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## Connecting Children and Young People with Trees

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## Connecting Children and Young People with Trees

### Cover Page Footnote

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# Connecting Children and Young People with Trees

Gill Forrester, Jo Maker, Will Price, Hollie Davison, and Heather Gilbert

## INTRODUCTION

The importance of spending time in nature has never been better understood than it is today (Barragan-Jason et al., 2023). Connecting to nature has a huge variety of benefits, but the ways of creating this connection are even more numerous and diverse. From providing outdoor adventure centers to teaching reading outside under a tree, there are many ways that families, schools, and other groups seek to engage children and young people with nature. But in a world where technology is becoming increasingly accessible and attractive to children and young people, and almost limitless information is available at the touch of a screen, how do we connect them with what's happening on their doorstep? And what can we do to encourage them to step outside?

The National Forest has decades of experience helping children and young people engage and build connections with and value the stories and significance of their local treescapes. We use “treescapes” here in its broadest sense: any landscape, habitat, or natural area where there are trees. This could be a vast, dense woodland or a small group of trees within school grounds, as each of these varied spaces can be used to promote a connection with nature.

The following success stories range from engagement with treescapes in traditional education settings to the establishment of extracurricular youth groups and the use of art as a connector. Just as in traditional education, no one alternative method will suit all, and so the success of the National Forest's work lies in the flexibility and diversity of its approaches.

## THE NATIONAL FOREST

If you don't live in or near England's National Forest, you probably have never heard of it. In the grand scheme of things, it doesn't cover a huge area, but despite its modest size, the National Forest is one of the boldest environmentally led regeneration initiatives in the United Kingdom. Over three decades ago, this 200-square-mile stretch of the Midlands in the heart of the UK (Figure 1) was postindustrial land. The impact of heavy industry, familiar to many of us across the world, left a landscape horribly scarred, black from coal and clay mining, and devoid of trees. It was hardly a children's playground.



Figure 1. Map showing the location of the National Forest (dark green) within mainland Great Britain (light green)

Unsurprisingly, the closure in the 1980s of the coal and clay pits, which had supported thousands of jobs locally, resulted in high unemployment and almost as importantly, a heartfelt sense of loss: of heritage, community, and what was once a rich green landscape. In fact, the area that was to become the National Forest was at that time one of the least wooded parts of the country. The future of the area and its communities looked bleak, with many leaving to find work and greener surroundings for their families. That was until the idea of creating a National Forest was born — an idea that would transform the area from black to green. It wouldn't be a 200-square-mile, wall-to-wall plot of coniferous trees, but a forest in the old sense of the word: a distinctly wooded landscape that would provide a setting within which people lived, worked, and learned. It was a great idea, but who was going to make it happen?

In 1995, the UK's Department for Environment, Food and Rural Affairs (Defra) decided to set up an organization aptly named the National Forest Company (NFC). It was tasked with leading the creation and subsequent development of the National Forest, keeping communities at its core. Encouragingly, the UK Countryside Commission recognized early on that the National Forest had the potential to be one of the biggest and most exciting open-air classrooms in the country (Countryside Commission, 1994) and could provide an opportunity to showcase how environmental issues interacted with each other, from the local to the national and global. Incredibly, since then over nine million trees have been planted, and it is these trees that have been the catalyst for change. To ensure that the National Forest both survived and thrived, children, young people, and environmental education were put at the heart of how the Forest was envisioned from the outset, with the aim of fostering a sense of local pride, awareness, appreciation, and ownership (Figure 2). The commitment was not only to embed the concept of a forest into the culture of the next generation, but also to connect children and young people to what would be very different surroundings from those of their predecessors. So how was this going to be achieved?



*Figure 2.* Lightboxes showing the industrial heritage of the National Forest  
(Photo credit: Andrew Allcock/National Forest Company)

Early work was focused on environmental activities, such as tree planting, giving talks in schools, and developing natural areas on school grounds, and, by 2015, around 500,000 young people, both within and beyond the National Forest boundaries, had engaged in such activities (Rowntree Jones et al., 2022). It became clear that widespread and long-term engagement with the Forest would initially need to come through the one resource almost all children and young people have access to: their schools.

## THE NATIONAL FOREST TEAM

Since the inception of the NFC, countless individuals have been integral to the growth of outdoor learning across the region. The programs described here were pioneered and driven by a whole range of inspiring educators, from NFC-employed project managers to practitioners in schools. We, as authors, represent some of the current team working to build on previous efforts and help bring the benefits of outdoor learning to an even wider audience. However, we are keen on acknowledging and recognizing the hard work, dedication, and inspiration of all those involved across the years, without whom these amazing outcomes would not have been possible.

## CREATING A FOREST FOR LEARNING: SCHOOL-BASED INTERVENTIONS

In the early years following the National Forest's creation, curriculum delivery within schools was mostly indoors and classroom based. Nationally, despite growing evidence of the wider holistic benefits of outdoor learning (Mart & Waite, 2021), local schools did not appear to be utilizing their school grounds or staff resources for it with any regularity, if at all.

