

Est.  
1841

YORK  
ST JOHN  
UNIVERSITY

Ratcliffe, Thomas, Brigstocke, Sophie, Metcalfe, James and Goodwin, Alison (2026) Natural Health Service For North Yorkshire : Final Evaluation Report. Project Report. York St John University / North York Moors Trust.

Downloaded from: <https://ray.yorks.ac.uk/id/eprint/14786/>

The version presented here may differ from the published version or version of record. If you intend to cite from the work you are advised to consult the publisher's version:

Research at York St John (RaY) is an institutional repository. It supports the principles of open access by making the research outputs of the University available in digital form. Copyright of the items stored in RaY reside with the authors and/or other copyright owners. Users may access full text items free of charge, and may download a copy for private study or non-commercial research. For further reuse terms, see licence terms governing individual outputs. [Institutional Repositories Policy Statement](#)

# RaY

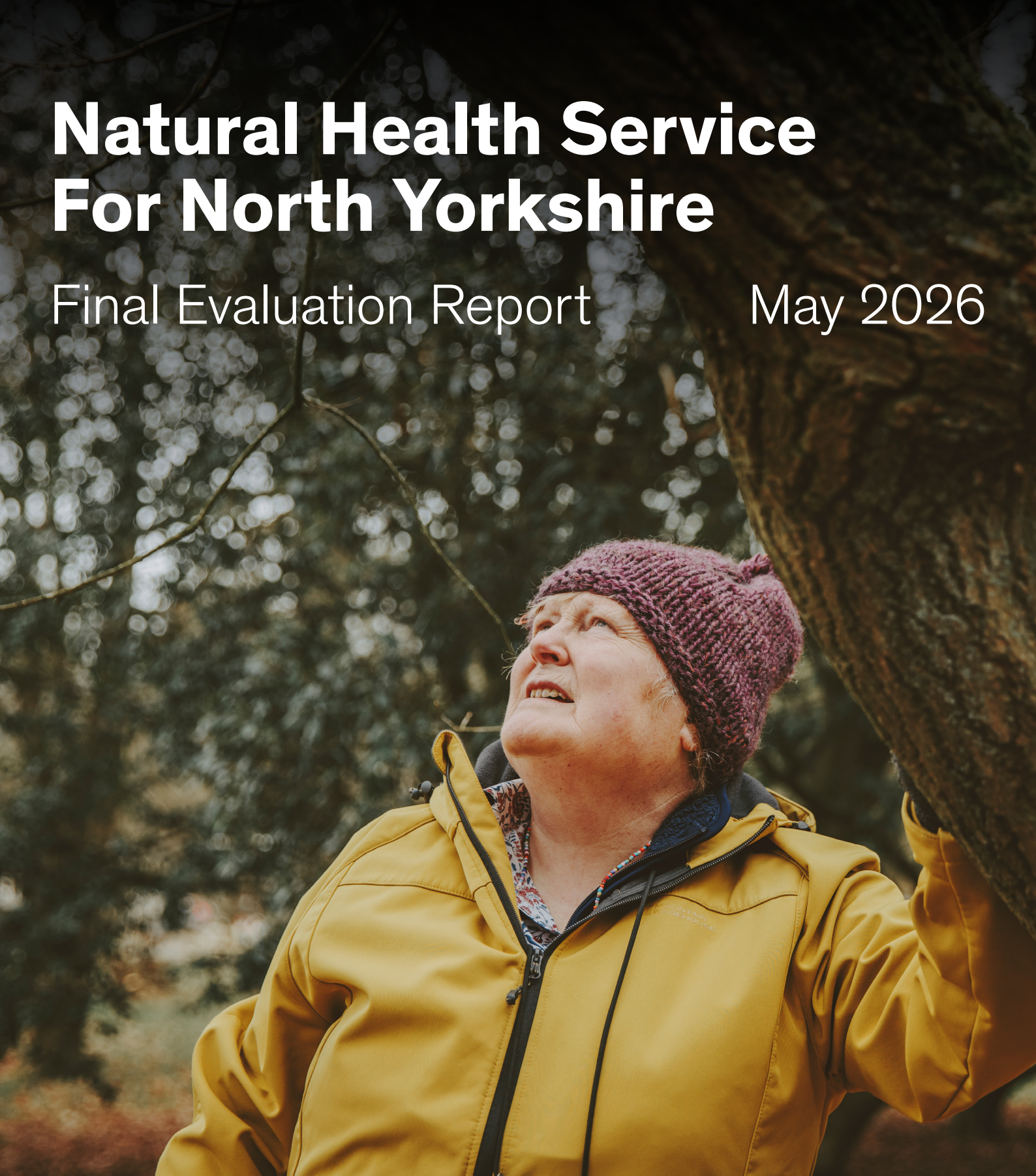
Research at the University of York St John

For more information please contact RaY at  
[ray@yorks.ac.uk](mailto:ray@yorks.ac.uk)

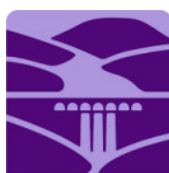
# Natural Health Service For North Yorkshire

Final Evaluation Report

May 2026



**Howardian Hills**  
National Landscape



**Nidderdale**  
National Landscape



**North York Moors**  
National Park



**YORKSHIRE DALES**  
National Park Authority

Est. 1841

**YORK  
ST JOHN  
UNIVERSITY**



Funded by  
**UK Government**



**YORK  
& NORTH  
YORKSHIRE**  
COMBINED AUTHORITY

**DAVID  
SKAITH  
MAYOR**

# Contents

---

<b>Copyright, Use and Citation</b>	<b>3</b>
<b>Executive Summary</b>	<b>4</b>
<b>Introduction</b>	<b>6</b>
What is the Natural Health Service	6
What the programme offers	6
Aims and objectives	7
Background to the pilot and context	8
<b>Methodology</b>	<b>10</b>
<b>Evaluation results, findings and discussion</b>	<b>11</b>
Phase 1: Training and workforce development	11
Engagement with the training	11
Mental health and wellbeing benefits of nature and Protected Landscapes	11
Barriers to green social prescribing in Protected Landscapes	12
Training impact and confidence, and referrals	13
System readiness	14
Green social prescribing approaches and impacts in Protected Landscapes	14
Phase 2: 10 week Interventions	15
Background on data collection results	15
10-week nature intervention outcome changes	15
Group demographics	16
Referral process and signposting to the programme	16
Programme design, delivery and experience	17
Mental health	18
Physical health	18
Nature connection	20
Protected landscape connection	21
Social connection and community	22
Person-centred approaches to early-intervention and preventative support	23
Behaviour change	23
Increase in economic activity	24
Barriers and challenges	25
<b>Conclusion</b>	<b>26</b>
Organisational capacity building	30
Evaluation study limitations	30
<b>Recommendations</b>	<b>32</b>
<b>References</b>	<b>34</b>



## Copyright, Use and Citation

© 2026 Natural Health Service for North Yorkshire.  
All rights reserved.

This report, Natural Health Service for North Yorkshire: Final Evaluation Report (May 2026), has been produced as part of the Natural Health Service for North Yorkshire programme.

This publication may be shared and used for non-commercial purposes, including policy, practice, and research, provided that it is appropriately cited. No part of this publication may be reproduced for commercial purposes without prior written permission.

### Disclaimer

The views expressed in this report are those of the authors and contributors and do not necessarily reflect those of all partner organisations or funders. While every effort has been made to ensure the accuracy of the information presented, no responsibility can be accepted for any consequences arising from its use.

### Citation

Please cite this report as Natural Health Service for North Yorkshire Pilot Final Report (2026)

### Acknowledgements

This programme was delivered through a partnership between the North York Moors Trust, North York Moors National Park Authority, Yorkshire Dales National Park Authority, Howardian Hills National Landscape, and Nidderdale National Landscape, with independent evaluation by York St John University. We also acknowledge the RSPB for their collaboration in developing the Nature Prescription calendar for North Yorkshire.

# Executive Summary

---

North Yorkshire is renowned for natural scenery, with nearly half of the region designated as Protected Landscape. Encompassing the North York Moors and Yorkshire Dales National Parks, as well as the Howardian Hills and Nidderdale National Landscapes, these expansive areas are fundamental to the region's pride and sense of identity. While they are loved for their beauty and tranquility, they are increasingly recognised for the role they can play in addressing pressing social and health challenges.

