

The Nature Connection Handbook

A guide for increasing people's connection with nature.



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Introduction

Whatever our relationship with nature is, we can get closer. We can notice more, listen more, feel more, enjoy more, and care more.

Research shows that the closer we get to nature, the happier we are, the more worthwhile life seems, and the more we are willing to take action to help our wildlife and the environment. In the context of the problems our climate and wildlife are facing, closer relationships with nature are more necessary than ever before.

A population that has a close relationship with nature and recognises their shared futures will greatly improve our ability to take meaningful action on the climate and improve the future for wildlife. Isolated actions like recycling, electric cars, and insulating homes are a good start but are not enough to meet the scale of the problem or address its root causes. The changes that most need to happen are those inside us, with radical and fundamental shifts in how we think and feel about nature.



Who is this handbook for?

Nature needs people and organisations that take the challenge of transforming the human relationship with nature seriously. We are seeing more and more people across a range of roles and organisations helping to meet this challenge and connect people with nature. So, with this in mind, the handbook has been written for:

- People working in government bodies
- People working in environmental NGOs
- People working in health NGOs
- Teachers, lecturers, and other educators
- Youth workers
- Health workers
- Occupational therapists
- Counsellors, therapists, and wellbeing officers
- Outdoor educators
- Nature guides
- Creatives
- Managers
- Sustainability leads
- Human resource managers
- Groundspeople and landscape designers
- Urban planners
- Community groups
- And more!

Designed for a broad audience, this handbook invites flexible and creative application by a wide range of readers, offering:

- An accessible summary of nature connection research and application
- Pathways for helping people improve their connection with nature
- Examples of activities and initiatives that support and develop nature connection.



Nature connection: what it is and why it matters

Nature connection is about our relationship with nature – how we think about, feel about, and experience nature. When we feel very close to nature, we recognise ourselves as part of the natural world, and value our relationship with it. We notice nature, seek it out, and feel happy when we are in it.



Our connection to nature can be strengthened

Connecting with nature is much more than just being in nature, it is how we interact with it that is most important. Our focus in this handbook is on psychological nature connection – how we relate to nature in our minds and through our emotions. It is based on a rapidly growing body of research that shows that the strength of a person's connection to nature is linked to their wellbeing and environmental behaviour.

The science of nature connectedness focuses on the psychology of the human-nature relationship. It studies how people think and feel about nature and their relationship with it. Research is based on scientific measurements of people's nature connectedness – the strength of their emotional and psychological connections to the rest of the natural world. The nature connection guidance in this book is based on this research, and what we have found out about what causes people to have stronger or weaker relationships, how the strength of their relationship impacts their wellbeing and environmental behaviour, and – most importantly – how to help people grow stronger relationships with nature.

Having a close relationship with nature is like having a close relationship with friends and family. You feel like you know them deeply and intimately. You notice and understand their passing moods, expressions and quirks. They can bring you feelings of great joy or of deep grief. Your fate is bound up with theirs – what happens to them happens to you too. Or nature may be more of an acquaintance to us. We may like it well enough, but there is little intimacy or attention paid to it. We may spend time in nature, but it serves as more of a backdrop to the things we do – we don't feel like we spend time *with* it. For some of us, nature is a stranger. We pay it little attention, have little interest in what it does, and get little back from it. In some cases, nature may even be a nuisance.



Nature connection in the UK

Compared with similar countries, people in the United Kingdom visit nature less and have a weaker connection with nature – across 18 ‘Western’ countries the UK’s level of nature connection was 16th out of 18.¹ This is perhaps no surprise as the UK is one of the most nature depleted countries in the world,² and national surveys suggest that, as a nation, we’re not as tuned into nature as we could be. Research by the National Trust and University of Derby³ found that only a minority of people take the time to watch birds, bees, butterflies or other wildlife, smell wildflowers, listen to bird songs, pay attention to clouds or the moon and stars, and draw or take photos of nature. Many of us are missing out on these simple activities that increase our feeling of connectedness.

This is important because we know that noticing the simple things in nature matters more than how much time we spend in it.⁴ During the first coronavirus lockdown it was found that increases in noticing nature explained higher levels of wellbeing better than people’s increased visits.⁵ Noticing nature, engaging in simple activities with nature, and celebrating the good things in nature are key to developing a stronger connection with nature and the benefits to human and nature’s wellbeing.⁶

BENEFITS

Improved mental wellbeing

More pro-environmental behaviours

Greater vitality and happiness

More pro-nature conservation behaviours

More satisfied with life

Greater meaning and purpose in life

Nature connection unites people and nature’s wellbeing

Simply noticing the good things in nature each day for a week brings sustained and clinically significant improvements in mental health.^{7,8} There is now a solid body of evidence from dozens of studies that have shown having a strong sense of connection to nature helps people feel good and function well.⁹ The effect is powerful, a population survey found the strength of a person’s sense of connection to nature was four times more important than socio-economic status in explaining their sense that life is worthwhile.¹⁰

As well as being good for people, improving nature connection is good for nature too. Having a strong sense of nature connection has an impact on how we treat nature. When people have a closer relationship with nature, they are more inclined to want to help nature and take action to protect it. Dozens of studies have shown a clear and causal relationship between nature connection and carbon cutting pro-environmental behaviours.^{11,12} The same link has been found for pro-nature conservation behaviours – those which aim to protect wildlife and fight against decreasing biodiversity.³

The science of nature connection shows us that we can unite the wellbeing of people and nature. By helping people to connect with nature, you can bring about real change to their lives and the future of the environment.