Sadly, this remained the case within National Forest schools as recently as 2016, when less than 20 percent of primary schools were providing regular outdoor learning sessions. Given that outdoor learning was defined as "learning in a treescape setting at least once a month," it was clear that schools were facing barriers that were preventing them from connecting not only with local woodlands within walking distance, but also with trees within their immediate school grounds (National Forest Company, 2018, p. 6). When we, the team at the National Forest Company, asked schools what was hindering them from providing regular and sustainable outdoor learning, they consistently highlighted the same barriers. These were:

- The lack of specialist expertise and confidence of teachers within schools
- The perceived risk of arranging sessions outside of the classroom and the time required for them
- The absence of facilities of suitable outdoor learning spaces within the school grounds
- The cost of transport to take children off site

It was clear that to open up outdoor learning opportunities for as many children and young people as possible, we would need to help schools overcome these barriers. Inevitably this was going to involve finding the funding to support those efforts, which proved to be one of our greatest challenges! To our great delight, a turning point came (after searching for a long time) when five years' worth of funding was secured from the Audemars Piguet Foundation, a corporate foundation whose mission aligned precisely with ours (Audemars Piguet, n.d.). Our joint vision was to engage the next generation in understanding, caring for, and enjoying their new woodlands and woodland culture. By engaging with schools, we wanted to give every child and young person the opportunity to increase their understanding of the forest growing around them, to use their forest as a learning environment, and to have an enhanced overall learning experience. Securing funding for a project we named "Creating a Forest for Learning" (CF4L) meant that we could employ a dedicated Outdoor Learning Officer, which was a pivotal step toward achieving this vision. The Outdoor Learning Officer's aim was to highlight the benefits of outdoor learning with primary and secondary schools across the National Forest, encouraging and supporting them to become Forest Schools. The Forest School initiative was central to our approach and key to the project's ultimate success. As explained on the Forest School website, Forest School is:

... a child-centered inspirational learning process that offers opportunities for holistic growth through regular sessions. It is a long-term program that supports play, exploration and supported risk taking. It develops confidence and self-esteem through learner inspired, hands-on experiences in a natural setting.

[It] has a developmental ethos shared by thousands of trained practitioners around the world, who are constantly developing their learning styles and skills to support new and imaginative learners. Its roots reach back to the open-air culture, *friluftsliv*, or free air life, seen as a way of life in Scandinavia where Forest School began. (Forest School Association, n.d.).

Having deliberately adopted an approach that was introduced in the UK in 1993 and is recognized worldwide, we faced the challenge, beyond encouraging engagement, of empowering schools to make outdoor learning sustainable. Crucially, however, the National Forest team did not want to become outdoor learning providers parachuting into schools to conduct one-off occasional sessions. Instead, we wanted schools and teachers to be able to take the Forest School initiative forward on their own. The perception was that for the Forest Schools to succeed, specialist expertise was required, and the concerns that transport costs, preparation time, and the lack of teacher confidence and suitable outdoor learning spaces within school grounds, which were considered barriers to that success, could all be addressed. It was just a matter of how that could be managed. With the Audemars Piguet Foundation funding, we were able to offer schools within the National Forest access to Level Three Forest Schools Practitioner training for teachers. The road to sustainability in our view was to encourage each school to train two staff members who would support each other in delivering outdoor learning, initially within their school grounds. Once qualified, staff would be able to cascade train others (e.g., teaching assistants and parents) who could work alongside them, putting into practice what they learned. One teaching assistant commented:

The skills I learned from the Forest School training were very different from my teacher training and have given me so much more confidence to be able to deliver a wide range of activities outside of the classroom. I discovered that you can have great fun learning outside!

This approach certainly helped reduce the perception that arranging out-of-classroom sessions took a long time and involved risk; it also removed immediate concerns about the cost of transport. The long-term aim was for us to embed outdoor learning within the ethos of the schools so that the practice gradually progressed from occurring on school grounds to taking place in the treescape nearest to the schools within walking distance.

Training uptake was high, and schools were progressing well, until the COVID-19 pandemic struck. The long-term impact of the pandemic has been severalfold, but immediately noticeable was the loss of teaching staff post-lockdown and subsequent recruitment difficulties. The pressure this then placed on the remaining staff, whether they'd had Forest School training or not, meant that outdoor learning was no longer seen as a priority due to limited staff capacity. Frustratingly for some schools, despite their awareness of the tremendous benefits outdoor learning can offer children—particularly those still struggling with the impact of COVID-19—this will remain an issue until there are improvements in the schools' ability to recruit staff.