Health and life outcomes are worsening, inequalities are widening and health and support systems are under sustained pressure. The Protected Landscapes family have a long record of delivering nature based wellbeing work, but this programme represents a shift in how that contribution is made. The Natural Health Service for North Yorkshire was developed to bring this work together in a more intentional and targeted way.

The programme aimed to show how a Protected Landscape-led model of green social prescribing can play a stronger role in improving mental and physical wellbeing. It also sought to reduce isolation, support social, physical, and economic activity, and contribute to prevention and early intervention, particularly at a time when traditional systems are under strain -while connecting people with nature.

The pilot combined two connected elements:

A structured 10 week nature based intervention, building connection with these landscapes to support people with a range of health, wellbeing and social needs.

Professional training and workforce development, focused on building confidence, credibility and practical understanding of how nature based approaches can support early intervention and prevention across health, social and wider public services.

The findings show clearly that the approach works.

Participants experienced measurable improvements in mental wellbeing, physical health, activity levels, and social connection over the 10 week programme. Many described reduced anxiety and stress, improved mood and sleep, and renewed resilience and routine. As one participant reflected, the programme was “massively helpful for my brain and my emotions.”

Social connection emerged as a key outcome. Group based, non-clinical settings and doing so in the landscapes created a strong sense of belonging, particularly for those experiencing isolation. As one practitioner observed, “all our mental health patients just want to belong.”

A notable shift was seen in how participants viewed the programme as treating them as “people, not patients”, engaging as individuals with strengths, interests and choices and looking at the whole person rather than an illness or situation. For some, this led to meaningful next steps, including renewed readiness to consider employment: “I’m even thinking that it might be the right time to... do a few hours of employment, which I’ve not participated in for 20 years.”

Professionals also demonstrated strong belief in the model. Training significantly increased confidence, knowledge and intent to use nature based approaches, with near universal agreement on the benefits of nature for mental and physical wellbeing. As one professional put it, “you can see the benefits and you know what the patients will get out of it.”

While the intervention and training were effective, the evaluation highlights clear barriers to scaling, not just for this pilot, but for green social prescribing more broadly.



Image credit: Matt Storm

There is no lack of belief or willingness among professionals. Instead, system-level barriers are currently prohibitive. These include unclear referral pathways, limited visibility of provision, time pressures within services, and reliance on informal relationships rather than embedded infrastructure.

The Natural Health Service for North Yorkshire works in practice. The programme delivered strong outcomes for participants and built workforce confidence and capability to use nature based approaches. The immediate task is to continue doing what works well, while influencing systems to better support its wider implementation.

North Yorkshire has acted as a testbed for this approach. The uniqueness of our landscapes, and the strength of collaboration across the Protected Landscapes make the region an ideal place to develop, test and evidence a model of this kind. What has been achieved in a short space of time demonstrates how these natural assets can be mobilised into a deliverable, measurable and system aligned offer.

Looking ahead, there is also a clear role in advocating for Protected Landscapes to be better recognised and integrated within public health and prevention agendas. The evidence from this pilot strengthens the case for Protected Landscapes to be understood as active delivery partners within prevention and early intervention.

The opportunity now is to continue delivering and demonstrating how the Natural Health Service for North Yorkshire can achieve tangible outcomes in the region, while also acting as a “greenprint” for how Protected Landscapes across England and the UK could play a more consistent and central role in prevention and early intervention improving health, wellbeing and wider life outcomes.

We are proud of what we achieved in six months and excited by where this programme might go next in North Yorkshire but how it may influence beyond our boundaries too. This work would not have been possible without the staff and facilitators who worked at pace and with great professionalism or indeed the support of the Protected Landscape family.

We hope this report is useful in setting out the outcomes achieved, the learning generated, and the recommendations for how this work can be sustained, strengthened and taken forward.

# Introduction

---

North Yorkshire is uniquely positioned to explore the impact of nature-based approaches to improving health and wider life outcomes with its significant, rich and varied natural landscapes, stretching from coastal Whitby to rural Wensleydale. Mounting health, social and economic challenges, as well as a [decline in healthy life expectancy](#), are placing increasing pressure on already stretched services. In response, there is widespread recognition of the need to shift toward preventative, community-based, and person-centred approaches that address the wider determinants of health and life outcomes, as outlined in the latest [NHS 10 Year Plan](#).

The Natural Health Service for North Yorkshire has been developed as a positive and proactive response, demonstrating how Protected Landscapes can be more effectively utilised to address these challenges. The programme builds on successful regional work, including [Nature Prescriptions](#), [Nature on Prescription](#), and Growing Green and Blue Health, alongside national initiatives.

## What is the Natural Health Service

The Natural Health Service for North Yorkshire is a green social prescribing programme helping people to live healthier, more active and connected lives through a connection with nature and the region's National Parks and National Landscapes.

This is the UK's first Protected Landscape-led Natural Health Service in delivery.

The programme is led by the North York Moors Trust and delivered together with the North York Moors National Park Authority, Yorkshire Dales National Park Authority, Howardian Hills National Landscape, and Nidderdale National Landscape – the collective Protected Landscape family across North Yorkshire.

The pilot ran from October 2025-March 2026.

The programme was funded by £100,000 from York and North Yorkshire Combined Authority, Mayor of York

and North Yorkshire David Skaith, and UK Government through the UK Shared Prosperity Fund.

The pilot has been independently evaluated by York St John University.

## What the programme offers

The programme offered a structured and practical approach to connecting people with nature for their wellbeing.

1. Nature Intervention – a 10-week programme of guided nature connection sessions and movement-based activities to support participants health and wellbeing, reduce social isolation, and help people to become more socially, physically and economically active. Sessions begin close to home within community settings familiar to participants, before deeper interaction with nature in local green spaces and their local Protected Landscape using a step-by-step approach.
2. Nature Plan – intervention participants create personalised “Nature Plans”, setting out achievable steps to remain and prolong the benefits of being connected with nature and link into local community activities to staying active outdoors or signpost to other appropriate services.
3. Professional Training and Workforce Development – the programme provides free training and resources for professionals across sectors including health, housing, employment, community services and criminal justice. It aims to build confidence in using nature as an asset in prevention, treatment and recovery to address a wide range of service users' needs or challenges. This builds on the Nature Prescription for North Yorkshire, a calendar-based tool co-developed with the RSPB, adapted for the region to support professionals in prescribing nature-based activities from home through to Protected Landscape settings.



## Aims and objectives

The programme's aims were to:

1. Support improved mental and physical wellbeing and wider life outcomes.
2. Reduce health inequalities through early, accessible prevention.
3. Reduce loneliness and social isolation.
4. Build confidence, resilience, and connection to place.
5. Increase social and economic participation.
6. Nurture a stronger connection with nature in a place-based way, from local communities to Protected Landscapes.
7. Develop new and effective ways to support people, particularly through nature-based approaches.
8. Position Protected Landscapes as key assets in addressing health, social, and economic challenges, playing a more proactive role within early-intervention and prevention.

The programme's objectives were as follows:

1. Deliver 10-week nature-based interventions using a phased "stepping stone" approach to build skills, confidence, and connection to nature, as well as improve health and wider life outcomes.
2. Provide each participant with a bespoke nature prescription (e.g. "my five steps") to support continued engagement.
3. Deliver training and workforce development sessions for health and support professionals.
4. Ascertain levels of need and demand for the programme to inform development and scaling.
5. Build a robust evidence base to support integration with regional health and support services and future commissioning (e.g. by combined authorities, ICBs, NHS).
6. Introduce new audiences to Protected Landscapes and raise awareness of their role in early intervention and prevention.

## Background to the pilot and context:

North Yorkshire's natural environment forms a rich tapestry of green and blue spaces, from dramatic coastline to the heather-covered North York Moors and the limestone valleys of the Yorkshire Dales. Interwoven with rolling farmland, ancient woodlands, rivers and wetlands, these landscapes offer a powerful combination of awe, beauty, tranquillity and space, which shape both place and people.

The region is characterised by a large, rural geography with dispersed communities and an ageing population, alongside coastal towns and villages and urban areas on the edges of larger conurbations, such as Bradford, Teesside, Leeds, and York. Across these geographies, inequalities present in different but reinforcing ways.

