



National
Trust

Nature and me

Five ways to strengthen the
relationship between people
and nature.

Is this the key? That feeling of connection with nature
– so simple, so basic, and yet so often ignored. Could it
help us heal some of our most pressing modern ailments
– from the climate emergency to mental health?

In this short guide, we show how to get closer to nature
and the benefits this can bring. It gives us cause to
rethink some of our fundamental assumptions and lays
out a practical framework for action.

*Based on research by the University of Derby's
Nature Connectedness Research Group and
experiences at National Trust places.*

In partnership with



Breakthrough thinking

We humbly present a small breakthrough* in thinking about the way we, human beings, form relationships with nature.

It builds on a body of psychological study and it has been tested quite literally in the fields, as well as woodlands, beaches and parks.

We want to share what we've learnt far and wide, because we believe that, if embraced, it can boost the wellbeing of people and the wellbeing of the natural world we inhabit.



**UK Universities 100 best breakthroughs for its impact*



Part one: Understanding

Introduced by Professor Miles Richardson, who leads the Nature Connectedness Research Group at the University of Derby.

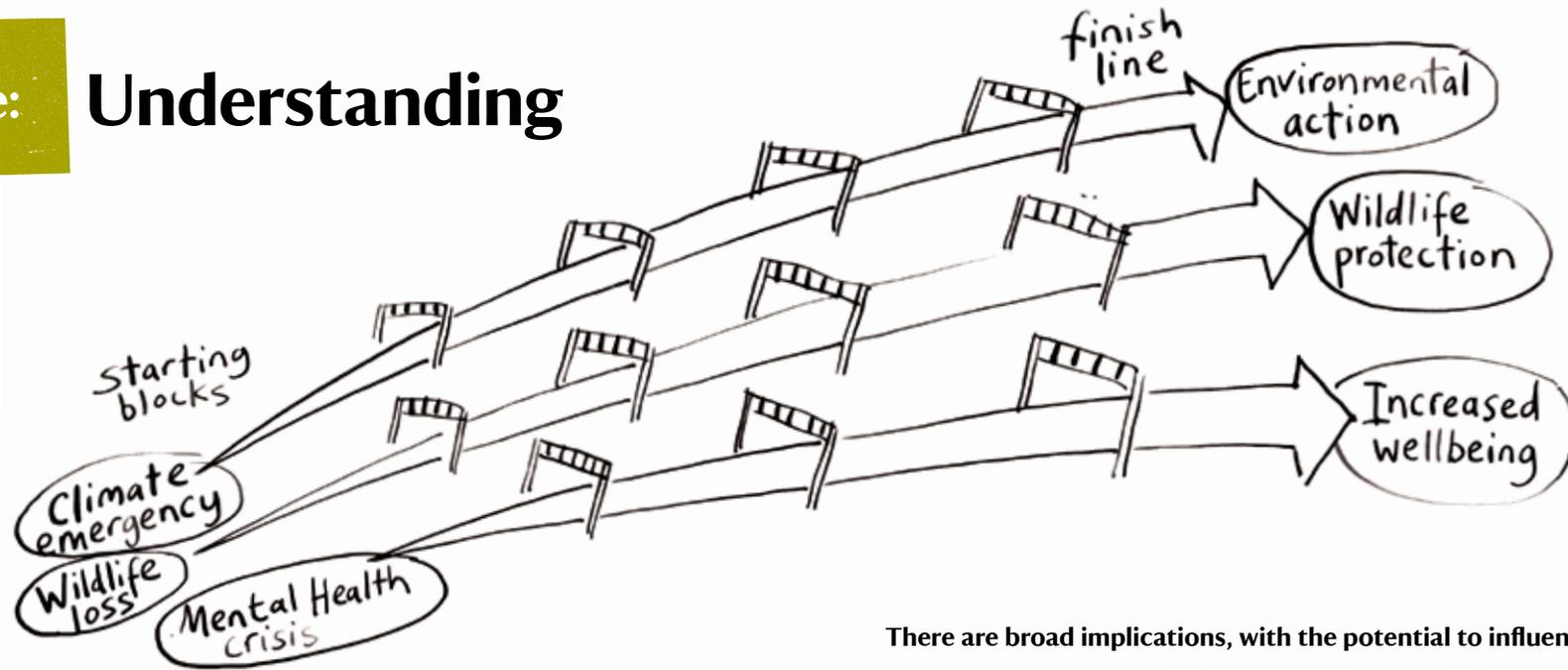


Part two: Application

Introduced by National Trust Outdoor Experience Manager, Penelope Chapple.

Part one:

Understanding



Miles Richardson

Three of the most important issues of our time have one thing at their heart: the relationship between people and nature.

We have studied the relationship between people and nature so we can understand how it can be improved. In part one of this guide, we summarise our research findings and introduce a practical framework to inform the design of experiences in nature. In part two we show the framework at work, using examples from National Trust places to explain how we're completely rethinking our approach to nature engagement and the impact this has had.

There are broad implications, with the potential to influence:

Management and planning, from the way we manage land, design urban spaces, housing and transport, to encouraging sustainable lifestyles.

→ **Examples**, page 22-23: a field of sunflowers becomes a local destination and willow thrones invite people to enjoy a view.

Wellbeing and fitness, including the design of health, wellbeing and fitness programmes.

→ **Examples**, page 24-25: yoga in nature takes on more meaning and outdoor art classes build confidence.

Learning and education, bringing nature connection into the curriculum and outdoor learning.

→ **Examples**, page 26-27: woodland wellbeing experiences for schools and young adults.

