

Using Nature-Based Solutions to treat Long-Term Conditions

Evidence shows how nature can boost mental health, ease pain, and improve quality of life for millions living with chronic long-term conditions.



Background

More than a third of working-age adults in the UK have a long-term health condition, such as diabetes, heart disease, chronic pain, or mental health issues. This number has increased over the years, with more than 2.5 million people now unable to work due to long-term illness. Research shows that social prescribing can support individuals with long-term conditions through referral to link workers, who help them connect with services and activities in the community to improve their health and wellbeing. Green social prescribing involves connecting people to nature-based interventions such as walking schemes, community gardening, conservation volunteering, green gyms, open water swimming, and outdoor arts and cultural programmes.

What are Nature-Based Interventions?

Nature-Based Interventions are activities that take place in natural settings like parks, gardens, forests, or near water and are designed to improve your physical and mental health. These can include:

- Walking or hiking in nature
- Gardening or working with plants
- Mindfulness or gentle movement outdoors (like Tai Chi or Qigong)
- Creative activities using natural materials
- Water-based activities (like swimming or kayaking)

How Does It Work?

You might be referred to a **link worker** who is someone who helps you create a care plan based on what matters most to you. They can connect you with nature-based activities that support your health and wellbeing.

What Does the Research Say?

Researchers looked at many studies to see how nature-based activities help people with long-term conditions. Here's what they found:

Mental Health

Research shows that nature-based interventions can help people experiencing poor mental health feel calmer, happier, and less anxious or depressed.

Cancer

Studies suggest that spending time in nature may improve mood, boost energy, and enhance physical strength for individuals living with cancer.

Neurological Conditions

For people with conditions like Parkinson's, nature-based interventions have been found to ease fatigue and reduce feelings of anxiety and depression.

Chronic Pain

Evidence indicates that nature-based experiences can help people manage chronic pain more effectively, often leading to reduced discomfort and better coping strategies.

Multiple Long-Term Conditions

A wide range of research highlights the benefits of nature-based interventions for those living with multiple long-term health issues. These benefits include:

- Increased physical activity
- Improved heart health (e.g., lower blood pressure and heart rate)
- Support with weight management
- Stronger social connections, reduced loneliness, and improved confidence and employability

Overall, people reported feeling more emotionally resilient and satisfied with life.

What Should You Do Next?

If you're living with a long-term condition and would like support to access nature-based activities, a Social Prescribing Link Worker may be able to help you find a nature-based intervention that fits your lifestyle and supports your wellbeing.

References

Mental Health Research



**SPORT
ENGLAND**



Bhatti F, Leeuwrik T, Savins C, Jackson L. An interpretative phenomenological analysis of the experience of a nature-based therapy intervention for children with long-term health conditions and associated psychological difficulties. *J Health Psychol.* 2025;13591053251315380.2.

Buckley A, Brownlie K, Hill K, Hallamore R-R, Vijan N, Perry M. Health professionals' inclusion of green space in the management of long term conditions: a scoping review. *PHYS THER REV*. 2020;25(5):399-410.

Darcy PM, Armit H, Hurd A, Paton LW, White PCL, Coventry PA. Green Social Prescribing: A Before and After Evaluation of a Novel Community-Based Intervention for Adults Experiencing Mental Health Problems. *Health Soc Care Community*. 2025;2025(1):2016261.

Gelkopf M, Hasson-Ohayon I, Bikman M, Kravetz S. Nature adventure rehabilitation for combat-related posttraumatic chronic stress disorder: a randomized control trial. 2013;209(3):485-93.

Høegmark S, Andersen TE, Grahn P, Roessler KK. The Wildman Programme - Experiences from a first implementation of a nature-based intervention designed for men with stress and chronic illnesses. *Complement Ther Clin Pract*. 2022;46:N.PAG-N.PAG.

Husk K, Lovell R, Cooper C, Stahl-Timmins W, Garside R. Participation in environmental enhancement and conservation activities for health and well-being in adults: a review of quantitative and qualitative evidence. *Cochrane Database of Systematic Reviews*. 2016(5).

Jessen NH, Løvschall C, Skejø SD, Madsen LSS, Corazon SS, Maribo T, et al. Effect of nature-based health interventions for individuals diagnosed with anxiety, depression and/or experiencing stress— a systematic review and meta-analysis. *BMJ Open*. 2025;15(7):e098598.

Kaleta B, Campbell S, O'Keeffe J, Burke J. Nature-based interventions: a systematic review of reviews. *Frontiers in Psychology*. 2025;Volume 16 - 2025.