That said, with the focus firmly on young people's mental health and well-being, schools where staff and parent confidence, experience, and capacity have grown are determinedly forging ahead once more. To support the provision of outdoor learning, along with partially funded accredited training for staff, we were able to start schools along the road to addressing the lack of facilities and outdoor learning spaces within their school grounds. This was achieved through the offer of small grants that enabled schools to work toward the creation or management of existing treescapes within their grounds and/or to purchase resources to support delivery of outdoor learning, from the creation of a temporary outdoor classroom using a canvas tarp strung between trees to the purchase of waterproof clothing, tools, art easels, cameras, and tree identification charts (Figure 3).





*Figure 3.* The purchase of waterproof clothing has made pond dipping both accessible and inclusive for all (Photo credit: National Forest Company/Darren Cresswell)

Children have taken part in activities from storytelling, creating art, and engaging in sensory tasks to den-building (Figure 4), cooking, and fire-lighting, which have given them new practical skills and also enabled them to become decision-makers and leaders capable of recognizing and valuing the skills of others. Activities were tailored to the needs of each group to enable more young people to take part in them. These activities included:

- Scavenger hunts
- Using natural dyes
- Den-building (mini- and full-size)
- Making stick people
- Tree identification
- Orienteering
- Making natural musical instruments
- Making mud faces
- Making bows and arrows
- Creating nature art
- Using tools (including knives and Kelly Kettles)
- Climbing trees
- Hunting insects
- Fire-lighting and cooking on open fires
- Pond dipping
- Leaf rubbing
- Making dream catchers
- Making natural Christmas decorations



*Figure 4.* Building confidence through learning den-building skills (Photo credit: National Forest Company/Darren Cresswell)

One Forest School practitioner shared:

I have noticed that children react in different ways outside the classroom. Children that struggle with written work can surprise you by excelling at group tasks involving construction and decision making! I now allow children to learn and develop in their own way and, as a result, I have seen improvements in self-esteem and self-confidence, which has had a positive impact on attendance, behavior, and achievement in the classroom.

Financial support, together with advice and guidance, provided all schools within the National Forest with the supportive network they required to move toward delivery of a sustainable outdoor learning program. Despite the difficulties schools faced due to the pandemic, staff losses, and budget cuts, the CF4L project resulted in greater equity for young people to access treescapes across the Forest, regardless of background or school (Figure 5). We feel that the results of capacity-building within schools over a five-year period speak for themselves, as over two-thirds of primary schools in the National Forest (Figure 6) now provide regular outdoor learning as part of their curriculum offerings!



*Figure 5. Learners sharing experiences at a Champion School visit  
(Photo credit: National Forest Company/Darren Cresswell)*