Conservation, looking at more effective ways to engage support for work to protect nature.

→ **Examples**, page 28-29: moths draw crowds and an inspiring World Ranger Day.

Recreation, offering fun experiences that encourage people to really notice nature.

→ **Examples**, page 30-31: updating our '50 things' campaign, a spring trail, dawn chorus walk and nature hunt.

What makes a good relationship?

Introducing the concept of nature connection.

More than just being outside

Two approaches have prevailed when it comes to our relationship with nature – the importance of being in it (access), and the importance of understanding it (knowledge). And while both matter enormously, they are not the full story.

Enter Nature Connectedness

In the early 2000s, researchers began seeking to understand a different kind of relationship – the level of closeness, or ‘connectedness’ to nature. This captures an individual’s emotional relationship, or sense of kinship, with nature.

Relationship: synonyms

exchange, interconnection, interrelation, mutualism, reciprocity, symbiosis. incorporation, integration, merger, unification. affinity, attachment, closeness, intimacy, rapport, sympathy. kinship, oneness, solidarity, togetherness, unity. colleagueship, companionship, company, fellowship.

Merriam-Webster dictionary

In the years that have followed, the concept of nature connectedness has been developed and applied, with a view to understanding how we can improve levels of connectedness. At the University of Derby, we have worked with Natural England and others to develop the Nature Connection Index¹. Our index looks at six factors, asking people to score themselves against the following statements:



Using this Index, we ran a nationwide survey to compare nature visits to nature connection. When we analysed 4960 responses² and combined this with other research, we came to five conclusions...

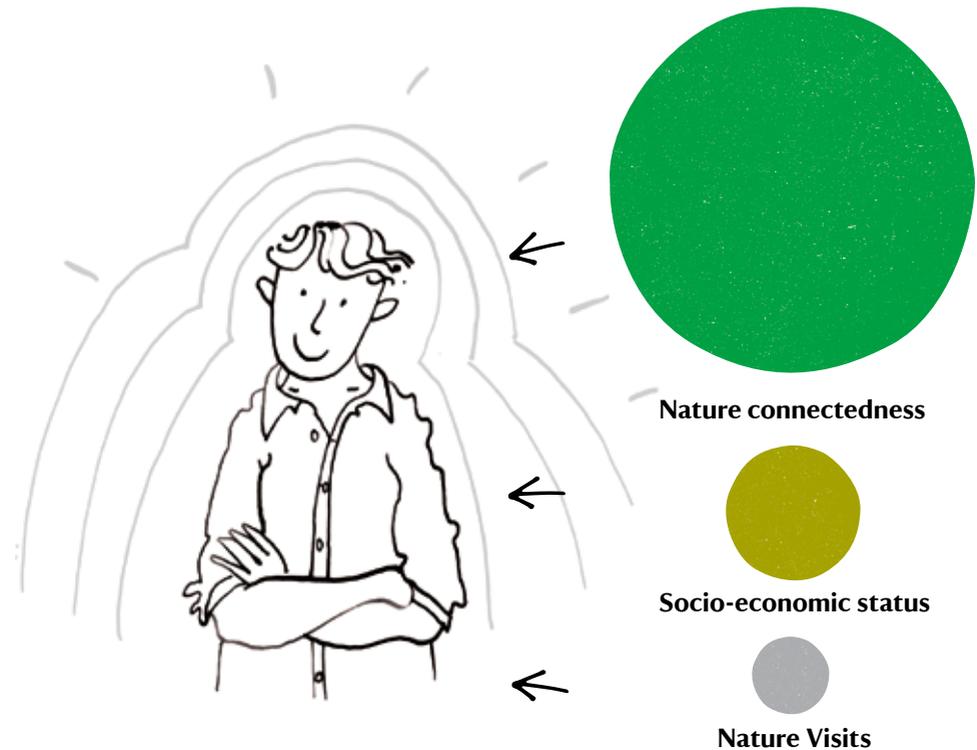


1. Life feels good when we have a strong connection with nature

When we measure what makes people feel that 'life is worthwhile' a close relationship with nature is four times more important than spending power.

Someone can feel connected with nature by simply stopping to listen to the birds, or really notice the beauty of a plant or a sky. And the good news is that this simple sense of connection is much more important than income when it comes to the sense of a life with meaning. Nature connection is also linked to different types of wellbeing, from being happy and feeling good to functioning well day to day.³

A worthwhile life



Nature connection versus nature contact

Contact with nature (measured as nature visits) is not the same as connection with nature. Connection plays a much more important role in our sense of feeling life is worthwhile, whereas contact with nature is more important for our general health.

2.

It's possible to feel close to nature in towns and cities

You don't have to be out in the wild to relate to nature. Nature connection can be simple, everyday and under our noses.

We looked at the impact of simple activities, like watching the clouds, the stars or the sunrise, listening to birdsong and smelling flowers. Each builds a richer relationship with nature and each can be enjoyed in a town or a city.

In another study⁴ we found that... noticing urban nature is good for you

In a randomised controlled trial of 582 adults, we prompted people to notice the good things they could experience in nature found in urban environments for seven days. As a result of taking part, we found that the mental health of participants improved - and that this effect lasted for at least a month.

Nature can be enjoyed by...

Everyone



Everywhere



3.