Connection is about moments, not minutes

Being out in nature is good for us. But what we do in nature matters more than how long we spend in it. Research shows that noticing nature is more important than simply spending time in green places. People who watch wildlife, listen to birdsong, or take photos of nature feel closer to nature than those who don't do these things.⁶ Nature connection and engaging with nature through simple activities explains psychological wellbeing better than time spent in nature.^{3,4,5,10,13} Furthermore, those who feel closer to nature gain more benefits from the time they spend in it.^{14,15}

Connection is about feeling, not knowledge

The closer our relationship with nature, the more likely we are to do things that help it. When we are connected to nature we take actions that minimise the impacts of human activity on the climate, such as using less energy and water, recycling and reducing our waste, and using environmentally friendly transport options.^{11,12} We are also more likely to provide food and shelter for wildlife.³

Research has found that our connection to nature is much more important than our environmental knowledge in the actions we take to help the environment and wildlife.^{3,16} While people who feel close to nature often know more about it than those who don't have a close relationship, knowledge and environmental education alone do not lead to nature connection.^{16,17} How we interact with the natural world and feel about it matters more.



Things to remember about nature connection



We are all starting from somewhere different

We are all connected with nature – just to different degrees.

Our relationship with nature can always be improved.

It's simple to start growing closer to nature

It's about feeling not knowledge. We need to focus on emotional connection not facts and figures.

It's about what you do, not how long you take. We need to notice nature, not just visit it.

Nature connection unites people and nature's wellbeing

The more connected we are the better we feel. Better connection means better mental wellbeing

The more connected we are the more we care about nature. Better connection means more willingness to take action for wildlife.

Pathways to nature connection

The journey to connection starts with the five pathways to nature connection - ways of being in, engaging with, and relating to nature that help us grow closer to nature.¹⁸ Research has found that when people activate these pathways when engaging with nature, they feel closer to the rest of the natural world. They provide a flexible design framework that can be applied across a range of contexts – from shaping how people interact with nature, through to informing the design of infrastructure and events.



The five pathways to nature connection

1



Senses
Exploring and experiencing nature through all the senses

An illustration showing two hands holding a green leafy branch. The hands are rendered in a gradient from brown to green. The background is a light orange color with faint white curved lines suggesting movement or air.

2



Beauty
Seeking and appreciating the beauty of the natural world

An illustration showing two hands holding a smartphone. The phone screen displays a green plant. The hands are rendered in a gradient from brown to green. The background is a dark green color with faint white lines suggesting light or movement.

3



Emotion
Noticing and welcoming the feelings nature inspires

An illustration of a person with white, curly hair and a green garment. The person's face is dark brown and they have a serene expression. The background is a light orange color with faint white lines suggesting movement or air.

4



Meaning
Celebrating and sharing nature's events and stories

An illustration showing a hand pointing upwards towards a bright sun. The sun is a white circle with rays. The hand is rendered in a gradient from brown to green. The background is a dark green color.

5



Compassion
Helping and caring for nature

An illustration showing a bird and a nest. The bird is a simple orange shape with a beak. The nest is a cluster of small green dots. The background is a light orange color.



Senses

The senses pathway involves actively engaging with nature through all the senses, and noticing what is seen, heard, smelt, felt, or tasted. We activate the senses pathways when we pay attention to what the senses are experiencing and seek sensory stimulation from the natural world.

DO

Look closely at moss, listen to birds, smell the bark on a tree, feel the textures of different leaves.



Beauty

Activating the beauty pathway involves noticing and appreciating the beauty of nature, and seeking opportunities to experience and celebrate this beauty. Arts-based activities can help with this celebration, for instance by creating photos or drawings of nature, and making or listening to music about nature's beauty.

DO

Take a photo of a beautiful tree, explore the beauty of wildflowers, find a place with a view.



Emotions

Nature offers moments and experiences that can lead to feelings of awe, wonder, joy, calm, or delight. Activating the emotions pathway involves seeking, noticing and reflecting on these moments and feelings. We can become more aware of the positive emotions we experience when spending time with nature.

DO

Seek moments of awe or calm in nature, notice how nature makes you feel, find joy in watching wildlife.



Meaning

Activating the meaning pathway involves exploring our personal and cultural stories and what nature means to us. This includes sharing myths and folklore about certain plants or animals, celebrating natural events such as the summer equinox or the first swallows returning, or reflecting on your personal nature stories and experiences. Meaning also features in our use of language and metaphor about the natural world, and is often explored in literature, poetry, songs, and art.

DO

Celebrate the longest day of the year, tell someone about your favourite tree, write about what nature means to you.



Compassion

The compassion pathway is activated by looking after nature and seeking opportunities to help it. It involves a sense of care and love for nature and taking actions that help protect and support the wellbeing of the natural world. This can be achieved by activities like creating wildlife friendly gardens, supporting conservation organisations, or collecting litter.

DO

Provide a home or food for wildlife, take part in local tree-planting events, buy eco-friendly products.

How to help people grow closer to nature

The pathways to nature connection can be used as a framework for the design of activities, places, and initiatives to help people develop closer relationships with nature. Here are five key areas of application for you to consider in developing your nature connection strategy and actions.



Growing closer to nature



Engage

Invite people to notice nature through activities, challenges and campaigns



Share

Share nature's beauty, what it means to you, and how it makes you feel



Design

Create spaces, places, and things that prompt people to get closer to nature



Celebrate

Celebrate and enjoy nature; recognise and create nature-based events, traditions, and rituals



Embody

Become a nature-connected organisation

Engage

We know that one of the main ways to improve people's nature connection is to help them notice nature more. Use the pathways as a framework to create and deliver activities that invite more active engagement with nature. Campaigns to encourage people to start noticing nature are a simple and effective way of increasing nature connection, improving wellbeing and nature-friendly behaviour.

IN PRACTICE

Research has found that when people are asked to notice three good things in nature every day for a week, they activate the pathways to nature connection and gain lasting psychological benefits and increased nature connections.^{7,8,19} Invite people to take photos of nature, write about nature, or create nature-based art to encourage close attention to nature, leading to closer relationships with it. Set a challenge for your audience or colleagues, run a campaign, or bring activities into the everyday running of your organisation. Have a look at our case studies for ideas and inspiration.

