



# **Heathlands Heartlands Project**

## **Retrospective health and wellbeing evaluation**

**HLF, Durham Wildlife Trust and Natural England**

**Performed by the North East Local Nature Partnership**

## Introduction

The Heathlands Heartlands project is a 2 year project funded by the Heritage Lottery Fund and Natural England. The project aims to establish closer links between communities and their local 'doorstep' heaths which are located in South Stanley. Local communities have the opportunity to be at the heart of the heaths restoration, helping to determine how sites are managed and using this as a catalyst for tackling some of the effects of deprivation. The project seeks to increase the appreciation of, and access to, the heathland sites with the aim of offering skills training to support community led regeneration.

Originally, the project did not intend to evaluate health and wellbeing impacts and consequently no methodology for doing so was included. However towards the end of year 1, it became evident participants are attracted to volunteering for reasons beyond conservation and the benefits gained are varied. This led the team to attempt a retrospective analysis of the health and wellbeing impact of participating in Heathlands Heartlands. It is hoped this will then inform future health and wellbeing measurement methodology and facilitate discussions for a universal approach to recording and evaluating the health and wellbeing impact of nature based volunteering projects and specifically HLF projects.

## Rational and context

Long term funding for nature based projects can be a concern and frequently results in sporadic project availability. If health and wellbeing benefits can be demonstrated, there is an opportunity to engage more stakeholders and progress towards nature based social prescribing budgets. The need for projects and services of this sort is demonstrated by many factors and policy issues.

- It is estimated that 1 in 4 British adults will experience at least one diagnosable mental health problem in any one year, and 1 in 6 will experience this during their lives (ONS 2001).
- There is an over-reliance on prescription drugs for the treatment of mental health condition (Beresford 2005) and more evidence-based alternative treatments are called for by GPs (Mental Foundation 2005).
- People living in deprived areas have the highest levels of mental health problems (Melzer et al 2004, Fryers 2003). Locally 5 of 7 local authority areas have districts that are in the 10 – 30% of districts in England that contain the largest proportion of highly deprived neighbourhoods (DGCL, The English Indices of Deprivation 2015).

The evidence base demonstrating the links between good physical and mental health and having access to and engaging with green spaces and volunteering is significant. Inactivity and increased stress hormones cause mitochondrial damage and telomere shortening which leads to inflammation

and to the development of chronic illness. It is increasingly recognised that the natural environment plays an important role in health prevention and improving poor health, however current policies and commissioning often fails to recognise this or maximise the benefits to be gained. The natural environment has a major role to play in alleviating the mounting pressure placed on NHS services by chronic illnesses, but we may lose this service from nature if we aren't more connected to our environment and better able to quantify the value of the services received. This is acknowledged by Dr William Bird, "The natural environment has a quantifiable health value and we run the risk, through lack of understanding of this, of depriving future generations of a 'natural health service' (2007).

Studies have recorded many restorative responses for those experiencing negative health states, including reduced stress, muscle tension, blood pressure, excess weight and recovery from illness and surgery. Chronic low grade cellular term inflammation is the fundamental root cause of:

- Diabetes
- Cardiovascular Disease
- Cancers
- Dementia (secondary to visceral fat)
- Depression and Anxiety
- Arthritis and many other conditions

The accumulating evidence that supports the notion that contact with nature is beneficial for human health and well-being has further weight added to the argument, as evidence for nature based approaches also has the ability to enhance skills and behaviours as well as reduce the risks of ill health (Pryor et al. 2006).

A lot of work has already been performed in observing the links to nature/ the natural environment and better health and wellbeing. The projects and studies have been performed across a range of organisations from charities such as Groundwork and Wildlife Trusts to Natural England and Local Authorities. Many have focused on mental health and examples include:

EcoMinds Project, an initiative in 2007 between Mind and 3 Wildlife Trusts and looked at nature-based interventions in mental health treatments. It became obvious that service gaps and funding were the biggest challenges to the long term future of this approach, despite demonstrating health care cost savings when compared to more traditional treatment options and patient journeys.

