can be seen in Appendix 1.

Impact on pupils

Reports were in agreement that the NFS and CWFO projects had **a highly positive impact** on pupils. NFS conducted end-of-year reviews with 87 schools in the second year

of delivery, in which the following proportion of schools agreed that the project had a positive effect on pupils':

- attendance (41 per cent)
- behaviour (92 per cent)
- interest in the natural world (97 per cent)
- care and concern for the environment (94 per cent)
- developing new skills (97 per cent)
- mixing with different peers (84 per cent)
- interest with learning (94 per cent)
- developing resilience and coping strategies (94 per cent)
- increasing physical activity and motor skills (98 per cent)' (D6, p.8).

The pupil outcomes study was carried out with an achieved sample of 211 primary school pupils. Data analysis showed no change in pupil mental health and wellbeing or connection to schools and a slight decrease in pupil connection to nature, albeit from a high baseline finding. Baseline scores showed that pupils had a strong sense of belonging with other pupils; 65 per cent said that they enjoyed going to school, 84 per cent said that being outdoors made them feel peaceful and 84 per cent agreed that people cannot live without plants and animals. Scores at the item level in the endline survey showed little change (IE), a positive finding at the end of a highly challenging time for providers, teachers and pupils.

The NFS delivery report also states:

> 'In case-study interviews, teachers attributed a positive impact on pupils' mental health and wellbeing to outdoor learning, reporting that children had become more resilient, academic performance had increased and lessons had become more creative. Interviewees from case study schools emphasised the value of outdoor learning for children's enjoyment, awe, and wonder; stating that children's eyes lit up and giggles of excitement filled the air as pupils watched nature in their own school grounds' (D6, p.8).

The theme of improved pupil wellbeing was consistently reported as a primary project outcome. Although this was a key project aim, it became particularly important in the context of the pandemic, in which 'for a significant amount of time, many children were not able to leave their immediate household vicinity … teachers reported that many of the children, particularly in the younger age ranges, lacked communication skills, confidence and demonstrated significant anxiety' (D5, pp.18-19). In what follows, we provide quotations from different reports to illustrate how OL supported different pupils in achieving a range of outcomes, many of which were linked with or contributed to their wellbeing. The quotation below provides an overview of the type of changes teachers observed in their pupils and the importance of OL in these processes:

> ‘Teachers attributed incremental improvements to pupils’ social interactions and behaviours to learning outdoors, citing emotional literacy, communication, and self-expression as key outcomes additional to the core project assumed outcomes. Teachers referenced nature as a tool for focusing pupils’ attention and restoring calm’ (D6, p.40).

It was noticeable that one particular aspect of OL cited by all reports was the extent to which children enjoyed OL sessions; the NFS delivery report stated that teachers ‘cited children as feeling “overjoyed” to spend time in nature, regardless of weather’ (D6, p.39). This provided the foundation for their **engagement with learning and behaviour change**:

> “Children who are not normally engaged in class became fully immersed in an outdoor art session. Often this child struggles to maintain focus and listen to instruction but in the outdoors he came alive. Saying it was the best day ever!” (teacher, IR2, p.18).

> “We saw another side to children who struggle in class. They engaged and took risks. They understood safety and were looking after each other. We saw no behaviour issues outside” (teacher, D3, p.8).

Enjoyment of OL also contributed to **improved attendance** for some pupils, particularly those who found the school environment challenging:

> “The teacher regularly has around 8 children absent in her class but noticed that attendance has improved since the Growing among Trees sessions started; for the past 2 weeks we have had 100% attendance for the sessions” (provider, D4, p.11).

Children in disadvantaged areas are ‘often not used to accessing the outdoors’ (D2, p.14), and it can take time to introduce them to outdoor play and learning. One of many case study examples below shows how a child’s **resilience grew** through Forest School sessions:

> “One … was identified as a pupil who would really benefit from Forest School. He cried at many things during the first session; ranging from walking on wet grass, to when there was a branch in front of him and when he could not climb over a log, these challenges were very emotionally challenging for him. Upon understanding that the school staff and [name] were there to support him, he began to take part in the session further, and even walked through puddles on his way back to class! At the second session, he arrived prepared for the weather (‘I am warm in my double zip coat’ he said) and walked confidently into the woods” (teacher, D2, p.44).

OL was widely reported as having a **positive impact on children’s social skills**, particularly as the effects of lockdown and social distancing were felt among younger pupils:

> ‘The Covid 19 pandemic had a devastating effect on our Year 1 and Year 2 classes who have a marked decrease in social skills as a result of the social isolation. The Forest School activities have been incredibly impactful in providing opportunities for the children to socialise in an enjoyable and adventurous way. I have really noticed this translating to friendship building’ (teacher, D5, p.17).

Teachers also commented on **improved communication skills**:

> “It has been particularly interesting to observe the effect the outdoor learning has had on the communication skills of the pupils. After the initial lockdown we noticed that a lot of our pupils had retreated very much into themselves. The structure of the outdoor learning sessions and the collaboration required, whilst also being in a non-classroom environment, has really broken down some of the barriers to getting the children to speak with each other and to the teachers again” (teacher, D5, p.17).

Sessions have also led to children gaining in **social and physical confidence**:

> “I have noticed that sitting in a circle, in the outdoor learning zone, is a great leveller. Pupils who would not normally answer questions in class, have felt more confident to speak up. The non-competitive nature of the sessions has meant that more children are joining in, for example, in activities that require physical activity (such as den building), these pupils would not normally be as enthusiastic in PE lessons” (teacher, D5, p.17)

And different OL activities can lead to a greater **interest in or connection with nature**:

> “There were innumerable experiences that illustrated the students’ deepening connection to nature. On one occasion, even the most boisterous students were silently transfixed as a passing walker demonstrated communicating with the woodpeckers by rapping his walking staff on the trees to imitate their hammering. Equally, I’ll never forget their awed, upturned expressions as a buzzard floated silently through our camp clearing, seemingly inches above our heads” (teacher, D5, p.29).

The final point relates to **improved academic attainment**:

> “We demonstrated, through the recording of their outdoor learning and tracking of their SEMH development, how vulnerable pupils have particularly benefitted from the small group work outside the classroom to help and support their learning in lessons through increased engagement and subsequent attainment” (teacher, D6, p.74).

Impact on teachers

NFS' end of year review with 87 schools in the second year of delivery also included questions about the impact of the project on teachers. The following proportions of schools agreed that NFS had a positive impact on teachers':

- 'confidence to lead lessons outdoors (89 per cent)
- ability to translate curriculum into outdoor spaces (83 per cent)
- confidence using natural materials as teaching aids (79 per cent)
- confidence to manage risk outdoors (82 per cent)
- confidence to increase the range of subjects taught outdoors (85 per cent)
- curiosity and willingness to try new things (87 per cent)
- confidence to share outdoor learning lesson with peers (72 per cent)' (D6, p.9).

These findings show a high proportion of schools had **increased confidence in their capacity to deliver** OL. The NFS insight report with 30 teachers had similar findings, with percentages ranging from 88 (confidence to increase the range of subjects they taught outside) to 100 (NFS increases curiosity and willingness to try new things). This was something replicated across all reports on the CWFO projects and is important in the context of providers finding a lack of teacher confidence a barrier to OL in schools (IR1, p.6; IE, Section 4, p.10). The following quotation illustrates how even reluctant school staff could discover the joy of teaching outside with project support:

> "I was never an outdoor type of person, but we had so much fun it didn't feel daunting, and I overcame my barriers. Initially we [staff] lacked confidence, but we found it was not as difficult as it sounds. It reflected on the kids as they saw us learning too. We enjoyed ourselves with our students" (teacher, D3, p.9).

The NFS independent evaluation reported that confidence in and enthusiasm for OL developed over time as teachers began to see the benefits of OL for their pupils and, as a result, drew **professional satisfaction** from the activities:

> "The whole school thinks that it's really beneficial. We've seen a huge change in staff confidence with pupil engagement" (teacher, IE).

Success with OL, in turn, **opened teachers' minds** to the ways in which OL could encourage their pupils learning:

> "I've noticed that different learning styles, are much better facilitated through outdoor learning than in a traditional classroom environment. It has been really useful for the children to learn experientially, and I have noticed attainment of children who had previously struggled with subjects such as maths, really improve" (teacher, D5, p.17).

And encouraged teachers to experiment with **different curricular areas** outside:

> "We are able to use the outdoor learning area for so many subjects, we really hadn't considered this possible before the project. Our previous assumptions were that Geography and Science were the two subjects which fit with the outdoor learning, but we now know all subjects; Maths, English, D & T, History, Art can be delivered very effectively in an outdoor setting. This means that the whole school can benefit" (teacher, D5, p.18).