Share

Sharing your own engagement and connection with nature will make your experiences and practices available to others, offering examples of ways to activate the pathways to nature connection. Promote sharing amongst other people. Connection can be shared in in-person conversation and interactions, as well as in online spaces, and other written, visual and tactile forms.

IN PRACTICE

In your interactions with colleagues, visitors/clients, or the wider public, share what you have noticed and appreciated in nature, how nature makes you feel, and what it means to you. Talk about nature in ways that highlight its beauty and wonder, and your own emotional connection to it. Encourage others to bring stories about nature into everyday life and conversation, helping to normalise nature talk as a social practice, and establish connection to nature as a way of life. Maybe start a meeting by sharing nature experiences from that week. Create and share images, artwork, nature finds, and nature journals. Compile a nature playlist, share nature poetry, art, and photography, or start a nature book-club.

Design

People need spaces that invite them to notice nature and prompt them to explore the pathways to nature connection. The value of wild and nature-rich areas is amplified by creating opportunities for people to engage with them and find joy and calm. Designing spaces and objects that encourage activation of senses, beauty, emotion, meaning, and compassion maximises opportunities for forging closer relationships with nature.

IN PRACTICE

Seating invites people to enjoy nature, and an appealing 'sit-spot' offers a place for people to return to develop their relationship with a specific natural space that becomes meaningful to them. Artwork and sculptures can grab attention and invite people to pause, look, and engage with nature, and amplify sensory experience of the natural world. Sensory gardens, shelter and food for wildlife, and nature trails all encourage more attention, more engagement, more connection, and create opportunities for community management. In internal spaces, maximise views of nature outside, and bring nature in. Get to know a house plant or use screens to show live feeds from nature cameras.

Celebrate

Nature should be enjoyed and celebrated. Local and global traditions tie nature's calendar to human life, and we can all do more to increase recognition of these and add more. Help to connect people with natural rhythms and bring a sense of meaning to life. Celebrating nature helps re-establish emotional connections with nature, and reminds us of our relationship with the rest of the natural world.

IN PRACTICE

Create your own celebrations, campaigns, and festivals to share the wonders and joy of the natural world. Organise events to recognise the summer or winter solstice, the flowering of blossom, or national dawn chorus day. Celebrate the vibrancy and diversity of nature, and reflect this through art and music. Link nature's calendar into your organisational calendar, using the change of seasons as a chance to reflect on human life and seasons and the relationship between us and the rest of the natural world. Bring nature into other cultural and seasonal celebrations and events, and invite different communities to share their experiences and practices for celebrating nature.

Embody

While you and your organisation help others to connect to nature, don't forget to strengthen your own relationship with nature. Apply the principles of engage, share, design, and celebrate to embody nature connection within your own lives and organisations. By nurturing workplace cultures that value strong relationships with nature, organisations will foster happy, fulfilled, nature-connected staff who take action for the environment and inspire others.

IN PRACTICE

Consider what your organisation can do to support staff to engage with nature and activate the pathways every day. Encourage nature breaks, walking groups, and outside meetings. The pathways to nature connection can be a part of work-based wellbeing initiatives and support systems. Workspaces and practices can be built around engagement with nature. Internal sustainability programmes can broaden their focus to include human-nature relationships, with benefits for carbon-cutting, waste reduction, and nature-friendly behaviour. Put a relationship with nature at the heart of everything you do, both within and beyond your organisation.

Nature connection case studies

A wide range of organisations across environmental, mental health, arts and culture, business, local government, and community sectors have made use of the pathways to nature connection. Large NGOs and environmental organisations; local governments; sports, youth, and arts organisations; and a variety of national, regional, and local charities and businesses have used the pathways to design activities, spaces, and campaigns that prompt greater attention toward, and active engagement with, the natural world. Here are some examples of the pathways in practice, showing the range of exciting and creative applications of the science of nature connection.



National Trust: 50 things to do before you're 11³/₄

Who _____

The National Trust protect and care for historic and natural places across England, Wales, and Northern Ireland, while helping people engage and connect with nature. Since 2012, they have run a national campaign to inspire children's activities in nature: '50 things to do before you're 11³/₄'.

What _____

In a revision of the 50 activities, the National Trust used the pathways to nature connection to create more opportunities for children to activate senses, notice nature's beauty, create emotional connections, engage with nature's meaning, and act with compassion for nature. For example, 'climb a tree' was changed to 'get to know a tree', with suggestions like 'listen to the wind rustling in the leaves and the birds singing'.

Outcomes _____

Prompting children to notice and explore nature offers children experiences that help them feel differently about nature, with potential for lasting shifts in their relationship with the natural world.

Find out more _____

→ www.nationaltrust.org.uk/50-things-to-do



Friends of St Ann's Green Spaces

Who

Friends of St Ann's Green Spaces are a community organisation who aim to conserve, care for and enhance the green spaces across the site of St Ann's Hospital in London. They design and deliver activities to encourage users of the site, residents, patients, hospital staff and local community members to get involved in caring for St Ann's green spaces and to enjoy its full potential in an atmosphere of mutual appreciation and safety.

What

'Connect with nature' sessions are offered for people with mental and physical health issues, especially service users of the hospital, but also St Ann's staff members and members of the local community, accommodating all ages and abilities. The sessions were designed by applying the pathways to nature connection, in combination with the NEF five ways to wellbeing. They include a slow-paced walk, collection of natural materials, creative activities, informal discussion and simple exercises to develop sensory and observational abilities. At the end of the walk, participants return to the nature table to display and create with the materials gathered. A walk on Diwali involved the creation of mandalas made with yellow leaves, and just after Halloween celebrations there was a focus on invertebrates that don't always get a lot of love, despite their vital roles in the ecosystem: "Villains" like the wasp and the spider and the "ewww" creatures like snails, slugs, and worms. In a "Wintering" walk, participants examined what different creatures do to prepare for winter and looked at how trees and plants ready themselves for the cold and darkness. They considered what we can learn from nature about making



our own preparations for winter and discussed the best things about the dark-half of the year. As part of a commitment to showing compassion for nature participants plant bulbs in a small, neglected part of the site.

