



University of Essex



An independent assessment for The Wildlife Trusts:
by the University of Essex

The direct and indirect contribution made by **The Wildlife Trusts** to the health and wellbeing of local people



Protecting **Wildlife** for the Future



University of Essex

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The direct and indirect contribution made by individual Wildlife Trusts on the health and wellbeing of local people

Report for The Wildlife Trusts

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Abbreviations

n	sample size
PA	PA
WB	Wellbeing
NEF	New Economics Foundation
CCG	Clinical Commissioning Group
WEMWBS	Warwick Edinburgh Mental Wellbeing Scale
SWEMWBS	Short Form Warwick Edinburgh Mental Wellbeing Scale
PGI	Personal Growth Inventory
NWC	Natural World Challenge

Executive Summary

Background

There is an emerging body of evidence that contact with nature provides important benefits for human health and wellbeing and that the work of The Wildlife Trusts and similar organisations contributes significantly to enabling this. While several individual studies and evaluations have pointed to the likely impact of particular actions by specific Wildlife Trusts, there has been no overall evaluation of the health and wellbeing impacts of the movement's collective work. For Phase 2 of this three-stage research project, the Wildlife Trusts have commissioned the University of Essex to determine the direct and indirect contribution of the individual Wildlife Trusts in improving human health and wellbeing.

Key Findings

Part A - Wildlife Trusts' current nature-based activities

- Overall, responding Wildlife Trusts reported typically running more than 14,400 activities for the general public and 2,965 activities for vulnerable groups (individuals with defined needs) each year, covering a wide range of activity, from nature-based art and bush craft to wildlife surveying, outdoor exercise and practical conservation;
- Activities for vulnerable groups primarily cater for those experiencing social disadvantage, people with mental ill health and the unemployed;
- The primary intended outcome of activities for the general public is to engage people with nature, whilst the intended outcome of activities for vulnerable groups is to improve physical and mental health and promote social inclusion;
- Considered together with the key finding from the Phase 1 literature review, the results suggest that Wildlife Trusts provide significant and important contributions to both the promotion of good public health and to Green Care (the use of nature-based interventions to treat diagnosed illnesses) in the UK.

Part B - Case studies: Overview of Wildlife Trust data on health and wellbeing outcomes

- Seventeen Wildlife Trusts provided researchers with the findings of prior evaluations, six of which (35%) were for the general public and 11 of which (65%) were for vulnerable groups;
- Evaluations identified that Trust activities for both the general public and vulnerable groups facilitated each of the five ways to well-being: participants connected to nature and other people, engaged in physical activity, took notice of their surroundings, volunteered on projects and developed skills;
- General public participants developed skills, knowledge and employability; improved their perceived and actual health and increased their physical activity; engaged in healthy eating; took notice of their natural surroundings and actively volunteered on nature-based projects;

- Participants from vulnerable groups reported improvements in confidence, self-esteem and mood and the ability to manage medication more effectively;
- Data reported in Part B clearly demonstrates that activities provided by the Wildlife Trusts function effectively both as health-promoting nature-based activities for the general public and as Green Care interventions for vulnerable groups.

Part C - Community Perception Study

- Members of the public in Essex and Lancashire reported that they were primarily involved with their local Wildlife Trusts through visits to Trust sites, Wildlife Trust membership and volunteering;
- This involvement largely took place in order to be active, get fresh air and help wildlife;
- Members of the public perceived that the main role of their Wildlife Trust was to protect nature and to help people to access and engage with it. The least frequently reported role was to improve human health;
- Despite the overall perception that The Wildlife Trusts are not principally concerned with human health, at least 96% of participants in the community perception study reported that involvement with their local Wildlife Trust had improved their physical and mental health, skills and social interaction.

Part D - Wildlife Trusts' views on evaluating health and wellbeing

- Most individual Wildlife Trusts consider that evaluating the health and wellbeing benefits of their work is beneficial for demonstrating impact;
- However the majority of Trusts report a lack of time, staff and funds to carry out extensive evaluation.



Conclusions and Recommendations

The Wildlife Trusts run an extensive range of activities for the general public and vulnerable groups, which provide a range of benefits for both the health and wellbeing of the general population and those with diagnosed therapeutic needs (Green Care).

To maximise the impact of activities that they run and to demonstrate and promote the role of Wildlife Trusts in improving human health and wellbeing, The Wildlife Trusts should:

- Encourage the currently lesser attending vulnerable groups to attend activities;
- Evaluate health and wellbeing impacts more regularly, widely and consistently across activities and individual Trusts;
- Promote the role of The Wildlife Trusts in improving human health and wellbeing - to the public, health and social-care commissioners and decision-makers, political and business leaders;
- Calculate and demonstrate the economic value of Wildlife Trust activities, given the public health and Green Care roles these perform.

The following recommendations have therefore been made:

i) Consistent Health and Wellbeing Evaluation

In order to demonstrate the impact of individual Trusts and to present a convincing collective case, The Wildlife Trusts should:

- Adopt a standardised Wildlife Trusts health and wellbeing evaluation tool;
- Adopt a systematic approach that allows individual Wildlife Trusts to share and pool health and wellbeing data and evidence;
- Increase skills within the movement concerning the evaluation, analysis and promotion of health and wellbeing impacts and the value of these to society;

- Provide a guidelines document to support Trusts in evaluating and writing up the findings of health and wellbeing evaluations.

ii) Promoting the Role of the Wildlife Trusts in Enhancing Human Health

In order to promote their role in improving human health and wellbeing The Wildlife Trusts collectively, and individual Trusts should:

- Publicise their focus on health and wellbeing more widely;
- Promote and run activities specifically focused on human health and wellbeing;
- Calculate the economic value of activities run by Trusts for both the general public and vulnerable groups of individuals with defined needs;
- Present the findings of health and wellbeing evaluations to the general public through a range of strategically planned media channels.

iii) Extending Service Provision

In order to further increase their service provision, Wildlife Trusts should increase the provision of non-practical conservation activities, and provide Green Care services to currently lesser-attending vulnerable groups such as older people, those with dementia or addiction problems, and the overweight and obese.

The recommendations will enable the Wildlife Trusts to evaluate and demonstrate the impact of their activities more widely, and to engage a broader range of participants.

Ultimately, greater awareness and understanding of the relationship between nature-based activity and human health and wellbeing, based on high quality delivery and rigorous evaluation, will lead to greater support for nature-based approaches and a consequent improvement in the health and wellbeing of the UK's human population.

1. Introduction

1.1 Background to research

There is an emerging body of evidence to indicate that contact with nature provides important benefits for human health and wellbeing. However, the health benefits of engagement with natural environments rich in wildlife have received less attention. For Phase 1 of this three-stage research project, the Wildlife Trusts commissioned the University of Essex to conduct a literature review to identify existing research regarding the health benefits of natural environments rich in wildlife (Bragg et al., 2015).

The Phase 1 literature review concluded that engagement with nature and more specifically, environments of high biodiversity can provide significant health and wellbeing benefits for range of individuals within the general population and those with health needs related to physical inactivity, dementia and social isolation. With the UK presently ranking worse than the European average for individuals' mental wellbeing (Eurofound, 2012), and with mental health comprising 23% of ill-health in England, Public Health England currently lists wellbeing and mental health as its number one health priority (Public Health England, 2013). Contact with nature and involvement in nature-based interventions have been shown to facilitate each of the five ways to wellbeing (NEF, 2009; Bragg et al., 2015). This positions activities run by Wildlife Trusts as a possible route for improving individuals' physical and mental health. The current research report represents Phase 2 of the project whereby the University of Essex has been commissioned to determine the direct and indirect contribution of the Wildlife Trusts in improving human health and wellbeing. This report gives a comprehensive overview of the activities of the Trusts, pulling together information and evidence provided by individual Trusts in relation to the activities they provide and their impact on health and wellbeing. The report also examines the perceptions of local communities on the contribution made by individual Wildlife Trusts to the lives of local people and local environments.

1.2 The role of the Wildlife Trusts in promoting health and wellbeing

In the UK there are 47 Wildlife Trusts, each of which is an independent, autonomous charity whose primary concern is the conservation of nature within its own geographical area. The Wildlife Trusts have more than 800,000 members and manage more than 2300 nature reserves which are visited by more than seven million people annually. The Trusts directly engage more than 386,000 people in events and activities that bring them closer to nature.

The activities of the Wildlife Trusts are coordinated by the Royal Society of Wildlife Trusts who campaign for wildlife at a UK level. The Wildlife Trusts' shared vision is "an environment rich in wildlife for everyone", which they aim to achieve by creating a Living Landscape

and securing Living Seas. The overall objectives of the Trusts are to:

1. Demonstrate how nature works;
2. Inspire people and communities to value and take action for nature;
3. Champion nature and our work.

In achieving these objectives the Wildlife Trusts run a number of projects intended to improve the health and wellbeing of participants. These projects take place in a variety of natural environments and include a number of different activities, both for the general public and specific groups of vulnerable people. In providing therapeutic Green Care services specifically for vulnerable groups, many Trusts often work in partnership with other organisations such as local NHS Trusts, health charities, private individuals, corporate businesses, local authorities and National Lottery funders. In addition, the Wildlife Trusts also provide activities which although likely to promote health and wellbeing, are not necessarily promoted in this light. Within the current report, the term 'vulnerable groups' encompasses a range of individuals with defined needs, including individuals who may be considered to be: socially disadvantaged; unemployed; older people; overweight / obese; experiencing physical disability; experiencing mental ill-health; experiencing dementia; experiencing addiction problems.