People who feel more connected to nature are more likely to protect nature

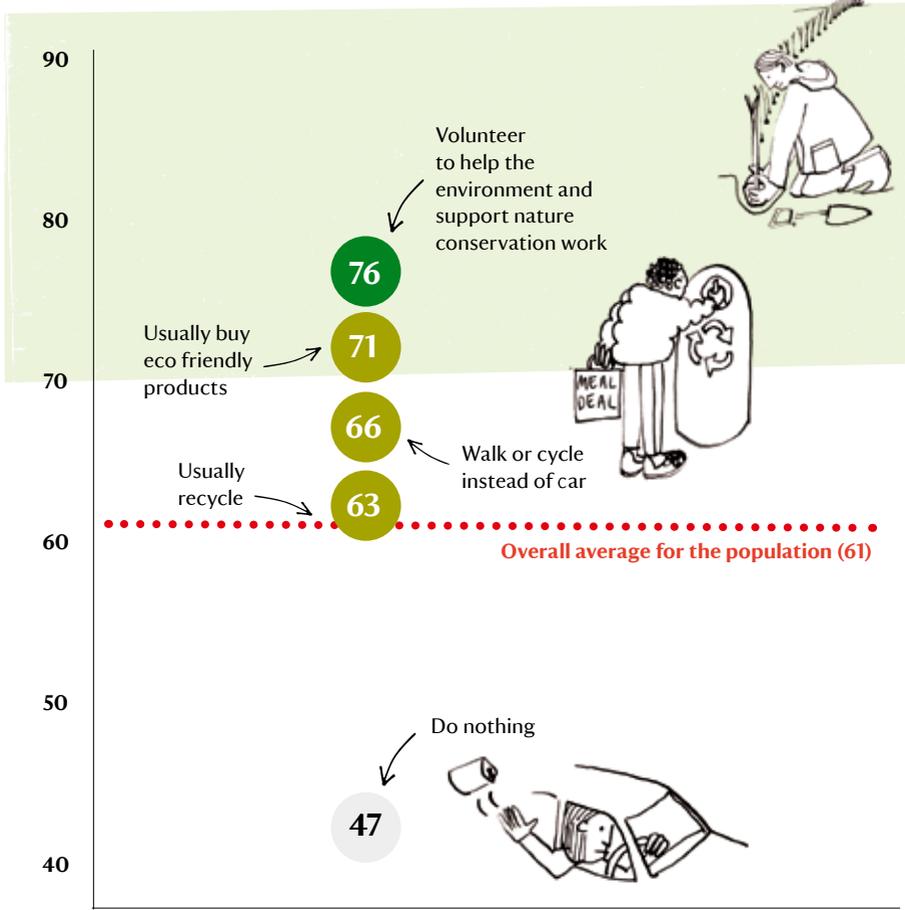
Our research showed a strong relationship between someone's level of nature connectedness, and their willingness to act or make choices in favour of nature.

Other research⁵ found that...
 In a study of children aged 9-11:

1. The level of *environmental knowledge* explained only 2% of the variance in pro-nature behaviour.
2. The level of *nature connectedness* explained a 69% variance in pro-nature behaviour.

Evidence from 75 studies has shown a causal link between nature connection and pro-environmental behaviours.⁶

Highly connected with nature To achieve sustainable lifestyles, people will need to move into the green shaded zone.



Less connected with nature

- **Pro-environmental behaviours** include recycling, green transport, reducing consumption.
- **Pro-nature behaviours** include encouraging biodiversity and supporting conservation causes.

A link between connection and action: people with a closer relationship with nature are prepared to do more for the environment or nature.

4.