Outcomes

The case study shows a rich and creative application of the pathways to support a community and strengthen the link between people and nature in an urban space. By connecting attendees to nature, the sessions aim to combat social isolation caused by poor health, unemployment, social problems, or mental health problems. Many attendees return for additional sessions. People particularly enjoy the collaborative and sensory aspects of the walk. The hope is that people will appreciate the unique beauty of the St Ann's site and that by visiting often, engaging in nature based activities and noticing how the place changes over the seasons, participants will develop a stronger connection to nature that will carry over into other parts of their everyday lives and enable them to find beauty, meaning and wonder in the middle of even the most urban of environments.

Find out more

→ www.facebook.com/StAnnsGreenSpaces



Barnet, Enfield and Haringey 
Mental Health NHS Trust
A University Teaching Trust

Oak Project

Who

The Oak Project is a national arts programme that uses art, culture and creativity to help restore society's connection with the environment. Developed in response to University of Derby research on the pathways to nature connection, the Oak Project harnesses the power of art to promote tuning into nature through sensory and emotional engagement, cultivating appreciation of nature's beauty and meanings, and inviting love and compassion for the natural world.

What

Launched in 2021, the Oak Project's first year involved three major projects. The first, responding to a brief that included the pathways to nature connection, *Silence – Alone in a world of wounds* by Studio Morison is a sculptural space at Yorkshire Sculpture Park that offers space for quiet reflection and connection to nature. An associated engagement programme offered creative activities to individuals, families, and community groups. The second project, *Great Oaks from little Acorns grow ...* by Charlotte Smithson, was an installation at the RHS Chelsea Flower Show. Designed to activate the pathways to nature connection, the work involved suspended recycled flasks and test-tubes with individual stems of plants. Viewers were invited to notice the beauty, emotional impact, and meanings of nature. The third project was the *Tune into Nature Music Prize*, a competition for musicians and singer/songwriters aged 16–29 whose work fosters and celebrates a stronger relationship with nature through contemporary popular music. The prize was offered in response to research showing the decline of nature connection amongst young people, and the decline in references to nature in contemporary music. Ceitidh Mac was the overall winner in 2021, with the song 'Birds'.



Outcomes

Hundreds of thousands of people had opportunities to engage with the artworks and associated activities in the Oak Project's first year. Evaluations showed the artworks activated the pathways to nature connection, increased people's connection to nature, inspired people to want to do more to help nature, and offered positive emotional experiences. Pre- and post-surveys showed visiting Silence led to increased feelings of nature connection and wellbeing, with greatest benefits for those with lower nature connection and wellbeing before the visit. The project demonstrates the power of art and cultural interventions to activate the pathways, increase connection to nature and motivate environmental action.

"Experiencing nature through the arts is leading to a significant increase in both nature connection and personal wellbeing"

Find out more

→ www.oakproject.org.uk



Mental Health Foundation: Mental health and nature policy briefing

Who

The Mental Health Foundation (MHF) is the UK's leading charity for everyone's mental health. Prevention is at the heart of what they do, aiming to find and address the sources of mental health problems through community and peer programmes, research, public engagement, and advocacy. Each year the Mental Health Foundation sets the theme, organises, and hosts Mental Health Awareness Week, providing a focus for national conversations about mental health and the changes needed to protect and support it.

What

In 2021, the Mental Health Foundation chose 'Nature and the Environment' as the theme for Mental Health Awareness Week, on the back of their research into the positive impacts of nature during the coronavirus pandemic. In addition to the national campaign, MHF released a research report about the importance of connecting with nature, and a policy briefing that calls for the government to focus on connection with nature in the formation of policies relating to nature and mental health. The policy briefing recommends that connection with nature should be used as a measure for the effectiveness of policies, rather than measuring people's time in and visits to nature. The protection and restoration of nature, and improved safe and equitable access to nature for all, is called for in order to maximise people's opportunities to develop deep relationships with nature. There is a call to

make use of the planning system and urban design to improve the visibility and availability of nature in all areas, in ways that allow for and encourage people to notice and engage with nature every day. A recommendation is also made to help children build sustainable long-term connection with nature, through making nature part of the learning process and creating school grounds that allow for and encourage meaningful experiences with nature.

Outcomes

The policy briefing highlights the importance of nature connection for mental health by putting it at the heart of recommendations for policy makers and decision makers. It also shows that nature connection can be built into policy proposals, scaling up the application of nature connection research to bring about the social and cultural transformations needed for the wellbeing of people and nature.

Find out more

→ www.mentalhealth.org.uk/campaigns/nature/nature-policy-ask-mhaw



Plymouth City Council: Green Minds – Redefining a city’s relationship with nature

Who

The Green Minds project aims to support Plymouth to become known as a ‘nature city’, building on its ‘Britain’s Ocean City’ brand, and working alongside the development of the new National Marine Park. Green Minds is developing and testing a transferable and sustainable system for planning and managing land in an urban environment through three approaches:

- Creating Green Mindsets (rewilding people) to welcome nature, not fight it
- Rewilding of daily urban life through new natural infrastructure and nature-friendly land management practices
- Applying complexity management principles, it views nature as a stakeholder to develop integrated sustainable land use policies and processes.

Plymouth aims to be an urban pioneer in this field, with Green Minds as a catalyst, working in partnership with citywide partners and other land use projects and sharing our learning nationally and internationally.