Rural communities experience geographic isolation, transport limitations, and reduced access to services, often contributing to social isolation.

Coastal communities face entrenched and multi-layered inequalities, including poorer health outcomes, lower life expectancy, and limited economic opportunity.

Urban areas also experience persistent challenges, including health inequalities, lower levels of physical activity, and reduced access to quality green space.

Collectively, these factors contribute to widening disparities in health and life outcomes, alongside increasing demand on services. At the same time, health and support systems are under sustained pressure, particularly across primary care, mental health services, and employment services.

There is growing recognition of the need to shift toward preventative, person-centred approaches that address the wider determinants of health and life outcomes, including social connection, physical activity, and access to nature. This aligns with the direction of the NHS 10 Year Plan, moving from treatment to prevention and from hospital to neighbourhood-based support.

In this context, nature-based or "natural health" approaches have gained traction within social prescribing and public health strategies.

Evidence shows that [engagement with nature can reduce stress and anxiety, improve physical health and mental wellbeing](#), support transitions back to employment or social connection, and support the prevention and management of long-term conditions. North Yorkshire, with its significant natural assets – its Protected Landscapes – is poised to play a key role in this.

The Natural Health Service for North Yorkshire builds on a strong foundation of regional and national practice. This includes initiatives such as RSPB Nature Prescriptions and Nature on Prescription, alongside programmes such as HEY Smile's Growing Green and Blue Health. These initiatives have [demonstrated demand for and the benefits of nature-based interventions](#).

The development of the Natural Health Service for North Yorkshire also reflects the statutory foundations of the creation of Protected Landscapes, alongside their historical relationship with the National Health Service. Both emerged from post-war government policy, rooted in an ambition to improve public health and provide access to cleaner air, open space, and opportunities for recovery and wellbeing. The programme builds on this legacy, exploring how stronger and more deliberate connections between the NHS and Protected Landscapes can be realised today.

Protected Landscapes deliver a wide range of public engagement activities, including outdoor learning, volunteering, and wellbeing programmes, connecting diverse audiences with nature. Alongside this, organisations such as the North York Moors Trust have strengthened access to nature for health and wellbeing.

However, these offers are sometimes fragmented and often time-limited due to funding. The Natural Health Service for North Yorkshire brings this work together into a coherent region-based model that is clear to commissioners, policymakers and professionals and offers a better opportunity to leverage long term sustainable funding.

Protected Landscapes generate significant environmental, social and health value. In England, they are estimated to save the NHS £2.1 billion annually in avoided treatment costs, alongside delivering strong social return on investment. This programme seeks to make that value more visible, structured and commissionable, positioning Protected Landscapes and natural assets as a core part of prevention and place-based health systems.

North Yorkshire is uniquely positioned to test this approach. With almost half of the region designated as Protected Landscape – increasing further after the designation of the Yorkshire Wolds National Landscape – it provides a natural testbed for a large-scale, place-based model of nature-based interventions.

The Natural Health Service for North Yorkshire serves as a “greenprint” for how Protected Landscapes can contribute more directly to public health and wider outcomes.



Image credit: Matt Storm



Image credit: Matt Storm

# Methodology

---

This evaluation was designed to assess both the system-level readiness for integrating a Protected Landscape-led Natural Health Service approach and the real life impact of programme delivery.

The methodology took a co-produced, mixed method approach, including quantitative and qualitative data collection.

## **Phase 1 – Training and workforce development**

– focused on professionals across various sectors including health, housing, employment, community and voluntary services, and the criminal justice system. Training sessions enabled greater insight into perceptions of nature-based interventions and identified barriers and enablers to refer within existing systems, whilst providing resources for how to use or prescribe nature in early-intervention and prevention.

A survey and semi-structured interviews (in person and on Microsoft Teams) were conducted with professionals working across health, wellbeing, and community sectors prior to the commencement of the 10-week programme.



## **Phase 2 – 10 week nature intervention**

– explored the outcomes of a structured programme for participants to assess changes in wellbeing, social connection, physical health, and engagement with nature. Evaluation used a baseline and post-intervention survey to monitor the efficacy and impact of the programme. A reflective workshop in week 10 of the programme also gathered further data.

This stage collected quantitative data in the survey using both validated scales ((SWEMWBS), UCLA Loneliness, adapted Nature Connection Scales), programme-specific measures and open-ended responses questions which were combined into a Qualtrics survey which was completed by participants in the first and last sessions.

Semi structured interviews gathered further data (in person, on Microsoft Teams and by phone) with participants from a variety of groups across the programme.

Together, these two phases provide a complementary perspective: identifying the conditions required for implementation and the reception by professionals, while demonstrating what can be achieved when those conditions are met. Findings also offer insight into programme effectiveness and wider system changes required to scale this approach.

# Evaluation results, findings and discussion

## Phase 1: Training and workforce development

### Engagement with the training

The training with professionals achieved broad reach across all four Protected Landscapes, demonstrating successful delivery and engagement with a geographically diverse workforce.

Professionals represented a wide, multidisciplinary workforce spanning health, community, and voluntary sectors, with a mix of early career (60%) and experienced practitioners (40%). The largest groups of professionals comprised social prescribers (13%) and health and wellbeing coaches (12%) with smaller numbers drawn from specialist services, including GPs, domestic abuse, housing support specialists, and probation, capturing perspectives from both statutory and non-statutory sectors.

A total of 215 professionals were engaged over the course of the pilot project through a combination of training and taster sessions. Of these, 119 professionals completed the survey and 5 health professionals were interviewed.

The training was received very positively by professionals.

### Mental health and wellbeing benefits of nature and protected landscapes

Professionals shared near universal agreement that spending time in nature benefits mental wellbeing (99%) and physical wellbeing (96%), indicating strong alignment with Green Social Prescribing principles.

Across all interviews, professionals emphasised nature's impact on health and wellbeing. Professionals repeatedly described nature as calming, grounding, and restorative. Interviewees said:

*“that sense of calm... slowing down...taking in what's around them” – Mental Health Practitioner, NHS.*

*“It is connecting with, listening and also you know the quietness, the time to think, the time to process thoughts. So I think that kind of ties in a lot with mindfulness.” – Mental Health Practitioner, NHS.*

Interviews with professionals highlight that patients, particularly those with mental health conditions, can feel overwhelmed in urban environments. In contrast, North Yorkshire's Protected Landscapes offer a gentler setting, with more open space, reduced noise, and a range of natural environments proven to support mental wellbeing, helping individuals feel calmer, especially those experiencing anxiety or ADHD.

Professionals made expressed links between the resources provided through the Natural Health Service for patients and service users and improved physical health outcomes:

*“You're also increasing your physical activity as well, so your all round health would be improved by this” – Social Prescriber, NHS*

Nature and Protected Landscapes support social connection. They offer opportunities to reduce loneliness by human contact when getting out into Protected Landscapes:

*“When I did work as a first contact practitioner in Scarborough and one of the huge things that I came across was loneliness...not just older adults, younger people too...getting out and about...you're increasing the chance of maybe bumping into people or striking up a conversation. So I think that's a benefit, also meeting people” – NHS Manager*

North Yorkshire's Protected Landscapes offer distinctive health benefits beyond urban green space. Interviews reinforced the positive impact of connecting with and spending time in Protected Landscapes for the five human senses, for quietness, for mindfulness and for beauty. The health benefits of nature in these places were described as "endless".

*"Mindfulness walking is something... look around you, notice the sounds, notice the smells, look at the colours" – Mental Health Practitioner, NHS*

Variation across professional groups highlighted the importance of accessibility and flexibility in programme design. Those working in clinical and high-demand settings reported lower levels of personal engagement with nature, compared to higher levels among community and wellbeing-focused professionals. However, belief in the benefits of nature remained consistently high across all groups. Correlational analysis supported this pattern, indicating a moderate positive relationship between time spent in nature and strength of belief in its benefits, suggesting that personal experience reinforces attitudes, but does not necessarily translate into referral behaviour.

Professionals stated that there is potential that the integration of this programme as a green social prescribing initiative for the NHS would decrease the amount of service appointments by patients, especially amongst regular patients.