Mud to Muscle project, was delivered by Lancashire, Manchester and North Merseyside Wildlife Trust and focused on improving participant physical and mental health through conservation volunteering.

Locally Northumberland Wildlife Trust participated in the BBC 'Breathing Spaces' projects in 2009 that created volunteer opportunities for social care referrals and their carers on wildlife trust sites.

Sustaining these projects is the biggest challenge and evaluating their health care and none health cost benefits is often tricky. This evaluation does not intend to consider value for money or cost benefit as this was not part of project design and requires more resources than is available at this point in time.

## Objectives

- Analyse the behaviour change experienced from participating in Heathlands Heartlands project.
- To design and conduct user friendly feedback methods and conduct an evaluation.
- To identify any unanticipated wider benefits from project participation.
- To inform data collection and evaluation methods for HLF projects in the future.

## Method

The collection of qualitative and quantitative data was performed through a questionnaire (appendix 1) with 3 measurement scales to indicate degree of agreement. A variety of recognised questionnaires were reviewed to devise the questionnaire style used in this evaluation. This included; the Short Warwick-Edinburgh Mental Wellbeing (SWEMWBS), Oxford Happiness Questionnaire, Office of National Statistics Wellbeing Measure, General Health Questionnaire, GAD-7 and SF-36 standard form. The 20 questions in part A focused around personal development and relationships and focused on 5 areas with 4 sub questions in each:

1. Feelings about the environment and outdoors
2. Feelings about self
3. Feelings about self confidence
4. Feelings about relationships with others
5. Feelings about health and wellbeing

There was also the opportunity to contribute thoughts to the future of nature based projects like Heathlands Heartlands and your experiences from participating.

The 10 volunteers involved completed the questionnaires independently, with the data being collected in quarter 4 of the second year of the project.

This method resulted in the collection of ordinal data and so it is appropriate to use distribution free methods for analysis such as tabulation and frequencies. Quantitative data that is categorical and ordinal, that is to say, it is structured and ordered but reflects personal judgement, is not a measurement for improvement as there is no baseline to compare it to. However this data can show a change or otherwise in feeling or behaviour, which is the purpose of this evaluation.

A semi-structured qualitative interview was performed with 3 of the volunteers and recorded. The information collected from these interviews was used to support case studies produced from this

project. From the outset, there was no intention to analyse this qualitative data as part of this evaluation. It is intended through a separate piece of work, to perform a review of this process to inform the use of recorded interview and data analysis in future HLF projects.

## Findings

This evaluation of the Heathlands Heartlands project produced positive qualitative and quantitative data. Although the intention to review the health and wellbeing impact of the project was done retrospectively, it is possible to draw some inferences about the impact participating had on participant’s health and wellbeing and some themes emerged from the qualitative methods. Each of the question areas relate to aspects of achieving and maintaining good health and wellbeing.

Well-being has been described as being not just the benefits gained from good psychological and physical health, but as being related to specific aspects such as favourable thoughts and feelings, satisfaction with life, ability to be self-sufficient and proactive, possessing a sense of happiness, and a positive evaluation of one’s life in a general sense (Diener et al. 1999).

### Feelings about the environment and outdoors – Question 1

The highest scores were for the participants feelings about the environment and outdoors. Participating in Heathlands Heartlands has made participants feel more; aware of their natural surroundings, able to be active outside no matter the weather and recognise nature has a positive effect on how they feel for 90% of participants. The graph below also shows the project did not make them feel less connected to nature.