1.3 The role of the Green Exercise Research Team

There is growing empirical evidence to show that exposure to nature brings substantial mental health benefits and at the same time, physical activity is known to result in positive physical and mental health outcomes. Over the last 12 years at the University of Essex, the Green Exercise Research Team has combined these ideas into a programme of research on 'Green Exercise' (activity in the presence of nature) and 'Green Care'. The Green Exercise Research Team is also a leading authority on the use of Participatory Appraisal and Action Research to assess the needs and opinions of communities. With over 25 years' experience of participatory assessment, we have worked with a wide variety of organisations and target groups both within the UK and internationally. The Green Exercise Research team have therefore been commissioned to determine the impact (direct and indirect) of Wildlife Trust activities on human health and wellbeing.

1.4 The impact of nature on health and wellbeing

There is a large and increasing body of evidence to suggest that contact with a wide range of natural environments can provide multiple benefits for human health and wellbeing. These benefits include enhanced physical health (via increases in physical activity) and improvements in social and psychological wellbeing via a reduction in stress and anxiety, increased positive mood, self-esteem and resilience and improvements in social functioning and inclusion (Maller et al., 2002; Morris, 2003; St Leger, 2003; Tabbush and O'Brien, 2003; Pretty, 2004; Pretty et al., 2004; 2005; Louv, 2005; Driver et al., 2006; Pretty et al., 2007; Van den Berg et al., 2007; Barton et al., 2009; Hansen-Ketchum et al., 2009; Thompson Coon et al., 2011; Ward-Thompson et al., 2012; White et al., 2013; Brown, Barton and Gladwell, 2013; Gladwell et al., 2013; White et al., 2013; Wood et al., 2014; Bragg, 2014). These benefits are derived from multiple levels of interaction with nature (ranging from views of nature to active participation in nature-based activities) and from all types of natural environments (including urban green space, woodland, countryside, forest and waterside environments).

In addition, environments rich in wildlife are also associated with improved wellbeing. A systematic review performed by Lovell et al (2014) found that biodiverse natural environments may be associated with good health and wellbeing, including better mental health outcomes and an increase in healthy behaviours. Furthermore, the loss of natural environments rich in wildlife may decrease the ecosystem services they are able to provide, such as providing and supporting conditions for food growth, and as a result negatively impact on human health and wellbeing (Diaz et al., 2006; Mlambo, 2012; Lovell et al., 2014). However, the evidence base addressing the relationship between the 'quality' or level of biodiversity in the natural environment and health outcomes seems to be limited, with evidence failing to identify a specific role for biodiverse environments in the promotion of health (Clark et al., 2014; Lovell et al., 2014). Further research is therefore required.

Many organisations use the New Economic Foundations' (NEF) five ways to wellbeing as a framework for promoting healthier lifestyles and understanding how good wellbeing can be achieved (NEF, 2009). Contact with nature and involvement in nature-based interventions has been shown to facilitate each of the five ways to wellbeing (Bragg et al., 2015):

- i Connect- by promoting connections with nature and other people, thus increasing social inclusion;
- ii Be active- by enabling people to take part in exercise and activities in natural environments and gaining physical and mental health benefits;
- iii Take notice- by encouraging people to take notice of nature and the green environment and gaining the associated mental health benefits and an increased connectedness to nature;
- iv Keep learning- by promoting skill development and learning about the self;

- v Give- By allowing people to give through sharing and supporting each other, working as a team, volunteering their time and giving back to nature through the restoration of natural environments.

Given the growing concerns about poor physical and mental health, health inequalities and the increasing costs of maintaining good public health; the natural environment is likely to be a valuable tool for combating these issues (Bragg et al., 2015). Access to good quality environments is therefore essential for all.

1.5 Nature-based activities for the general public and Green Care interventions for vulnerable people

The evidence base relating to contact with nature and green space suggests that activities in natural settings are beneficial for the general public. These activities cater for people of all abilities, are inclusive and non-specific. For example, the majority of mental wellbeing benefits gained from physical activity in nature-based park environments have been shown to be universally obtained across gender, age, reported level of nature relatedness and physical activity performance level (Rogerson et al., 2015) suggesting that green environments can benefit all (Gladwell et al., 2013). In addition, there is evidence to suggest that activities in natural settings have therapeutic properties and that people with lower levels of wellbeing often experience greater benefits (Pretty et al., 2007; Barton and Pretty, 2010; Bragg, 2014; Bragg et al., 2015). Thus, when activities in nature are delivered as facilitated interventions they can provide applications for the less healthy and vulnerable groups in society (e.g. people with poor mental health, elderly, homeless etc). These nature-based interventions have been collectively termed 'Green Care' (Pretty, 2006; Hine et al., 2008; Sempik et al., 2010; Sempik and Bragg, 2013) or 'Ecotherapy' (Mind, 2007; 2013; Bragg et al., 2013) and are often run in partnership with a charity or another organisation as part as a healthcare intervention, specific treatment, rehabilitation or special educational programme (Bragg et al., 2015). These nature-based interventions can also vary in format; however the common linking ethos is contact with nature using a coherent and deliberate strategy to generate health, social or educational benefits using nature. There is a substantial body of evidence relating to the health and wellbeing effects of nature-based interventions which highlights benefits ranging from improvements to physical health and wellbeing, increases in social and cognitive functioning and reductions in social isolation (Sempik et al., 2010; Grandgeorge and Hausberger, 2011; Annerstedt and Wahrborg, 2011; Sempik and Braggm 2013; Lancu et al., 2013; Bragg et al., 2013; Husk et al., 2013; Bragg, 2014).

To summarise, in addition to benefits of contact with nature in everyday life, organised engagement with nature offers health and wellbeing benefits to both the general population (often termed 'health promotion via nature-based activities') and to different specific vulnerable groups and people with defined needs (often termed 'Green Care'). An important quality provided

by nature engagement, is that it offers a continuum of applications for health, which accommodates individuals' movement between the three contexts of engagement (see Figure 1).

Figure 1. The different contexts in which an individual may engage with nature



Explanatory notes: The 3 columns represent the different contexts in which an individual may engage with nature. On the left, the 'Everyday life' column highlights various situations in which an individual engages with nature as part of their normal lifestyle, including everyday leisure or work activities. People usually make a conscious choice to incorporate these nature-based activities into their lifestyle and have the ability and opportunity to do so.

The middle column 'Health promotion' outlines a variety of existing group projects and initiatives which aim specifically to encourage individuals, communities and disadvantaged groups to benefit from nature-based activities in order to become more active, to have more social contact, to increase wellbeing or in the case of community food growing, to eat more healthily. People who attend these initiatives may not have the opportunity or ability to engage with nature as part of their 'usual' lifestyle and can attend these health promotion projects on either a regular or ad hoc basis. They may or may not be 'vulnerable' and will have joined the project on their own volition, or have been advised or suggested to join by a health, social or community worker, by a family member or friend. Funding is usually for the project as a whole and may come from public health, local authority grants or from the voluntary or private sector.

On the right, the 'Green Care' column represents the various nature-based interventions which have been specifically commissioned for an individual with a defined health or social need as part of their care or treatment package. People attending these interventions will follow a facilitated and structured programme, on a regular basis; will have defined needs and outcomes; and the service is usually commissioned by health or social care (although service users in receipt of a personal budget may commission their own services). Funding is paid per individual for the care/ treatment service provided by the intervention.

The green arrows suggest that these three columns are actually stages on a continuum. As one moves from left to right from everyday life to Green Care (top arrow), the needs of the individual become more acute, the support/care required is more intensive and the cost of the service increases. However what makes nature-based interventions so unique is the ability to reverse the trend and move from right to left (bottom arrow) as the individual's wellbeing improves. The existence of associated projects can (where appropriate) help an individual move on from needing the services of a Green Care intervention, to maintaining their improved wellbeing state by attending a health promotion initiative, and then to progress further by choosing to incorporate nature-based activities and healthier behaviours into their everyday lives, thus creating a habit for life. (Source: Bragg and Atkins, 2015).

1.6 Aim and objectives of this research

The aims of this research are therefore to:

- Highlight the contribution of the Wildlife Trusts activities to the health and wellbeing of local communities;
- Summarise the perception of local communities in the contribution of the Wildlife Trust activities on to the lives of local people.

The objectives of this study are to:

- Determine the number and type of such specific initiatives that have been carried out /are ongoing and the numbers of people taking part;
- Determine the number and type of indirect initiatives and the numbers of people taking part; and;
- Collate, analyse and synthesise any secondary data collected by the Trusts relating to these projects;
- Engage with a number of different communities to examine the perceptions of local communities relating to the direct and indirect effects both of nature and of the work of the Wildlife Trusts, on their lives and on the contribution made to their health and wellbeing.

1.7 Content and structure of this report

Three separate methods were used in order to provide a broad understanding both of the activities run by the Wildlife Trusts and what some of the health and wellbeing benefits of these activities might be, as well as investigating how the work of the Wildlife Trusts is understood and perceived by individuals within and outside the organisation. The three methods used are described in the Methods section.

Reporting of results is split into parts A - D. Part A reports details of the activities run by Wildlife Trusts per year (2015). Results of Part A are considered in relation to the key findings of the Phase 1 literature review in order to comment on the implied health and wellbeing benefits of Wildlife Trust activities. Part B comprises case studies of the impacts of activities run by individual Wildlife Trusts for both the general population and vulnerable groups. Part C reports findings of a study into public perceptions of the role and work of Wildlife Trusts. Part D reports on the Wildlife Trusts' perceptions of evaluating health and wellbeing.

Key findings are then considered together and conclusions drawn.

2. Methodology

2.1 Survey of current nature-based activities run by individual Wildlife Trusts and Wildlife Trusts' perceptions of evaluating health and wellbeing.