*"[The training] was really great. It was so informative. You can see the benefits and you know what the patients will get out of it." – Social prescribing link worker*

*"I would make the green social prescribing training mandatory..." – Social Prescriber, NHS*

## **Barriers to green social prescribing in protected landscapes**

Analysis of responses identified several key barriers for referral to nature-based interventions. Between 60-70% of respondents reported uncertainty about what nature-based services were available locally, while around half indicated that they did not have a clear or simple referral pathway to offer such provision. Similarly, approximately 50-60% highlighted the need for clearer information about available activities and how to access them. These findings suggest that the primary barriers to referral were structural and informational rather than attitudinal.

From the qualitative responses to the survey, there was also evidence that professionals were concerned with how nature-based interventions were perceived by clients, with some noting the need to present such approaches as credible and beneficial rather than optional or non-essential. In addition, several respondents highlighted the value of tangible resources, such as leaflets or structured programmes, that could be easily shared with clients to support engagement.

Professionals outlined barriers to green social prescribing in Protected Landscapes which included cost, transport, awareness, equipment, confidence and knowledge. For example, rural bus services are perceived as poor and there is not always a direct route to the Protected Landscapes. Some clients cannot drive while costs of travel and parking can be prohibitive. Lack of confidence, especially for those who struggle with anxiety and loneliness is an issue and lack of outdoor clothing can also be a barrier.

The dynamics of experiencing nature and Protected Landscapes on your own and in a group (and the type of group) on health and wellbeing also needs to be considered.

*"If you're deprived and don't have a car... how do you get from A to B?" – Mental Health Practitioner, NHS.*

*"When people actually really struggle with their confidence. So they actually might find it quite difficult to maybe go join a group." – Social Prescriber, NHS*

## Training impact and confidence, and referrals

There was very high reported satisfaction with the training. 90% of participants agreed or strongly agreed that the training improved their confidence, in explaining the free Nature Prescriptions resources made available through the programme to patients and clients. 86% reported that the training increased the likelihood of them signposting clients to nature prescriptions, 90% reported that the training had increased their confidence on identifying clients for whom a nature prescription might be appropriate and 89% reported that the training their knowledge of using Protected Landscapes for health and wellbeing.

This pattern of responses indicates that the training was not only well received but also perceived as useful and applicable to professional practice, aligning strongly with NHS Green Social Prescribing workforce development objectives.

The training has also raised awareness about green social prescribing and the role of Protected Landscapes.

*“I would make the green social prescribing training mandatory for like an induction period for when someone new starts.” – Social Prescriber, NHS*

In particular, the Nature Prescriptions calendar was highlighted by a high majority as a beneficial resource (95%). They liked how the Nature Prescription calendar was free, a hard copy, targeted, and specific. It was also seen as an alternative solution for traditional approaches to care and support.

Despite this, reported referral practices suggested that nature-based interventions were not yet routinely embedded within professional workflows. While a high proportion of respondents indicated that they regularly referred individuals to social or community-based services (68%), substantially fewer reported referring to nature-based activities (32%). This disparity highlights a clear gap between positive attitudes and practical implementation.

Respondents frequently emphasised the need for clearer and more accessible referral pathways, with several describing uncertainty about “where to refer” or how to identify appropriate nature-based opportunities for clients.

A number of professionals highlighted the importance of having simple, centralised information, indicating that current systems were perceived as fragmented or difficult to navigate. Over 70% expressed a preference for clearly defined processes, such as online forms or direct contact pathways. A similar proportion indicated that access to up-to-date information, including calendars or summaries of available activities, would increase their likelihood of referring. Approximately half emphasised the importance of having named contacts within organisations delivering nature-based programmes.

Interviewees recommended integrating the Natural Health Service for North Yorkshire into NHS software and systems including the Accurx software to communicate with patients about the service and potentially prescribe nature prescriptions. Accurx software is an NHS platform where patients and healthcare professionals communicate.

*“How do I actually refer somebody into it?” – Mental Health Practitioner*

Social prescribers need the time to be able to refer patients to activities, but interviewees felt the NHS is constrained by time. They also need to be made more aware of programmes such as Nature Prescriptions and the Natural Health Service. The training increased this awareness.

*“It’s getting them to remember it’s [Green social prescribing] there, you know it’s being with GPs and nurses... we have a hard enough time getting them to remember that social prescribing is there.” – Social Prescriber, NHS*

The need for NHS support at senior leadership levels was highlighted by professionals.

Professionals interviewed see nature as a non-pharmacological intervention that complements or sometimes outperforms medication. It was noted that many health professionals may prescribe medication rather than nature-based approaches. A social prescriber stated:

*“The first thing you’re going to be prescribed is drugs.” – Social Prescriber, NHS*



## System readiness

Despite strong professional belief in nature-based approaches and clear increases in confidence following training, referrals into nature-based provision remained inconsistent during the pilot.

The evaluation indicates that this was not due to lack of willingness or confidence among professionals, but to system-level barriers. These included unclear or informal referral routes, limited visibility of available provision, lack of integration with existing systems, and time pressures within clinical settings.

In effect, the workforce appears ready and the approach effective, but current systems are not yet designed to support routine use. This points to a gap in system readiness rather than professional engagement, and highlights referral infrastructure as a critical area for future development.

## Green social prescribing approaches and impacts in protected landscapes

The majority of participants reported enjoying time in general nature environments daily, weekly or most weekends (78%), with nearly one-third (30%) reporting spending time in protected landscapes. Eighty seven percent reported prioritising spending time outside in their daily lives.

However, there was no meaningful association between personal engagement with nature and likelihood of referral. This suggests that referral behaviour is shaped primarily by organisational and systemic factors rather than individual beliefs or experiences. However, it might also suggest the importance of training on the benefits of protected landscapes to address any perceptions of inaccessibility.

A step-by-step approach was recommended to help people access these landscapes for their health. It was recognised changes to lifestyles can be challenging.

*"I have a lady who doesn't leave the house. She doesn't go out of the house, even onto the doorstep. So, being able to say, right, in this calendar, it says, look from your window. You don't have to go outside to connect. It's okay. It's still safe. To then be able to get her to then go out into a garden and take those steps." – Mental Health Practitioner*

A sense of belonging and giving back to nature was deemed important for health and wellbeing. Positive outcomes for volunteers was mentioned:

*"All our mental health patients just want to belong, essentially, and I think by volunteering, by doing something regular, meeting up with different people, understanding nature, I think you become a collective, don't you, of people? And therefore, there is a sense of belonging as well." – Mental Health Practitioner*

## Phase 2: 10-Week Interventions

### Background on data collection results

Over 70 people were engaged during a short period of time. 45 participants took part in the intervention and completed the baseline Qualtrics survey in the first session. 35 completed the survey in the final session.

Matched data from the quantitative data analysis totalled 24 participants. Seven participants left the programme, some had difficulties completing the final survey and a number started the programme after the first session. This represents a retention rate of 73% from baseline to follow-up, and 53% matched data completeness, which is consistent with expectations for community-based interventions involving populations with health and social vulnerabilities.

Ten semi-structured interviews took place (in person, via Microsoft Teams and telephone calls) with participants from groups across North Yorkshire, including veterans from The Beacon in Catterick, carers from York Carers Centre, carers and those with hidden disabilities at Whitby Hidden Impairments Support and Help, and cancer survivors from the Friarage Hospital, Northallerton.



Image credit: Matt Storm

### 10-week nature intervention outcome changes

- ↑ Wellbeing (SWEMWBS): +24.1%**  
 Indicating an improvement in overall mental wellbeing.
- ↑ Social wellbeing: +17.5%**  
 Suggesting enhanced perceived social connection.
- ↑ Physical wellbeing: +13.5%**  
 Indicating gains in perceived health and activity.
- ↑ Loneliness (UCLA, reverse scored): +15.2%**  
 Reflecting reduced perceived loneliness.
- ↑ Nature connectedness: +4.1%**  
 Although this change was not statistically significant it likely reflects a ceiling effect within an already nature-engaged sample.
- ↑ Connection to Protected Landscapes: +3.6%**  
 Representing a modest, non-significant change in place-based connection within this sample.

Descriptive Data, Percentage Change and Paired Test Figures for Outcome Measure Baseline and Post 10 week Nature Programme Survey (n=24)

The figures above show the percentage change from the baseline to the post intervention survey.