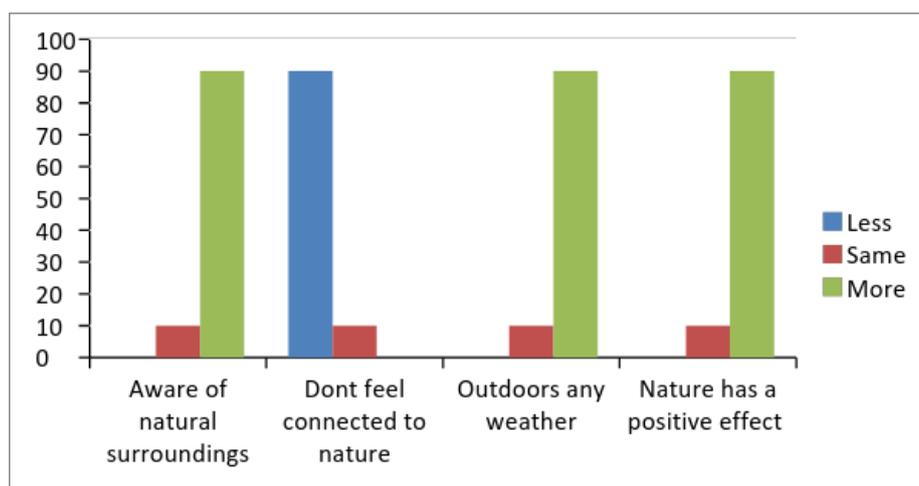


Chart 1: Your feelings about the environment and outdoors

## Your feelings about you – Question 2

When asked to rank agreement with feelings about you for all questions 70% of participants reported feeling the same. Reports of feeling more able to do something well and having valuable skills to contribute was observed by 30% of participants. Although fewer changes were reported for this question, only 10% reported feeling more fearful or anxious. This may have been due to personal circumstances when completing the questionnaire or misunderstanding the question however no further questions were asked to test this.

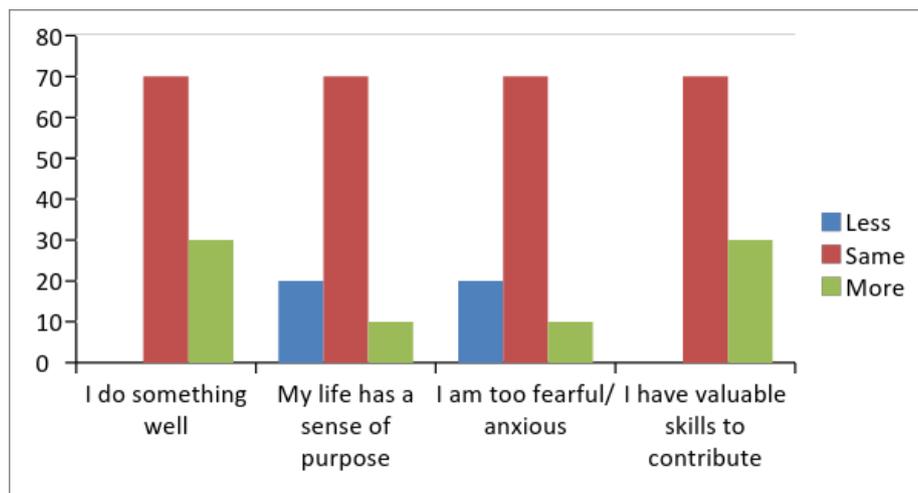


Chart 2 – Your feelings about you

## Feelings about your confidence levels – Question 3

When asked to rank their agreement with feeling more able to deal with life’s challenges 100% reported feeling more able. This may play an important role in creating resilience in individuals and communities. There was a 50% split between feeling the same and more optimistic about the future and 40% reported feeling more able to make difficult decisions. It was again observed that no one reported feelings of being less confident since participating in Heathlands Heartlands.