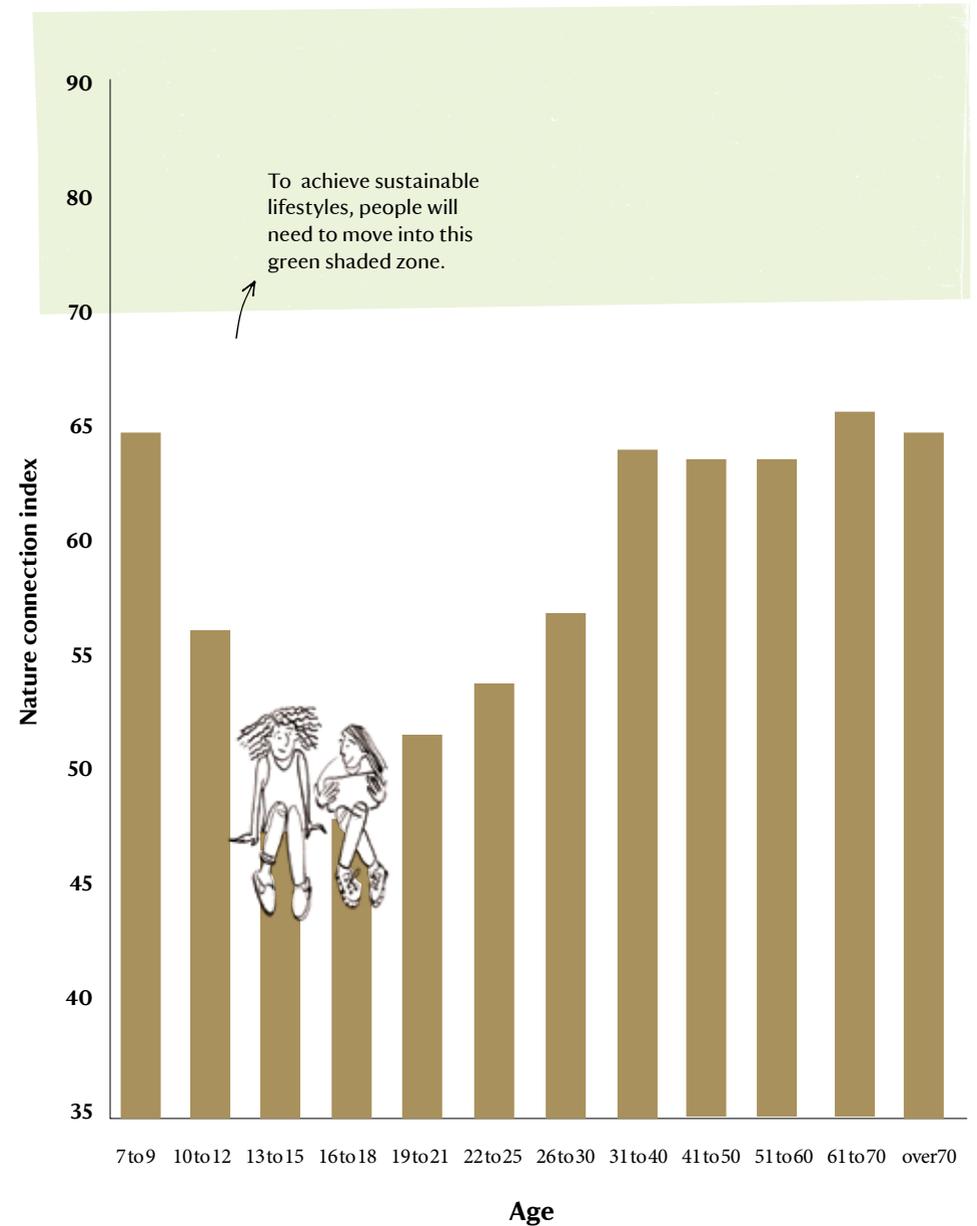
Teenagers fall out of love with nature

As children move into adolescence, they become more disconnected from nature.

After the age of nine, levels of nature connection drop dramatically and do not recover for twenty years. Other studies (see below), show that when teenagers prioritise a connection with nature, they're less likely to suffer from mental health issues.

Another study⁷ found that...

A study of 30,000 adolescents in Canada found that those who agreed that it was important to feel connected with nature, were also 25% less likely to experience mental health issues. The same study also found the number of adolescents who think nature connection is important falls by 30% between age 9 and 15.



5.

Connecting with nature is not an everyday habit

We found a nation of people who don't tend to do the things that will bring them closer to nature.⁸

Many individual experiences in nature are functional in purpose – walking the dog, cycling to work, getting some exercise, tidying the garden. And so when people do feel a greater sense of closeness with nature, it is often happenstance. I happened to see a beautiful sunset on my way home. A robin happened to settle on my spade.

And yet, we have also found a strong, positive response to triggers or 'nudges' to respond to nature. These can be as simple as suggesting people take a moment to listen to birdsong every day.



80%
of children **DON'T** regularly do activities that connect them with nature

Only **33%**
of adults often stop to appreciate the stars or the moon in the sky

Only **6%**
of adults often make homes for nature



Only **5%**
of adults often celebrate natural events (such as the longest or shortest day of the year)

Only **19%**
of adults often spend time in nature to make themselves happy

Only **30%**
of adults often listen to bird song

Only **16%**
of adults often enjoy watching wildlife at play

Our recommendation

The stakes are too high for us to leave this to chance. We have researched which experiences bring people closer to nature, and defined **five pathways to nature connection**:

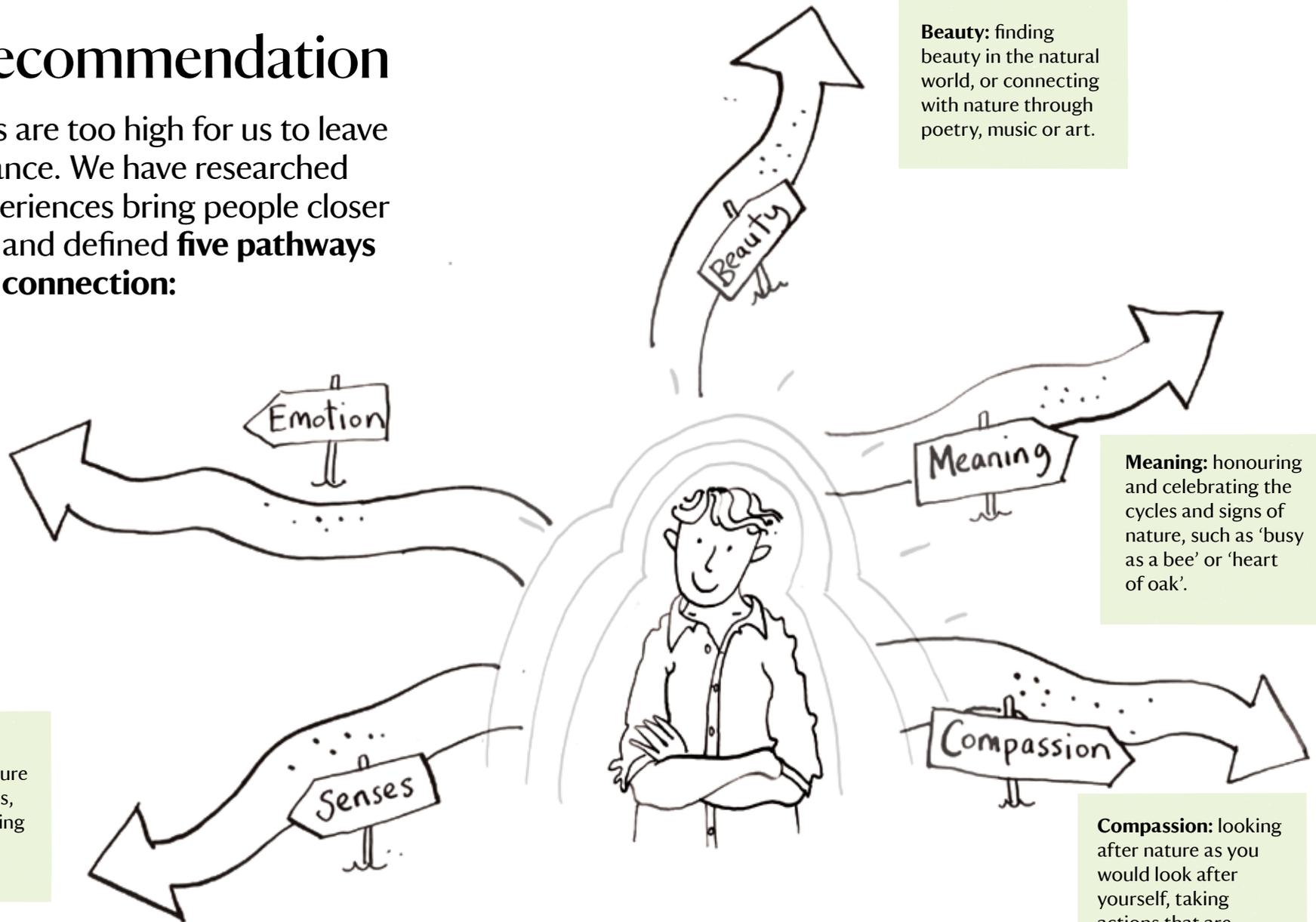
Emotion: tuning into an emotional bond with nature, or reflecting on the positive feelings nature can inspire.