2.1.1 Participants

All 47 UK Wildlife Trusts were invited to participate in an online survey of the nature-based activities they provide to local people within their area. All Trusts were emailed a covering letter and link to the online survey in March 2015. Reminder emails were sent out at the end of March 2015, with the final deadline for completion at the end of April 2015. Thirty-four of the 47 Wildlife Trusts took part in the survey, representing a response rate of 72%. Responses from individual Trusts were submitted by a range of people including CEOs, Education and Development Officers, Heads of People and Wildlife, Heads of Education and numerous managers and directors. Data gathered from this survey is reported in both Parts A and D of the results.

2.1.2 Survey

The questionnaire (see Appendix A) was developed to estimate the number and type of activities that the individual Wildlife Trusts run for the general public each year and what the most numerous and significant outcomes of these activities are. Trusts were also asked to identify the number and type of Green Care services they run specifically for vulnerable groups of people, which vulnerable groups they cater for and what their intended outcomes are. The questionnaire also asked Trusts about the advantages of barriers to evaluating the health and wellbeing impact of their work and to identify what help they would need in order to evaluate health and wellbeing outcomes in the future. Independent researchers from the University of Essex exported the data and transferred it to an SPSS database for sorting and analysis.

2.2 Review of health and wellbeing data collected by individual Wildlife Trusts

2.2.1 Participants

All 47 Wildlife Trusts were asked to provide any written evidence they had collected regarding the health and wellbeing benefits for participants in Trust activities. Requests were sent in March 2015, with a reminder email being sent at the end of March 2015. The final deadline for the receipt of written evidence was the end of April 2015.

2.2.2 Overview of data collation

All 47 Wildlife Trusts were emailed to request any information or evaluations on the health and wellbeing outcomes of their projects. Overall, seventeen Trusts provided such information, representing a response



rate of 36%. Of the seventeen respondents, thirteen (77%) had also responded to the survey (Section 3). The information provided by Trusts included evaluation reports, case study data and anecdotal evidence. Six of the Trusts (35%) provided information regarding the health and wellbeing impact of activities with the general public, whilst eleven Trusts (65%) provided information of the health and wellbeing outcomes of Green-Care services for vulnerable groups. It is also likely that many of the events with the general public included people from vulnerable groups.

All data received from individual Wildlife Trusts was collated by Essex University researchers. Thematic analysis techniques were used to identify the key health and wellbeing outcomes of engaging in Wildlife Trust activities, both for the general public and vulnerable groups. A summary detailing the impact of each individual Trust was developed, using both quantitative and qualitative evidence to support the findings of the analysis. Data acquired using this approach is reported in Part B of the results.

2.3 Community perception study

The Wildlife Trusts wanted to gain insight into community members' perceptions and thoughts about their local Wildlife Trust. To gather a snapshot of the perceptions of those community members visiting Wildlife Trust sites, a survey-based community perception study was completed. As 'snapshot' research, it was not intended that the sample obtained would be representative of those local communities in their entirety.

2.3.1 Participants

A community perception study was conducted using a sample of two Wildlife Trusts; these were Essex Wildlife Trust and Lancashire Wildlife Trust. In August 2015 researchers visited three nature reserves/visitor centres within each Trust area. During these visits, volunteers and members of the public were asked to participate in a survey detailing their involvement with the Trust and the impact of these activities on their health and wellbeing.

2.3.2 Survey

A survey (See Appendix B) was developed to determine how members of the public were involved with their local Wildlife Trusts and their reasons for getting involved. The questionnaire also asked participants what they thought the role of the Trust was and how involvement had affected their physical and mental health, skills and social interaction. Participants also detailed any changes in their feelings about themselves, nature and other people as a result of being involved with their local Wildlife Trust. Independent researchers from the University of Essex entered the questionnaire data into an SPSS database for sorting and analysis. Data gathered through this approach is presented in Part C of the results.



3. Results

3.1 Part A – Wildlife Trusts’ current nature-based activities

The Wildlife Trusts run activities both for the general public and for vulnerable individuals. Trusts were asked about the activities they run.

These were categorised into seven main activity types:

- i Practical conservation;
- ii Community gardening;
- iii Green Exercise;
- iv Training/educational activities;
- v Wildlife surveying;
- vi Nature art and craft;
- vii Bushcraft.

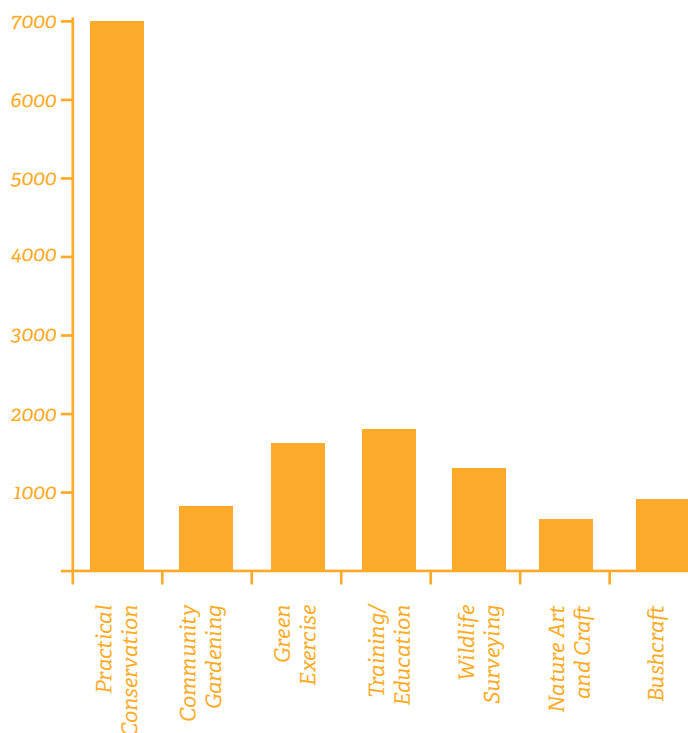
3.1.1 Wildlife Trust Activities for the General Public

All participating Trusts reported that they run activities for the general public. On estimating the number of activities / events they typically provide per year, Trusts reported that the most popular type of activity run for the general public was practical conservation, with 97% of Trusts running this type of activity, totalling 7,045 events per year (Table 1 and Figure 2). Training / Educational activities were the second most popular activity for the general public, of which it was estimated that a total of 1,858 events were provided in the last year.

Table 1. Wildlife Trust activities for the general public

Activity	Total number of sessions per year	Average number of sessions per Wildlife Trust	Maximum number of sessions run by Single Trust	Number of Trusts running activity
Practical Conservation	7,045	207	2,000	33 (97%)
Community Gardening	752	22	250	21 (62%)
Green Exercise	1,757	52	500	29 (85%)
Training/ Education	1,858	55	900	32 (94%)
Wildlife Surveying	1,331	39	170	32 (94%)
Nature Art and Craft	651	19	170	30 (88%)
Bushcraft	1,038	31	500	24 (71%)
Total	14,432			

Figure 2. Estimated total number of sessions per year for the general public



3.1.2 Green care services for Vulnerable Groups

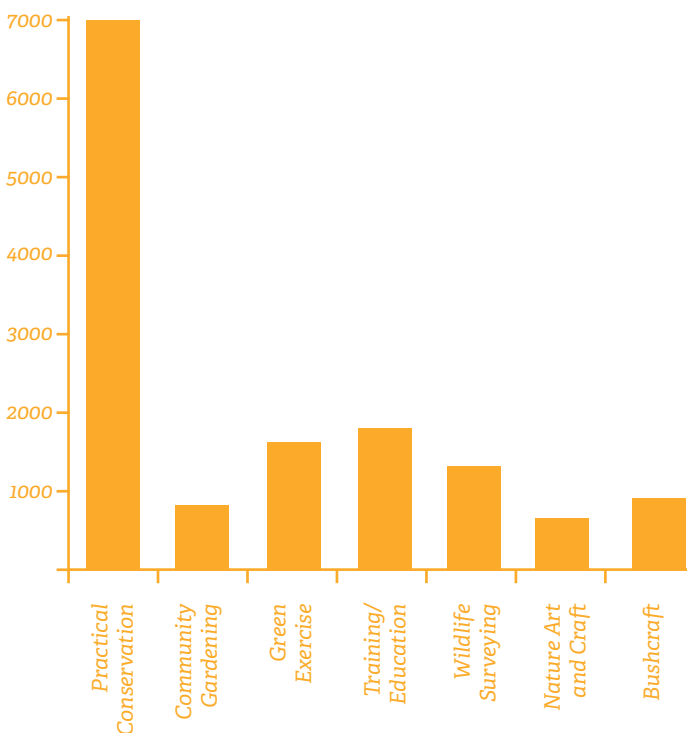
These sessions, specifically designed for particular groups of vulnerable people, are often run in partnership with other organisations, often as a healthcare intervention or as part of a specific treatment, rehabilitation or special educational programme.

Trusts were asked whether they run Green Care services for vulnerable groups; namely those experiencing social disadvantage, those who are unemployed, older people, people who are overweight or obese, people with disabilities or mental ill-health, those suffering with dementia and people with addiction problems. Overall, the Wildlife Trusts reported running all activity types (practical conservation, community gardening, Green Exercise, training/education, nature art and craft, wildlife surveying and bushcraft) for vulnerable individuals in society. The provision of these activities varied depending upon the Trust. Fewer Trusts reported running community gardening, wildlife surveying, nature art and craft or bushcraft activities for vulnerable groups (individuals with defined needs). The most frequently run events for the vulnerable being practical conservation sessions (Table 2 and Figure 3).