These considerations could have the effect of 'reigniting' teachers' passion for their profession, seen in the CWFO insight report comment:

> 'Staff across multiple projects found that their passion for their profession was 'reignited' as a result of their engagement in the project. Stakeholders and project-level evaluations reported that staff felt more engaged, more excited to be teaching, and more inspired to try out and incorporate new teaching practice' (IR1, p.29).

Changes in teachers' attitudes towards OL, their enjoyment of OL activities, improved relationships with their pupils and spending more time outside were reported as contributing to their improved health and wellbeing as well as to their pupils' (D6, p.4; IR1, pp.30-1; IR2, p.14).

Impact on teaching practices

The Forest Pathways report summed up a finding from across the CWFO projects on how teaching practices could change as a result of participating in the project:

> 'For some, the Forest Pathways programme has been a revelation as they have begun to understand the wide range of opportunities for teaching and learning in the natural environment. Through participating in sessions, staff have come to understand it as an approach that can support many areas of the curriculum and pupils' holistic development and is not just a pleasant 'nice to have' side activity, nor limited to children at the younger end of schools' (D3, p.9).

While echoing the same sentiment, the NFS report provided examples of ways in which staff were using OL in practice. These included:

- 'subject lessons from across the curriculum delivered in the outdoor classroom including mathematics, English and science.
- pedagogy in outdoor spaces ranged from using traditional learning materials such as books and clipboards and an outdoor blackboard, to full nature immersion and the use of materials such as sticks, leaves, and stones as learning materials.
- outdoor learning encouraged creativity and imagination; the project recorded multiple examples of poetry, drawing, reflective practice, and mindfulness completed in the outdoor classroom.

- schools became agile when incorporating outdoor learning as part of a traditional lesson i.e., leading story time in school grounds after the main lesson took place indoors; this worked particularly well in special school settings.
- the use of the outdoor space depended on the individual needs of pupils; schools leaned into the flexibility of the outdoor classroom and led mindfulness, one to one coaching and self-regulation sessions alongside curriculum learning' (D6, pp.48-9).

The quotations and text extracts in these sub-sections illustrate how successful OL projects can benefit schools by enthusing pupils and teachers and contributing to both their learning and their wellbeing. It also appears to be beneficial to their personal and, in the case of teachers, professional development. The next section addresses project implementation, examining how these different projects encouraged and supported schools with outdoor learning.

4. School-based project delivery

This section draws out in more detail the learning points from the school-based NFS and CWFO projects' delivery.

4.1 Project recruitment

The projects recruited schools in a variety of ways that included hard-copy letters of introduction, email invitations, publicising the project through established networks or online, inviting schools to register online and setting up meetings with key personnel in the school. NFS used a distributed model of recruitment via local partners. The DfE gave providers a list of schools that were potential participants in disadvantaged areas, which offered an initial focus for recruitment and, through this process of official nomination, encouraged schools' participation (IR1, p.15). To be eligible, schools were required to have 30 per cent or more pupils receiving free school meals (IR1, p.15; D6, p.13).

Schools had a range of motivations for joining the project, which programme reports linked to each school's priorities. These included supporting children's wellbeing and development through engaging with nature and offering new experiences; learning how to use OL across the curriculum; creating new teaching spaces within school grounds; and developing teachers' confidence in delivering OL activities. Feedback from some NFS primary schools showed an increased awareness of nature-related benefits following the pandemic and, in the second year of project delivery (the academic year 2020-21), NFS moved towards a model of improving wellbeing, recovery and resilience through nature (D6, p.30).

Almost all providers commented on the time-consuming nature of school recruitment and project set-up, particularly with schools unknown to the providers and that were new to any type of outdoor learning. In one CWFO project, pre-existing relationships with schools were 'crucial to the project's success' (IR1, p.16). The CWFO insight report suggested that 'sustained determination' (IR1, p.16) was needed to engage schools unknown to the providers, and NFS providers argued that new relationships with schools 'required multiple contact points to establish the necessary buy-in to the project' (D6, p.14).

All providers found that making contact with and engaging school senior leaders was the most successful approach to recruitment and retention, as this helped to ensure that senior staff understood the potential benefits of OL as well as the degree of commitment required to deliver it effectively (IR1, p.37; D6, p.15).

Challenges to recruitment

The main challenge to recruiting schools was the time and effort needed to develop a relationship with staff, explain the anticipated project outcomes, clarify the degree of commitment required and outline the support offered to embed OL successfully into

everyday school practices. All providers underestimated the length of time, the amount of effort and the cost of this phase. Any future national project should take into account the time needed to undertake these tasks, recognising that setting up, coordinating and then running a large-scale project needs resourcing. Linking with local providers who knew the schools and local areas helped with this process (e.g., D1, p.5; D5, p.3; D6, p.5).

Recommendations for this project phase are:

- **Start early** when recruiting schools to a project. Allow plenty of time to prepare recruitment materials and to liaise with schools; drawing on established networks and contacts may be helpful in this process. Time is also needed to set up meetings with senior leaders, particularly when involving schools new to OL who may have limited understanding of the benefits that it can bring. An ideal time to start this process is in the Spring or Summer term, as schools plan their year's work in the Summer term, and fitting in new interventions and meetings can be difficult once the new academic year begins in September.
- Build a **positive relationship between providers, the headteacher and school senior leaders**. NFS attributed high levels of engagement and progression in schools to 'an established relationship' with school leaders, who can give the project status and provide momentum through the allocation of time and resources (D6, p.15).
- Ensure that **the aims, methods and commitments of the intervention are clear**, so that schools understand the offer and can make an informed decision about participation.
- Consider making **the recruitment and set-up phases separate** from the time allocated to project delivery. NFS providers reported that 'the input and staff time required to build the initial relationships with schools was vastly underestimated, leading to a condensed programme of intervention in many schools' (D6, p.11; see also IR1, p.15). Allowing plenty of time for school recruitment allows schools to receive the full project entitlement.

Setting up the project in schools

NFS providers reported that understanding the 'often-unpredictable nature of working with schools' (D6, p.11) was a key enabler when setting up the project in schools. Schools have differing priorities in response to educational requirements, local community needs and the facilities available on or near the school grounds, and they can be fast-moving environments when needs change or new initiatives are begun. In addition, as most reports commented, teachers have little spare time (e.g., D3, p.15; D6, p.29). In practice this meant that providers found a flexible approach, in which they aimed to offer each school a bespoke version of the intervention that was tailored to school needs (IR1, p.18; IR2, p.6) and that linked schools to appropriate local expertise and assets (IR1, p.38; D6, p.11), was the most successful. Both NFS and CWFO project reports observed that local delivery partners, who were knowledgeable about OL practice and able to respond to each

school's OL constraints and opportunities, were important project enablers (D6, p.11; IR1, p.38; IE).

Once again, reports showed that the process of setting up the project took time. For example, an NFS education officer spent three days on each school site conducting an audit that included access to and functionality of school grounds, teacher engagement with OL, a review of local green spaces, OL resources, and focus groups with pupils and teachers. This was reported as a 'critical element of the delivery model' (D6, p.29) as it enabled providers and school staff to establish a working relationship and provided the foundation for designing the school's intervention. CWFO project Thrive in the Forest encouraged schools interested in participating to fill out an online self-assessment form, and followed this up with a face-to-face meeting that involved a deeper analysis of the school's needs, an assessment of suitable woodlands either on or near the school premises, the school's approach to participation, and understanding specific barriers to OL that needed to be overcome (D5, p.7). Some projects introduced a Partnership Agreement or devised an Annual Plan at this point to ensure that both parties understood the project commitments and could monitor progress towards agreed aims (D1, p.4; D4, p.36; D5, p.7).

All providers agreed on the importance of involving senior leaders in these discussions. The aim was to set up OL activities that continued beyond project funding, and engaging senior leaders 'encourages wider culture change and buy-in within schools' (IR1, p.17). One report suggested that involving special educational needs coordinators or learning mentors in project design can help with understanding the diversity of students' needs across the school (IR1, p.17); reports emphasised the importance of establishing clear communication channels within and between schools and providers to maximise project efficacy and impact (D2, p.34; D4, p.22; D6, p.35; IE).

