



A NEW RELATIONSHIP WITH NATURE:

WHAT IT MEANS AND WHAT WE CAN DO

A briefing from the **Nature Connectedness Research Group** at the University of Derby

This briefing draws together findings from our research into human-nature connections. The purpose is to inform people of the evidence and what it means in practice.

The challenge – a failing relationship with nature

There's no wellbeing without nature's wellbeing. Everyone is at risk from the loss of habitats and a warming planet. The climate crisis and wildlife emergency show that the existing relationship between people and the rest of nature is breaking down. It has become disconnected and narrow. Too often we see nature as something to use, control or as a threat to us. To fix this we need a new relationship with nature and doing so can also help tackle the crisis in our mental health and wellbeing.

In the UK, the Government's 25-year Environment Plan aims to improve the natural environment within a generation and to reconnect people with nature.¹ To achieve that, people everywhere need to feel that nature matters to them.

The relationship between people and the rest of nature, 'Nature Connectedness', is grounded in scientific study, is measurable and accepted internationally. It involves understanding that we are part of nature. It is about our emotional connections and responses to nature, which help to regulate our own feelings and keep us mentally healthy. And it is about a meaningful relationship with the rest of nature rather than seeing it as something other. In short, it's understanding that as humans **nature is our story**.

The big ambition - a new relationship with nature

Our ambition is happier and more fulfilled people and a thriving environment created by forging a new relationship with nature. To build that new relationship, and hence the wellbeing of people and the rest of the natural world, we need to reboot our policies and practices so that they enable people to connect with nature. We must go beyond access and visits to nature. Beyond engaging people with nature through facts and figures. The evidence outlined here tells us we can build a new relationship by focusing on five types of activity: tuning our senses, responding with our emotions, appreciating beauty, celebrating meaning and activating our compassion for nature. We must also moderate our use and control of nature.

The evidence – why our relationship with nature matters

The University of Derby is leading the development of ground-breaking evidence that explains what nature connectedness is, how it can be measured, its benefits for human and environmental wellbeing – and, importantly, how it can be improved.

Science shows we need to go beyond simply enabling people's access to nature, and enable people to build a connection with nature. It is our connection with nature that supports human and environmental health and wellbeing.

Here are some highlights of our research:

- Our recent National Statistics survey work² with Natural England and others shows that:
 - People's nature connectedness, but not their contact with nature, predicts a sense that life is worthwhile nearly 4 times larger than the increase associated with higher socio-economic status.
 - Nature connectedness predicts pro-environmental conservation behaviours, while the frequency of visits into nature does not.
 - Nature connectedness predicts pro-environmental household behaviours better than, and independently of, the frequency of visits into nature.
 - Levels of nature connectedness in children dip sharply between the ages of 10 and 15 years and can take 20 years to re-establish, to levels that are still insufficient for a sustainable future.³
- Our work with The Wildlife Trusts' 30 Days Wild public engagement campaign found that people who took part reported sustained increases in connection to nature, happiness, health, and pro-nature behaviours. Simple everyday engagement with nature matters.⁴
- Our work on pathways to nature connectedness found that sensory contact, emotion, beauty, meaning and compassion connected people to nature more effectively than the traditional approach of facts, figures and science.⁵
- Our work to develop a smartphone app found that people with common mental health problems who noticed good things about urban nature showed clinically significant improvements in their quality of life.⁶
- Our work shows nature connectedness is linked to both feeling good and functioning well notably bringing higher levels of self-reported personal growth.⁷

Wider research shows a causal link between nature connectedness and pro-nature behaviours.⁸ In sum, Nature connectedness is an essential target to foster a worthwhile and sustainable life. The evidence leads us to simple, low cost and universal solutions to help address the challenges of a warming climate, wildlife loss and mental health.

³ 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.

⁴ Richardson, M., Cormack, A., McRobert, L. & Underhill, R. (2016). 30 Days Wild: Development and Evaluation of a Large-Scale Nature Engagement Campaign to Improve Well-Being. PLoS ONE 11(2): e0149777. doi:10.1371/journal.pone.0149777 5 Lumber, R., Richardson, M., & Sheffield, D. (2017). Beyond knowing nature: Contact, emotion, compassion, meaning, and beauty are pathways to nature connection. PLoS One, 12(5).

⁶ McEwan, K., Richardson, M., Brindley, P. Sheffield, D. & Ferguson, F.J. A Smartphone App for Improving Mental Health through Urban Nature. (2019). International Journal of Environmental Research and Public Health, 16(18), 3373 doi.org/10.3390/ijerph16183373.

⁷ 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.

⁸ 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.

Simple solutions – improving our relationship with nature

Nature connectedness offers simple solutions to help deal with complex societal problems. Improving our relationship with nature responds to the challenge of the climate emergency and wildlife loss by encouraging care and respect for the rest of the natural world. People will be more supportive of the big changes needed if they are more connected to nature and feel that nature matters to them. A population connected with nature will also be more likely to take action for nature - from simple actions at home, such as recycling or wildlife friendly gardening, to those requiring more commitment, such as giving time to take part in conservation volunteering. Also, through a new, more connected relationship with nature people can live a happier, more worthwhile and sustainable life.