Table 2. Green Care services for vulnerable groups

Activity	Total number of sessions per year	Average number of sessions per Wildlife Trust	Maximum number of sessions run by Single Trust	Number of Trusts running activity
Practical Conservation	1,110	33	288	15 (44%)
Community Gardening	233	7	100	8 (23%)
Green Exercise	592	15	176	11 (32%)
Training/ Education	261	8	50	12 (35%)
Wildlife Surveying	173	5	100	5 (15%)
Nature Art and Craft	91	3	40	6 (18%)
Bushcraft	505	15	350	6 (18%)
Total	2,965			

Figure 3. Total number of Green Care services for vulnerable groups



3.1.3 Green Care services for specific vulnerable groups

When considering the provision of each activity type for specific groups of vulnerable people, Trusts reported that the vulnerable groups catered for most frequently are those experiencing social disadvantage, the unemployed and those suffering from mental ill-health (Table 3). However, practical conservation

activities and Green Exercise activities are provided for all of the specified vulnerable groups. Two Trusts also reported providing additional activities, including wild play events for people with specific learning requirements and educational activities for children with behavioural and coping issues. Some Trusts also provided comments regarding the activities they run for vulnerable people. A number of Trusts reported that they do not specifically cater for vulnerable groups and that vulnerable people often attend events that are open to the general public (Box 1).

Box 1. Trust comments regarding Green Care services for vulnerable groups

“Vulnerable people participate in many activities- some self-identify, others not. They will be participating in many volunteering opportunities but the activities are not specifically run for them.”

“No activities for particular groups.”

“We don’t generally target specific groups in our work- everything is open to all. We aim to integrate e.g. the unemployed into our usual activities for all. We neither seek funding for, nor deliver to target groups at present but occasionally work with groups such as prisoners and support requests from groups such as housing associations or socially disadvantaged groups to work with them- usually need our basic costs covering from this sort of work. To work specifically with any of these groups would require us to employ someone to do so and be paid by external funders. It is a distinct skill to do this well as would need to be distinctly supported by both staff and funds to do so.”

“We don’t run programmes/activities that are specifically targeted at the groups listed above, although undoubtedly people within those categories regularly attend a range of the events and activities we provide.”

“We do this in partnership with others but don’t collect statistics.”

“Very difficult to be precise- our activities are open to all but not exclusive to the above groups or targets at only one audience. We run activities in areas where social deprivation is high and work with schools and communities in these areas but would not specifically monitor how many overweight, unemployed etc people attend so cannot give relative figure.”

“The trust runs a small number of targeted sessions for vulnerable groups each year. All of our events and activities are inclusive and are promoted through groups that work with vulnerable people as part of our wider engagement strategies. As a result people from

vulnerable groups attend our activities and we have a small number of regular volunteers that would fall into one of these groups.”

We target and promote all of our activities to as wide a range of audiences as possible. Some promotion is specifically targeted at certain audiences particularly if the funding is to work with this audience. As far as we possibly can, we do not run groups exclusively for vulnerable groups.”

“At the moment none of these are offered specifically for vulnerable groups although vulnerable adults do from time to time attend some general public events. However we are about to develop a programme for vulnerable adults for Green Exercise.”

Table 3 Green Care services by type of vulnerable group

	Socially disadvantaged			Unemployed			Older people			Overweight/obese		
	%	Mean	Max	%	Mean	Max	%	Mean	Max	%	Mean	Max
Practical Conservation	27	8	100	18	5	100	12	5	100	6	2	50
Community gardening	6	2	50	6	0	6	9	1	10	0	0	0
Green Exercise	12	1	25	6	1	25	9	6	100	6	2	50
Training/ Education	21	3	30	12	1	20	6	2	50	0	0	0
Wildlife Surveying	3	0	10	6	0	10	6	3	100	3	0	5
Nature art and craft	6	0	10	6	1	10	3	11	20	0	0	0
Bushcraft	18	12	280	6	0	10	0	0	0	0	0	3

	People with disabilities			People with mental ill-health			People with dementia			People with addiction problems		
	%	Mean	Max	%	Mean	Max	%	Mean	Max	%	Mean	Max
Practical Conservation	12	4	50	29	8	66	6	1	20	9	1	20
Community gardening	0	0	0	15	4	100	0	0	0	0	0	0
Green Exercise	9	0	10	18	3	50	0	0	0	3	0	5
Training/ Education	12	1	10	12	1	25	0	0	0	0	0	0
Wildlife Surveying	3	0	10	9	1	13	0	0	0	0	0	0
Nature art and craft	6	0	10	9	1	10	0	0	0	0	0	0
Bushcraft	3	0	5	9	3	70	0	0	0	0	0	0

Notes: % = percentage of Wildlife Trusts offering these activities; 'mean' = mean number of sessions run per year; 'max' = maximum reported number of sessions run by one trust per year.

Based on estimates of the number of activities / events that Wildlife Trusts typically provide per year, the most popular type of activity run (the activity type reported by the greatest percentage of responding Trusts) for the socially disadvantaged individuals was practical conservation (27% of responding Trusts). Detailed break-down of the specific activity types run for specific vulnerable groups is given in Table 3.

3.1.5 Intended health outcomes of Wildlife Trust activities

3.1.5.1 Activities for the general public

In order to identify what Wildlife Trusts are hoping to achieve in running their activities for the general population, the Trusts were given a list of six health and wellbeing outcomes including: i) social interaction; ii) physical activity; iii) engagement with nature; iv) learning about nature; v) volunteering; vi) skill development; and were asked to identify the most important outcome for each of the activities. The most important intended outcome of practical conservation activities was volunteering, whilst for community gardening, nature art and craft and bushcraft, Trusts identified that the most important outcome was engaging with nature. Trusts that ran Green Exercise activities voted that physical activity was the outcome of greatest importance from these activities. Trusts running training and educational events indicated that these activities were primarily intended to promote skill development. The most important outcome for wildlife surveying events was to enable participants to learn about nature (Table 4).

Table 4. Intended outcomes for wildlife Trust activities with general public

Activity	Social interaction	Physical activity	Engagement with nature	Learning about nature	Volunteering	Skill development
Practical Conservation	3.0	0.0	27.3	0.0	69.7	0.0
Community Gardening	19.0	0.0	67.0	0.0	9.5	4.8
Green Exercise	3.6	57.1	10.7	25.0	3.6	0.0
Training/ Education	0.0	0.0	3.2	38.7	0.0	58.1
Wildlife Surveying	0.0	0.0	16.1	54.8	19.4	9.7
Nature Art and Craft	7.1	0.0	71.4	3.6	3.6	14.3
Bushcraft	15.4	0.0	61.5	7.7	0.0	15.4

Percentages indicate the percentages of Trusts which identified each of the named outcomes as being the 'most important' for each type of activity run for the general public (example interpretation: 7.7% of Trusts identified 'learning about nature' to be the most important intended outcome of bushcraft activities).

3.1.5.2 Green Care services for vulnerable groups

In order to identify what Wildlife Trusts are hoping to achieve in running their Green Care services for different vulnerable groups, the Trusts were given a list of five outcomes including: physical health, mental health, social care, social inclusion, education. For all types of vulnerable groups the majority of Trusts reported that they intend to improve both physical and mental health and promote social inclusion (Table 5). Several Trusts also said that they aim to educate participants but this was primarily for the socially disadvantaged, unemployed, people with disabilities and addiction problems. Few Trusts run Green Care services for vulnerable groups with the intention of providing social care outcomes.

Table 5. Intended outcomes of Wildlife Trust Green Care services for vulnerable groups

Vulnerable group	Physical health	Mental health	Social care	Social inclusion	Education
Socially disadvantaged (n=13)	61.5	61.5	23.1	69.2	84.6
Unemployed (n=6)	83.3	66.7	0.0	83.3	83.3
Older people (n=6)	66.7	50.0	16.7	100.0	50.0
Overweight/ Obese (n=2)	100.0	50.0	0.0	50.0	0.0
People with disabilities (n=7)	57.1	57.1	0.0	85.7	71.4
People with mental ill-health (n=17)	52.9	76.5	11.8	58.8	47.1
People with dementia (n=4)	75.0	75.0	0.0	25.0	0.0
People with addiction problems (n=3)	66.7	100.0	0.0	66.7	100.0

Percentages indicate the percentages of Trusts which identified each of the named health and wellbeing outcomes as being intended outcomes of activities run for each given vulnerable group (example interpretation: 61.5% of Trusts who run activities for social disadvantaged individuals identified physical health as an intended health and wellbeing outcome of these sessions).

3.1.6 Health and Wellbeing Benefits of Wildlife Trust Activities

Findings from the literature have shown that nature-based activities and Green Care improve wellbeing in both the general population and in vulnerable groups via each of the five ways to wellbeing (connect, be active, take notice, keep learning, give). In particular, the physical health gain, and improvements in psychological and social wellbeing have been highlighted.

From the presented activities of the Wildlife Trust for the general public and the Green Care services provided for vulnerable groups, we can infer that the Wildlife Trusts provide significant and important contributions to both health promotion and to Green Care in the UK. Per year, the Wildlife Trusts together provide at least 14,432 health promoting events to the general public, and 2,965 sessions to vulnerable groups, which may be categorised as provision of Green Care.