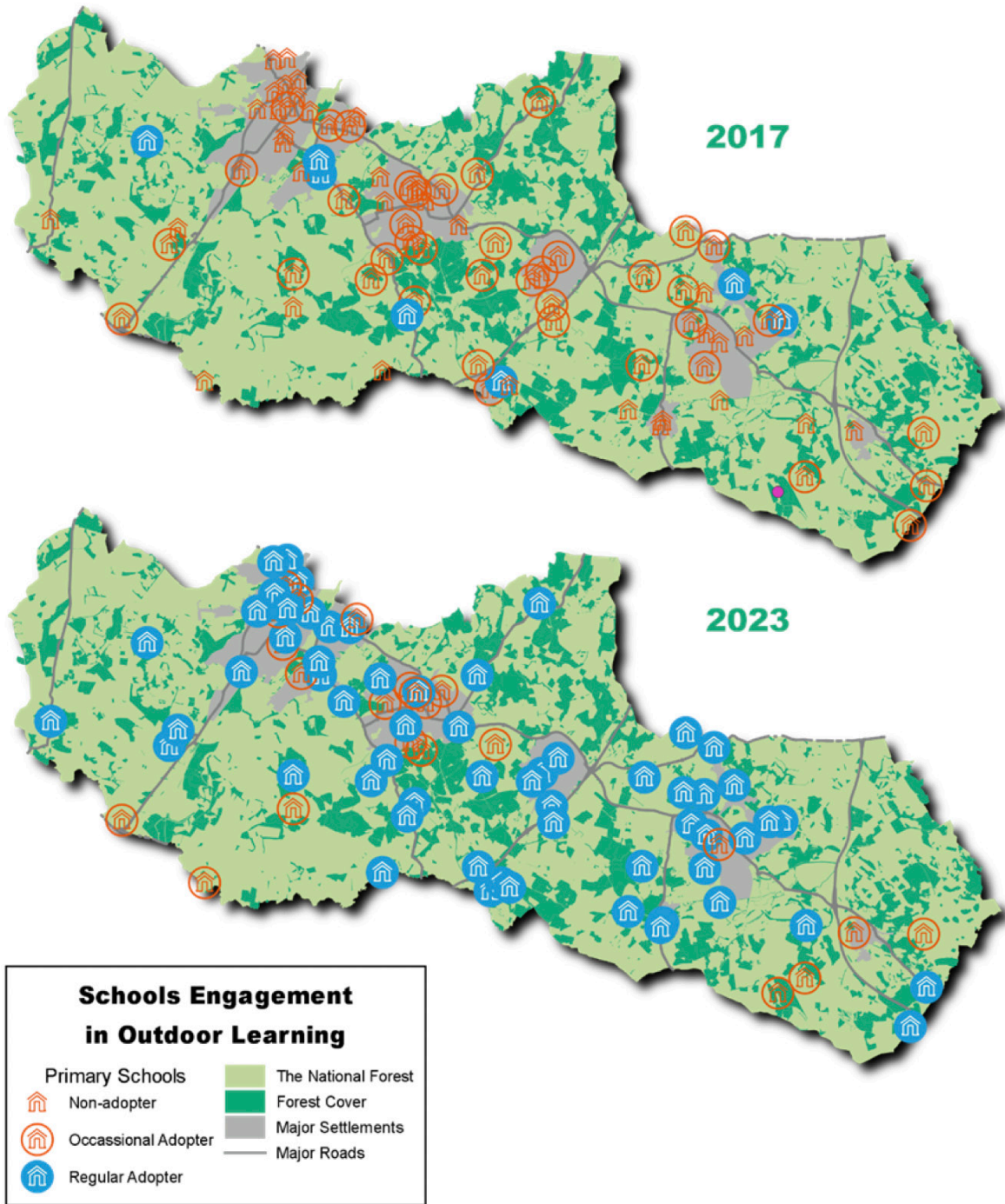


Figure 6. Distribution of primary schools across the National Forest showing their level of outdoor learning engagement in 2017 (above) and 2023 (below). Non-adopters are schools that have no provision of outdoor learning. Occasional adopters are schools that undertake outdoor learning only occasionally. Regular adopters are schools that take part in outdoor learning at least once a month.

One teacher, commenting on the value of regular sessions, said:

The children really look forward to our weekly outdoor learning sessions now. It took a few weeks for them to adapt to being in an unfamiliar environment, but now they really appreciate the area they live in. Some children have started exploring the woods near them at the weekends with their families and have even recreated some of our tasks.

It was also clear early on that when schools had the support of senior leadership, outdoor learning became embedded in the whole school ethos. This not only highlighted the importance of buy-in from senior staff, but also presented an opportunity to establish several exemplary Champion Schools. Their role was to share best practices and offer support and encouragement to other schools embarking on an outdoor learning program. Referring to Champion School visits, one staff member witnessing the impact of outdoor learning stated that:

The children have been able to engage with the natural world in a way that they normally just don't—the outdoor learning has brought them out of their shells ... these visits have enabled children to experience outdoor learning in a way that is currently unavailable to them (Figure 7).

When children who took part were asked for feedback, their comments also showed the positive impact Forest Schools could have on them: “I love Forest School because of all the fun we have playing with nature and making new friends,” said one. “[Forest School is] better than the beach,” said another.



Figure 7. The joy of gathering natural resources for nature art  
(Photo credit: National Forest Company/Darren Cresswell)

## CREATING A FOREST FOR LEARNING IN ACTION

The CF4L program was transformative for schools in different ways. Many progressed from only occasional extracurricular use of their grounds to offering regular outdoor sessions and demonstrating best practices in outdoor learning. Heather Primary School was one of these schools. Prior to engagement with the CF4L project, Heather Primary made very little use of their grounds for outdoor learning. Their classes for 3- to 7-year-olds had small outdoor areas, but there was limited equipment available to make use of those spaces. While the school did have an established gardening area, it was only used by a small, dedicated group of children in the after-school gardening club. The school had

engaged parent volunteers to start clearing another area of their grounds that they hoped could be used by all age groups for Forest School during the school day, but again, the school didn't have the infrastructure or resources to make the most of the area the volunteers had created.

In 2017, the Heather Primary School was successful in getting a grant through the CF4L program that allowed them to build steps up a slope and a pathway to access the Forest School area they had created, as well as to purchase teaching equipment such as den-building kits, campfire grills, safety gloves, and logs for seating. The head teacher explained that not only was she keen to expand the schools outdoor learning offering, but also that “our children are keen—and it is lovely to see those children who struggle academically outside working hard.”

By 2019, their woodland Forest School area was being used weekly by their youngest classes and frequently by the older age groups, as well. The staff delivered a range of activities but said that den-building and finding “fairy bracelets” were some of the students’ favorites! As the staff team’s confidence started to grow, they wanted to further enhance the outdoor learning experience for the children and applied for a second round of grant funding. This time, they purchased storage materials for their equipment, more equipment for cooking and den-building activities, and even a night vision camera to observe wildlife in their outdoor learning area. This increase in resources led to the introduction of collaborative sessions with the on-site preschool, bringing outdoor learning to children as early as possible in their learning journey.