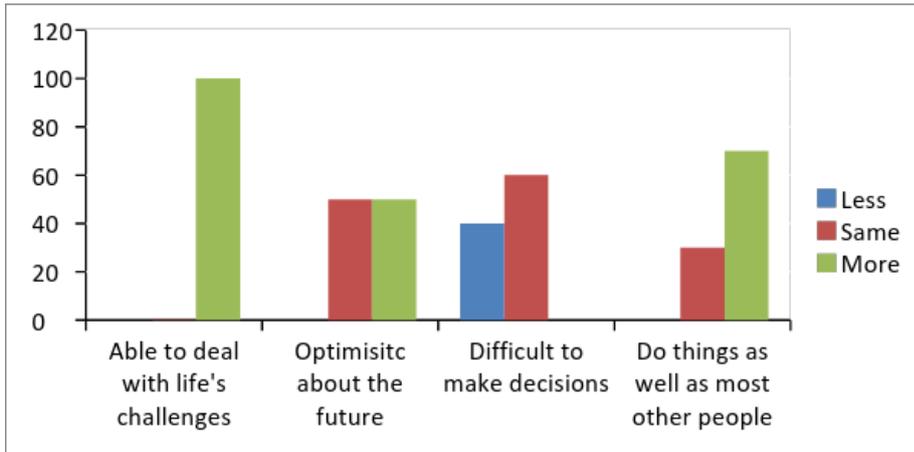


Chart 3 – Your feelings about your confidence levels

#### Feelings about relationships with others – Question 4

When asked to rank their agreement with these questions 100% of participants reported feeling more enjoyment spending time with others and more connected to their communities. These are 2 important aspects of maintaining good health and wellbeing according to the New Economics Foundation 5 Ways to Wellbeing, 2008. When reporting on their feelings on other people thinking you're a good person, 50% reported feeling more understood and 50% reported feeling the same. The least change occurred when asked if people think I am a good person, here 70% reported feeling the same and 30% reported more.

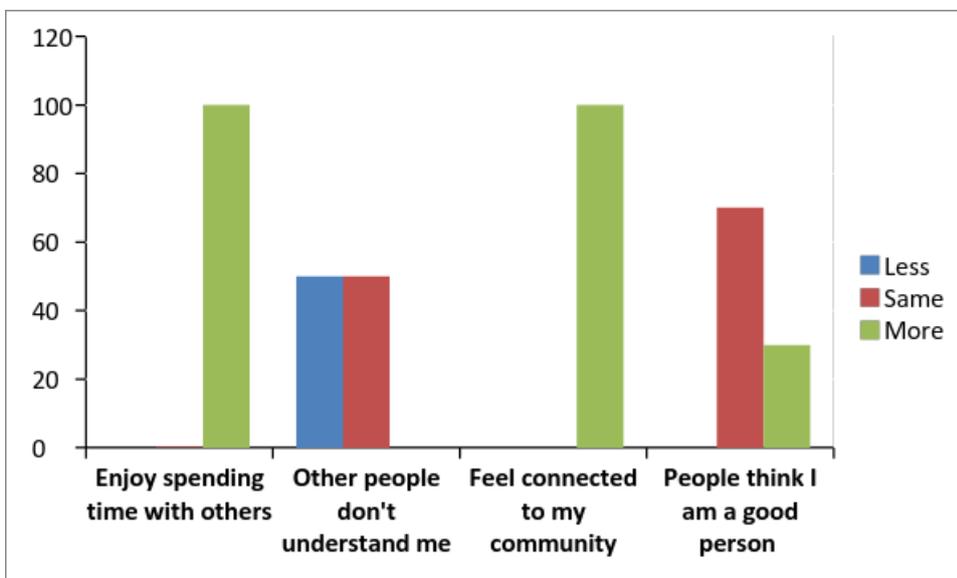


Chart 4: Your feelings about your relationships with others

## Feelings about health and wellbeing – Question 5

Question 5 related to participants feelings about health and wellbeing, where 100% reported they felt coordination and balance had improved and were happier with skills they have. A feeling of being more fit and strong was reported by 60% with 40% feeling the same as before. When asked to record their degree of agreement with finding it difficult to control emotions 20% reported feeling more able and 80% reported feeling the same. Importantly, no one reported a negative impact upon their health and wellbeing while participating in the Heathlands Heartlands project.