3.1.7 Key findings of Part A – Wildlife Trusts' current nature-based activities

- Overall, responding Wildlife Trusts estimated that they typically run more than 14,400 activities for the general public and 2,965 Green Care services for vulnerable groups each year, the majority of which are practical conservation activities;
- Green Care services for vulnerable groups primarily cater for those experiencing social disadvantage, people with mental ill-health and the unemployed;
- All activity types are typically funded through individual giving, lottery grants, donations from charitable organisations and corporate sponsorship;
- The primary intended outcome of activities for the general public is to engage people with nature; whilst the intended outcome of Green Care services for vulnerable groups is to improve physical and mental health and promote social inclusion;
- Considered together with the key findings from the Phase 1 literature review, the results suggest that Wildlife Trusts provide significant and important contributions to both health promotion and to Green Care in the UK.

3.2 Part B - Case studies: Overview of Wildlife Trust data on health and wellbeing outcomes

Part B addresses a body of data held by individual Wildlife Trusts. This data addresses the impact of activities run both for the general population and for vulnerable groups and individuals with defined needs.

3.2.1 Case studies: Impact of Wildlife Trust activities for the general population

Six Trusts provided information regarding the health and wellbeing impact of their activities for the general public; these were:

Of these six Trusts, five (83%) provided the results and/or feedback from evaluations which had been conducted internally using questionnaires developed by the individual Trust. One Trust (17%) provided the

findings of an external, independent evaluation which was conducted using standardized health measures.

3.2.1.1 Cumbria Wildlife Trust- Meadow Life

The Meadow Life project is a three year Heritage Lottery Fund project (April 2013-2016). The project works with farmers, small holders and community groups to enhance, restore and manage flower rich hay meadows in Cumbria using traditional practices to increase plant diversity. The project also aims to promote the meadows through demonstration days, events, workshops, walks and talks to provide opportunities for people to value hay meadows, their heritage value and the landscapes they are found in.

To date there have been at least 80 active volunteers, many of whom participated in the Trusts' evaluation of the project. All volunteers reported learning new skills, developing existing ones and increasing their knowledge of conservation. More than 75% of participants reported that they had developed their farming-based skills and 50% gained knowledge of meadow restoration techniques:

"I enjoyed learning which plants are important and how to identify them."

"I loved learning about grazing/grassland management and scything."

(Quotes from project volunteers).

Approximately 80% of volunteers also felt they had met like-minded people and 25% said they had spent more time with family and friends as a result of the project.

3.2.1.2 Dorset Wildlife Trust- Wildlife Skills

The Wildlife Skills training programme is funded through the Heritage Lottery Fund and is part of the Skills for the Future programme, which aims to provide individuals across the country with the skills to make a positive contribution to the heritage sector and to seek employment in the sector. 97% of 30 participants undertaking placements on this programme found employment as a result.

Dorset have also worked in partnership with Devon, Somerset and Wiltshire Wildlife Trusts to offer a further 46 training placements over three years (2014-2017). The first sixteen participants began placements in July 2014, engaging in a programme of tailored work-based training complimented by training in transferable skills to enhance employability. Some participants have been successful in obtaining qualifications in areas such as health and safety and first aid in the workplace.

3.2.1.3 Herts and Middlesex Wildlife Trust - Woodlands for People and Wildlife

Woodlands for People and Wildlife was a project funded by Heritage Lottery Fund and Veolia Environmental Trust that ran between 2011 and 2014 and aimed to increase biodiversity, understanding, participation and the number of volunteers caring for the Woodlands across South Hertfordshire. The project

provided nature reserve trails, guided walks, wild wood days and conservation activities to a wide variety of landowners, community organisations, councils and individual volunteers. A survey-based evaluation of the project, carried out by Herts & Middlesex Wildlife Trust with an external consultancy, revealed that the project engaged over 6,000 people from the local area and that 80% of respondents felt that the project had increased their understanding, use and enjoyment of the woodlands. Furthermore, 93% of children (taken from 333 responses) involved in the project said that they had lots of fun and 70% reported learning 'lots' of new things.

3.2.1.4 Staffordshire Wildlife Trust - Wild Steps

Staffordshire Wildlife Trust introduced the 'Wild Steps' programme in 2008 to promote health and fitness by engaging local people in conservation skills and wildlife themed walks to help enhance local green spaces (Staffordshire Wildlife Trust, 2011; 2012). The 4 year project engaged over 900 participants in a series of nature-based activities including wildlife walks and practical conservation. The health and wellbeing impact of engaging in the project was assessed in 30 volunteers who attended the programme for a series of 12 weeks. The 'Wild Steps' programme was open to all local residents within target wards of Newcastle under Lyme designated by a NHS commissioning board. During the 12 week period information was made available regarding healthy lifestyle choices from organisations like the British Heart Foundation and the NHS 'Keep Active' programme. These volunteers reported that attending the Wild Steps programme not only improved the quality of the environment but also increased their happiness, confidence and community cohesion.

Throughout the project all participants were encouraged to complete a 'Health Log Book' which tracked their calorie burn and highlighted the health goals they had set themselves, whilst involved with the project. Measurement scales were also made available for individuals to track their weight and BMI (this was optional). 30 volunteers from the local community who had been involved in the project took part in the final consultation, 29 of these participants suggested there had been an improvement in their mental health. Approximately 97% of 29 participants improved their mental health, 80% reduced their smoking and drinking and 61% revisited places that they had worked on during the project. Furthermore, more than 70% of participants reduced their body mass index, with 65.8lbs being lost across 30 volunteers. Participants felt healthier as a result of the project and also developed a variety of skills:

"I feel fitter and healthier since joining the WILD STEPS project. I have relished my opportunity to enhance my current skills and learn new ones..."

"Since participating in the project I have taken on board healthy eating, more exercise, and feel healthier..."



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Participants also reported that they had made new friends and interacted with others:

"It's been great to meet new people..."

"Good socially, mentally happier, made friends, discovered new places, encouraged to keep healthy."

3.2.1.5 Suffolk Wildlife Trust- Youth Outdoor Experience

Suffolk Wildlife Trust ran a 3-year Youth Outdoor Experience project from October 2007 – October 2010 which engaged young people aged 11-18 years in structured outdoor activities in local green spaces. Participants were engaged in two hours of outdoor sessions each week for a period of 12 weeks including activities such as practical conservation work, which contributed to the management of our reserves woodland activities, shelter building and sustainability activities. The impact of project was evaluated by the Green Exercise Research Team at the University of Essex using standardized health measures. The evaluation revealed that 60% of participants improved their wellbeing as a result of taking part in the project, whilst 60% felt healthier. In addition, 50% of the young people felt they were making a more positive contribution to society (Wood, Hine and Barton, 2011). Participants also increased their frequency of contact with nature and engaged in more activity as a result of the project, with the number of days participants performed moderate physical activity increasing by 45% by the end of the 12 week project.

3.2.1.6 Yorkshire Wildlife Trust- Stirley Community Farm

In 2011 Yorkshire Wildlife Trust began a project to turn a derelict dairy farm into a sustainable conservation grazing enterprise that delivers benefits to local people, visitors and wildlife. Stirley beef is purely grass fed and reared in a low input system and is available for sale direct to the public. An half – acre fruit and vegetable training garden, teaching kitchen and education centre provides an excellent opportunity for 'plot to plate' learning sessions and communal eating. A varied programme of nature-based activities attracts a wide audience and an annual food festival attracts up to 1,000 people per year. Since 2011, the farm has provided

opportunities for people to spend time outside, be physically active, meet new people and contribute to society.

The farm has brought in over £1million of investment to the local area, provided jobs and training. More than 37 people have received formal training and opportunities for employment. There is also anecdotal evidence to suggest the project reduced health needs in the local area through the promotion of physical activity, social interaction and healthy eating and by supporting mental wellbeing. Volunteers are a key part of the successful running of the project. External evaluations recorded statements from volunteers who had gained a sense of achievement, felt that they made a difference and were provided with vast opportunities for learning:

“Excellent day, lots of opportunities for learning.”

“Very good for mental well – being, very relaxing and friendly, thank you.”

“You don’t need acres of land to make a difference- our forest garden and mini-orchard is on a very small scale.”

3.2.2 Case Studies: Impact of Wildlife Trust Green Care services for the vulnerable

Eleven Trusts provided information regarding the health and wellbeing impact of their Green Care services for vulnerable groups; these were:

- i Avon Wildlife Trust;
- ii Cornwall Wildlife Trust;
- iii Devon Wildlife Trust;
- iv Hampshire and Isle of Wight Wildlife Trust;
- v Herefordshire Wildlife Trust;
- vi Lancashire Wildlife Trust;
- vii London Wildlife Trust;
- viii Shropshire Wildlife Trust;
- ix Tees Valley Wildlife Trust;
- x Ulster Wildlife Trust;
- xi Wiltshire Wildlife Trust.

Of these eleven Trusts, 10 (91%) provided feedback from evaluations which had been conducted internally, whilst one Trust (9%) provided the findings of an external, independent evaluation. Four Trusts (36%) conducted evaluations using standardized health measures, namely the Warwick Edinburgh Mental Wellbeing Scale (WEMWBS).

3.2.2.1 Avon Wildlife Trust - Communities and Nature Programme

Avon Wildlife Trust is currently providing a Communities and Nature programme (started in January 2013) which engages people from vulnerable backgrounds with nature and outdoor activities. Participants include disadvantaged young people, families, refugees, people with learning disabilities and those recovering from mental health issues. The programme seeks to engage participants in improving the natural environment. Participants have taken part

in wildlife walks and conservation tasks on nature reserves and enhanced local green spaces. Anecdotal evidence indicate that participants feel that they have improved their health and well-being, become more confident, developed life skills and the ability to work as part of a team. Participants have also reported feeling more included in their community and being empowered to work in their communities independently of the Trust; whilst young people have had the opportunity to develop skills with many participating in the John Muir Award.