Measure	Pre Programme Mean (SD)	Post Programme Mean (SD)	Mean Change	t(df)	p
Wellbeing (SWEMWBS)	20.25 (4.72)	25.13 (3.81)	+24.1%	4.97 (23)	.001
(Loneliness (UCLA) *	5.54 (1.93)	6.38 (1.81)	+15.2%	2.54 (23)	.018
Nature Connectedness**	37.96 (3.86)	39.52 (4.76)	+4.1%	1.35 (22)	.192
Social Wellbeing**	19.54 (4.96)	22.96 (3.29)	+17.5%	2.99 (23)	.007
Physical Wellbeing**	12.71 (3.44)	14.42 (3.62)	+13.5%	3.18 (23)	.004
Protected Landscapes**	27.75 (2.95)	28.75 (1.78)	+3.6%	1.52 (23)	.141

\*reverse scored

\*\* non standardised scales

### Group demographics

Participants in the surveys were predominantly older adults, with the majority aged 55–64 years (29%) and 65–74 years (27%), and a further 11% aged 75 years and above. Younger adults were less represented, though present among participants. Employment status reflected a diverse but often economically inactive population, with 31% retired and 22% unable to work due to health or caring responsibilities. Smaller proportions were engaged in paid employment or voluntary roles.

These characteristics indicate that the programme reached a population at elevated risk of social isolation, reduced wellbeing, and limited access to structured activity, aligning closely with the intended pilot target group for social prescribing interventions.

Participants were recruited across multiple geographically distinct cohorts spanning Protected Landscapes and surrounding areas, including Whitby, the North York Moors, Howardian Hills, Catterick, the Yorkshire Dales, and York-based locations.

Delivery was structured through localised groups operating within these areas, supporting engagement across both rural, coastal, and urban contexts.

### Referral process and signposting to the programme

Many participants were signposted to the programme through community routes, including staff or volunteers at organisations they already engaged with, such as York Carers Centre, e50K and WHISH, as well as through word of mouth and email. Others were formally referred, including those socially prescribed via Wharfedale, Airedale and Craven Alliance PCN. Sign-up was generally described as straightforward and positive, though some participants noted that greater clarity at the pre-intervention stage around activities and attendance expectations.

Participants agreed that in the future, people should get referred to this nature intervention programme through the NHS. Different platforms (online and offline) for different participants needs were suggested for the referral process. Online only could potentially exclude some groups.

Participants reported strong and consistent motivations for joining the programme. The vast majority (92%) indicated that they aimed to improve their mental wellbeing, with substantial proportions also reporting a desire to spend more time in nature (77%), improve their connection to nature (69%), and try new activities (69%). Social motivations were also prominent, with 58% seeking to meet new people and 54% aiming

to build confidence. Qualitative responses reinforced these findings, with participants frequently describing a need for calm, reflection, and “time for me,” often in the context of caring responsibilities or long-term health conditions.

### Programme design, delivery and experience

Overall results from the interview data showed that intervention participants were very positive about the 10-week programme. Importantly, all participants (100%) reported that they would recommend the programme to others, indicating exceptionally high levels of satisfaction and perceived value.

There was high praise for the programme facilitators and volunteers throughout the interviews. They were described by participants as passionate, knowledgeable, kind and very well organised. Participants highlighted that they felt safe, supported and looked after.

Participants enjoyed the variety of activities which they took part in and new places which they visited, such as mindful photography, habitat and and rights of way enhancement, natural journaling, and farm and visits.

Participants valued the well prepared, planned and balanced sessions, demonstrating how the programme considered the needs of those participating. Interviewees appreciated the warm and inclusive atmosphere of the programme. The quality of resources was also highlighted.

The quality of the programme acted as a motivator for participants to want to attend and, also many barriers were removed as explored further in this report.

Participants highlighted the importance of the takeaways at the end of programme, such as the nature calendar and the continuation of the conversation on WhatsApp. A participant from the Catterick Group highlighted the benefits of the overall programme experience:



*“So it's a different mindset to a certain extent. It's definitely the way forward for people for getting them outside and getting them in contact with nature and it definitely helps with mental health...Everybody will walk away with something from it” – Catterick Group Programme Participant*

Analysis of factors influencing attendance highlighted the importance of both structural and relational factors. The programme being free of charge was identified by 85% of participants as supporting attendance, alongside encouragement from facilitators (81%) and other group members (77%). Provided equipment and clothing (77%) and transport-related support (50%) were also key enabling factors. These findings indicate that the programme successfully reduced common barriers to participation, particularly those related to cost, access, and confidence.

Reported barriers to attendance were largely external to the programme, with health issues or illness being the most common (54%), followed by competing life commitments (31%) and weather-related challenges (15%). Only a small proportion of participants reported anxiety about attending (8%), suggesting that the programme environment itself was perceived as accessible and supportive.

From the surveys, the importance of accessibility and programme design was evident throughout. Free access, provision of equipment, and supportive facilitation were consistently identified as critical enablers, particularly for individuals already facing structural or psychological barriers to participation to such interventions or activities.

## Mental health

Encouragingly, despite the short length of the programme, analysis of the baseline and post participant surveys revealed improvements in wellbeing scores on the SWEMWBS that reached statistical significance ( $p < .001$ ). Mean group scores increased by 24.1% which represents a robust and positive change.

Qualitative analysis from the surveys' findings provided further insight into the mechanisms underpinning these outcomes. A dominant theme was that of psychological restoration, with participants describing the programme as calming, restorative, and emotionally supportive. These experiences were often framed in contrast to ongoing stressors, including health challenges and caring responsibilities, and align closely with the observed improvements in wellbeing.

Participants used the nature-based activities as a healthy distraction from bereavement, military family stress, social isolation, caring responsibilities and illness. Being in nature provided a mental "break", a reset and a refresh. Participants were also able to focus more when taking part in the activities on the programme and noted increased positive feelings as a result:

*"January is just a really bad month. So for me personally, it [Natural Health Service for North Yorkshire] starting then and having that positive thing to come and do was really, like, massively helpful for my brain and my emotions." – Catterick Group Programme Participant*

The programme increased calmness and mindfulness amongst participants and made interviewees feel more relaxed – reducing anxiety and stress. It made participants "slow down". It also gave participants a wider perspective. Some participants saw the value in using nature to reduce their anxiety and stress levels. They commented on how the emotional state of being relaxed is interlinked with mindfulness and being in the present.

*"... it gave me so much joy and less anxiety and I felt so relaxed, you know. I love animals and we were going to the pleasant farm and we fed alpacas and I loved it, every single bit of it. The relaxation, I don't have to go to gym or I don't have to go anywhere, to be honest. I can just be in my own garden looking at the birds and relax." – WHISH Group, Whitby Programme Participant.*

One of the outcomes of the programme was that it helped improve the mood and resilience of most participants, with participants linking this improvement to being in a Protected Landscape compared to an urban environment:

*"It [being in a National Park] just gives you clarity, it helps you sleep, it's just a general positive mood." – Catterick Group Programme Participant*

## Physical health

In the survey results, physical wellbeing and activity-related behaviours showed a positive change, the reached statistical significance ( $p=.004$ ). Participants reported more walking as an outcome of the programme – although some participants commented they would have liked additional walking included on the programme. Mean group scores on the physical wellbeing scale scores on the pre and post intervention survey improved 13.5%.

Some participants felt fitter and had lost weight which was another physical activity outcome of the programme:

*"I'm now fitter and I've lost some weight since started in January. Which is about a stone and I feel generally fitter." – York Carers Centre Programme Participant*

Spending more time spent outdoors was also noted by participants beyond the programme.



## Nature connection

Nature connectedness was assessed using a set of established items drawn from the Nature Connection Index and wider nature connectedness measurement framework. These items capture emotional connection to nature, the importance of nature in participants' lives, and pro-environmental attitudes and behaviours. Mean group scores on the Nature Connectedness scale increased from pre- to post-intervention (4.1%), indicating a positive shift in participants perceived relationship with nature. Although this change did not reach statistical significance, the direction of change was consistent across participants.

The findings indicate that the programme deepened respondents' nature connection:

*“Changes in frost and lichen and the trees, touching them, feeling them, the patterns of them, I think just made you feel at one with it, with nature...I just felt the connection [with nature] was a lot deeper, I think, doing that.” – Friarage Group Programme Participant*

It increased the amount of time that those on the programme spent outside and increased their mindful, sensory immersion. Participants mentioned becoming present and reaching a state of calm and relaxation. Changes in nature (i.e. season, weather) and the impact on participants' sensory experiences and emotions were also highlighted in responses.