Designing the intervention involved providers and school staff working together to choose the type of intervention that aligned with appropriate school priorities. In the first year of delivery NFS schools selected from the options of improving school grounds for on-site activities, a series of off-site visits, or a combination of the two. In response to teacher feedback, NFS prioritised improving school grounds in year two (D6, p.7). The CFWO projects offered two models in which schools could choose one-off taster sessions for a larger group of students and staff, or a series of weekly sessions for a more in-depth experience with a smaller group selected by the school. It is worth noting that schools which opted for the latter model 'consistently noted that benefits for both young people and staff grew week on week', while the impact of the one-off sessions 'was typically limited' (IR1, p.19). Choices also needed to be made over the type of activities, and providers found the majority of schools that were new to OL appreciated guidance on selecting the ones that would be most beneficial to their pupils (D1, p.10).

Challenges to project set-up

The challenges to setting the project up in schools depended on the priorities, experience and location of each individual school. Some schools had extensive green grounds, for

instance, while others had only hard landscaping (D5, p.10). Most of the Forest Pathways schools were motivated to join the project by 'a desire to improve [children's] confidence and self-esteem' (D3, p.6), while NFS providers reported that teachers across all school settings recognised the value of taking children outside (D6, p.28), but lacked confidence in linking OL to the curriculum (D6, p.7). Generally speaking, providers reported that teachers did not always understand what OL involved (in terms of commitment) and could deliver (in terms of pupil outcomes), which meant that the set-up phase was critical in designing an intervention that school staff believed would overcome the barriers to OL in their particular school.

Other challenges raised across the programme related to lack of funding, difficulties with accessing training, unsuitable pupil clothing, lack of access to green space, lack of time to engage with and plan for OL, and low levels of parental support. During implementation, all providers worked together with schools to overcome their barriers and develop sustainable OL that would continue beyond the programme's timeframe.

Recommendations for this phase of an OL project are:

- Providers and schools **work together to recognise each school's priorities** and the challenges that they face in delivering OL activities. It is important for providers to 'meet schools where they are' (IR1, p.34) to provide the support they need to establish and build OL practices into everyday school life. Local providers, who understand local communities and are experienced in nature-based learning, are key project enablers.
- **Build the intervention around school priorities**. Schools need to fulfil their educational obligations, and each has its own community issues and needs; demonstrating how OL can support both is a centrally important aspect of project engagement and encourages long-term participation.
- **Involve school senior leaders**, so that they are aware of the benefits of the intervention and the required resource commitments and can promote implementation by allocating time and resources. Involving other members of staff, such as special educational needs coordinators or learning mentors, can help with understanding the diversity of student needs across the school and encourage an inclusive OL culture. One CWFO project reported that finance managers attended these early meetings as part of setting the budget for the next year (D5, p.11).
- Consider **including time for a 'snagging phase'** (D6, p.51) in which schools and providers review their plans and finalise dates for intervention activities.
- Establish **clear channels of communication** within and between schools and providers to maximise project efficacy.

Project delivery

This section examines the practical delivery of the different projects, reporting on ways in which providers supported schools with their different challenges as they attempted to embed a sustainable approach to OL.

Project models

This sub-section outlines project models in order to provide understanding of how the six school-based projects worked in practice. The following sub-sections then discuss the challenges to project delivery, explore different aspects of project implementation and provide recommendations for future practice.

Projects generally followed the model of provider delivery, teacher-provider co-delivery, and then teacher-only delivery. This gradually tapered, practical approach was aimed at building teacher confidence and expertise and was complemented by theoretical staff training. Levels of on-site practitioner support varied between projects; for instance, NFS schools received 17 days of bespoke support from their Education Officer, with special schools receiving an extra five days (IE), the Growing from Trees project report recommended a minimum of 18 days support (D4, p.4), while Outside is Fun developed individual timelines for each school in recognition of differing confidence and experience levels (D1, p.12). All projects invited schools to participate in their intervention for 12 months, although Covid restrictions and uncertainties meant that participation time for some was variable.

CWFO projects took place within school grounds and in local woodlands. One criterion for participating in Outside is Fun was that schools should be within a one-kilometre walking distance of a local community woodland, in which TCV delivered their outreach activities (D1, p.4); Forest Foxes combined on-site activities with visits to other schools and woodlands (D2, p.7); Forest Pathways delivered activities in school grounds and local woodlands (D3, p.4); Growing among Trees used school grounds and woodland settings within walking distance from the school (D4, p.3); and Thrive in the Forest offered schools the choice of on-site, off-site or a combination of both for their activities (D5, p.9). In the first year the NFS project took place on school grounds or off-site visits, according to school choice, but focused on on-site activities in the second project year in response to feedback from teachers and to Covid restrictions. Once again providers found flexibility was important; some schools needed more support with delivering OL activities, while others benefitted from extra days in greening their school grounds than anticipated in the original model (D6, p.43).

Theoretical staff development took place throughout the projects' lifetime, and providers' offer included accredited and non-accredited online and face-to-face webinars, modules and courses. Projects also provided schools with resources such as ideas for curriculum-linked activities, lesson plans and advice on improving wellbeing (IR1, pp.20, 32; D6, p.22).

Delivery challenges

Across the projects, providers found that primary and Alternative Provision schools were 'generally well-positioned to increase the amount of OL within the school day' (e.g. D6, p.49), but that engaging secondary and special schools was more challenging due to timetable constraints, the limited number of teaching resources and, in the case of secondary schools, the larger number of teachers (IR1, p.33; D6, p.31). Some secondary schools also reported the difficulty of balancing curriculum goals with OL (IR1, p.33). Special schools had a different set of constraints that precluded spontaneity are discussed in more detail later in this section. NFS providers suggested that these schools needed a delivery time of longer than 12 months to engage sufficient teachers and make the process sustainable (D6, p.30), and that an alternative could be a statutory requirement for OL (D6, p.31). It is worth noting that, across the programme, there were 25 schools with secondary-aged students and 27 special schools that participated in the school-based projects (from a total of 270), reflecting the ongoing challenge of engaging these schools with OL.

The other main challenges reflected teachers' concerns during recruitment, seen in Section 4.1; a lack of funding, difficulties with accessing training, unsuitable pupil clothing, lack of access to green space, lack of time to engage with and plan for OL, and low levels of parental support. Providers' recommendations for addressing these concerns can be seen in the following sub-sections that discuss a whole school approach to OL, accessing green spaces, training to build teacher confidence, resources for delivering school priorities and investing in OL. Where relevant, specific challenges are discussed in each sub-section.

Sustainable OL: encouraging a whole school approach

All school-based project reports state or suggest that providers aimed to encourage a whole school approach to OL. One provider made two key points about the rationale for this; first ensuring that OL is not contingent on one individual and secondly, ensuring that expertise is shared among different staff so that OL can become a regular part of the school experience:

> 'Our experiences have shown that often there is only one teacher or TA in the school who is responsible for or takes an interest in outdoor learning. If this teacher / TA leaves, the initiatives and opportunities for the pupils can instantly reduce. If senior leaders are engaged, and a number of teachers are trained, the approach is much more sustainable' (D5, p.23).

Providers found that developing a whole school approach slowly was important, and NFS providers commented that a timeframe of between 18 – 36 months (depending on schools' previous OL experience) would be more realistic than the 12 months allocated in this programme (D6, p.38). The key enabler for a whole school approach was for different members of the school community – from senior leaders, teachers, support staff to pupils, parents and local businesses or organisations – to become engaged in OL activities so

that they (gradually) became part of everyday school life. Children could then derive a more sustained benefit from regular OL activities; CWFO projects found that sustained engagement with OL consistently led to benefits for staff and pupils, whereas brief engagement tended to have a limited impact (IR1, p.19). As one CWFO provider commented:

> 'The level of buy in across the school was paramount to the success of the programme and increased the likelihood that outcomes would be sustained' (D4, p.16).