3.2.2.2 Cornwall Wildlife Trust - Wild Penwith and Wild Cober Volunteer Groups

Cornwall Wildlife Trust set up the Wild Penwith Volunteer group in January 2010 to maintain and restore valuable wildlife habitats (Cornwall Wildlife Trust, 2011). Continuing the success of this group, since May 2015, they have also successfully launched a second group, the Wild Cober Volunteers, run on the same lines. Volunteers were derived from a number of backgrounds but also included long-term unemployed, ex-offenders and recovering alcoholics, who restored 2.55 hectares of wildlife habitats in 388 volunteering days. A sub-set of 9 volunteers took part in a questionnaire survey provided by the Trust to determine the impact of the project on health and wellbeing. All volunteers reported that the project had resulted in improvements in their fitness and strength:

“Not only is volunteering fun, but it’s a great way to exercise and spend time outside in nature.”

Approximately 93% of participants also reported that the activities had a positive effect on mental health:

“I always feel my mood improves once I am out in the countryside.”

In addition, 86% of participants felt that they had increased their confidence, self-esteem and self-positivity and 78% reported that the volunteering had a positive effect on their emotional well-being. All participants reported having achieved a sense of purpose and satisfaction, and that they had made new friends:

“I have met lots of people through taking part in this activity and thoroughly enjoyed the work and their company.”

The volunteering programme also helped to tackle issues related to unemployment as 75% of participants reported that the project had helped to improve their job prospects through skill development:

“Some skills I have learnt I will take on for the rest of my life.”

3.2.2.3 Devon Wildlife Trust- Enhancing the Healing Environment Project

Devon Wildlife Trust set up the ‘Enhancing the Healing Environment Project’ to support people with dementia and mental health needs, who need hospitalisation (Devon Wildlife Trust, 2012). The Trust developed an internal and external sensory trail around a local hospital ward and also provided a courtyard and

garden for participants to use. Anecdotal evidence from hospital staff indicates that the project improved participant health and well-being by reducing stress, confusion, anxiety and agitation, all of which resulted in a reduction in the use of anti-psychotic medicine and improved sleep patterns. The use of nature within the ward and surrounding area also increased job satisfaction and staff retention; improved the experience of carers and community involvement (Devon Wildlife Trust, 2012).

3.2.2.4 Hampshire and Isle of Wight – Woodland Therapy

Hampshire and the Isle of Wight Wildlife Trust runs Woodland Therapy, a weekly access to nature programme for adults living with long-term mental health conditions, which is funded by the Big Lottery Reaching Communities Fund. Sessions take place in woodland at our Bouldnor Forest Nature Reserve on the Isle of Wight throughout the year and the project is run according to the Forest School ethos of participant-centred engagement. During the sessions, clients put up shelters, cut firewood and cook a healthy campfire lunch. There are also opportunities to get involved in a range of green woodwork and conservation projects; and many enjoy watching woodland wildlife such as red squirrels and nesting birds. Hampshire Wildlife Trust asked participants to complete a feedback questionnaire on how the project made them feel and what they had enjoyed most. Anecdotal evidence from these questionnaires showed since starting the sessions 71% relied less on formal support services, 85% felt that their self-confidence had increased and 100% felt that nature had a positive effect on their mental health, and indicated that the project increased self-esteem and confidence through development of skills:

“I love the group. I come every week and I don’t like missing it for any reason. I now go swimming and on organised walks too. Getting out in nature makes me feel like I’ve been born again.”

“As a result in regaining my confidence I have become a volunteer for the Wildlife Trust and enjoy every minute of it.”

“Woodland Therapy is an absolute must for me every week. As soon as I get to Bouldnor my head goes quiet, a total positive extreme to the chaos that usually reigns.”

“You’ve something to get up for and no matter what the weather throws at you, you know it will be a tranquil few hours.”

“Adventure is there should you want it, sometimes though just sitting round a campfire ‘being’ is enough. It’s enriched my life. Would I miss it if I didn’t have it? Terribly so.”

3.2.2.5 Herefordshire Wildlife Trust - Orchard Origins

A longstanding desire for Herefordshire Mind and Herefordshire Wildlife Trust to work together brought about the implementation of the ‘Orchard Origins’ project in July 2012, which engaged people with poor mental health in orchard maintenance and product development activities such as pruning trees and picking fruit and sorting of fruit, production of goods and retail (Herefordshire Wildlife Trust, 2014). The project was funded by the Big Lottery Fund between July 2012 and March 2014 and employed a support worker who was responsible for the evaluation of the project, which was conducted using the Warwick Edinburgh Mental Wellbeing Scale and one item questions to assess identity and self-esteem. Twenty one service users took part in the evaluation all of whom saw an improvement in their self-esteem, sense of identity and wellbeing after 12 months of being involved in the project. At the start of the project all participants’ wellbeing was classified as ‘very low’ or ‘below average’, increasing to ‘average’ following only four months of engagement.

Having developed a sustainable business model Orchard Origins now operates as a social enterprise, generating income through sales of products and services and engaging 6-10 volunteers each week, an increasing number of whom are referred because of their offending history [which may be attributable to wellbeing issues].

3.2.2.6 Lancashire Wildlife Trust - Mud to Muscle/ Gateway to Urban Nature

Between October 2010 and 2012 Lancashire Wildlife Trust ran the Mud to Muscle project which engaged males aged 45 years+ at risk of poor health in green activities (Lancashire Wildlife Trust, 2012). This target group was selected based upon discussions with the Public Health Team at Bolton Council who highlighted males aged 45 years + were a key ‘at risk’ group in the Borough. Much of Lancashire’s work in this area is targeted at communities / demographics with the most need as guided by their relationship with Lancashire Care Foundation Trust, public health teams and neighbourhood management officers.

The project consisted of two weekly sessions based at a number of green spaces, whereby the participants helped to improve habitats and infrastructure and engaged in environmental conservation. In order to demonstrate the impact of the project on health and well-being, Lancashire Wildlife Trust performed a questionnaire evaluation with participants who had attended the project for more than three months (sample of 42 participants). Approximately 83% of participants reported feeling healthier after taking part in the project, whilst 81% reported feeling fitter:

“It has helped my depression by getting out of the house.”



More than 85% of participants said that the project had encouraged them to be more physically active, with 91% using the outdoors for physical activity and 81% being more confident in performing physical activity. In addition 88% of participants said that the project had improved their skills, with 48 accredited qualifications being awarded:

“I have enjoyed working with others. It has helped me develop skills I wouldn’t ordinarily do or experience.”

Participants also felt that they had connected with other people (80%) and made a difference in their community (93%):

“I have made new friends and as I am blind I have made great leaps and bounds in being part of Mud to Muscle.”

In addition to the Mud to Muscle Project Lancashire Wildlife Trust also ran the Gateway to Urban Nature project between 2010 and 2013 which provided opportunities for residents living in deprived areas to create, enhance and manage underused green spaces in their local neighbourhoods (Lancashire Wildlife Trust, 2014). The project created and resurfaced over 4,000m of footpath as well as making practical improvements to over 10 different habitat types, some of which were UK priority habitats. This practical work was achieved through the active involvement of 179 volunteers who between them worked 1,458 volunteer days. Lancashire Wildlife Trust evaluated the impact of the Gateway to Urban Nature project with 335 participants, and found that 79% of participants felt that the project had encouraged them to be active and 77% to appreciate the outdoors. In addition, 81% of participants said that they had connected with other people and 78% developed skills and challenged themselves.

3.2.2.7 London Wildlife Trust- Potted History

The Potted History project began in summer 2013 as a three-year programme of gardening and reminiscence work with older people across Lambeth, Lewisham and Southwark comprising 2 elements: a weekly group meeting year round at the Centre for Wildlife Gardening for a group of 12 people, and an outreach element which runs series of groups in day centres, residential care homes and other community venues for groups of 8 older people who have greater difficulty in accessing nature by themselves. The project is funded by the Big Lottery, with additional funding from the Merchant Taylor’s Company Charitable Trusts and the Linbury Trust.

The project brings nature to these participants by way of collections of seasonal flowers, leaves and herbs to use in the sessions. Participants also sow seeds and harvest quick-growing salad crops; plant bulbs, make habitats for insects, feeding stations for birds and art and craft from natural materials. At four of the outreach sites substantial improvements for people and wildlife have been made to the outdoor space including the creation of raised beds and herb planters. Reminiscence runs alongside the activities, using the materials as prompts for memories, and staff support participants in sharing their experiences, knowledge and thoughts with others.

Feedback from participants indicates that the project has reduced social isolation providing people with a regular opportunity to get out of the house, learn new things and interact with others. Being outdoors and experiencing the sensory pleasures associated with natural environments has also improved participants’ mood and happiness:

“I was really anxious before coming today...but now I feel really relaxed- it’s nice being outside.”

“Since coming here I’ve managed to give up smoking - I was depressed...but now I really look forward to coming here.”

“Thoroughly enjoyed the company and activities.”

The project also promoted improvements in physical well-being, with 100% of participants of the regular participants of the weekly group (out of 9 who answered this question on the feedback form) reporting physical health improvements and the majority of participants taking fresh fruit and vegetables home to eat.

3.2.2.8 Shropshire Wildlife Trust - Telford Green Gym

The Telford Green Gym programme run by Shropshire Wildlife Trust commenced in April 2015 and aimed to deliver a programme of Green Gym activities across the borough. Telford and Wrekin Council commissioned Shropshire Wildlife Trust to run a two year programme of activities as they were keen to work with partners who had expertise in the working in the voluntary sector. In 2015 the first 33 participants were recruited, with 132 Green Gym sessions and 5,121 hours of voluntary work on 17 community sites across the Borough. Participants included unemployed and retired people and those who were experiencing long term sickness. Evaluation by Shropshire Wildlife Trust on 13 participants attending sessions for 12 weeks demonstrated an improvement in health and well-being. Approximately 70% of participants improved their score on the short form Warwick Edinburgh Mental Wellbeing Scale, whilst 46% of participants reported eating more portions of fruit and vegetables:

“My fitness levels increased greatly over a quite small period of time and I noticed the same in people who attended also, not just because of the exercise that we were doing but also the education in a healthy diet and exercise.”