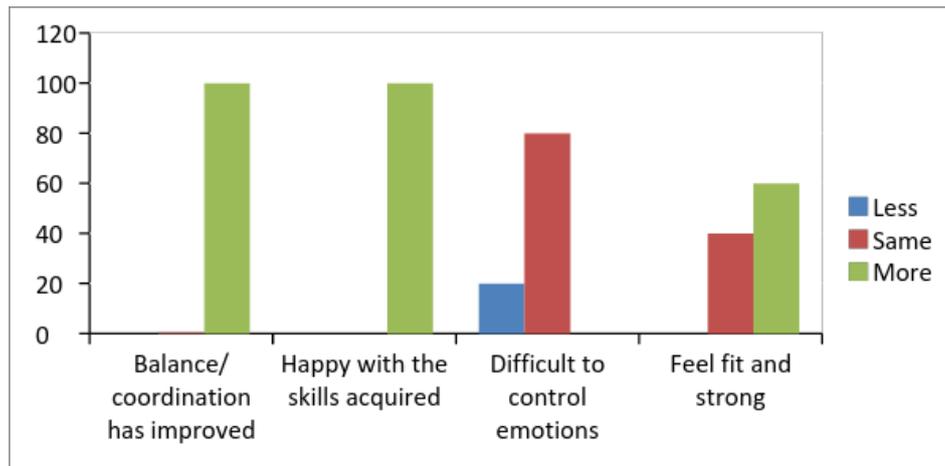


Chart 5: Your feelings about your health and wellbeing

In part B of the questionnaire there was the opportunity for participants to add comments on the role of nature based projects in the future and their overall experience of Heathlands Heartlands project.

In summary of this qualitative data some strong themes emerged. All participants thought that more people in the North East should be able to participate in a project similar to Heathlands Heartlands and projects of this nature should be funded more widely and incorporated into local health prevention plans. All reported their project experience to be what they expected and 20% added the project was more than they expected.

The key themes from the free text were:

- Enjoyment from working with others.
- Would recommend others to volunteer in nature based projects.
- Sense of purpose.
- Social rewards.
- Accomplishing tasks I would never have expected.

- Learnt a lot about our local landscape and habitat.

## **Discussions and conclusions**

This brief overview of the Heathlands Heartland project provides evidence for the impact a habitat restoration project can have on participants beyond volunteering. It shows project benefits extend beyond the natural environment and it importantly also serves to increase the self confidence, physical activity and mental wellbeing of those involved.

### **The main challenges of this evaluation and future work**

It is clear there is benefit to nature from Heathlands Heartlands, as demonstrated in project case studies. During the project it became evident participants felt they were also experiencing health and wellbeing gains and for some this was their reason for participating above conservation.

It must be highlighted that there are limitations to this data due to the retrospective nature of the evaluation and therefore the absence of a baseline to report a measurable improvement and the small participant numbers. We can say that one score is higher than the other and highlight some interesting observations. Since it was not intended to evaluate health and wellbeing as part of the project scope initially, this has meant that some principles of best practice were not implemented. That said some useful information can be gained from the approach taken.

Volunteering in a nature based habitat restoration project has shown a positive change in feelings relating to health and wellbeing, relationships with others and to the environment and outdoors. The results from the surveys have provided a good overview and will help to guide for future work. It will allow the benefits of Heathlands Heartlands to be seen by other organisations and commissioning bodies and help in explaining the wider project benefits. It would be sensible to adopt this approach when developing nature based proposals to ensure valuable health and wellbeing data is collected and analysed. Activities which support presenting nature based projects as having multi benefits for communities and individuals, positively contributes to persuading those with commissioning ability of the reasons to make better use of our natural environment for improving and maintain good health and wellbeing.