What

One of Green Minds’ key aims is to rewild people. The pathways to nature connection have been used to inform



audience engagement and support community participation activities, nature-based enterprise, improvements to green/blue spaces, community stewardship and professional audiences to connect with nature through a nature-based leadership programme. Other examples of activities informed by the nature connection pathways include nature-based land management training, citizen science, digital media posts, a series of creative commissions, social prescribing programme and much more! The pathways have also been used to inform place-making through infrastructure improvements to spaces, for example, fixed point photography encouraging people to engage with a view, seating and interpretation that encourages dwell time near nature-rich areas, wildlife habitat features, landscaping and art that draw attention and prompt engagement whilst walking through sites. The nature connection pathways and Nature Connection Index have also been used in the evaluation framework for the project.

Outcomes

Green Minds is helping landowners, professionals and communities see nature as an asset, leading to increased investment and a new sustainable land management system that delivers ecological and social value across Plymouth. The project demonstrates the value of focusing on changing people's feelings, minds, attitudes towards nature in order to meet sustainable land use goals. It offers a fantastic and innovative example of large-scale and wide-reaching application of the pathways to nature connection, showing how relationships between people and nature can be put at the heart of solutions for local government planning and design.

Find out more

→ www.greenmindsplymouth.com



Generation Green

Who

Generation Green is a 16-month funded project that aims to connect young people to nature, create and save jobs, and build an aspirant workforce for a green recovery. Generation Green is funded by the government's Green Recovery Challenge Fund. The fund is being delivered by The National Lottery Heritage Fund in partnership with Natural England and the Environment Agency. The primary beneficiaries are young people aged 14 to 26 years from the North, Midlands, and coastal and deprived urban areas – those who are traditionally less likely – due to social, economic and cultural factors – to connect with nature, or engage with nature and nature preservation/conservation. The project is being delivered by the Access Unlimited coalition, made up of the Youth Hostel Association (England and Wales), the Outward Bound Trust, Scouts, Girlguiding, Field Studies Council and the 10 English National Parks.

What

Through new jobs, training, volunteering roles, residentials and outdoor and online learning experiences, the project will provide more than 100,000 opportunities to connect young people to nature – many for the first time – and to cultivate a sense of care for the natural environment. The pathways are at the heart of the activities designed to connect the young people to nature, offered through free resources and day stays and visits run by the project partners. A wide range of activities are suggested to activate each of the pathways. For example, a 'gratitude scavenger hunt' is suggested to activate the emotion pathway – a bingo grid is created with things to find in each square, such as 'one thing that makes you happy' and 'one thing that feels nice to touch' and 'one thing that you've never seen before'. To activate the meaning pathway,

an activity involves creating tracking signs and symbols for young people to create trails for others to follow, and finding and making sense of natural animal tracks and signs. In an activity to promote sensory contact, people are led blindfolded to a tree to get to know it without sight. They are then led away and later asked to find and reunite with their tree based on their engagement with it.

Outcomes

Young people from deprived areas, BAME groups and disadvantaged backgrounds have fewer opportunities to experience nature and the outdoors at an early age, affecting their engagement with the natural environment in later life. The environment workforce is also one of least diverse workforces in England. Through creative application of the pathways to nature connectedness, the Generation Green project helps young people develop closer relationships to nature and improve wellbeing, while tackling inequalities in access and opportunities, lack of diversity in the environmental field.

Find out more

→ www.yha.org.uk/generationgreen



RSPB Nature Prescriptions

Who

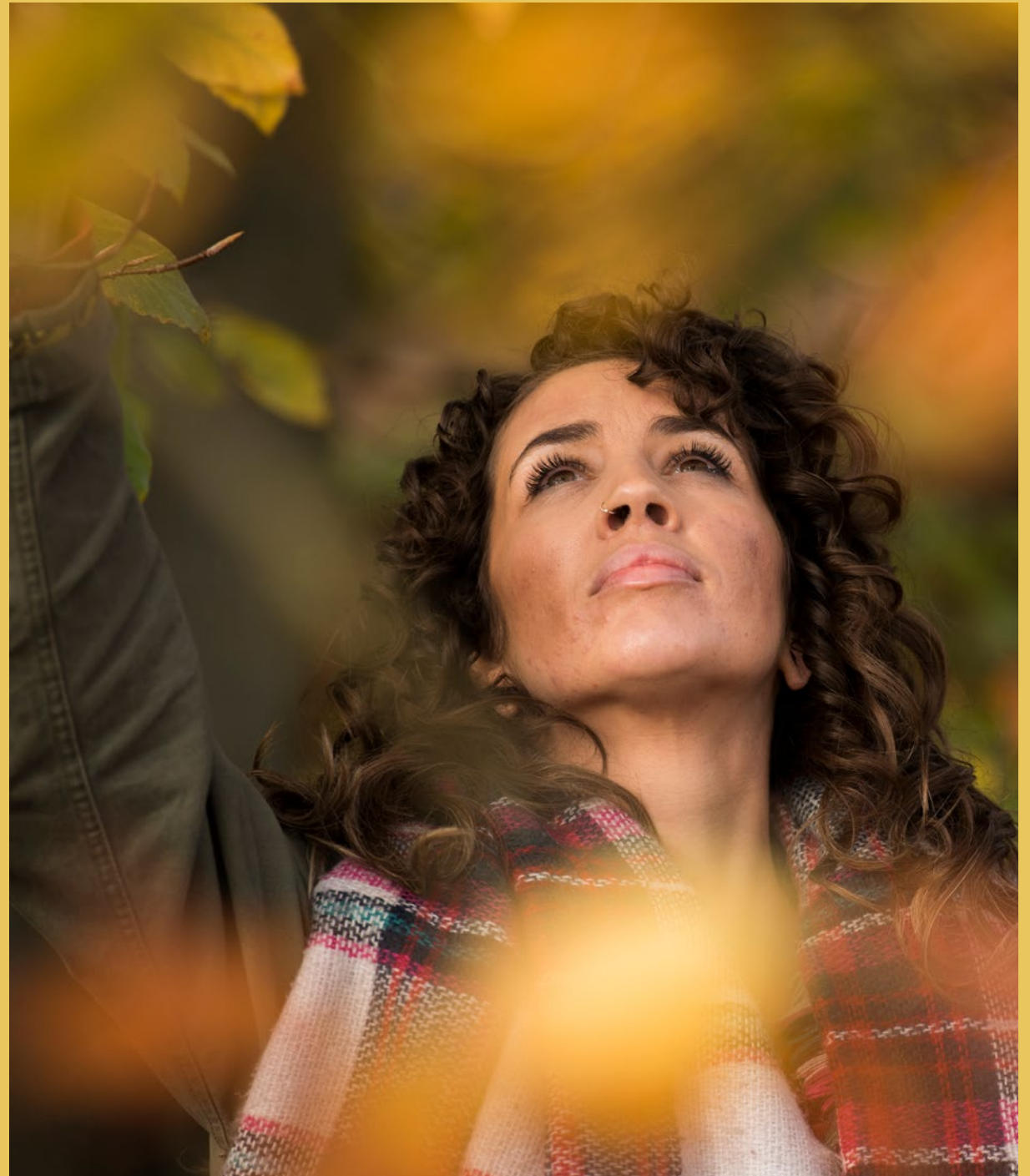
RSPB Scotland and Edinburgh and Lothians Health Foundation designed and delivered a Nature Prescriptions pilot project. Working with five GP practices in Edinburgh the scheme involved the prescription of nature-connecting activities to help improve patients' health and wellbeing. Over 335 nature prescriptions were formally recorded as being given, predominantly to support patients with mental health conditions.