Senses: actively engaging with nature through the senses, for example listening to birdsong or smelling flowers.

Beauty: finding beauty in the natural world, or connecting with nature through poetry, music or art.

Meaning: honouring and celebrating the cycles and signs of nature, such as 'busy as a bee' or 'heart of oak'.

Compassion: looking after nature as you would look after yourself, taking actions that are good for nature.

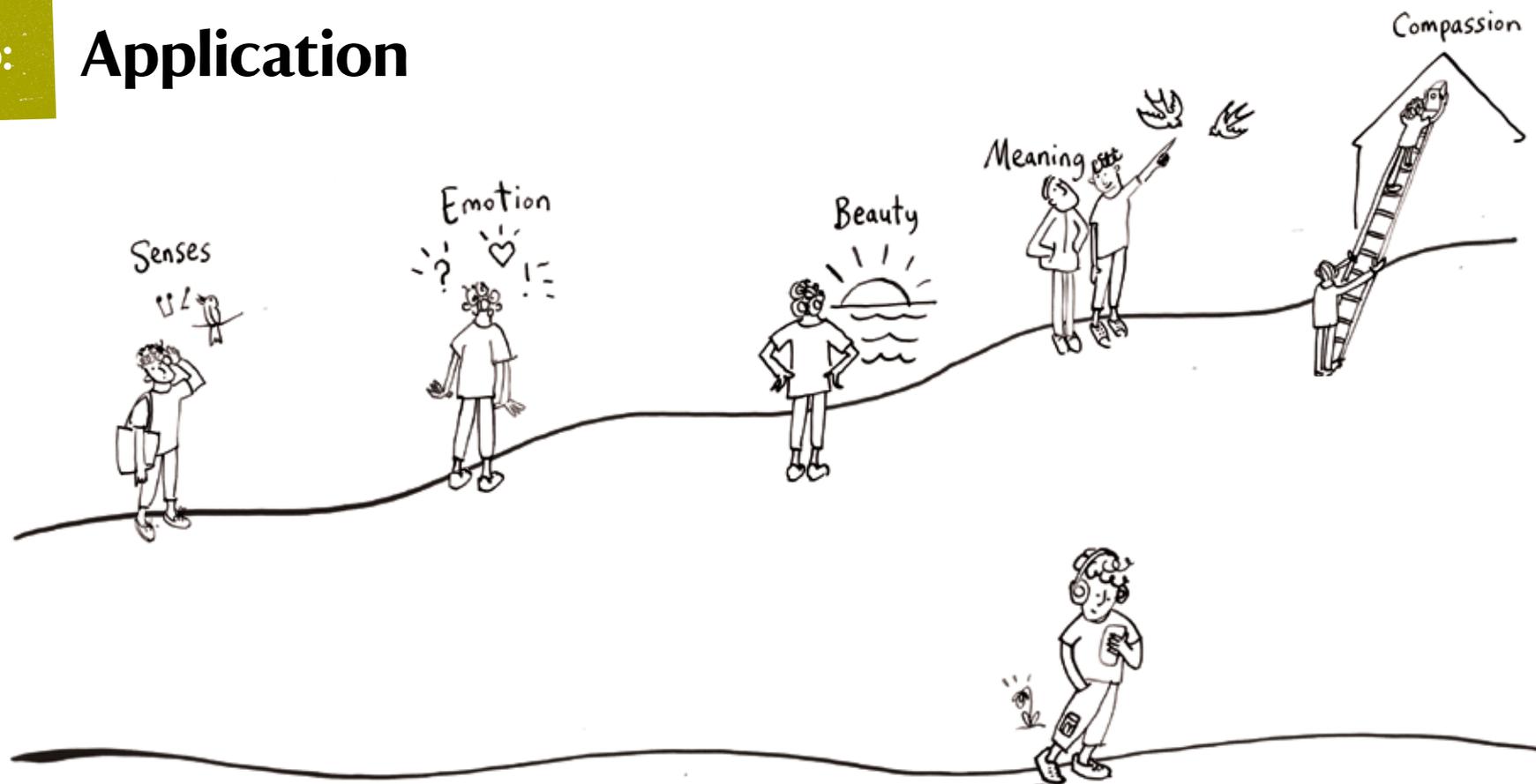


Part two:

Application

Highly
connected
with nature

Less
connected
with nature



**Penelope
Chapple**

Rethinking our approach to experiences in nature.