*“But you know, you kept stopping and starting and thinking about things and listening and touching, using your senses.” – Friarage Group Programme Participant*

Participants felt that the programme has increased their learning about local natural environments and nature. They had gained more ecological knowledge and environmental awareness. Bird identification skills and the use of the Merlin app were highlighted positively and a takeaway from the programme.

They also noted how their understanding of landscape, history and ecology had improved. Some participants were already confident in nature whilst for others the programme has improved confidence levels.

Through the programme participants recognised the quality of time spent in nature as important – rather than the quantity of time – to increase their connection with nature.

*“I do get out but I'm normally pre-occupied. It's not necessarily the amount of time but the quality of time that I'm there. Being in nature rather than being through it. It's just how much you connect to what's around you.” – WHISH Group, Whitby Programme Participant.*

The programme activity, which including management of habitat, conservation and restoration of rights of ways increased some participants' motivation to protect nature and the ability to access in; however, it was noted that motivation to translate this into action could be further increased. Most participants felt a sense of responsibility towards nature and viewed that small, positive actions can make a difference to the natural world:

*“We can't change the world and the world's a bloody mess a lot of the time, but if you could do something little, it's empowering and positive and you think, well, I've done that, I've tried, you know. Yeah, I just think it's good to give back if you can.” – Catterick Group Programme Participant.*

From the qualitative analysis of the surveys, nature itself was experienced as an active mechanism of change rather than simply a setting.

Participants described increased sensory awareness, reflection, and appreciation of the natural environment, which appeared to underpin both psychological and behavioural outcomes.

## Protected landscape connection

Mean group scores on the scale designed to measure appreciation of Protected Landscapes increased 3.5%. It is likely this positive but modest increase which did not reach statistical significance is due to the strong appreciation of protected landscapes reported at the start of the programme, rather than absence of effect, particularly when considered alongside strong self-reported behavioural changes in nature engagement.

From the interviews, the deepened interaction with the Protected Landscapes – North York Moors and Yorkshire Dales National Parks and Howardian Hills and Nidderdale National Landscapes, motivated participants to spend more time outdoors outside of and beyond the programme, strengthened nature connectivity and, for some participants, started to inspire pro-environmental behaviours.

Participants valued the diversity found across the Protected Landscapes and the varied environments offering different health and wellbeing benefits. They felt being in a Protected Landscape “grounded” them. They felt a sense of perspective, scale and meaning, which deepened nature and emotional connection. Some participants highlighted a sense of pride towards protected landscapes.

*“...it's just the enormity of it [Protected Landscapes] and just the nature all around, the birds, the flowers, the trees. And if I'm walking along and see litter, I will always pick it up. But yeah, I think I'm very privileged to be able to still be fit enough to go out for these places and go walking and enjoy National Parks.” – York Carers Centre Group Programme Participant*



Image credit: Anthony Hurd

## Social connection and community

Social connection scores increased by 17.5 % and scores on the UCLA loneliness scale improved by 15.2%. These improvements are notable and reach statistical significance.

These findings from the survey are supported by qualitative findings.

Across all groups, participants emphasised the building of new friendships and social support through the programme. For example, military spouses from the Catterick Group described the programme as counteracting the isolation of garrison life, where communities are transient. The sessions became a space to spend time with people, as much as nature, who have shared experiences (i.e. caring responsibilities, military life, disabilities, bereavement).

This connection with other people through the programme was a strong outcome of the in both the

quantitative and qualitative findings – particularly those suffering from isolation and loneliness prior to the programme.

Sessions gave participants an activity to look forward to each week:

*“Yes, I used to feel sort of quite isolated being a carer and it’s [Natural Health Service for North Yorkshire] increased socialising opportunities and it was something that I really looked forward to each week.”*  
– York Carers Centre

There was also evidence of a developing collective identity amongst some groups as a response and highlighting the strength of the model in shifting behavioural change:

*“This is what we do on a Tuesday now”* – Catterick Group Programme Participant



Image credit: Matt Storm

### Person-centred approaches to early-intervention and preventative support:

Participants consistently described the importance of the programme treating them as “people, not patients”. This reflects a shift away from solely illness-focused service-led identities and serve as an example of the value of moving toward a person-centred service. Such shifts are important within early-intervention and preventative approaches, where supporting people’s confidence, agency and sense of belonging is central to improving wellbeing and sustaining engagement over time.

Rather than focusing narrowly on symptoms or needs, the programme created conditions that supported active involvement in wellbeing. Participants engaged as individuals with strengths, interests and choices, rather than as passive recipients of support. For many, this went beyond reducing loneliness alone, helping people to rebuild confidence, routine and social roles that had been disrupted by poor health, caring responsibilities or longterm disengagement.

The findings suggest that the social and relational aspects of the intervention are a key mechanism of change. Group-based activity in non-clinical settings enabled shared experience, peer support and informal connection, supporting preventative-orientated outcomes such as confidence, motivation and reengagement with everyday life. These outcomes align closely with public health priorities.

Strengthening and further exploring these person-centred outcomes would support a deeper understanding of how nature-based interventions contribute to sustained wellbeing and prevention at both individual and system levels.



Image credit: Matt Storm



Image credit: Matt Storm

### Behaviour change:

Some participants shared how the programme led to behavioural change, increasing the structure and routine in their lives:

*“It’s given me more structure in my daily life that is I’ve built on the fact getting up quite early and getting dressed, sleeping better.” – York Carers Centre Group Programme Participant*

Participants also stated how taking part in the activities gave them a wider perspective and made them think differently about life:

*“It was thinking in a different way, making me feel a bit calmer about things.” – Friarage Group Programme Participant*

Participants also reported increased confidence in social contexts and in engaging with outdoor activities that had previously felt inaccessible.

*‘The course has had a positive impact on my recovery in that it has stretched my expectations of myself – particularly in realising I can walk a bit further than I thought and sooner.’ – Friarage Group Programme Participant*

## Increase in economic activity

The programme reached a population at elevated risk of social isolation, reduced wellbeing, and limited access to structured activity. A significant proportion of participants were economically inactive (30% retired; 22% not working due to ill health or caring responsibilities), although a small number were already engaged in employment or voluntary roles.

Given the short duration of the pilot, assessing measurable changes in economic activity was not feasible. However, improvements in social connection, mental wellbeing, and physical activity are widely recognised as important precursors to work readiness. These factors can support increased confidence, motivation, routine, and the capacity to engage in structured activity all of which are key stepping stones toward employment, volunteering or socialisation.

Participant feedback reflects these enabling changes. For example, one participant noted:

*'Made a big difference – got me out of the house. Connected me with nature but also with people.'* – Skipton Group Participant

There were also early indications of progression toward economic participation. One participant described a renewed readiness to consider work:

*"I'm even thinking that it might be the right time to think about doing a few hours of employment, which I've not participated in for 20 years."* – York Carers Centre Group Programme Participant

While these findings are indicative rather than conclusive, they suggest that the programme may play a valuable role in supporting progression toward the counteracting the challenges that underlay economic inactivity related to wellbeing, confidence, and social connection.



Image credit: Anthony Hurd



## Barriers and challenges

The wintery weather during the pilot 10-week nature intervention were highlighted as a challenge. In response the programme provided alternative activity options where possible.

Transport logistics were highlighted particularly for the Catterick group, where the use of a large coach made access to narrow rural roads challenging.

Some participants experienced physical barriers to participation. For example, one participant from the Catterick group noted that mobility issues prevented engagement in more physically demanding activities, such as routes involving stiles:

*“because I’ve got a problem with my hip. They’ve been really good, but when I started this, I probably didn’t realise quite how active and stuff, because I didn’t go to them when they did the path and stuff, because I knew I wouldn’t be able to climb in and out properly with the stiles going across and doing stuff. So I chose not to turn up.” – Catterick Group Programme Participant*

Feelings of anxiety, particularly in relation to meeting new people and visiting unfamiliar places were reported as initial barriers for some participants. One participant from the WHISH group in Whitby described high levels of anxiety at the start of the programme, which made participation difficult.