What

GPs and other medical practitioners offered patients formal prescriptions to encourage and permit them to connect with nature. Patients were provided with a leaflet and seasonal calendar that offered suggestions and guidance for connecting with nature. Moving beyond the idea of being active outdoors, the emphasis was on developing personal, reciprocal relationships with nature, through emotional and meaningful engagement with the natural world. Activities drew on the pathways to nature connectedness and were designed to activate senses, beauty, emotion, meaning and compassion.

Outcomes

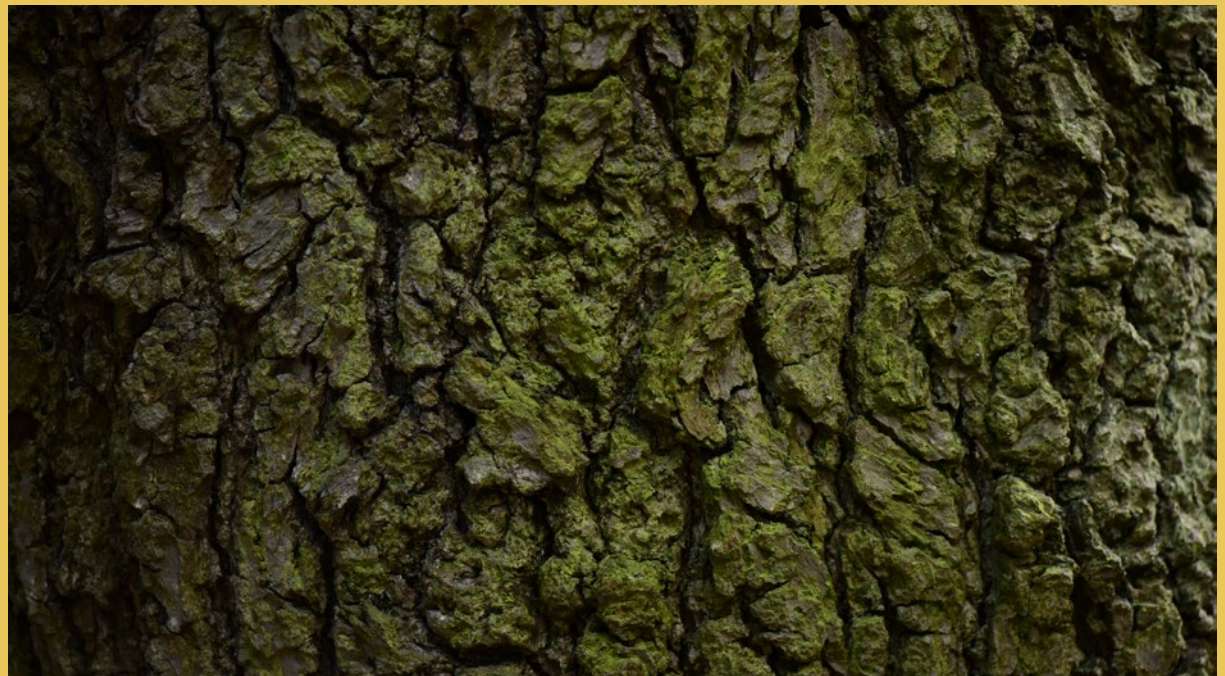
Patients reported that the scheme benefited their health, increased their awareness of nature, and led to ongoing engagement and connection with the natural world. The scheme was very well received by the prescribers, with 91% saying they would continue to prescribe it. Over half of patients surveyed reported an increased awareness of nature, and 87% said they would continue to use their nature



prescription for wellbeing. Patients said that the scheme gave them permission and motivation to take time out of their day to engage with nature. Sensory engagement with nature and noticing positive emotional responses were among the most popular activities.

Find out more

→ www.rspb.org.uk/our-work/rspb-news/rspb-news-stories/nature-prescriptions/



Glimpse

Who

Glimpse are a campaigning organisation that also partners with NGOs and ethical brands. They have worked with The National Trust, RSPB, Possible and Canopy & Stars in campaigns related to nature connectedness.

What

Glimpse have integrated the pathways into several creative briefs. For example, they developed 'The Story Bench' based on the meaning pathway - inviting people to share their stories about a piece of land before carving these images onto a bench, to help them deepen their connection to the land. They are currently working with travel company Canopy and Stars to create a card deck with 'rituals and practises for nature connection' for city dwellers. Glimpse also use the pathways to provide creative 'stimulus' for creative professionals.