## FIVE-POINT PLAN FOR OUTDOOR LEARNING

A key approach to supporting the development of outdoor learning in schools is to embed outdoor learning activities within School Improvement Plans, providing long-term commitment to delivery. It was clear to us that the CF4L project was having a positive impact in schools, but we were not confident that all primary schools were ready to embed outdoor learning within their ethos and curriculum delivery.

The barriers to outdoor learning varied across the participating schools; in some cases, barriers were ingrained within an individual school’s culture. Those schools needed more support in order to build their confidence in the benefits and longer-term impact of outdoor learning; staff training had gone some way toward this. The activities with children slowly provided the impact evidence the schools needed to fully engage in and commit to outdoor learning. The inclusion of outdoor learning activities within School Improvement Plans demonstrated the senior leadership’s commitment to them, preventing the cessation of those activities if staff or parents who were passionate and Forest School-trained left.

To encourage and support schools to embrace the CF4L approach, we decided to develop a Forest for Learning Five-Point Plan (National Forest Company, 2018) and share it with schools. The goal was for each school to have:

- A year-round monthly program of outdoor learning sessions
- At least one Forest School-trained teacher or teaching assistant
- An outdoor wooded learning space within the school grounds or within walking distance of the school
- Outdoor learning included as a key part of the School Improvement Plan
- Access to a supported network of outdoor learning professionals and the provision of high-quality off-site outdoor learning

The Forest for Learning Five-Point Plan set out our aspirations for outdoor learning within the National

Forest, but it was equally intended as a template that could be replicated easily beyond the National Forest boundary and across the country. We believed our plan was a cost effective and uncomplicated approach to connecting (or reconnecting) young people with nature, but it was much more than this. It was also a tool for driving positive change for outdoor learning, the environment, and well-being.

## BEYOND THE FOREST BOUNDARIES—FOREST FOXES

The National Forest is bordered by several large urban areas, where people might live less than a 30-minute drive from woodland but have never visited it. The distance may be short, but visiting treescapes within the Forest was often beyond the reach of disadvantaged communities within those urban areas. Initially our focus was on local schools within the boundary of the National Forest, but successful engagement with young people living in disadvantaged communities just beyond those boundaries would clearly benefit those involved and increase the reach of the Forest’s treescapes. But where to start?

An opportunity for the Forest School Association to partner with Leicester City in the Community (the community foundation of the English Premier League football club in Leicester City) presented itself in 2019, and the Forest Foxes project was set up. This project was one of five national pilots funded in part through the Children and Nature Programme (Natural England, 2022) and designed to increase opportunities for children to connect with nature and to improve their health, well-being, and engagement with education. In turn, it gave us the perfect opportunity to open up first-time access for young people from urban landscapes to connect with more rural treescapes. Following a model similar to the CF4L project and working closely with both organizations, we were able to support the introduction of 29 inner-city schools to outdoor learning. Our approach combined teacher training, in-school interventions focusing on nature connectedness and, most importantly for us, a funded program of visits to treescapes within the National Forest. This enabled young people who typically had no experience of environments beyond concrete and blacktop to engage with pupils from within the Forest who viewed outdoor learning as normal (Figure 6).

Having transport costs covered removed a significant barrier to accessing Forest treescapes and meant that teachers could not only see best practices demonstrated in those treescape settings but also could witness the immediate impact outdoor learning could have on their pupils. One inner-city teacher from Leicester commented, “Many of these students struggle in class, but when they are out here, they are enthusiastic, taking part in everything.”

This was by no means a unique comment. Providing access to the Forest had enabled the children and young people from inner-city schools to connect with a completely new treescape environment and, more importantly, it had enabled them to connect with nature in a totally different way than they had through the experiences open to them within urban school and community settings. For many, it was transformational and the start of a journey of awe and wonder (Figure 8).

One child from a school in Leicester wrote:

I enjoyed watching the fires and creating games with nature. I learnt that you do not need equipment to play outside, you can create it. I recommend Forest Foxes to my sister because she loves being outdoors.

Another wrote:

[I] learnt how to light a fire up, and how to make a tent. I also found new species of animals that I did not know of. I would definitely recommend this activity for other people because Forest Foxes make survival skills really fun and educational.





*Figure 8. The satisfaction of achieving something different (Photo credit: National Forest Company/Darren Cresswell)*

As with the CF4L project, a key element of the Forest Foxes project, alongside Forest visits, was the provision of Level 3 Forest School training for teachers. Unfortunately, just as the Forest Foxes project was launched, the COVID-19 pandemic struck. That didn't stop us. Partners were able to deliver a combination of online learning sessions and (when permitted) practical outdoor skill training in person. This meant that teachers could continue their training, developing their knowledge and experience so they were ready to deliver outdoor learning sessions once pupils returned to school. The group practical skills days delivered within treescape settings stood out as particularly successful, once again demonstrating how important it was to train teachers in appropriate spaces. One trainee felt that a skills day had "given me the confidence to talk to pupils and staff that I've never met before," illustrating the wider benefits and connections that can be made within a treescape setting (Figure 9).