Recommendations for embedding a whole school approach include:

- **Making haste slowly**: NFS providers aimed for incremental change to teacher knowledge and confidence (D6, p.21). Shifting school culture towards embracing OL takes time as different members of the school community absorb the ideas and then learn to contribute to the practice of OL; secondary and special schools will need longer to engage with the process than primary or Alternative Provision institutions.
- Senior leaders providing **practical support for OL** by allocating time and resource to the project. This can include time to attend training, plan activities and schemes of work, network with local schools and maintain school grounds. The NFS report commented that this type of senior leader commitment meant 'a consistent pace of progression was usually maintained, decisions were taken quickly and staff attendance at training was usually high' (D6, p.7).
- Senior leaders **building OL into teacher objectives**, so that all staff are expected and supported to deliver OL sessions to enhance and enrich the curriculum. This formal requirement encouraged teachers to feel 'as though they had permission to deviate from traditional, classroom-based teaching and extend their practice through outdoor learning' (D6, p.44). OL may also be included in schools' annual improvement plans, thereby explicitly linking OL activities with school priorities.
- **Teachers attending training**. Teachers in NFS schools who participated in the 'Introduction to Outdoor Learning' training reported that the discussion around barriers and solutions to OL delivery was particularly beneficial: 'As a result of this, many schools naturally began discussing how they could embed outdoor learning across the whole school, and teachers felt like they had had a say in how their school could make changes to facilitate this' (D6, p.44).
- Teachers providing senior leaders with **regular reports on project progress and impact**. A baseline assessment of OL facilities and activities, carried out at the time of recruitment, can provide the foundation for future monitoring. One report recommended an emphasis on generating quantitative data in future projects, to ensure a robust evidence base and minimal burden on delivery organisations. Qualitative data can be generated at key points in the evaluation (IR1, p.39). These different data sources can offer strong evidence to help build support for OL.
- **Valuing and encouraging participation of all staff**. Including caretakers or grounds staff in plans for improving school grounds means they can play an active

role in developing and maintaining OL areas. Including support staff in training means that they can lead OL sessions, thereby reducing teacher planning demands. One CWFO report commented that 'although it is vital that there is commitment at a senior level to supporting outdoor learning, the passion and drive to train and deliver activities is vital' (D2, p.39).

- **Valuing and encouraging participation of all pupils**. Involving pupils in decisions about OL 'increased engagement' (D6, p.43); giving children the chance to share their OL skills with others enabled them to have confidence in their learning and 'feel pride about what they have learnt' (D2, p.21). Being aware of the needs of each group and the provision of extra material enabled 'students with extra needs to take part easily' in OL activities (D2, p.21). Reports also suggested that encouraging pupils to share their experiences via a school assembly could help to enthuse other pupils and promote an inclusive ethos (e.g., D1, p.12; D4, p.22). NFS end-of-project reviews with 87 schools found that 51 per cent had involved pupils with the design phase of the project (D6, p.30).
- **Communicating with and involving parents**. Those NFS schools that were proactive in informing parents about future activities said that 'parents were engaged and more prepared for outdoor learning' (IE); sharing evidence of children's progress with parents (D6, p.47) and involving parents in training (IR1, p.50) also contributed to an inclusive and supportive ethos. In some cases, parents and different members of the local community contributed time, resources or both (e.g., D6, p.27).

Accessing green spaces

Access to green spaces was a fundamental enabler for the projects. The barrier for schools could be that their grounds were unsuitable, or teachers were unaware of the potential of their schools grounds for outdoor learning; that teachers were unaware of local green spaces or how to access them; that schools lacked the expertise to utilise green spaces in or around their grounds; that local green spaces were unsuitable because of antisocial behaviour and safeguarding risks; that the logistics of organising a trip to green spaces, combined with the cost of transport and the demands on staff time, made trips too difficult to organise. In addition, one report commented that there was 'huge inequality' across the schools in terms of green space, ranging from playing fields with mature woodlands to small hard landscaping with no grass (D5, p.10).

These diverse challenges were met in similar ways by the projects. Some projects supported schools with a grounds audit to identify potential for OL activities (D4, p.19; D5, p.6), or advised schools on (D3, p.6) and (in some cases) provided resources for changes to the grounds (IE). Others found local spaces close to school grounds and then helped schools to negotiate access and ensure the off-site green spaces were safe (D5, pp.6-7). Others subsidised trips (D2, p.25) and residentials (D6, p.19) that required transport.

Schools selected on-site delivery or delivery close to school grounds because this minimised staff time and resources required for OL (D4, p.15), and support with improving

and utilising the grounds meant that schools 'could make the best use of the space they had' (D6, p.44). Some schools were reluctant to take their pupils off-site because of the perceived risk (D5, p.10; see also D6, p.12), although this reluctance may have been exacerbated by anxieties around Covid at the time of project delivery.

Off-site project delivery, such as during residentials, at other schools to learn about their practice, and in natural spaces for Forest School and other activities, were aimed at widening teachers' and young people's experiences of and learning in the natural world. While all OL has the potential to improve teacher-pupil and peer relationships by changing classroom routine and expectations, residentials offer longer opportunities to strengthen these relationships through a series of team-building and collaborative activities, seen in the following teacher feedback:

> 'The children all enjoyed the variety of team building activities on offer, but they particularly enjoyed the maze. It really challenged them to communicate with one another. It brought out the leader in one child who would normally be a little quieter. Other children appreciated the child's opinions and instructions and could see it working which brought about much excitement. Staff were surprised by some of the results. We could see children step up to the task who perhaps weren't as academic as others' (teacher, D6, p.41).

Off-site trips also offer a chance to explore new wildlife habitats and landscapes; teachers reported pupils' 'awe and wonder' as they discovered 'the variety of species that lived around the wildlife centre' during residential stays (D6, p.8).

Recommendations for supporting schools to access green spaces are to:

- **Undertake an audit of school grounds and local green spaces** to identify areas suitable for OL in or close to the school. This can be done with a provider who has local knowledge, and who can then provide expertise on how to develop and utilise these areas.
- If not provided by the project, support schools **with accessing funding** for developing their sites for OL. NFS teachers reported that improving their grounds was one of the project elements they most valued (IR2, p.6).
- Ensure **improvements to school grounds are** manageable and small in scale (D6, p.12), so that school staff develop confidence in utilising each change and are not overwhelmed by maintenance requirements. In the NFS project, building sheltered outside classrooms was the most popular development in primary schools; secondary schools and APs valued spaces designed for one-to-one work with pupils and practical learning opportunities such as vegetable growing; special schools were offered a sensory trail and willow dome, which were designed to develop emotional regulation and mindfulness through nature (D6, p.12).

- Where appropriate, support schools in **securing permission to access local woodlands** and other green spaces. Conducting risk assessments and ensuring spaces were safe helped to reduce teachers' preparation time (D2, p.25; D5, pp.6-7).
- **Offer funding for transport** to off-site activities. One provider commented that providing bursaries to support travel costs was a key enabler for schools to take part in those activities (D2, p.25).
- **Understand schools' time constraints** when planning off-site trips, as they need to be manageable within the school day (D3, p.4; D4, p.15).

Developing teacher confidence through training

All providers reported that teacher training was central to their model, and that the overarching aim was to give teachers the confidence and knowledge to take pupils' learning outside (e.g., D3, p.13; D6, p.52; IR1, p.21). Providers also anticipated that training would enable teachers to deliver high-quality OL activities that, in turn, were likely to bring benefits to pupils and thereby strengthen staff confidence in OL as an appropriate pedagogical approach (IR1, p.12). CWFO providers utilised either a curriculum-based or Forest School-based approach to OL (IR1, p.38), and NFS supported teachers with curriculum-linked learning in natural spaces (D6, p.5).

Providers found a wide variety of teacher OL experience in schools, and teachers in most projects reported that they understood the value of OL on pupil wellbeing. However, CWFO projects found teachers generally had low levels of confidence in delivering OL activities (IR1, p.6). NFS providers found that a significant proportion of teachers, especially in primary schools, had some previous experience but across the project had three main concerns: managing risk outdoors, managing behaviour and taking curricular learning outside (D6, p.48).

Training objectives across these projects were encapsulated in the NFS delivery report. They were to:

- Develop teachers' confidence, knowledge and practice in OL.
- Support staff in understanding the links between nature and wellbeing.
- Help staff address practical considerations such as maintaining school grounds, managing health and safety, and addressing risk (D6, p.9).

All projects started with a series of on-site visits that involved leading OL activities. For example, Outside is Fun provided opportunities for bushcraft, school green gyms, Forest School, citizen science, the John Muir Award, orienteering, curricular-based sessions and parent training (D1, p.5). Forest Pathways offered games, tool work, nature discovery, fire craft, natural art and time for reflection (D3, p.4). Education Officers in NFS gave one-to-one training on-site and modelled lessons in English, science, maths and history (IE). Training on risk assessment and adapting activities to wet weather were particularly welcomed (IR1, p.30; IR2, p.21).

Complementary theoretical training from NFS providers included one day of Academic Resilience Approach training and a package of four webinars that 'supported the direct delivery' (D6, p.21) in schools. NFS lead teachers were also offered the opportunity to attend a regional workshop. CWFO projects offered or facilitated Forest School qualification training at Levels 1 or 3 as well as modules on topics such as emotional resilience, challenging behaviour, Forest School maintenance, connecting with nature for wellbeing, taking different curricular subjects outside (e.g., art and design, religious education, science), wild teaching with pupils, tree identification and woodland culture. The work of the Mersey Forest Partnership, Liverpool John Moores University and local schools (Thrive in the Forest project) was of particular note in this respect. They jointly developed a suite of accredited OL modules, called the Natural Curriculum Practitioner programme, which provided curriculum-based training developed in response to project schools' needs at the time of their school grounds audit.