Participants also reported developing skills and making friends by interacting with others:

“I have learned so much including how to build hedgerows.”

“I enjoy the regular opportunities offered to learn new skills such as Hedge laying, coppicing and environmental preservation...The group have regular walks along specific nature trails, this is a good opportunity to chat with other members...”

“I am physically fitter, I’ve made many new friends, now I can saw wood accurately and dig the soil.”

3.2.2.9 Tees Valley Wildlife Trust – Inclusive Volunteering

In 2006 Tees Valley Wildlife Trust created the Inclusive Volunteering Project, which involved a small group of patients from a local forensic mental health unit volunteering on nature reserves once a week in habitat management activities as part of their rehabilitation. This has grown to work with over 50 volunteers (2016) referred by a range of care organisations, agencies and individual carers across sectors and four local authorities areas, as well as people who self-refer to improve their wellbeing. The inclusive approach has

built up Tees Valley’s experience and expertise to work with people suffering from a range of short and long-term physical and mental health conditions including anxiety, depression, personality and delusional disorders and learning disabilities, as both prevention and intervention.

Activities have expanded to include workshops on woodwork, surveys, craft activities, walks and events promoting the use of nature in health self-management, with conservation volunteering remaining a key activity, all designed to maximise the benefits from the five ways to wellbeing. John Muir Awards have also been completed by many participants and have been instrumental in developing participants’ confidence, esteem and relationships through practical and environmental skills as well as communication and observation skills.

Tees Valley conducted an evaluation of the impacts of their work in 2012, as well as collecting feedback on popular wellbeing and connection to nature measures including the Short Warwick-Edinburgh Mental wellbeing Scale, Personal Growth Initiative Scale and Inclusion of Nature in Self Scale, with 19 participants. From these findings they were able to develop their own assessment procedure including an original ‘Nature and Wellbeing Scale’ alongside qualitative interviews, reviewed by Teesside University School of Health and Social Care, and approved by a regional NHS ethics committee. This procedure has been used to evaluate progress with 100 participants over 12 weeks (2015).

Participants and their support workers/carers reported increased feelings of confidence and a sense of achievement from taking part in the activities:

“It seems such a simple thing for someone to be taught to use a strimmer and it’s the easiest thing to see a result of your labours. Now if you’re doing a path you can look back and think I’ve done that.”

“...definitely seen changes confidence wise in people, learning new skills is definitely linked to people’s confidence.”

“...you get a lot of satisfaction...when you see the public going by and they’re like ‘thanks that’s looking nice’ and it gives you a bit of a boost.”

“Makes me feel as if I’m achieving something, and aiming for goals and getting out in the fresh air and working with people.”

54% of volunteers reported feeling close to other people ‘all of the time’ and frequently commented on the opportunities provided for social interaction:

“It got me out of the house and it got me involved with things and it got me living again...”

“The worst thing that can happen to somebody with mental problems....is to be excluded.”

Participants felt that volunteering on the project helped them to develop skills:

“Experience is really valuable and any interview I go into I’d always bring up the Wildlife Trust and the work I have done...”

“You need someone to learn from...I’m quite happy to watch him and learn from him, even there when I’m not doing much I’m watching and trying to pick up, oh right you hold it like that and you do it like that to do the best....I’ve got a bit better.”

The work has been funded by the Wildlife Trusts Strategic Development Fund, Health and Social Care Volunteering Fund, Big Lottery programmes and local Community Health Funds.

3.2.2.10 Ulster Wildlife Trust – Natural World Challenge Project

The Natural World Challenge (NWC) Project was a five year project (2010-2015) which provided the opportunity for Caring Breaks’ clients to discover a whole range of new activities and to experience the natural world in ways that others in the wider community perhaps take for granted. The project involved collaboration between Ulster Wildlife and Caring Breaks – a social care charity that provides respite breaks for family carers in the Belfast area by providing activities for their sons and daughters with a learning disability, to relieve the burden of continuous care and social isolation experienced by carers and enhances social inclusion for adults with a learning disability through engagement. Clients’ of Caring Breaks were referred to the project and took part in a variety of activities including wreath-making, cooking, recycling, healthy eating, marine life, woodland trails and treasure hunts. Caring Breaks conducted an evaluation of the project in both carers and clients. Feedback from adults with learning disabilities indicated that the project helped them to develop skills. In a survey of 32 participants 88% reported spending more time in nature and 97% being more aware of wildlife:

“The recognition of birds at home in the garden is just amazing.”

“They see that the forest is there to be enjoyed. They are beginning to recognise the various types of habitat suited to each animal.”

Participants (100%) also reported getting out of the house more and making new friends, whilst carers of family members attending the project also reported that those they care for had improved their social and personal development and attained new skills:

“The activities teach the clients to work as a team. They learn to be tolerant and patient and to share and these are all skills which assist them in general life.”

“Before caring breaks this client had nothing else. She was in the house all the time and had no stimulation from people her own age and no opportunity to interact with new people. Now she meets new people and she really enjoys the challenges.”

“The clients are definitely more independent. I have seen once client who would have been reluctant to do anything for himself now helping and actually working with the leader. The leader gives him responsibilities and he responds.”

“It is great for carers to see their children being capable and making friends. They can plan better for the future...”

Participants also developed healthier lifestyles with increased awareness of healthy eating and exercise:

“I have seen changes, some of them are fitter. Some of them have lost weight and are keen to lose weight. There is no longer a flat refusal when we are doing a walk...they are willing to try.”

Carers themselves also experienced benefits from the project. In a survey of 64 carers 77% revealed that they felt less isolated, 59% reported that they had developed social networks and 98% felt less stressed.

3.2.2.11 Wiltshire Wildlife Trust – Wellbeing through Nature

The Wellbeing through Nature project was run by Wiltshire Wildlife Trust between 2011 and 2014. The project was a nature-based recovery programme supporting adults facing mental health problems by



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using nature as a therapeutic measure to prevent mental ill-health and support recovery. In addition, the programme aimed to help local people look after their mental, physical and emotional wellbeing through a range of activities including woodland crafts, cooking and volunteering, underpinned by the five ways to wellbeing. Over the course of the project 387 four hour nature-based sessions were provided engaging over 240 participants. Wiltshire Wildlife Trust evaluated the impact of the project on participants’ health and wellbeing using the Warwick Edinburgh Mental Well-being Scale and through interviews with participants. Overall 48 clients completed the scale at the start and end of their time on the programme, with their mean wellbeing score increasing from 38.5 to 45.9; representing a statistically significant improvement in wellbeing. In addition to improving wellbeing, qualitative feedback from participants indicated that

the project helped them to feel part of a group and interact with other people:

“Two months ago I started to attend the wellbeing programme and already I feel like a part of the group. The best thing is that anybody can become a member. I am in a wheelchair and have no problems.”

“Everybody in the group is so friendly and they always have a smile for you and there is always somebody there to help if you need it.”

“It has helped me because I am meeting people, good to talk...”

The project also enabled participants to develop skills and try new things:

“So far I have done things I thought I would never have before, such as making and drinking my own nettle soup.....and I have also had the chance to make candles and some pottery.”

“Changes in myself have been more of a positive attitude, increased social and communication skills and developed my knowledge of a range of subjects.”

“The project is a life changing experience. I have gained skills in woodland management, more confidence, social skills and I believe in myself...”

Some participants also commented the project had eased symptoms of illness, helped them to reduce their medication and to get out of the house and take notice of the environment:

“I’m sure that my being able to reduce and stop some of my medication has been as a result of feeling better supported than I have done in years...”

“Since being on the project I have taken time to really notice things. When I walk along I notice the flowers and insects and take time to look at things that I hadn’t done before.”

“It has helped me get out and stopped me living under the duvet all day. Great to get out with nature, get some fresh air, socialise.”

“Has helped my depression and agitation and helped me to wind down and make decisions about my life.”

This project led to Wiltshire’s further development of adult and youth wellbeing programmes, supported by the NHS and delivered in partnership with a range of organisations including ‘Help for Heroes’.

3.2.3 Key findings of Part B - Case studies: Overview of Wildlife Trust data on health and wellbeing outcomes

It is clear from the examples above that whether working with the general public or with specific client groups, nature-based activity is being used across the Wildlife Trusts to engage with a wide range of audiences with very diverse needs, backgrounds and demographics. These examples also demonstrate the range of health and wellbeing outcomes and indicators Wildlife Trusts contribute to, the different methods employed to measure them, the short and longer-term approaches to achieve these and the balance between benefits to individuals and those for the wider community.

- Overall the information and evaluations received from Wildlife Trusts identified that for both general public and vulnerable groups, participants’ health and wellbeing was improved through the facilitation of each of the five ways to wellbeing (connect, be active, take notice, keep learning and give);
- General public attendees developed skills knowledge and employability; improved their perceived and actual health and increased their physical activity behaviours; engaged in healthy eating; took notice of their natural surroundings and actively volunteered on nature-based projects;
- Vulnerable group attendees frequently reported feeling more confident; having an enhanced mood and self-esteem; experiencing less stress; and importantly, being able to reduce and manage their medication more effectively;
- Whereas general public attendees tended to gain physical health benefits and nature-related skills, vulnerable group attendees primarily reported psychological wellbeing improvements. Although these outcomes were recorded in line with the often differing intended outcomes of these activities, in line with Bragg and Atkins’ (2015) nature engagement contexts model these findings demonstrate that the range of activities provided by The Wildlife Trusts respectively function effectively as health-promoting nature-based activities for the general public and as Green Care interventions for vulnerable groups;
- Beyond the beneficial outcomes of Wildlife Trust activities inferred from the Phase 1 literature review in relation to findings of Part A, data reported in Part B demonstrates that Wildlife Trust activities provide important additional benefits to different participating groups.