*Figure 9. Staff engaging learners with nature following training facilitated by the National Forest Company (Photo credit: National Forest Company/Darren Cresswell)*



Ultimately, the success of Forest Foxes was the result of partnership collaboration, using Leicester City in the Communities knowledge of the city schools, the shared experience of nature connectedness approaches contributed by the Forest Schools Association, and the National Forest Company's skills in building treescapes. Forest Foxes achieved our aim of extending outdoor learning beyond the Forest boundaries, raising awareness of treescapes, nature, and their associated benefits to more children and young people and ultimately, their communities. Increasing the reach of treescapes to a more diverse audience beyond the Forest has made urban settings part of the National Forest's story, helping young people to value, engage, and build connections with the stories and significance of their local treescapes and enhancing their connection with nature going forward.

## **FOREST FOXES IN ACTION**

Many of the schools engaged through the Forest Foxes program are what can be called "grey" schools—schools with no green space on site. In these schools, any outdoor spaces that are available to the students are usually covered in blacktop or concrete and are not a particularly inspiring environment for students to explore. In one such school, children and young people have some access to a small area with a wooden gazebo, wooden planters, and a small plot for planting vegetables, but otherwise, they have very little opportunity to engage with the natural world. However, involvement with the Forest Foxes program in partnership with Leicester City in the Community gave some of the students' new opportunities for such engagement.

Ten children, considered to be those who would benefit most from having time outside the classroom to express themselves in a safe outdoor environment, were chosen by the school to participate. Some of these children stated that they did not enjoy attending school, so the school staff felt that engaging them in a new way of learning might develop their interest in coming to school.

The children took part in sessions such as fire-lighting and den-building, pushing them outside of their comfort zone; they developed their capabilities and learned new skills. One child, "J," stood out as having gained the most from taking part in the project. She stated clearly at the start that she did not like attending school but loved being outside "digging, skipping, and making dens." She had, however, never built a fire, touched a bug, or had a go at natural crafts; the potential for her to learn from Forest School sessions was incredible. J engaged with all of the outdoor learning sessions very well, taking part in activities as a member of a team and showing her leadership skills, frequently helping others participate. Her confidence grew by leaps and bounds throughout the six-week program. She eventually supported other teams in activities that she found easy and had experience with. She developed a sense of pride in the activities she completed: "I lit the fire and felt proud of myself," she said, after successfully lighting a fire to make hot chocolate.

On completion of the project, J told the team that she thought Forest School was fun and that she had learned a lot about the environment, with fire-lighting being her particular favorite activity. Her experience at Forest School allowed her to build better relationships with other classmates, which she was able to take back to the classroom, helping her enjoy her school experience better.

## **HOW DO WE CONTINUE TO ENGAGE YOUNG PEOPLE AFTER PRIMARY SCHOOL?**

Throughout delivery of the CF4L project, it was apparent that most primary schools were keen, and able, to adopt the Forest Schools approach. They were quick to take up training opportunities and apply for small grants to plant trees within their grounds, manage existing treescapes for accessibility and education, and purchase equipment to facilitate outdoor learning. Secondary schools, however, were facing barriers that made engaging with outdoor learning more difficult. This was disheartening, as research had shown that children's connection with nature (referred to as nature connectedness)

decreased significantly once they left primary school, just at a point in their education and development when connecting with treescapes could support children through a period of rapid change and make a positive difference to their well-being (Richardson et al., 2019).

Many secondary schools had extensive grounds, some with existing (relatively unmanaged) treescapes and others with unused areas ideal for treescap development, so space wasn't the issue. However, unlike young people attending primary schools, who had one teacher throughout the day, secondary students had different teachers for different subjects, and age cohorts did not function as a class. In addition, subject timetables frequently made it difficult to organize accessible outdoor learning sessions. So, we were presented with a problem: How could we engage our secondary schools with the Forest?

We started by consulting with the schools to find out what might work for them. What we found was that secondary schools were interested in using outdoor learning as a way of transitioning pupils from primary to secondary schools or for providing nature-based interventions for more challenging and targeted pupil groups, in particular students with special educational needs and disabilities (SEND). When we followed this information up with desktop research, we discovered that, as of late 2022, UK government statistics showed that just under 1.5 million pupils in England had special educational needs (UK Government, 2022a). Startlingly, this figure had increased by 77,000 from 2021, confirming that the diagnosis of SEND in young people was rapidly rising. In addition, the rate of SEND students who also encountered mental health issues was alarmingly high: a recent study highlighted that 78 percent of children with autism had at least one mental health issue (Kerns et al., 2020).