Challenges to developing teacher confidence

An important concern for teachers, cited by most reports, was the amount of time involved in engaging with, planning and delivering OL (e.g., D5, p.23; D6, p.7). Providers found that supporting teachers to adapt their teaching, rather than asking them to adopt a whole new approach to pedagogy, was key to the process of integrating OL into everyday school activities. Some teachers found difficulty in finding time to attend training, but this could be mitigated by senior leader support. NFS providers found that secondary school teachers had a number of different pressures that prevented them from participating in all parts of project training, despite their willingness to do so (D6, pp.30-1) and argued that this was an issue likely to need 'statutory adaptations to school governance to address in full' (D6, p.30). Almost all training was moved online during Covid lockdowns, which helped to reduce demands on teacher time and encouraged providers to continue with a blended approach once lockdowns were lifted.

NFS providers found that they needed to adapt their training model to meet the needs of the special schools involved with their project. Pupil and parental input were particularly important in the design phase to ensure that accessing natural spaces was done in a way that was appropriate for all pupils. Training for teachers was conducted in groups, partly so that teachers could discuss their challenges and approaches, and partly so that more in-depth training could be offered; these schools often teach children with complex medical conditions, who require specialist support and equipment (D6, p.43-4), and who need time and extra support to prepare for OL activities. Special schools cater for pupils with different disabilities and so have a wide range of priorities, which the NFS project addressed by including an extra five days of training.

Recommendations for staff training are to:

- **Train teachers on or close to school grounds** in the early stages of the project. Providers found that building teachers' confidence in familiar surroundings meant that they were subsequently more willing to explore off-site OL opportunities (D1,

p.12; D5, p.3; D6, p.32); teachers reported that observing experienced practitioners deliver OL was a key factor in increasing their confidence (IR1, p.7).

- Offer a **broad range of training**, including more specialist or bespoke modules as staff confidence and knowledge grow. 'Introduction to Outdoor Learning' sessions, aimed at all staff members, were well-received at the start of some projects (D1, p.11; D6, p.44).
- Support teachers to **adapt their teaching to the outdoors**. Providers in CWFO projects demonstrated ways in which OL could be used for curricular subjects, which showed teachers that OL 'did not have to be a dramatic change or diversion from what they were already doing' (IR1, p.20). One provider commented that 'It's not just about getting them [teachers] outside to deliver the class curriculum, it's using nature to deliver the curriculum' (IR1, p.20). This included enabling teachers to deal with wet weather: 'Adapting sessions to the needs of the weather has been a key lesson for all involved … Supporting teachers to understand and develop their own lesson plans that takes account for the weather and other changeable elements enables them to be better prepared and resilient' (D2, p.21).
- Ensure that the **aims of the training and the intended audience are clear** when promoting training sessions. It may help to demonstrate how any new training fits in with or complements previous sessions or areas of learning. Requesting details of potential attendees' experience will help to ensure that providers understand the knowledge levels of potential attendees and that staff attend training that is appropriate for their level of expertise and confidence.
- In keeping with a whole school approach, **involve all staff** in regular OL training, either through attendance or staff cascading their learning throughout the school. This helps to embed knowledge more widely across the school, which makes it more likely that OL activities will be sustained.
- **Engage school senior leaders**, so they understand the importance of training to develop teachers' knowledge and expertise and support teachers' attendance. NFS providers commented that staff attendance at training was 'consistently high' in schools with strongly engaged senior leaders (D6, p.16).
- Take time to **ensure that children with special needs** can access OL. One provider report commented that 'Ensuring that there are no barriers to outdoor learning for any pupil has been a challenge, but simple alterations often ensured that all students were able to participate fully in sessions. Awareness of the needs of each group and the provision of extra materials enabled students with extra needs to take part easily – preparedness in this way was a key lesson learnt throughout the sessions' (D2, p.21). Schools may have a local university that provides OL training similar to the Natural Curriculum Hub offered by Liverpool John Moores University.

Teaching resources

As identified earlier, schools had a range of motivations for joining the programme, and project reports linked these to school priorities of supporting children's wellbeing, development and learning through outdoor activities. In addition to the practical and

theoretical training, teachers were offered resources and opportunities to widen their knowledge and encourage expertise-sharing between teachers and schools.

An important resource for busy teachers was access to lesson plans, risk assessment templates and other teaching ideas that provided a starting point for OL activities and reduced planning time. Projects linked these resources to the national curriculum (e.g., D5, p.36) or focused on other areas of child development such as engagement, behaviour and wellbeing (e.g., D3, p.13). The proviso here was that they should complement teacher objectives rather than creating additional requirements to minimise the time required to plan (IR1, p.37).

Opportunities for teachers to share learning and experience were also well-received. One project organised visits to other schools, finding that these enabled school staff to see different ways in which OL could be utilised and to set up supportive contacts in the local area (D2, pp.23, 25). Other opportunities to network arose through webinars or regional meetings, which allowed teachers and schools to make contact with like-minded colleagues and discuss valuable aspects of practice. NFS providers, for instance, received regular feedback such as, '"the most useful part of the webinar was seeing what other schools had done and hearing the impact it has had" and "the most useful part of the webinar was sharing experiences with other staff. Hearing about what other schools are doing and seeking reassurance when needed"' (D6, p.45). These comments suggest that teachers of OL can feel isolated until they meet others who are engaged in similar activities.

Training and support of this kind helped teachers to develop OL expertise and manage their time effectively. At the end of the NFS project, 65 per cent of respondents (n=30) reported that planning NFS activities took the 'same' or 'less' time, and was as easy as, planning other lessons. They argued that a critical factor was to have the right information and support that was adapted to the needs of each school (IR2, p.19).

Challenges with resources

There was concern about where resources created during the course of the projects should be stored for easy access and re-use. NFS providers found that a new project portal for uploading resources was perceived as a burden by project teachers and was used by a small fraction of participating schools (D6, p.7). This could be because, as one CWFO report commented, there is an 'overwhelming range of resources' online (D4, p.21) and there was no perceived need to add more. The Thrive in the Forest project stored their newly-created resources in their Natural Curriculum hub, which was linked to Liverpool John Moores University teacher training activities. Large future OL projects should consider a way of coordinating the current fragmented provision of these services rather than adding to them.

Recommendations for supporting schools in delivering their priorities through OL are:

- **Regular training** (see previous section).
- **Signposting schools to resources** such as OL lesson plans, teaching ideas and websites where they can obtain permission to use urban parks or green spaces. Schools are likely to appreciate guidance on resources appropriate for their priorities, as the range of choices can be bewildering. Supporting teachers from secondary schools with ideas and resources appropriate for their curriculum is particularly important (D3, p.16).
- **Encouraging networking** to share good practice and reduce isolation. This can be via formal sessions such as webinars, conferences and school visits, through informal contacts between teachers in different schools, or through social media sites that schools are already using.

Investment in outdoor learning

Project reports demonstrated four key areas for investment to enable sustainable OL in schools.

The first was staff training. CWFO projects offered free outreach activities and either subsidised or free staff training opportunities (IR1, p.36); in return schools were expected to release staff to attend. Forest Foxes also subsidised transport for school trips to other schools and woodlands, as they found this an important enabler for schools to engage with trips (D2, p.25). All staff training in the NFS project was free, and once again schools were expected to release staff to attend. Earlier we discussed the centrality of staff training to sustainable OL, and providers argued that investment in training should be prioritised beyond their project lifetime:

> ‘Future provision should continue to emphasise the importance of teacher training to ensure that schools provide sufficient support to teachers involved in outdoor learning which, in turn, will enable outdoor learning activities to be sustained’ (IR1, p.30; see also D6, p.53)

The second, complementary, area was providing teachers with access to teaching resources and support that were appropriate for their school’s priorities and needs. At the start of their project participation, for example, NFS schools were provided with a package of field and activity guides (D6, p.19) and education officers provided ‘useful resources and guidance’ that were targeted to each school as the project progressed (IE). The following teacher’s comment indicates how these resources were received:

> ‘“NFS have been so supportive and helpful. They have provided so many resources that our school have been using every week and have provided great training and ideas for our staff!”’ (IR2, p.17).