*“it was really difficult for me, you know, walking and doing anything. And, you know, I was very anxious in the beginning, but it’s just my thing, you know, I’m just like, you know, my anxiety were to the roof at the time. So it was difficult to, you know, meet new people and go to new places.” – WHISH Group, Whitby Programme Participant.*

Participants noted how the facilitators were very flexible and adaptable to the barriers and challenges and sought approaches to solving them. One example is that appropriate equipment was provided to ensure inclusivity.

A participant from the York Carers Centre group highlighted the positive impact of being provided with suitable clothing in a sensitive and non-stigmatising manner:

*“Because of my weight, I needed extra, extra large waterproofs. Yeah, and that was like a provided in such a way that didn’t make me feel that awkward in anyway.” – York Carers Centre Group Programme Participant*



## Conclusion

This evaluation provides consistent evidence that the Natural Health Service for North Yorkshire is an effective and distinctive model of nature-based social prescribing, capable of delivering meaningful improvements in health and wider life outcomes.

Drawing together feedback from professional engagement and participant experience there was a clear and coherent narrative: when people are supported to engage with nature through a structured, accessible and place-based approach, the benefits are substantial and sustained.

In addition to participant outcomes, the evaluation demonstrates clear impact at a professional level. Training activity significantly increased professional confidence, awareness and intent to use nature-based approaches. Professionals reported greater confidence in identifying appropriate individuals and signposting to nature-based provision. While the referral process has not evolved enough to keep pace, the findings show that training is an effective mechanism for building capability, highlighting its importance as part of any future scaled model.

Across both phases, there is a strong alignment between professional belief, participant motivation and measured outcomes. Professionals from health, housing, employment, debt, environment and criminal justice system sectors demonstrated near universal recognition of the benefits of nature for mental and physical wellbeing. Participants reported exceptionally high levels of satisfaction, perceived value and impact.

These beliefs are reflected in statistically significant improvements across core outcome domains, including mental wellbeing, physical wellbeing and activity, social connection and loneliness.

Mental wellbeing emerged as the strongest and most consistent outcome, with both quantitative and qualitative data demonstrating improvements in mood, anxiety, stress, emotional regulation and resilience, alongside enhanced routine, sleep and capacity to cope with everyday pressures.

Qualitative evidence further illustrates the depth of these changes, highlighting reductions in anxiety and stress, improved mood and confidence, increased routine and structure, and the development of both organic and intended positive behavioural changes that extend beyond the programme itself.

Notably, the evaluation identified a range of positive behaviour changes, including increased confidence, re-established routines, sustained engagement with outdoor activity, interest in volunteering, and renewed consideration of employment after periods of economic inactivity.

Importantly, the evaluation demonstrates that the Natural Health Service for North Yorkshire does not deliver impact in a single domain, but operates as a holistic intervention. Improvements in mental wellbeing, physical activity, social connection and nature connection are closely interlinked and mutually reinforcing.

For many participants, the programme supported a shift in identity from “patient” to “people”. This represents a fundamental evolution from doing things to individuals towards enabling agency and participation in their own support. People engaged as individuals with strengths, interests and choices, rather than as recipients of treatment, creating a more human and personalised approach. Such changes in perception are increasingly recognised as important in recovery-oriented practices and reflects the core principles of public sector strategies.

Nature itself was experienced not simply as a setting, but as an active mechanism of change supporting mindfulness, sensory engagement, and reflection. These combined mechanisms help explain both the consistency and the scale of observed outcomes.

Evaluation showed not only that nature-based social prescribing works, but why doing such activities within a Protected Landscape setting can be effective. Protected Landscapes offer a combination of attributes that differentiate them from many other green social prescribing settings. Participants consistently described the scale, quality and character of these environments as central to their experience, citing openness, tranquillity, beauty and a sense of perspective. Compared to more



urban green spaces, Protected Landscapes provide reduced noise, fewer crowds and richer sensory engagement, which supports stress reduction, emotional restoration and cognitive clarity. For participants experiencing anxiety, sensory overload or chronic stress, these qualities were particularly important. This was supported further by professionals about the impact these landscapes can play.

However, the evaluation also makes clear that access to nature alone is not sufficient.

The effectiveness of the Natural Health Service for North Yorkshire lies in combining high-quality environments with a structured, supported and inclusive delivery model.

The phased “stepping stone” approach – beginning in familiar, local settings and gradually building confidence toward deeper engagement with nature in Protected Landscapes – played a critical role. As shown here, such a transition helped overcome barriers such as low confidence, anxiety, limited experience of outdoor environments and practical constraints. This highlights that it is supported access to nature, rather than proximity alone, that drives outcomes.

The group-based nature of the programme further strengthens its impact. Social connection emerges as both an outcome and a mechanism for increased confidence, with participants benefiting from shared experiences, peer encouragement and a sense of belonging.

Physical activity is embedded in enjoyable, non-clinical, interest led contexts that reduce perceptions of exercise as burdensome and support sustained engagement. Physical health impacts extended beyond increased activity, with participants reporting feeling more energised and, in some cases, achieving meaningful weight loss, reinforcing the role of nature-based approaches in supporting longer term physical health.

Protected Landscapes are well placed to deliver a Professional Training and Nature Intervention model at scale within a place-based system. As publicly valued assets with established mandates around access, engagement, learning and wellbeing, they offer both the credibility and infrastructure required to act as trusted partners within health and support systems and services. The programme shows how Protected Landscapes can move from passive to proactive contributors to prevention and early intervention, aligned with wider public priorities.

Alongside this strong evidence of effectiveness, the evaluation identifies a clear and persistent implementation gap. While professional support for nature-based interventions is high and participant outcomes are positive, referral pathways and system integration remain underdeveloped, reflecting

findings from related research elsewhere. Barriers to implementation are predominantly structural rather than attitudinal. This includes limited awareness and mapping of provision, unclear or fragmented referral routes that rely on relationships rather than infrastructure, time pressures within clinical settings, and the short-term funding cycles that underpin delivery. As a result, nature-based approaches remain underutilised despite clear and articulated need.

The more significant challenge, therefore, is how these interventions are integrated into existing systems so that access becomes routine rather than dependent on local relationships or short-term funding. In summary, the findings indicate that:

- professionals believe in the model;
- participants benefit from the model; but
- systems are not yet fully enabling the model.

The Natural Health Service for North Yorkshire pilot demonstrates that these barriers are not inherent to nature-based social prescribing itself. Where programmes are intentionally designed, outcomes are meaningful.



Image credit: Matt Storm



At a system level, the findings point to a significant opportunity. Embedding Protected Landscape-led interventions within health and support pathways would support a shift toward preventative, community-based approaches that address multiple determinants of inequality simultaneously, including health, social isolation, inactivity and disconnection from nature. For some participants, these shifts translated into early economic re-engagement, with individuals expressing renewed confidence to consider volunteering or return to work after extended absence, highlighting the wider preventative and socioeconomic value of the model. Achieving this requires a move away from short term, project-based funding toward more stable commissioning, professionalised and coordinated referral mechanisms, further workforce development, and sustained cross sector collaboration.

The evaluation also highlights an important consideration for the Protected Landscapes sector itself. While the pilot has demonstrated strong capability and impact, sustained delivery cannot rely indefinitely on limited grant funding or goodwill, particularly for organisations with capacity challenges. For Protected Landscape-led green social prescribing to become a routine and reliable offer, long-term funding stability is required to support delivery, maintain workforce capacity, and deepen partnerships with community organisations and health systems.

In summary, this evaluation shows that:

- Nature-based social prescribing delivers measurable and meaningful improvements in mental wellbeing, physical health, physical activity and social connection;
- Connection to nature and to Protected Landscapes plays a role in shaping both outcomes and participant experience;
- Protected Landscapes offer distinctive advantages as delivery partners and environments, combining rich natural assets, public trust and place-based legitimacy; and
- Current systems do not yet fully enable consistent, equitable access to these interventions.

The key implication is that the question is no longer whether green social prescribing works, but how models such as the Natural Health Service for North Yorkshire can be embedded and scaled – not only within the region, but Protected Landscapes across England and the UK. The evidence presented here demonstrates that Protected Landscapes are well positioned to play a central role today.

## Organisational capacity building

The programme has strengthened organisational capacity across partners to develop, test, and embed new approaches to green social prescribing within Protected Landscapes.

It has enabled the North York Moors Trust to further its charitable mission, staffing, expertise in green social prescribing, alongside raising its organisational profile.