Our research also reinforced what we had learned from our primary schools: Outdoor learning was seen as an all-inclusive educational tool (Güdelhöfer, 2016) that could potentially increase student self-esteem and participatory motivation, increase self-perception, and lower anxiety levels. Addressing the academic difficulties of SEND students through nature-based programs improves their academic achievement, empathy, self-esteem, and creativity (Stavrianos & Pratt-Adams, 2022). In addition, it was clear that for these students, treescapes could provide spaces of safety and calm, as well as opportunities for effective alternative educational delivery. This message was reinforced by the teachers we consulted, who felt that treescapes could play a key role in relieving anxieties, including those linked to issues such as climate change, by providing students with hope for a greener future. By focusing on SEND students, we also felt we could support secondary schools in providing opportunities for hands-on experience that could help prepare those students for adulthood and improve their employment prospects when they were ready to enter the world of work (Wilson, 1994). In the United Kingdom, this aligns with the 2016 UK government white paper "Educational Excellence Everywhere," in which the Department for Education (DfE) outlined the need for every child to have experiences that equip them with "the knowledge, skills, values, character traits and experiences that will help them to navigate a rapidly changing world with confidence" (UK Government, 2016, p.88).

As a charity, the National Forest Company and our team strive to link to and, where possible, address both local and national priorities. The 2022 DfE policy paper on sustainability and climate change states that it is critical that young people and adults have the skills that will allow them to build careers and participate in what is clearly hoped will be a global Green Industrial Revolution (UK Government, 2022b). By 2024, we hope to secure further funding to support secondary schools in delivering forestry-related qualifications, targeting SEND students where appropriate. Our goal is twofold: to inspire and develop a generation of future foresters who are passionate, willing, and qualified to take stewardship over the treescapes within their own community; and, at the same time, to support a demographic that would benefit significantly from engaging with treescapes but who can struggle to find employment (Figure 10).



Figure 10. Inspiring future foresters through engaging with treescapes  
(Photo credit: National Forest Company/Darren Cresswell)

## CONNECTING THROUGH ART: YOUTH LANDSCAPERS

Through our various approaches, we soon realized that although engaging young people with treescapes through formal education settings was key, offering the opportunity to engage with woodlands beyond and outside of those settings was also vital. When we talked to young people, it was evident that they wanted opportunities to engage with treescapes on their own time and in nontraditional settings. They wanted options that could not always be explored within formal school settings.

The Youth Landscapers Collective (YLC), based in the heart of the National Forest, is a unique example of how youth-led, place-based art projects that advocate for the environment can engage young people with nature and treescapes. The YLC was formed in 2016, supported by Black to Green, a project funded by the Heritage Lottery that celebrated the transformation of the heart of the Forest from the site of coal and clay industries to a sustainable green landscape. The focus of the YLC was, and still is, to engage young people in an exploration of the past, current, and future ecologies of their local area through interdisciplinary projects. Collaboration and co-production, supported and guided by experienced and talented local artists Jo Wheeler and Rebecca Lee and the NFC, are central to the YLC's approach. This approach has resulted in young people working together, learning both with and from each other, while also being informed by the practice of professional artists, specialists, and enthusiasts who join their projects as guest collaborators.

Using the local landscape as their inspiration, the intergenerational group developed and delivered thought-provoking and creative art projects, including “Telling of the Bees” and “The Underneath.” The group connected with local experts, including a beekeeper, a mushroom grower, ecologists, and forestry workers, to draw upon their breadth of knowledge and expertise. In “The Underneath,” the YLC explored the hidden networks that connect the forest beneath our feet. Featuring a wooden structure inspired by the gills of mushrooms, the artwork opened up at nightfall to reveal an animation of mycelium and roots, providing a portal into the unseen world below (Figure 11). These projects illustrate how the use of new creative technologies to investigate the natural world can connect young people with subject matter they may not otherwise engage with by harnessing their interests.

Throughout this paper, we have talked a lot about the benefits of treescapes and outdoor learning for young people, but it is equally important to celebrate all that our young people have achieved, and share

that learning together, whether through mainstream or extracurricular activities. In this example, the members of the YLC were given the opportunity to present the results of their annual arts projects at the National Forest Timber festival, a three-day event held in the heart of the Forest that promotes celebration, debate, and reflection about our relationship with trees and forests. This opportunity meant that YLC participants could share their projects, not only with a national audience, but also with an international one. For the past two years, the group has proudly presented ambitious audiovisual installations, to be experienced after dark, interpreting complex natural systems taking place in the treescapes around them.

We found that when they joined the group, many young people were not used to spending time in treescapes. However, using creative physical and digital methods gave them a route into nature and treescapes that they were comfortable with and that provided them with new skills, experiences, and connections. This has been particularly impactful for young people who find traditional education settings more challenging. One parent told us:

[My son] has an Asperger’s diagnosis and doesn’t make friends easily... There are not a lot of opportunities in the area and whilst he was involved in scouts, he was ignored and not doing very much. ... [He] initially got involved with ... Youth Landscapers Collective (YLC) ... because he wanted to make a film. He is ... at an age where he was getting interested in film and technology so YLC came along at the right time. YLC played to his strengths. ... YLC has given him a focus—all of his money now goes on kit that he carries around. He is not messing around and is very proud of the work he has done. At the Timber Festival he was like a different kid. He hopes to use the YLC work to get onto a University Course.... It has been lovely to see him being completely accepted, listened to and looked up to. It has been amazing to see. In previous years it has been really hard to watch him struggle, but now he has YLC.