The third area of investment was in school grounds. CWFO projects supported schools in accessing funds from different sources; for instance, the Land Trust provided match funding to support Outside is Fun's project work on their community woodland sites (D1, p.7), and two schools planted trees on school grounds with grant funding from the Woodland Trust and local businesses (D3, p.11). In the first year of delivery, the NFS project either paid for school grounds improvements or provided the resources for them. In the second year all schools received a £400 budget for greening their school grounds (IE). Investment in school grounds enabled initial involvement with OL and provided schools with an asset that allowed them to continue activities once the projects were completed (IE).

The fourth and final area of investment was providing wet weather clothing for pupils. In the second year of delivery, NFS schools received a £400 budget for purchasing equipment for OL (IE), generally used for wet weather kit and, in some cases, storage. The provision of appropriate clothing was regarded as a key enabler by different projects (e.g., D1, p.10; D2, p.35; D6, p.7), all of whom were working with schools in disadvantaged areas where children often lacked these clothes. Investing in equipment such as wellies and raincoats ensured first, that all pupils could access the outdoors once teachers were ready to take their lessons outside and secondly, that parents and carers were not upset by children returning home with dirty or torn clothing (D6, p.49).

At this point it is worth including two relevant comments from provider reports. The first, from a CWFO project, relates to the 'relatively small amounts of investment' needed to embed OL in schools:

> 'Relatively small investments in equipment, materials and site improvements were helpful to sustain activities beyond the life of the programme by putting in the necessary infrastructure. Some schools committed school budget to invest in equipment. We were able to help some schools access resources such as seating logs, fire pits or free trees, while others were successful in applying for additional funding through Ernest Cook Trust' (D3, p.14).

The second is the comment from NFS providers that providing funding, while much appreciated by schools, is not enough on its own to embed OL into everyday school practices:

> '… funding a school without the context of support, training, and expertise on hand to guide and develop the outdoor learning journey will not secure a sustainable legacy of outdoor learning within the school' (D6, p.53).

Recommendations from the school-based projects are that outdoor learning in schools should be supported by investment in four particular areas:

- Teacher training
- Teaching resources
- Greening school grounds
- Wet weather clothing for pupils.

School-based project legacies

Project legacies in all cases centre around developing the skills and confidence of school staff to deliver OL activities in their schools and provide benefits for the approximately 53,000 pupils who participated. The statement from the NFS delivery report below illustrates the points made by all projects in this context. 'Hyper-local delivery' refers to local providers supporting schools to use green spaces that are on their grounds or within walking distance from the school:

> 'The project provides evidence that a distributed model of hyper-local delivery can unlock a demand for outdoor learning in schools, and support schools to overcome barriers, adopt sustainable teaching practice, and deliver a range of positive outcomes for teachers and pupils' (D6, p.10).

While it is not possible to be sure of the number of project schools that will continue with OL, there is evidence that the project has facilitated a cadre of trained and knowledgeable teachers who have experienced the benefits that OL can bring them and their pupils. Many schools from the CWFO projects have expressed the intention to continue with OL (IR1, p.35), and the NFS project reported evidence of a 'cultural shift towards outdoor learning practice' in project schools that suggests continuing engagement (D6, p.10). Maintaining or expanding OL in schools has the potential to benefit the health and wellbeing of current and future pupils as well as to 'broaden and enrich' their learning experience (D6, p.49). There are no current plans to monitor the development of these legacies.

The different relationships and networks facilitated by the C&N programme have raised the profile of OL and encouraged new partnerships. For instance, the Forest Pathways project linked with the Bradford Forest School Network to support schools during and after the project (D3, p.5). Local schools can continue to access the Land Trust Community Woodlands opened to them through the Outside is Fun project, and TCV South Yorkshire is monitoring this use and continuing to support schools where necessary (D1, p.8). Forest Foxes plan to scale up their activities by encouraging schools to use their Pupil Premium to fund OL (D3, p.38). Some schools are continuing their relationships with their project provider (D3, p.14). As part of the NFS project legacy there are networks of schools, predominantly in the Bradford area, where staff meet to share practice, expertise and

resources, and longer-term relationships between schools and providers have been established to deliver a NFS model over three years.

The Thrive in the Forest project has several legacies. The Natural Curriculum Practitioner resources, developed by the Mersey Partnership and Liverpool John Moores University (LJMU), have been expanded into a new Natural Curriculum Hub [10] that is hosted by LJMU. In support of the process of establishing sustainable OL at school level, Wirral Council has provided funds to develop a leadership training module at LMJU that is aimed at ensuring senior leaders are aware of the benefits, expectations and commitment needed to embed OL (D5, p.20).

The University is complementing these courses by incorporating OL into its initial teacher training offer, and the partnership secured funding for an outdoor learning zone at LJMU that is open to student teachers and local schools. Embedding OL into initial teacher training through the Natural Curriculum Hub and the OL zone means that new teachers will have the confidence and knowledge to deliver a wide range of curricular and enhancement activities outside from the start of their careers, enabling a greater number of children to benefit in the future (D5, p.20). It is something that could be considered for all initial teacher training provision across England (D6, p.52).

Conclusion

The two school-based projects have successfully engaged approximately 53,000 children and young people and 270 schools in disadvantaged areas with OL. Research evidence on the inequality of access to green spaces [11] demonstrates the timeliness and importance of this project; evidence presented in these school-based project reports adds to the growing body of research on the educational, social, developmental and wellbeing benefits of OL for children and teachers [12].

The absence of a randomised controlled trial on the impact of NFS was unfortunate (D6, p.50), although a pupil outcomes survey was implemented in its place (IE), and future projects should ensure that any intervention and evaluation are designed together. The strength of the largely qualitative approach in these reports was that those involved with the programme could report their views on the delivery and efficacy of their project, point out strengths and weaknesses from their perspective, and offer advice for the future. Critically, the school-based programmes have demonstrated the desire from schools, teachers and pupils to engage more regularly and consistently with the natural world:

> '… [W]ork through the project has demonstrated that educators want to bring the curriculum and the natural world together, both in the way that they teach (the physical space), and as part of a rich and varied curriculum that prepares young people for the changing world they will inherit. Young people echo the calls for nature's role in their education, asking for more time spent learning in and about nature' (D6, p.52).

The CWFO insight report commented that a programme strength was to offer providers both funding and autonomy so that providers could tailor their delivery to schools' priorities and introduce young people to a rich variety of natural environments and learning experiences (IR1, p.38). Across the programme, the school-based project reports demonstrated that there is not one outdoor learning 'best practice' but multiple pedagogies and approaches that can engage young people with the natural environment; the CWFO insight report recommended that future projects ensure that a breadth of outdoor learning opportunity continues across England (IR1, p.38).

Project providers generally found engaging secondary and special schools more difficult than primary schools and alternative provision institutions. The NFS report argued that, in the future, projects should note that secondary and special schools 'require considerable time and investment to create opportunities to increase outdoor learning. Often overlooked, these settings have some of the greatest needs to bring nature closer to the curriculum' (D6, p.52). In response to this, the project recommends the mandatory inclusion of OL within teacher training, curriculum and the common inspection framework (D6, p.52).

The range of online resources is, as one CWFO report commented, 'overwhelming' (D4, p.21), particularly for primary schools, although there are fewer resources for secondary schools. An audit and review of existing materials could be used to provide a form of national bank of outdoor learning materials, and large future OL projects should consider a way of coordinating the current fragmented provision of these services rather than adding to them.

Finally, in the context of falling school budgets, it is important to remember providers' assertion that the infrastructure for OL can be achieved with relatively little investment from schools. NFS schools began their OL journey with an initial investment of £400 for greening school grounds and £400 for investing in wet weather clothing; some CWFO projects were supported to find pots of funding that provided safe outdoor spaces, and providers argued that there is 'an increasing number of focused grants' to fund equipment, resources and training' (D1, p.8). This does not include an ongoing commitment to fund training, travel or other extra-curricular expenses that a school would need to source from an external body. Nonetheless relatively small sums can start to connect young people with nature by facilitating OL activities, which, in turn, can have wide-reaching effects on children's health and wellbeing. This is a task of critical importance, as the NFS delivery report commented:

> '[t]he pandemic only brought into sharper focus the role that nature plays in the wellbeing of our minds and bodies … against the backdrop of a global climate and ecological crisis, the requirement to green our curriculum and education estate has never been more urgent' (D6, p.52).

5. Growing Care Farming

As was the case with the school-based projects, the Growing Care Farms (GCF) project ran from 2019 – 2022. Original levels of funding were reduced and the project re-structured in response to uncertainties following the Covid pandemic. Delivered by the partnership of Social Farms & Gardens, a UK-wide charity that assists over 2,500 organisations that support the health and wellbeing of individuals through nature-based activities (IR3, p.4), and Thrive, the gardening for health charity that supports those who have disabilities or ill-health, the aims of the project were to:

- Raise the profile of care farming.
- Build the capacity of the care farming sector by increasing the supply and demand for care farming places in England.
- Maintain a consistent and reliable standard of service delivery from all care farms (D7, p.5).