Outcomes

Glimpse believe that shifting mindsets or cultural paradigms is one of the most powerful ways to influence a system, and that nature connection is vital to creating the shift in consciousness required to deal with the ecological crisis. Glimpse say that working on creative projects that seek to boost nature connectedness generate enthusiasm, energy and ideas.

Find out more

→ www.weglimpse.co

GLIMPSE



Norfolk and Waveney Mind: Nature Connect

Who

Norfolk and Waveney Mind are part of the national Mind organisation, a mental health charity that believes no one should have to face a mental health problem alone.

What

Norfolk and Waveney Mind have used the pathways research in developing a project called Nature Connect to support participants to rediscover and deepen their connection to nature in everyday and urban settings. Nature Connect aims to support those who are socially isolated and at risk of mental health problems. The year-long programme of activities include sowing and growing, mindful walks and forest bathing, creative activities and opportunities to design and deliver new local nature-based projects. The programme will also include a six-week nature awareness course called Nature Re-Connect, designed to activate the five pathways to nature connectedness: engaging senses, noticing beauty, awareness of emotional responses to nature, creating meaning, and enacting compassion.

Outcomes

The programme aims to support people to develop a more mindful and enriching connection with the natural world, without having to go to remote spaces. Spending more time in nature and engaging in activities that sustain local natural habitat will help grow more resilient, connected individuals and communities. Participants will learn how to use a closer relationship with nature to enhance their wellbeing and apply

this across all aspects of their daily life. The group format will also allow for social connections to be formed and foster a sense of community amongst like-minded individuals. Using the pathways to nature connection will encourage the growth of new relationships with nature to help with the prevention of mental health issues.

Find out more

→ www.norfolkandwaveneymind.org.uk



Wildfowl and Wetlands Trust: Generation Wild

Who

The Wildfowl and Wetlands Trust (WWT) is the UK's leading wetland conservation charity. They protect, restore and create healthy wetlands and help bring people closer to nature. One aspect of their work connecting people with nature is the design and delivery of outdoor learning, providing experiences for children and young people and educational resources for teaching staff. 40,000 learners engage with their learning programmes each year.

What

The WWT's Generation Wild project will work with schools, children and families in disadvantaged communities to help them connect to nature. Marking a shift from earlier projects that have focused on school curriculum requirements and knowledge acquisition, the aim of Generation Wild is to help children connect emotionally to nature, through activities based on the pathways to nature connection. Examples include 'hear a bird beating its wings', 'search for smells', 'make a present for an animal', 'make an assault course for an ant', 'find a lovely leaf', and 'dance in the rain'. Children collect virtual badges for each activity they complete, and become a 'Guardian of the Wild' once they collect ten. Developed in partnership with creative production company Stand + Stare, the project takes an arts-based approach built around a magical narrative revolving around Ava, part-Osprey, part-girl. Technology is used in producing magical 'translatorphones' that allow the children to listen in to the wetland animals.



Outcomes

Connecting with nature makes children feel happier, increases their self-esteem and improves their health. Generation Wild will connect 45,000 children and their families with the aim of creating a generation with life-long love of the natural world. The project helps those with fewer opportunities to connect with nature by working with disadvantaged communities. Working with families and teachers ensures they develop understanding of the use of the pathways which will help them support the children's journeys to nature connection.

"We need to change hearts and minds and all of the evidence seems to be suggesting that simply teaching children about nature isn't enough ... if children are to come to truly love nature, they need to experience and connect with it directly; see it, hear it, feel it, smell it and ultimately feel part of it."

Find out more

→ www.generationwild.org.uk



Paths for All

Who

Paths for All are a Scottish charity who champion everyday walking, for a happier, healthier, greener Scotland. They work with a wide range of people, from volunteers within communities, charitable organisations, and Local Authorities, and actively engage with the wider general public through social media.

What

Paths for All's nature connectedness themed campaign called Walking with Nature encouraged people to be active, connect with nature, and do small kind things that improved the places where people walked. Each week of this campaign had a different theme, for example, kindness week, bird week, micro-volunteering, litter week, forest week and 'connecting with nature wherever you are'. Content for each week and activities informed by the pathways to nature connection were shared on social media channels. For example, activities prompted during bird week included: "As you are walking listen out for birdsongs. Are they the same? Do you enjoy some more than others?", and "Find a spot to pause and observe birds. Try to notice the intricacies of feather patterns and markings. There are often beautiful, underrated birds around us every day." People were also encouraged to share their experiences through descriptions or photos, with prizes offered to incentivise participation.

Outcomes

This campaign was a tremendous success, with a great deal of public engagement. The campaign also won a Highly Commended Award in the Nature of Scotland Awards. Since



the campaign nature connection has become embedded within the charity's communications work, and widely promoted through social media by the communications team. The activities have since been used by Paths for All's Dementia Friendly Team, working in a care home to encourage residents to connect with nature more often. A second campaign is now being run, over a longer period of time, and the charity is looking to make wider use of the pathways and the science of nature connection. This includes work to improve spaces to connect with nature, such as positioning benches away from paths and in amongst trees and plants.

Find out more

→ www.pathsforall.org.uk



"I took my daughter round to Loch Lomond for a walk as I needed some 'water therapy' as I like to call it. She grabbed a notepad and pen and said "do you mind if I sit on the beach and write a spring poem? I get better ideas when I'm surrounded by it". It made me feel all warm inside to realise, she gets it too, she feels it, the connection with nature."

A quote from a person engaging with the "connect with nature wherever you are" theme

Studio Weave: The Hear Heres

Who _____

Studio Weave are a RIBA Chartered Architecture Practice based in London, who won a competition to design a series of 'playful incidents' in the parkland surrounding Kedleston Hall in Derbyshire, commissioned by the National Trust and Arts Council England.