It is these individual experiences that truly show the transformational impact that connecting young people with their local treescapes can have.



Figure 11. “The Underneath”: Installation created by the Youth Landscapers Collective for Timber Festival 2022 (Image Credit: David Severn/Youth Landscapers Collective)

## CONCLUSION

The importance of people connecting with nature and treescapes has become increasingly apparent in the last few decades, with a growing body of evidence highlighting the benefits of this for our physical and mental well-being (Barragan-Jason et al., 2023). It has also become increasingly clear how important it is to start creating connections with nature in the early years (Price et al., 2022) to help children and young people value, engage, and build connections with the stories and significance of their local treescapes.

The National Forest's Five-Point Plan set out a strategy to encourage every primary school in the Forest to engage in outdoor learning and to regularly access a wooded learning space on their school grounds or within walking distance. Communicating this message to partners, funders, schools, and parents, whether urban or rural, has resulted in this goal steadily becoming a reality. This simple and cost-effective approach has meant that it could easily provide a template for other schools, inspiring positive change for learning, the environment, and well-being by reconnecting young people with nature.

The CF4L project provided a model that successfully increased National Forest schools' engagement with treescapes through capacity building, funding teacher development, and making capital improvements to school grounds for outdoor learning. Building a support network for schools; increasing knowledge, skills, and confidence in teachers; and facilitating the creation of and access to treescapes has dramatically increased the commitment of the schools to long-term provision of outdoor learning. Schools can incorporate outdoor learning into their School Improvement Plans and link treescape activities across multiple curriculum areas, resulting in ongoing nature-based learning throughout the year. These results further illustrate the importance of adopting a simple approach, where activities are relatively uncomplicated and low cost but have a significant and long-term impact. With increased confidence, schools have done what we strived to encourage from the outset: They have started to utilize and explore other local and more diverse treescapes across the National Forest.

Creating the Forest for Learning and Forest Foxes programs has shown that it is frequently children and young people from disadvantaged backgrounds or with disabilities and special educational needs who benefit most from connecting with treescapes. These individuals can have difficulties within mainstream school classroom settings or with the transition from primary to secondary school. The provision of alternative outdoor learning programs that connect these children and young people to nature can be transformative. The scope for developing new outdoor, vocational, and accredited programs linked to treescapes, especially for secondary schools, is evident: They provide opportunities to increase student confidence and well-being alongside creating Forest stewards for the future.

Finally, the Forest Foxes project demonstrates the importance of collaborative partnerships and the value of working beyond invisible boundaries to connect inner-city schools with local urban and rural treescapes previously unknown to them. In contrast the YLC, as a unique program within the Forest, illustrates how young people can engage with and value treescapes outside of mainstream education settings in different ways and on their own terms, collaborating using creative and innovative methods of interpreting treescapes.

By offering multiple mechanisms for connecting with treescapes, we can all provide opportunities for children and young people to make those connections in a way that is most meaningful to them. The benefits for children and young people include improved social skills and academic achievement as well as increased awareness of their heritage. For many, connection with nature leads to an increased sense of ownership and the desire to protect and care for not just their local treescapes, but also for the wider national and global environment for future generations. There will be barriers to engagement along the way, but with some determination and imagination, we can all succeed and make a difference to our communities that we can be proud of.



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## ABOUT THE AUTHORS



**Gill Forrester** began her career as a Countryside Ranger on the North West coast of England. Passionate about the environment and education, she subsequently worked as a primary school teacher and then Environmental Education Advisor within disadvantaged communities. Holding an MA in International Tourism, Gill is committed to working with communities to raise awareness of heritage, the environment, and sustainability. Now the community and wellbeing manager for the National Forest Company, Gill focusses on connecting communities to the forest around them.



**Jo Maker** has over 20 years of experience working in the arts, developing place-based cultural projects that respond to landscape, heritage, and ecology. As the arts & creativity manager for the National Forest Company, Jo develops strategic projects across 200 square miles of the Midlands that reflect upon and reimagine our relationship to nature, climate, and time.



**Hollie Davidson** is a project officer at the National Forest Company, focusing on supporting community projects to bring more people out into nature to support their wellbeing, enhance their appreciation for the natural world, and better understand the importance of the environment around them.



**Heather Gilbert** is the research and evidence manager for the National Forest Company. After completing her PhD at the University of Nottingham, United Kingdom, Heather undertook several years of fieldwork studying biodiversity trends around the world. Much of this work involved engaging students of all ages with biodiversity research and the conservation issues it informs. Heather now works with the National Forest teams to support a diverse range of programs encompassing environmental, societal, and economic research into building a sustainable future with trees at the heart.