For the National Park Authorities, the programme has supported progress into green social prescribing – a strategic ambition – by creating space to explore delivery requirements and align activity with their statutory management plans.

The Howardian Hills National Landscape have furthered their journey in green social prescribing journey, following on from The Nature Connectors projects.

For Nidderdale National Landscape, the programme provided practical insight into implementation and organisational learning through the appointment of an external consultant and creation of a feasibility study.

Across all partners, the programme has built capability to deliver green social prescribing interventions, established a more consistent framework for health and wellbeing activity across Protected Landscapes, and demonstrate feasibility and value.

In addition, the partnership has gained increased prominence and strategic leverage, strengthening engagement with regional and national stakeholders, including the National Health Service, Ministry of Defence, and Department for Work and Pensions.



Image credit: Anthony Hurd

## Evaluation study limitations

The quantitative survey component of this evaluation is subject to several limitations. The sample size for matched analysis was modest, limiting statistical power particularly in detecting changes in secondary outcomes such as nature connectedness. In addition, findings reflect only those participants who completed both baseline and post-intervention surveys.

The absence of a control group further limits the ability to draw causal inferences. In particular, it is not possible to determine the relative contribution of each specific Protected Landscapes, environments, or activity types in producing observed outcomes, nor to distinguish programme effects from those associated with general time spent in nature.

While the qualitative data provided valuable contextual insights, future evaluations would benefit from more additional approaches. Expanding sample sizes, incorporating comparative designs, and extending follow-up periods would strengthen the evidence base and support a deeper understanding of both outcome sustainability and the relative contribution of different programme components.

Finally, it is important to note that this pilot and report was delivered within a relatively short timeframe and, at the point of writing, without secured funding for continued evaluation. As a result, longer-term follow-up (e.g. 6–12 months post-intervention) has not been feasible, limiting the ability to assess sustained changes in behaviour or wider life outcomes over time.



Image credit: Matt Storm

# Recommendations

## Recognise protected landscapes as assets for prevention

Why: Protected Landscapes can function as an effective health assets, delivering measurable improvements in mental health, physical health, social connection, and behaviour change. Their scale, tranquillity, sensory richness, and public legitimacy differentiate them from other green spaces or green social prescribing initiatives. More explicit recognition of Protected Landscapes within prevention and early intervention strategies would enable this value to be systematically realised.

## Integrate protected landscape-led interventions into health, employment and support pathways

Why: Professionals identified strong potential for naturebased interventions to reduce demand on health services while supporting engagement with employment, and other service participation. However, this potential is constrained by limited of such interventions within these systems. There is a need for clearer and more accessible referral pathways – particularly in the NHS, however other routes can be explored ,eg, Accurx NHS platform. Once realised, embedding Protected Landscaped provision within health and other support pathways could enable more consistent, targeted access and support wider public outcomes beyond health alone.



Image credit: Matt Storm

## Embed green social prescribing within core workforce development and professional education

Why: Training and resources provided through the Natural Health Service for North Yorkshire significantly increased professional confidence, legitimacy and intent to refer, yet green social prescribing is not routinely embedded within professional education or development. Professionals expressed a clear desire for training to be core rather than optional. Integrating green social prescribing, including the role of Protected Landscapes, into workforce development frameworks and relevant education or training would support sustained system change.

## Prioritise a personcentred approach to health and support services

Why: A key outcome of the programme was a shift in identity from “patient” to “people”, reflecting a move away from passive, illnesscentred models of support towards one that emphasises agency and a tailored approach. Participants engaged as individuals with strengths and choices rather than recipients of treatment. This humanising, personcentred approach aligns strongly with public sector strategies and supports more responsive and sustainable forms of support.



Image credit: Matt Storm

## Deliver longterm investment to enable preventative and costeffective delivery

Why: The pilot demonstrates strong impact, but reliance on shortterm funding limits continuity, scale and confidence among referrers. Longterm funding is required to provide a consistent offer, retain skilled staff, build partnerships, embed referral pathways, and evaluate impact over long periods. Without this stability, the preventative and costeffective potential of Protected Landscaped interventions cannot be fully realised.

## Maintain supported access to address inequalities

Why: Positive outcomes were achieved because barriers such as cost, transport, equipment and confidence were actively addressed. Without supported access, those with the greatest need are least likely to engage. Continued focus on inclusive design is therefore essential if Protected Landscapes are to contribute meaningfully to reducing health and social inequalities.

## Value behaviour change and socioeconomic outcomes alongside health impacts

Why: In addition to health improvements, the programme supported wider behaviour change, including increased routine, confidence, volunteering and renewed consideration of employment after long periods of inactivity. Professionals recognised these as important precursors to work readiness and reduced reliance on services. These outcomes represent significant public value and should be reflected in commissioning and evaluation frameworks.

## Strengthen the role of protected landscapes in national health and wellbeing policy and practice

Why: Despite growing evidence of benefit, Protected Landscapes are not consistently embedded within national health and wellbeing policy conversations. This pilot provides a strong foundation for deeper collaboration with national organisations and sector bodies to articulate the role of natural and cultural landscapes in prevention, recovery and resilience, supporting more coherent and joinedup approaches.



Image credit: Matt Storm

# References

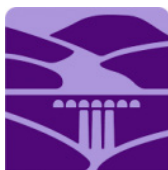
---

- Braun, V. and Clarke, V. (2021) *Thematic Analysis: A Practical Guide*. London: SAGE Publications.
- DEFRA (2024) 'Preventing and Tackling Mental Ill Health through Green Social Prescribing Project Evaluation' - taken from: <https://randd.defra.gov.uk/ProjectDetails?ProjectId=20772>
- Department of Health and Social Care (2025) '10 Year Health Plan for England: fit for the future' Policy Paper - taken from: [www.gov.uk/government/publications/10-year-health-plan-for-england-fit-for-the-future](http://www.gov.uk/government/publications/10-year-health-plan-for-england-fit-for-the-future)
- Garside, R., Lovell, R. (2021) 'Nature on Prescription'. Taken from: [www.ecehh.org/research/nature-prescription/](http://www.ecehh.org/research/nature-prescription/)
- Hurd, A., Armitt, H. (2023) 'Humber and North Yorkshire Green Social Prescribing 'Test and Learn' Programme. Final Report – April 2023'. Taken from: <https://heysmilefoundation.org/wp-content/uploads/2022/08/Humber-and-North-Yorkshire-Green-Social-Prescribing-Test-and-Learn-Programme-Final-Report-April-2023-1.pdf>
- Linsley, P., McMurray, R., (2018) 'Measuring social return on investment for the North York Moors' - taken from: [www.york.ac.uk/research/impact/social-return-on-investment-north-york-moors/](http://www.york.ac.uk/research/impact/social-return-on-investment-north-york-moors/)
- Mooney, A., Alarilla, A. and Cavallaro, F. (2026) *Healthy life expectancy trends in the UK*, The Health Foundation. Available at: <https://www.health.org.uk/reports-and-analysis/analysis/healthy-life-expectancy-trends-in-the-uk-a-watershed-moment> (Accessed: 26 April 2026).
- North York Moors Trust - Nature Prescriptions - taken from: [www.northyorkmoorstrust.uk/ourprojects/nature-prescription-project](http://www.northyorkmoorstrust.uk/ourprojects/nature-prescription-project)
- Stewart-Brown, S., Tennant, A., Tennant, R., Platt, S., Parkinson, J. and Weich, S. (2009) Internal construct validity of the Warwick–Edinburgh Mental Well-being Scale (WEMWBS): a Rasch analysis using data from the Scottish Health Education Population Survey. *Health and Quality of Life Outcomes*, 7, p. 15.
- Richardson, M., et al (2019) A measure of nature connectedness for children and adults: Validation, performance, and insights.
- Russell, D. (1996) 'UCLA Loneliness Scale (Version 3): Reliability, validity, and factor structure', *Journal of Personality Assessment*, 66(1), pp. 20–40.





**Howardian Hills**  
National Landscape



**Nidderdale**  
National Landscape



**North York Moors**  
National Park



**YORKSHIRE DALES**  
National Park Authority

Est.  
1841

**YORK  
ST JOHN  
UNIVERSITY**



Funded by  
**UK Government**



**YORK  
& NORTH  
YORKSHIRE**  
COMBINED AUTHORITY

**DAVID  
SKAITH  
MAYOR**