What _____

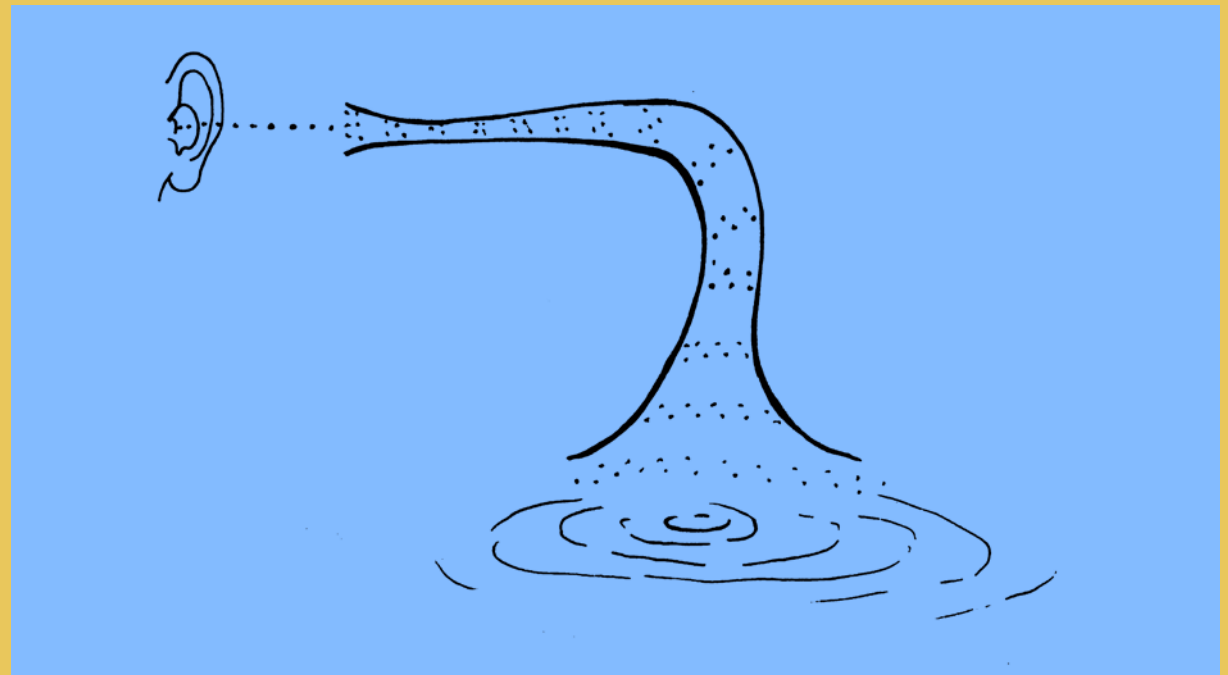
Studio Weave's 'The Hear Heres' offered visitors an immersive and interactive experience with nature. The Hear Heres are four structures that play with sound and open auditory vistas in the landscape. They are designed to pick up and amplify sounds in four locations around the parkland, inviting people to listen to the sounds of a tree's crown, the sky, water, and woodland.

Outcomes _____

While not designed in response to the pathways to nature connection, the Hear Heres exemplify the power of creative design to encourage human-nature interaction. Through rich sensory engagement and a sense of play, they prompt people to pause, and invite exploration to offer a new perspective on the wonders of the natural world.

Find out more _____

→ www.studioweave.com



Scaling up

It is now widely acknowledged that the climate and wildlife emergencies are caused by humans' use of the Earth's resources to support unsustainable consumption. As highlighted by the United Nations,²⁰ a sustainable future requires a transformational change in our relationship with nature.

Large-scale social and cultural shifts are needed to meet the challenges we face in addressing the climate and wildlife emergencies. The principles of nature connection in this handbook can be applied at a wider scale across the public realm of life to change how people relate to the rest of the natural world. With the focus of many sustainability initiatives being on reduction and restriction, nature connection offers a positive vision of a vibrant and nature-rich world that helps people feel good and live meaningful lives.

People with a close relationship with nature can lead the way in shaping the future of our institutions, spaces, and processes: putting nature connection into education's curricula, teaching spaces or practices; designing landscapes, urban spaces, and buildings that provide for and prompt engagement with nature; creating technologies that connect rather than disconnect humans from nature; developing health and social care services that integrate nature connection; or inspiring families, friends and communities to come together to enjoy and nurture nature.

Readers of this handbook can help bring this vision to life by advocating for a sustainable future with a closer relationship with nature.

Resources

Professor Miles Richardson's nature connectedness research blog

→ www.findingnature.org.uk

University of Derby Nature Connectedness Research Group

→ www.derby.ac.uk/research/centres-groups/nature-connectedness-research-group/

University of Derby's free online Nature Connectedness course

→ www.derby.ac.uk/short-courses-cpd/online/free-courses/nature-connectedness-relationship-with-nature/

Practitioner Guide to Assessing Connection to Nature

→ cdn.naaee.org/sites/default/files/assessing_connection_to_nature.5.11.20.pdf

Generation Green – activities for connecting young people to nature (can be used by less young people too!)

→ www.yha.org.uk/generationgreen/free-resources



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About

The Nature Connectedness Research Group was formed at the University of Derby in 2013. The group has pioneered the first interventions to bring about sustained increases in nature connectedness, bringing about improved wellbeing and pro-nature behaviours. Their work involves pure research such as a £1.5 million NERC funded UK Future Treescapes project and application, through input into the design of programmes and campaigns, for example, 30 Days Wild, 50 Things with the National Trust and the 2021 nature themed Mental Health Awareness Week. In 2018 its work was named by Universities UK as one of the UK's 100 best research breakthroughs for impact. The group won the institutional award for research impact at the 2021 Green Gown Awards. Research group lead Prof. Miles Richardson is a lead author on the global transformative change assessment being conducted by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services.

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