Care farms provide an important nation-wide source of alternative provision for children with defined needs, and this project made an important contribution to enabling greater numbers of these children to access the outdoors.

The four delivery strands of the project were

1. **Advocacy, central support and resource development**. This involved advocating for care farming among those responsible for referrals in health, social care and specialist education; developing information and resources for care farmers and prospective care farmers about funding, training and networking opportunities; engaging with media and social media to promote care farming; launching a regular project bulletin; and holding national conferences (D7, pp.9-14).
2. **Training**. This included developing and delivering online, face-to-face and blended courses and modules for care farmers, prospective care farmers, referrers, service users and those with an interest in care farming (D7, pp.30-31).
3. **Regional and national networking**. This aimed to link care farmers and commissioners and to support those involved or potentially involved with care farming, an aspect of care farming that has been a major challenge. Networking activities were moved online in response to Covid restrictions and remained online for the duration of the project. Activities included themed and network meetings and webinars and developing relationships with third sector organisations such as Sustain, Linking Environment and Farming (LEAF) and the National Academy of Social Prescribing (D7, pp.39-42).
4. **Quality Assurance**. This was implemented through the Care Farming Code of Practice, now relaunched as the Green Care Quality Mark. Work in this area included strengthening the accreditation process, developing online resources to support applications, and promoting the Code to established and prospective care farmers (D7, pp.47-48).

This section draws on the project delivery (D7) and insight (IR3) reports, which have provided detailed information on project implementation and reflections on lessons learned. Further information on project data collection and analysis is presented in Appendix 1.

5.1 Project outcomes

The project feedback data, analysed by the Green Exercise Research Team at the University of Essex, found **high levels of satisfaction with the project**. Responses from 298 individuals who attended project activities recorded an increase in knowledge gained about care farming; of 288 respondents, 98.6 per cent indicated that they had found the project resources to be useful; staff ratings for the success of the four different strands of the project ranged between 81.5 and 89.1 per cent (IR3, pp. 7-9). Survey participants included current care farmers, prospective care farmers, healthcare professional, academics, individuals from the agriculture or nature sectors, service users or family members of service users, and individuals from other backgrounds (IR3, p.7). Stakeholders (i.e., care farmers, prospective care farmers, referral agencies and interested parties) reported in their interviews that they felt that the project had improved perceptions of care farming, reached care farmers and prospective care farmers, and increased awareness of care farming in government agencies such as Natural England and DEFRA (IR3, pp.9-10). Stakeholders also expressed appreciation for the project's work in consulting with the government's new Environmental Land Management Schemes (IR3, p.10).

Project providers reported **a growth in the number of care farming places and care farms**. Survey data from care farmers were collected at different times during the project, and project leads estimated that the number of annual care farming places in England rose from 438,656 to 675,295 during the project lifetime, representing a 54 per cent increase from the previous survey. The number of care farms in England has also increased, from 253 at the start of the GCF project to 344 at the end (D7, p.24), enabling a greater number of children and adults with a defined need to benefit from health, social and specialist educational care service delivery on care farms (D7, p.56). Although the ambition was to increase the 'scale and scope of care farm services … to 1.3 million' by 2023 [13], the project was significantly affected by covid-related disruption and subsequent funding reductions, and this was a strong achievement.

Training and qualifications were regarded as an 'essential' part of giving referrers confidence in the sector (IR3, p.19). The **training developed by the GCF team** was aimed at supporting all those interested in or involved with care farming, from those at the start-up stage to professional development for those with established care farms. Attendees reported that training was 'highly relevant, up to date and covered a good breadth and depth of information, topics … [and] geographical areas' (IR3, p.19). Themed training, on areas such a dementia or learning difficulties, was particularly well received, and participants appreciated learning from established care farmers who attended the

sessions. Online delivery helped to increase the accessibility of the training offered (IR3, p.20).

Analysis of the qualitative data showed that the project team were successful in supporting care farmers. Stakeholder interviewees described the team 'as a **central point for concerns and advice**' and reported that the team's support helped care farmers to feel more confident in their practice and to feel that there was potential for growth in their care farms (IR3, p.13-14). Feedback from the staff surveys noted the increased demand for information around safety and risk in care farms and reported that project funding enabled a significant improvement in the support and resources for care farming; during the pandemic, support navigating changes to the sector and with seeking funding were particularly valued (IR3, p.14). To sum up, the insight report commented:

> Care farmers are at risk of experiencing social isolation and this was exacerbated by the pandemic. GCF created an inclusive community, with opportunities to engage in the activities believed by care farmers to have had a positive impact on loneliness' (IR3, p.16)

Networks promoted by GCF recruited new care farmers, prospective care farmers, health, education and social care and social prescribing professionals throughout the lifetime of the project (D7, p.56).

Networking events included information on linking care farmers with social prescribers, understanding the sector's response to the Covid restrictions and seeking avenues of funding while regular incomes were disrupted during lockdowns (IR3, p.14). Through these different activities, networking events encouraged new connections and facilitated new partnerships (IR3, pp.15, 18), but the project had insufficient time to resolve this issue.

Care farmers reported in their survey that they had developed **new ways of working and communicating** with service users during the pandemic. Most reported that they intended to continue with innovations such as engaging on social media sites, online newsletters and online support sessions (D7, p.24), thereby enabling them to reach a wider audience and deliver a more flexible service.

Project legacies

GCF's legacy is a foundation for the future development of the care farming sector. In addition to the raised awareness, supportive community and growing networks described above, this legacy has two main components.

The first is a **bank of digital resources**, the 'Care farming knowledge base', that was developed by the GCF team and is hosted on the Social Farms & Gardens (SFG) website [14]. The intention behind the site is to lay the foundation for 'sector building, learning and awareness' (D7, p.27), and the content is aimed at increasing the knowledge of prospective care farmers, established care farmers who want to develop their services

further, those interested in or currently commissioning care farming services, and people interested in care farming, for example researchers or journalists. The SFG website also hosts training resources that were jointly developed with Thrive, lists a range of training opportunities offered by SFG and other organisations [15], and offers a subscription 'Resource Roundup' newsletter that informs on relevant funding avenues and other training opportunities [16]. Some training courses developed with Thrive continue to be hosted on their website (D7, p.56.).

The second legacy is the updated care farming Code of Practice, which is now known as the **Green Care Quality Mark** and provides quality assurance for care farms. The strengthened Quality Mark is a key part of increasing the confidence of referrers in care farming by maintaining standards in service delivery (D7, p.54) and providing a framework for those wanting to start up a care farm (D7, p.56).

The GCF project team streamlined and updated the existing Code into a site-specific, self-assessment application that is hosted on the SFG website [17]. It is regularly updated to align with changes to commissioning, legislation and good practice (D7, p.47), thereby offering care farmers a tool for collating and documenting evidence, policies and procedures (IR3, p.22-3). A wide variety of resources to inform and support those engaging with the Quality Mark are hosted on the relevant webpage, and project analytics show an increased engagement with these resources each year. The main page, for instance, increased from 160 views in 2019/20 to 1911 views in 2021/22 (D7, p.52). Completed applications are reviewed by a panel of assessors and, once the Quality Mark is awarded, organisations are required to participate in an annual compliance process

Conclusion and recommendations

The Growing Care Farm project successfully raised awareness of care farming among national and regional organisations, supported farmers at all stages of the process of engaging with care farming, and recorded an increase in the number of care farms and care farming places. This was all against a backdrop of budgetary changes and a global pandemic (D7, p.55). Both reports comment on the way that the GCF project has brought momentum to the care farming sector, and their recommendations focus on continuing to invest to promote the sector and build capacity further. Suggested areas for investment include:

- **Maintaining momentum through advocacy and promotion**. This involves engaging more referrers and other stakeholders to campaign on the sector's behalf, and demonstrating the relevance of care farming interventions by, for instance, generating evidence around the educational, environmental, social and wellbeing impact of care farming.
- **Continuing to support the care farming and green care sector**. The two project reports argued that the learning from GCF can be used to support the wider green care sector, and suggested widening the opportunities for training, networking and quality assurance. This could include marketing the GCF training legacy; ensuring

care farmers and green care providers have opportunities for networking, peer support and partnership development; developing accredited training for a Level 3 qualification in green care practice; producing a directory of care farms; producing specific resources for specialist care farms who work with different groups of service users; and keeping training up to date as the sector responds to new demands and opportunities.