To gain a more in depth understanding of the health and wellbeing benefits of the project, a further evaluation could be carried out along with an economic analysis. In this instance, a flexible research design would be used to minimise threats to internal validity whilst maximising the ability to establish statistical validity. This would involve a multi-method evaluation process, consisting of pre, post and follow up surveys for participations and interviews with project leads and a number of baseline and follow up questionnaires would be gathered to achieve statistical power and validity.

The project could also be economically evaluated using a cost-benefit analysis to establish whether the project is cost-effective and improves participant health. This may be particularly useful for

those considering to commission similar projects as such an analysis would account for cost benefits of the project outside of the health sector when considering cost effectiveness.

## Appendix

## Appendix 1 - Questionnaire



### Heathland Heartlands benefits to health and wellbeing

#### How does volunteering in nature affect you?

##### Questionnaires for participants

We are interested in finding out how participating in Heathlands Heartland has affected how you feel physically, emotionally and about your local environment.

This questionnaire is anonymous and optional, please inform your project leader if you do not wish to participate.

Take as long as you need to complete the questionnaire but try to answer the questions instinctively. Once you have completed the form please fold it over and place in the box as shown by the project leader.

When answering the questions we would like you to think about any changes (positive or negative) in your emotional and physical wellbeing and your skill set, as a result of participating in the Heathlands Heartlands project.

Please **draw a circle around the number you agree with** next to each statement.

##### **Your feelings about the environment and outdoors**

	 Less	 Same	 More
I am aware of my natural surroundings and confident to explore them	1	2	3
I do not feel connected to nature	1	2	3

I feel able to be active outside no matter what the weather	1	2	3
Nature has a positive effect on how I feel	1	2	3

### Your feelings about you

	 Less	 Same	 More
When I do something, I do it well	1	2	3
My life has a sense of purpose	1	2	3
I am too fearful or anxious	1	2	3
I have valuable skills to contribute	1	2	3

### Your feelings about your confidence levels

	 Less	 Same	 More
I am able to deal with life's challenges	1	2	3
I am optimistic about the future	1	2	3
I find it difficult to make decisions on my own	1	2	3
I can do things as well as most other people	1	2	3

### Your feelings about your relationship with others

	 Less	 Same	 More
I enjoy spending time with other people	1	2	3
I think other people don't understand me	1	2	3
I feel connected to my community	1	2	3
Other people think I am a good person	1	2	3

### Your feelings about your health and wellbeing

	 Less	 Same	 More
My balance and/ or coordination has improved	1	2	3
I am happy with the skills I have acquired	1	2	3

I find it difficult to control my emotions	1	2	3
I feel fit and strong	1	2	3

**Your thoughts nature based projects for the future?**

1. Do you think more people in the North East should be able to participate in projects similar to Healthlands Heartland?
2. Do you think projects like Healthlands Heartland should be funded more widely and incorporated into local health prevention plans
3. Has your experiences in the Heathlands Heartland project been what you expected?

**Do you have any other thoughts or comments to add about your experiences in Heathlands Heartland?**

## Appendix 2 – Tabulated responses - Percentages

Question 1	Sub-question number			
Agreement	1	2	3	4
1 – Less	0	90	0	0
2 – Same	10	10	10	10
3 – More	90	0	90	90

Question 2	Sub-questions number			
Agreement	1	2	3	4
1 – Less	0	20	20	0
2 – Same	70	70	70	70
3 – More	30	10	10	30

Question 3	Sub question number			
Agreement	1	2	3	4
1 – Less	0	0	40	0
2 – Same	0	50	60	30
3 – More	100	50	0	70

Question 4	Sub question number			
Agreement	1	2	3	4
1 – Less	0	50	0	0
2 – Same	0	50	0	70
3 – More	100	0	100	30

<b>Question 5</b>	<b>Sub question number</b>			
<b>Agreement</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>1 – Less</b>	00	0	20	0
<b>2 – Same</b>	0	0	80	40
<b>3 – More</b>	100	100	0	60