Here at the National Trust we've got lots of experience of telling stories about our historic places. But we have struggled to work out the best ways to really engage people with the nature beyond the usual nature trails, information boards and forest-school-style workshops. We invited Miles Richardson to advise us on what we could do differently. When he introduced

our countryside teams to the 'five pathways to nature connection', some could immediately see how they could adapt experiences already on offer. Common to all of these experiences is a shift – from focussing on what we want people to understand about a place, to the way people experience a place. Already we've found the new mindset is yielding powerful results.

Management approaches



A blooming revelation

A field of sunflowers at Rhossili planted for wildlife attracts more than the bees.

Tips:

Create and celebrate nature's beauty. We had two goals for this project – planting for wildlife and creating a spectacle for visitors – but it led to broader benefits.

When a forgotten field, adjacent to the path to Worm's Head at Rhossili, was returned to National Trust management, our countryside team decided to create a beautiful, nature-rich landscape for the benefit of wildlife (specifically bees and birds) and visitors.

No-one predicted the sensation this would cause. We've seen a huge increase in visitor numbers: the Rhossili sunflowers have become a social media sensation, been mentioned in Parliament and, most encouragingly, have caught the attention of neighbouring farmers interested in the benefits of planting for wildlife. Visitors are encouraged to act for nature too. Sunflower seeds are on sale in our shop so people can take them home to feed the birds (or plant their own crop).



Tips:

Share your passion for a place and create prompts that invite people to pause and explore. This has made people feel closer to a place and want to return.

Adding splendour to a view

Natural sculptures inspire people to enjoy the views in Shugborough's park.

The grounds of Shugborough Hall in Staffordshire have recently come back into National Trust management. The team wanted to share their love for the grounds and devise ways for visitors to enjoy their favourite spots. Paths were cut into grasslands to open up views. Seating was placed – inspired by the decorative detail in Shugborough Hall – in the spots with great views. A local willow sculptor was commissioned to create acorn thrones and recliners, creating a sense of privilege to be enjoying the views and encouraging people to explore the grounds. Visitors were also invited to create wild art pieces to express how the Arboretum has made them feel.

As a result we've seen an increase in visitors, plus visitors engaging on a deeper, more meaningful level and returning to see progress.

Wellbeing & fitness



Yoga on the rocks

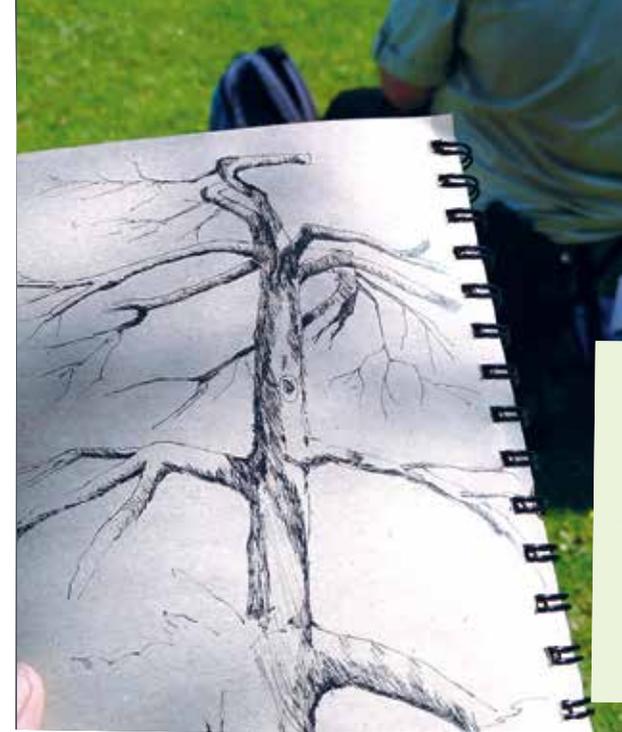
Outdoor exercise classes become more meaningful.

Tips:

Introducing a focus on nature can create a new, more enriching dimension to an activity. Work with providers who understand and support this approach.

We've been offering yoga classes in the dramatic landscape around Yorkshire's Brimham Rocks for some years. But when our Visitor Experience Manager was introduced to the five pathways to nature connection, she decided to rethink their approach. She discussed with the yoga instructor, deciding to: time classes to align with the seasonal equinoxes; lengthen some classes – two hour sessions gave participants a much more in-depth experience of a place; locate classes in areas with the most striking views; and invite people to notice changes in nature (seasons, light, weather) during their practice.

Now, instead of turning up for a class and leaving, people tend to linger in the landscape. We also find the classes have much broader appeal.



Tips:

Understand what your audience is comfortable with – there are lots of ways you can ask people to slow down and notice nature without it feeling alien.

Drawing strength at Clumber

There's more than one way to be mindful of the beauty of nature.

The team at Clumber Park in Nottinghamshire wanted to offer a regular activity for locals that would have mental wellbeing benefits. They thought about offering mindfulness activities, but knew that the concept of things like 'forest bathing' or meditation would put many people off. Instead, they looked at more practical activities that have a similar effect on people's ability to slow down and notice nature. They decided to offer an outdoor art class.