Mygind L, Kjeldsted E, Hartmeyer R, Mygind E, Bølling M, Bentsen P. Mental, physical and social health benefits of immersive nature-experience for children and adolescents: A systematic review and quality assessment of the evidence. *Health & Place*. 2019;58:102136.

National Guideline A. NICE Evidence Reviews Collection. Evidence reviews for psychological, psychosocial and other non-pharmacological interventions for the treatment of PTSD in adults: Post-traumatic stress disorder: Evidence review D. London: National Institute for Health and Care Excellence (NICE) Copyright © NICE 2018.; 2018.

Shorer S, Shacham M, Bloch B. Long-Term Group Nature-Assisted Therapy for Veterans Diagnosed with Chronic PTSD. *Soc Work Groups*. 2023;46(3):235-48.

Cancer Research

Carreño A, Fontdecaba E, Izquierdo A, Enciso O, Daunis-I-Estadella P, Mateu-Figueras G, et al. Blue prescription: A pilot study of health benefits for oncological patients of a short program of activities involving the sea. *Heliyon*. 2023;9(7):e17713.

Nakau M, Imanishi J, Imanishi J, Watanabe S, Imanishi A, Baba T, et al. Spiritual care of cancer patients by integrated medicine in urban green space: a pilot study. *Explore (NY)*. 2013;9(2):87-90.

Neurological Conditions

Heckmann JG, Kiem M, Immich G. Forest Therapy as a Nature-Based Intervention: An Option for Neurological Rehabilitation? *Complement Med Res*. 2024;31(1):56-63.

Chronic Pain

Rören A, Debacker C, Saghiah M, Bedin C, Fayolle A, Abdoul H, et al. Effects of horticultural therapy versus handiwork on anterior cingulate cortex activity in people with chronic low back pain: A randomized, controlled, cross-over, pilot study. *PLoS One*. 2024;19(12):e0313920.

Multiple Long Term Conditions

Alejandre JC, Chastin S, Irvine KN, Georgiou M, Khanna P, Tiegies Z, et al. Contextual Factors and Programme Theories Associated with Implementing Blue Prescription Programmes: A Systematic Realist Review. *Health Soc Care Community*. 2023;1-24.

Britton E, Kindermann G, Domegan C, Carlin C. Blue care: a systematic review of blue space interventions for health and wellbeing. *Health Promotion International*. 2018;35(1):50-69.

Corazon SS, Sidenius U, Poulsen DV, Gramkow MC, Stigsdotter UK. Psycho-Physiological Stress Recovery in Outdoor Nature-Based Interventions: A Systematic Review of the Past Eight Years of Research. *Int J Environ Res Public Health*. 2019;16(10):1711.

Djernis D, Lerstrup I, Poulsen D, Stigsdotter U, Dahlgard J, O'Toole M. A Systematic Review and Meta-Analysis of Nature-Based Mindfulness: Effects of Moving Mindfulness Training into an Outdoor Natural Setting. *Int J Environ Res Public Health*. 2019;16(17):3202.

Howarth M, Brettle A, Hardman M, Maden M. What is the evidence for the impact of gardens and gardening on health and wellbeing: a scoping review and evidence-based logic model to guide healthcare strategy decision making on the use of gardening approaches as a social prescription. *BMJ Open*. 2020;10(7):e036923.

Jones RJF, Littzen COR. An Analysis of Theoretical Perspectives in Research on Nature-Based Interventions and Pain. *Int J Environ Res Public Health*. 2022;19(19).

Kotera Y, Lyons M, Vione KC, Norton B. Effect of Nature Walks on Depression and Anxiety: A Systematic Review. *Sustainability*. 2021;13(7):4015.

Menhas R, Yang L, Danish Nisar R. Community-based social healthcare practices in China for healthy aging: a social prescription perspective analysis. *Front Public Health*. 2023;11:1252157.

Mygind L, Kjeldsted E, Hartmeyer RD, Mygind E, Bølling M, Bentsen P. Immersive Nature-Experiences as Health Promotion Interventions for Healthy, Vulnerable, and Sick Populations? A Systematic Review and Appraisal of Controlled Studies. *Frontiers in Psychology*. 2019;Volume 10 - 2019.

Nguyen P-Y, Astell-Burt T, Rahimi-Ardabili H, Feng X. Effect of nature prescriptions on cardiometabolic and mental health, and physical activity: a systematic review. *The Lancet Planetary Health*. 2023;7(4):e313-e28.

Rogerson M, Wood C, Pretty J, Schoenmakers P, Bloomfield D, Barton J. Regular Doses of Nature: The Efficacy of Green Exercise Interventions for Mental Wellbeing. *Int J Environ Res Public Health*. 2020;17(5).