- **Strengthening the resilience of green care practitioners** by exploring the equivalent to 'supervision' in social care, with the aim of lessening care farmers' isolation and giving them support for their own health and wellbeing. Resilience in their mental health will enable care farmers to continue to offer care farming services to their community.
- **Building confidence in a green care sector offer** through highlighting the training, qualifications and quality assurance of the sector; and developing the Green Care Quality Mark as a sector-wide QA scheme (D7, pp.56-58; IR3, pp.24-5).
- Continuing to work for the recognition of care farming, and other green care approaches, as a paid-for therapeutic offering. This will support the process of **expanding and embedding referral pathways**, which in turn will enable more to benefit from their services. Suggested new referral pathways included occupational therapists, social prescribing teams and Integrated Care Systems (D7, p.69; IR3, p.23).

A final point relates to the focus of this programme: Children and Nature. Care farms provide an invaluable service for vulnerable people of all ages but have a particular role in facilitating outdoor learning for those who struggle with attending any type of formal schooling and have little access to nature. Quotations from teachers in section 3.3 demonstrate how learning outdoors has supported children's health and wellbeing across the school-based projects and highlight how meaningful activity outside can be a highly positive experience. Investing in capacity in the care farming sector and strengthening referral pathways between care farmers and referrers in education, health and social care will be an important part of ensuring that all children consistently benefit from time spent in the natural environment.

6. References

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17. https://www.farmgarden.org.uk/qualitymark (Accessed: January 2023)

7. Appendix 1: Research methods

7.1 Project reports

This document summarises and synthesises information from the eleven reports that have focused on the programme's delivery, monitoring and evaluation. These are:

1. *Outside is fun: 2020 highlights*, by The Conservation Volunteers (delivery report – referred to in this report as D1).
2. *Forest Foxes final report*, by the National Forest Company (delivery report – D2).
3. *Forest pathways evaluation report*, by Get out More CIC (delivery report – D3).
4. *Growing among trees project report*, by Marc Harris (delivery report – D4).
5. *Thrive in the Forest final report* by Mersey Forest Partnership (delivery report – D5).
6. *Nature Friendly Schools 2019-2022: final report* by Resilience Through Nature (delivery report – D6).
7. *Growing Care Farming final report* by Dr Rachel Bragg (delivery report – D7). https://www.farmgarden.org.uk/knowledge-base/article/resource/growing-care-farming-final-report (Accessed: January 2023)
8. *The Community Forest and Woodland Outreach project evaluation final report September 2022* by Wavehill Social and Economic Research (insight report commissioned by Natural England – IR1).
9. *Resilience Through Nature: Nature Friendly Schools impact assessment February 2022*, by Outrageous Impact Ltd (insight report commissioned by Resilience Through Nature – IR2).
10. *Growing Care Farming Insight Report March 2022*, by Dr Carly Wood, Dr Jo Barton & Claire Wicks (insight report commissioned by GCF delivery team Social Farms & Gardens and Thrive – IR3). https://www.farmgarden.org.uk/knowledge-base/article/resource/growing-care-farming-project-insight-report (Accessed: January 2023)
11. *Nature Friendly Schools: implementation, process and outcome evaluation*, by NatCen (independent evaluation commissioned by DEFRA – IE) https://randd.defra.gov.uk/ProjectDetails?ProjectId=20327

The **delivery reports** were those written by project providers to report on delivery to Natural England, these have not been published; **insight reports** were commissioned by people or organisations connected with programme projects (Natural England, providers), the NFS and CFWO insight reports have not been published, the GCF report is available on the Social Farms & Gardens website; the one **independent evaluation** was commissioned by DEFRA to report on the Nature Friendly Schools project, publication date tbc. There was no standardised monitoring across the projects, and each provider designed their own data generation, analysis and reporting processes.

The **Community Forest and Woodland Outreach and Nature Friendly Schools delivery reports** used methods of:

- End-of-project surveys with project schools
- Feedback from teachers, headteachers and school senior leaders
- Post-delivery questionnaires
- End-of-project reviews with teachers
- End-of-project partner focus group
- Practitioner and teacher observations
- Practitioner interviews
- Case studies
- Letters from pupils
- Project monitoring data.

The aim of these reports was to provide information on each stage of project delivery, to reflect on lessons learned and to offer recommendations for future OL projects.

The **Nature Friendly Schools** delivery report drew on:

- End-of-project reviews with 87 schools who participated in the second delivery year
- Case-study interviews
- Practitioner insights
- Feedback from training sessions.

The report also included findings from the insight report conducted by Outrageous Impact Ltd. The delivery report offered details on project implementation, and presented key findings, lessons learned and recommendations for future projects.

The **Growing Care Farming delivery report** drew on monitoring data to provide a detailed account of project implementation. These data provided insights on:

- Promotional activities
- Media / social media engagement
- Webinar and conference attendance
- Case studies from farms and service users
- Resources developed
- Website analytics
- Details of collaborative activities
- Surveys
- Training events and resources
- Networking activities
- Development of the Care Farming Code of Practice.

The report presented key findings, project learning and recommendations for future practice.

The **insight reports** differed in their approach.:

- The *Community Forest and Woodland Outreach project evaluation*, by Wavehill Social and Economic Research, reviewed the relevant delivery reports and project monitoring data, and conducted own interviews or online surveys with providers, project management and delivery staff and teachers. This was a process and

impact evaluation that: sought to assess the extent to which the CFWO projects met their aims and objectives; outlined enabling factors of each model; offered details of project delivery; and described project outcomes and lessons learned. This report included case studies from four of the five projects, as 'it was felt that school engagement would be limited as the [fifth] project finished delivery in March 2020' (IR1, p.11).

- The *Resilience Through Nature: Nature Friendly Schools impact assessment* was carried out by Outrageous Impact Ltd. Using the online platform Remesh, researchers conducted two 60-minutes focus group sessions with 30 teachers who had participated in the NFS project. Participants were asked about their motivations, experiences and ideas about each aspect of the project.
- The *Growing Care Farming Insight Report* was written by the Green Exercise Research team from the University of Essex. They drew on feedback survey data from 298 individuals who attended CGF activities (including current care farmers, prospective care farmers, healthcare professional, academics, individuals from the agriculture or nature sectors, service users or family members of service users, and individuals from other backgrounds). Nine members of staff involved with the project completed an online staff evaluation survey, and interviews took place with eight care farmers, prospective care farmers and individuals involved with the project at health, care or policy level (IR3, p.7). Survey data were collected during the course of the project and anonymised before being sent to the University. Individual interviewees were selected by Social Farms & Gardens to ensure representation from a range of stakeholders, but interviews were conducted and analysed by the University team, who coded the data deductively, using the four project elements and evaluation objectives as themes (IR3, p.7).

The **NFS independent evaluation report** focused in the first year on project implementation and process, and in the second year on implementation, process and outcomes. A randomised controlled trial (RCT) was planned but was not possible because of constraints of time, funding and uncertainty arising from Covid-19. The RCT leads intended to use validated pre- and post-intervention questionnaires to measure pupils' mental health and wellbeing, their engagement with school, and their care and concern for the environment. This would have enabled statistical tests to be conducted on validated, longitudinal data and offered robust evidence on the impact of Nature Friendly Schools.

In the first year of evaluation (2020-21), NatCen used interviews and focus groups. In the second year (2021-22) data collection involved observations of training, case studies with participating schools, interviews with providers, and focus groups with lead teachers and pupils. The aim of the qualitative data collection was to explore the implementation and outcomes of the project with providers, teachers and pupils. In line with the other reports, this evaluation concluded with recommendations for the future.

NatCen also carried out a quantitative longitudinal survey with primary schools carried out in both years of evaluation. Data analysis showed no change in pupil mental health and wellbeing or connection to schools and a slight decrease in pupil connection to nature,

albeit from a high baseline finding. However, the absence of an RCT counterfactual ‘meant that while the pupil outcome survey could provide an indicator of ‘distance travelled’ in terms of pupil outcomes, because of this design we would not be able to attribute any changes in outcomes, if found, to Nature Friendly Schools conclusively’ (IE).

The current review

The methodology for this report was a documentary analysis of the eleven reports arising from the programme. The first stage was a content analysis that had the objective of establishing the aims, activities, participant numbers, outcomes and learning from each project. The second stage was a thematic analysis, which identified patterns across the reports and recorded them, with relevant report page numbers, in a synthesis matrix table. This process allowed detailed interrogation of the reports and enabled a thematic summary that brought together the project outcomes, findings and learning.

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