Once a month, a group goes out to study and paint or draw a different feature in the landscape. The classes have attracted a loyal following; people have made friends and visibly grown in confidence as a result of joining the group. As a regular offering for locals, the classes have also been a great way of forging links with the neighbouring community.

Learning & education



School kids feel free

Woodland Wellbeing Days for schools at Cliveden move teachers to tears.

Tips:

Don't stick with 'We're going to learn' but rather, 'We're going to experience'. We find that children react to nature in different ways – embrace changes in direction.

The team at Cliveden have created a 'Woodland Wellbeing' programme to support the pastoral elements of the National Curriculum. It incorporates the five pathways in its design, with activities including: wild art, using found natural objects like leaves and pine cones and then encouraging children to talk about their work; lying on the grass to look up at the sky to spot the red kites (common at Cliveden) and imagining what the birds can feel, see and hear; and making 'mindfulness jars', introducing the idea of giving ourselves time to calm down when something difficult happens.

The classes can lead to a dramatic increase in children's wellbeing and confidence: 'Teachers had tears in their eyes when a student, usually silent in class, stood up and explained how they'd created their wild art,' observed our team.



Tips:

Collaborate with the right partners. We can provide the right environment and our partner's, HaRT, have the expertise to reach the intended audience.

Finding purpose in the woods

Children and young adults grow their confidence in the New Forest's Foxbury woods.

In the woodlands of Foxbury in the New Forest, a programme of 'ecotherapy' is offered to local children and young adults with physical, social and mental issues. It is a collaboration between the National Trust and local charity, Hampshire Art for Recreation and Therapy (HaRT). The pathway-inspired sessions include: sensory workshops, such as 'sound bathing' (listening to a Buddhist prayer bowl chime and then the sounds of nature); making homes for nature; making willow lanterns, wind chimes and boats; and learning traditional skills, such as coppicing.

For some, the experience has been life changing. Two boys, about to leave school with no qualifications, went on to successfully apply for a carpentry apprentice scheme. Most remarkably, an 11-year-old uttered his first words in years while sanding wood (he had been mute).

Conservation



Unsung heroes

A pop up nature reserve celebrates the beauty of moths at Blickling Hall.

Tips:

Bring one or two of the pathways to life at a time. Seeing the moths up close was a real 'wow' moment for visitors and gave us the chance highlight their role as pollinators.

Why do butterflies get all the attention? The rangers at Blickling Hall in Norfolk wanted to share their wonder of the beauty of moths, so often unseen or only visible at night. Last Easter, knowing that the gardens would be busy with families doing an Easter trail, they put up a temporary nature reserve. Moths were trapped overnight, put into a fridge to slow them down and then displayed in special tubes. Volunteers explained their role as pollinators and invited people to hold moth pupae so they could feel them wiggle in the palms of their hands and see the shape of the wings and eyes inside.

There were lots of repeat visits to the trail, with visitors coming back time and again to see the moths. People wanted to make moth traps; one child even asked for a moth costume and came back wearing it, full of excitement.



Tips:

Give people the freedom to explore for themselves. Focus on fewer, well-designed activities with really engaging leaders.

Amazing diversity

World Ranger Day activities engage the senses at Wiltshire's Dinton Park.

The simplest of exercises – pressing grasses into a lump of clay – meant people focussed on the detail of the plants they found in the fields at Dinton Park. It was one of the exercises on offer during a World Ranger Day event (31 July). Other activities included: demonstrating the ancient practice of green woodworking; making butterfly feeding stations and writing messages for the insects; tree climbing to appreciate amazing birds' eye views of the landscape; and collecting insects with sweep nets, sparking conversations about the insects' incredible patterns and colours.

Low on cost but labour-intensive to organise, the day was well worth the effort. People stayed for hours and all ages were amazed by the diversity they discovered in a landscape that, as some admitted, had at first looked 'boring'.

Recreational activities outdoors



50 things to do before you're 11^{3/4}



1. Get to know a tree

Rethinking a campaign

Changing our '50 things' challenges to follow the pathways.

Tips:

Simple changes can bring about a new relationship with nature, for instance, encouraging people to stop and notice details they would otherwise walk by.

Since its launch in 2012, our campaign '50 things to do before you're 11^{3/4}' has been a great way to inspire children's activities in nature. We reconsidered the list in light of the five pathways to nature connection and changed the emphasis of some of the challenges. Perhaps most symbolic is the change from 'Climb a tree' to 'Get to know a tree'. We'd found tree climbing quite one-dimensional and it made less confident or less able children feel excluded.

Through this change in focus, we can now include a much broader, more personal range of activities. Prompts include bark or leaf rubbings, counting a tree's rings, noticing seasonal changes, raking leaves, or inviting people to lie on a picnic blanket and look up at the sky through a tree's branches. Although designed for children, we see all ages enjoying the activities.

Finding colour at Glendurgan



At the exotic Cornish Glendurgan Garden, the Visitor Experience team set a new kind of spring trail, asking visitors find plants and other natural elements that matched the colours on a colour wheel. 'We were blown away by how well something so simple was received, with people commenting how they'd really noticed the individual beauty of spring flowers, the textures of the garden and the changing colours of the sea and sky,' said our Visitor Experience Officer.