Actions – for a new relationship with nature 5 pathways to a new relationship with nature

Improving people's relationship with nature, their nature connectedness, comes through simple, yet meaningful engagement with nature. Our research has identified five distinct relationships that activate people's connection with nature. The pathways to nature connectedness provide a new and applied approach to improving human-nature relations. They provide a framework with great flexibility of application, often through simple changes, in a range of circumstances from outdoor activity to the design of infrastructure to improve relationships between humans and nature on a larger scale.

Senses:

Noticing and actively engaging with nature through the senses. Simply listening to birdsong, smelling wild flowers, or watching the breeze in the trees.

Emotion:

Engaging emotionally with nature. Simply noticing the good things in nature, experiencing the joy and calm they can bring, and sharing feelings about nature with others.

Beauty:

Finding beauty in the natural world. Simply taking time to appreciate beauty in nature and engaging with it through art, music or in words.

Meaning:

Exploring and expressing how nature brings meaning to life. Simply exploring how nature appears in songs and stories, poems and art, or by celebrating the signs and cycles of nature.

Compassion:

Caring for nature. Simply thinking about what we can do for nature and taking actions that are good for nature, such as creating homes for wildlife, supporting conservation charities and rethinking our shopping habits.

The pathways are used by the National Trust, Durrell Wildlife Conservation Trust, New Zealand Government's Department of Conservation and others.









The pathways as a design framework.

Below the pathways are used to suggest some areas of action that decision makers and leaders can consider. We have paired them as systemic changes for a sustainable future and actions we can take now to create more opportunities to connect with nature.

Area	Systemic change	Actions we can take now
Education and learning	Consider how education can build the foundations of a new relationship with nature for a sustainable future. A 'green thread' of human-nature relationships can run through the curriculum to provide the context and vision for a new relationship with nature. Teaching and learning should include outdoor natural spaces, so that contact and connection with the natural world is at the heart of delivery at primary and secondary school.	Education authorities and academies should support outdoor learning initiatives that go beyond just being outside, to actively connecting with nature. Beyond schools, a national Wildlife Wellbeing Week should encourage all citizens to take action to notice and care for their local wildlife - improving the environment and habitats where they live.
Arts and culture	Consider how arts policy can celebrate nature and its meaning in our lives. Encourage people to express their own appreciation and connections with nature. Use creative installations to prompt engagement with nature in public spaces.	A national festival of nature to promote our connections with the natural world and with each other. National prizes for music, film and written word by young people that helps build a new relationship with nature.
Urban design and planning	Consider how planning can move beyond access to 'access for connection'. Actively create spaces to offer the prompts and opportunities to pause and notice the 'good things in nature'. Create 'habitats for connection' - provide an abundance and variety of wildlife to notice through bringing nature recovery networks into urban areas.	Urban designers and buildings managers should bring opportunities to connect with and care for nature into the everyday environment – from spaces such as pocket gardens in schools to creating secluded habitats to encourage wildlife, to urban places that prompt meaningful engagement with nature.
Health and social care	Consider how health and social care can use a new relationship with nature to help people feel good and function well. Build connection with nature into greener social prescribing.	Government departments and their agencies are already working to progress the use of nature based social prescribing at the national level and we encourage these initiatives to go beyond contact with nature to connection. Health and social care professionals can prescribe activities in natural environments that involve the 5 types of relationship above, for example 'noticing nature' walks, art or photography workshops, wildlife gardening or providing bird feeders in care home gardens. Revise the 5 Ways to Wellbeing guidance to include nature.
Housing	Consider how housing developments can enable an active relationship with nature: landscape design to prompt engagement with nature, resident management of wildlife-friendly gardens and new wildlife habitats to surround people with nature.	Incorporate principles of nature connectedness into planning design guidance and standards, and encourage developers to create environments that prompt engagement through the 5 pathways to nature connectedness.
Transport and infrastructure	Consider how transport can be geared to green commuting, with natural habitats and gardens at transport hubs to create an environment to prompt engagement with nature. Investment should prioritise walking and cycling through green corridors to encourage everyday engagement with nature.	Transport planners can map, signpost and promote green routes as alternatives to busy commuter routes. They can encourage wildflower and tree planting on roadsides and verges and create natural waypoints where people can pause and engage with the natural world.
Employment	Consider how workplaces can include the benefits of breaks in nature, help employees enjoy natural environments where they work, e.g. the NHS Forest initiative	A national sign-up scheme for business to 'look after your space' could encourage wildlife-friendly workplaces where employees connect with the good things in nature.
Cross-cutting issues	Public service providers should make every waiting area - from doctors' surgeries to bus stops - a place where people can notice the good things about the natural world. Move beyond access to parks, nature reserves and national parks to meaningful everyday engagement with nature on your door step.	



Further Information

Our research into nature connectedness has been named by Universities UK as one of the UK's 100 best breakthroughs for its impact. Central to that impact has been the application of our research findings to the design of new ways to connect people with nature.

For further information and support with building a new relationship with nature visit: derby.ac.uk/NCxRG