Singing with the birds



In previous years, the dawn chorus walks at Dyrham Park had focussed on identifying bird calls. Last year, in a fresh approach, the walks were led by a choir leader who taught participants simple 17th century folk songs featuring birds. We hadn't anticipated just how emotional an experience it is to sing outside in beautiful surroundings. 'Making our own sound made me feel more part of nature that morning', said one participant.

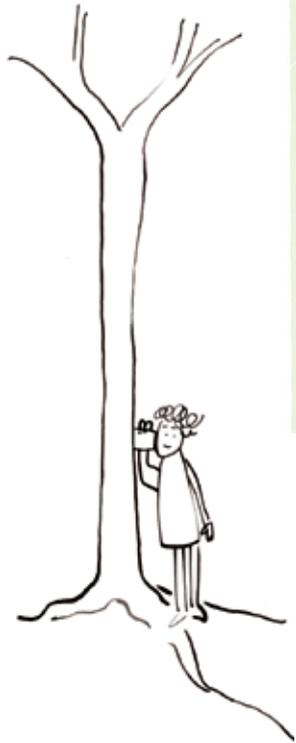
A chatty winter challenge



At Studland Bay, the team put together 'Make Me a Match' buckets, which challenged children to find the original home for a series of objects and replace them with something else they find in that spot. Children then showed their treasures to a team of staff and volunteers. Through the conversations (led by carefully-structured questions), the children became captivated by commonly-found natural objects – smelling moss, gently handling lichen or listening to shells.

This is only the beginning

There are so many more ways we can apply the five pathways to nature connection.



Senses

This could be...

listening to birdsong, smelling wild flowers, watching the breeze in the trees, going barefoot, tasting the fruits of nature.

Things we're trying:

- dusk runs
- barefoot walks
- stargazing tours
- apple days
- foraging groups and wild food recipes
- wild swimming, fun activities in water.

Emotion

This could be...

finding joy in wildlife at play, taking a moment to feel calm with nature. Wondering at details, like a spider's web. Reflecting on your feelings and sharing these with others.

Things we're trying:

- outdoor singing workshops
- outdoor poetry workshops
- pondscoping, listening to trees
- activities that encourage reflection or a response to nature.

Meaning

This could be...

creating a story about a tree, mapping the journey of a bee, finding folktales about nature, or celebrating key moments, like the longest day or the first swallow of summer.

Things we're trying:

- traditional customs and crafts, for instance green woodworking
- celebrating traditions and moments in nature, such as the solstices and when flowers are in season.

Beauty

This could be...

creating some wild art, painting the amazing colours of insects, taking a photo of a flower, visiting a place with an amazing view.

Things we're trying:

- resting places/benches with views
- planting schemes that create 'wow' moments
- activities that invite people to look closely, such as art classes, wild art and colour trails.

Compassion

This could be...

planting wildflowers, taking part in a beach clean, digging a pond, putting up a nest box, supporting conservation charities or buying eco-friendly products.

Things we're trying:

- 'micro volunteering' activities, like making homes for nature
- role-play activities (prompting children to imagine life as an animal or plant).

*** Imagine the results if we applied this thinking more broadly, to the way we design towns and cities, school curriculums and wellbeing programmes. It's a simple framework, but we know it works. Try it. See where the power of nature connection takes you...**

References

1 Richardson, M., Hunt, A., Hinds, J., Bragg, R., Fido, D., Petronzi, D., Barbett, L., Clitherow, T.J., and White, M. (2019). *An Affective Measure of Nature Connectedness for Children and Adults: Validation, Performance and Insights*. Sustainability, 11(12), 3250.

2 Martin, L., White, M. P., Hunt, A., Richardson, M., Pahl, S., & Burt, J. (2020). *Nature contact, nature connectedness and associations with health, wellbeing and pro-environmental behaviours*. Journal of Environmental Psychology, 101389.

3 Pritchard, A., Richardson, M., Sheffield, D., & McEwan, K. (2019). The relationship between nature connectedness and eudaimonic wellbeing: a meta-analysis. Journal of Happiness Studies, 1-23.

4 McEwan, K., Richardson, M., Sheffield, D., Ferguson, F. J., & Brindley, P. (2019). A Smartphone App for Improving Mental Health through Connecting with Urban Nature. International Journal of Environmental Research and Public Health, 16(18), 3373.

5 Otto, S., & Pensini, P. (2017). Nature-based environmental education of children: Environmental knowledge and connectedness to nature, together, are related to ecological behaviour. Global Environmental Change, 47, 88-94.

6 Mackay, C. M., & Schmitt, M. T. (2019). Do people who feel connected to nature do more to protect it? A meta-analysis. Journal of Environmental Psychology, 65 101323.

7 Piccininni, C., Michaelson, V., Janssen, I., & Pickett, W. (2018). Outdoor play and nature connectedness as potential correlates of internalized mental health symptoms among Canadian adolescents. Preventive Medicine, 112, 168-175.

8 National Trust. (2020). Noticing Nature. www.nationaltrust.org.uk/features/get-connected-to-nature

Thanks for reading! If you'd like to find out more, please:

Get in touch with us at: m.richardson@derby.ac.uk

Follow: Miles's blog at findingnature.org.uk

If you'd like this information in an alternative format, please contact beth.weston@nationaltrust.org.uk

Cover image: ©National Trust Images/Rob Coleman

Other images: ©NTI/Rob Stothard; ©NTI/Chris Lacey; ©NTI/John Millar; ©NTI/Arnhel de Serra; ©NTI/Chris Lacey; ©NTI/James Dobson

Illustrations by Susie Brooks @ susiebrooks.net

Editorial and design by Kirstie Dive & Company Ltd

nationaltrust.org.uk