3.3 Part C - Community Perception study

3.3.1 Participants

A total of 86 participants took part in the community perception study; 49% (n=44) were surveyed at Essex Wildlife Trust sites and 51% (n=42) at Lancashire Wildlife Trust sites. The majority of participants (52%) were female; however when split by Trust 64.3% of Essex Wildlife Trust participants were females compared to only 41% of Lancashire Wildlife Trust participants. Overall, the majority of participants (29%) were aged 66-75 years and classified their main occupation as retired (52%). However, participants from both Trusts were derived from a variety of age (Table 6) and occupation groups (Table 7). One participant from Lancashire Wildlife Trust identified their occupation as 'other'; this participant specified that they were an asylum seeker.

Table 6 Age groups for community perception study participants

Age group (years)	Lancashire Wildlife Trust (n=42)	Essex Wildlife Trust (n=44)	All (n=86)
18-25	1 (2.3%)	1 (2.4%)	2(2.3%)
26-35	5 (11.4%)	4 (9.5%)	9 (10.5%)
36-45	7 (15.9%)	7 (16.7%)	14 (16.3%)
46-55	9 (20.5%)	3 (7.1%)	12 (14.0%)
56-65	7 (15.9%)	8 (19.0%)	15 (17.4%)
66-75	13 (29.5%)	12 (28.6%)	25 (29.1%)
>75	2 (4.5%)	7 (16.7%)	9 (10.5%)

Table 7: Occupation status for community perception study participants 3.3.2 Involvement with the Wildlife Trusts

Main occupation	Lancashire Wildlife Trust (n=42)	Essex Wildlife Trust (n=44)	All (n=86)
Employed	9 (20.9%)	14 (33.3%)	23 (27.1%)
Unemployed	3 (7.0%)	0	3 (3.5%)
Retired	21 (48.8%)	23 (54.8%)	44 (51.8%)
Sick/disabled	5 (11.6%)	1 (2.4%)	6 (7.1%)
House person	3 (7.0%)	4 (9.5%)	7 (8.2%)
Carer	0	0	0
Student	1 (2.3)	0	1 (1.2%)
Other	1 (2.3)	0	1 (1.25)

3.3.2 Involvement with the Wildlife Trusts

Participants were asked to identify how they had been involved with their local Trust. As this sample consisted of individuals present at Wildlife Trust sites (who therefore by definition had some involvement with these Wildlife Trusts), this surveyed individuals' perceptions of their own involvement with their local Wildlife Trust. For Essex and Lancashire combined, the majority of participants (62%) reported that they had been involved by visiting Wildlife Trust sites (despite all of them being interviewed on a Wildlife Trust site). This was also the case for the two trust areas separately, but a large number of participants from Lancashire were also volunteers at the Wildlife Trust (Table 10). Approximately 12% of participants surveyed said that they 'had not been involved'. The majority of these participants were from Essex Wildlife Trust.

Table 8. Participant involvement with the Wildlife Trusts

Reasons for involvement with the Wildlife Trust	Lancashire Wildlife Trust (n=42)	Essex Wildlife Trust (n=44)	All (n=86)
Helping Wildlife	28 (63.6%)	18 (51.4%)	46 (58.2%)
Improving the Community	19 (43.2%)	8 (22.9%)	27 (34.2%)
Developing New Skills	19 (43.2%)	5 (14.3%)	24 (30.4%)
Meeting New People	24 (54.5%)	8 (22.9%)	32 (40.5%)
Fresh Air	24 (54.5%)	25 (71.4)	49 (62.0%)
Engaging with Nature	19 (43.2%)	22 (62.9%)	41 (51.9%)
Being Active	31 (70.5%)	20 (57.1%)	51 (64.6%)
Other	3 (6.8%)	2 (5.7%)	5 (6.3%)

Note: Percentages represent percentage of participants that responded to the survey; percentages do not add up to 100% as participants could tick more than one box

Participants who reported being involved with their local Trust were also asked to identify their reasons for doing so. For all participants combined the three most commonly reported reasons for getting involved were to be active, get fresh air and help wildlife. These were also the three top reasons for Lancashire participants' with the addition of meeting new people. For Essex Wildlife Trust participants, getting fresh air and being active were also amongst the top three reasons for getting involved alongside engaging with nature (Table 9). Five participants also reported getting involved for 'other' reasons (Box 2).

Table 9 Participant reasons for Involvement with the Wildlife Trusts

Involvement with the Wildlife Trust	Lancashire Wildlife Trust (n=42)	Essex Wildlife Trust (n=44)	All (n=86)
Wildlife Trust Membership	18 (40.9%)	12 (30.0%)	30 (35.7%)
One-off Outdoor Event	9 (20.5%)	4 (10%)	13 (15.5%)
Programme of Outdoor Activities	9 (20.5%)	4 (10%)	13 (15.5%)
Visits to Wildlife Trust Sites	24 (54.5)	28 (70.0%)	52 (61.9%)
As a volunteer	24 (54.5%)	5 (12.5%)	29 (34.5%)
Family Entertainment	5 (11.4%)	10 (25.0%)	15 (17.9%)
Other	0	0	0
Haven't been involved	2 (4.5)	8 (19.0%)	10 (11.6%)

Note: Percentages represent percentage of participants that responded to the survey; percentages do not add up to 100% as participants could tick more than one box

Box 2. Additional reasons for getting involved with the Wildlife Trust

“Happy walking in the woods.”

“Fun family activity.”

“To encourage the kids to enjoy the woods.”

“Education.”

“To teach my children.”

3.3.3 Role of the Wildlife Trusts

Participants were asked to identify what they thought the role of their local Wildlife Trust was. Overall and for participants from Lancashire Wildlife Trust the most commonly reported roles were to protect wildlife, help people to access nature and educate people about nature. For participants from Essex Wildlife Trust the most commonly reported roles were helping people to access nature, protecting wildlife, helping people to enjoy nature and conserve wildlife biodiversity. The least commonly reported role across both Trusts was helping to improve human health (Table 10). Three participants also reported that the role of the Wildlife Trust was to improve the community/provide a community resource.

Table 10. Participant views on the role of the Wildlife Trusts

Role of the Wildlife Trust	Lancashire Wildlife Trust (n=42)	Essex Wildlife Trust (n=44)	All (n=86)
Create or Improve Landscapes	25 (58.1%)	22 (53.7%)	47 (56.0%)
Help People Access Nature	37 (86.0%)	32 (78.0%)	69 (82.1%)
Improve Human Health	23 (53.5%)	15 (36.6%)	38 (45.2%)
Protect Wildlife	40 (93.0%)	37 (88.1%)	77 (90.6%)
Help People Enjoy Nature	35 (81.4%)	32 (78.0%)	67 (79.8%)
Conserve Wildlife Biodiversity	30 (69.8%)	34 (81.0%)	64 (75.3%)
Educate People about Nature	36 (83.7%)	33 (30.5%)	69 (82.1%)
Other	2 (4.8%)	1 (2.5%)	3 (3.7%)

Note: Percentages represent percentage of participants that responded to the survey; percentages do not add up to 100% as participants could tick more than one box

3.3.4 Changes in Health and Wellbeing

Participants were asked to identify whether they had experienced any changes in their mental or physical health, skills or social interaction as a result of their involvement with their local Wildlife Trust. Participants were asked to indicate changes for each of the specified wellbeing area on a scale from negative five to five, with a negative score representing deterioration and a positive score representing an improvement. Overall participants from both Wildlife Trust areas reported that they had experienced improvements in both physical and mental health, skills and social interaction (Table 11). Of the participants who reported their changes in mental and physical health 99% and 96% respectively reported improvements. These figures were similar for changes in skills and social interaction with 96% and 97% of participants respectively reporting improvements as a result of involvement with Trust activities.

Table 11. Participant changes in measures of health and wellbeing.

	Lancashire Wildlife Trust				Essex Wildlife Trust				All			
	Min	Max	Mean	%	Min	Max	Mean	%	Min	Max	Mean	%
Mental health	-0.3	5.0	1.9	97	-0.5	5.0	1.5	97	-0.5	5.0	1.7	99
Physical health	-2.0	5.0	2.0	95	-0.5	5.0	1.3	97	-2.0	5.0	1.7	96
Skills	-0.3	5.0	2.2	95	-0.5	5.0	0.9	97	-0.5	5.0	1.6	96
Social interaction	-0.3	5.0	2.1	97	-0.5	5.0	1.3	97	-0.5	5.0	1.7	97

Note: Percentages represent percentage of participants who reported an improvement

Participants were also asked whether working with their local wildlife trust had changed the way they feel about themselves, nature or other people. Participants reported that being involved with their local Wildlife Trust has helped them to feel happier and more confident, improved their levels of depression and self-esteem, whilst making them feel like a valued member of society. Through involvement with the Trust participants also reported having greater enthusiasm, understanding and knowledge about nature and that they enjoyed meeting like-minded people and integrating into society (Boxes 3, 4 and 5).

Box 3. Changes in participants' feelings about themselves

<p>"Having just retired this has helped me to adjust after many years in a busy working environment."</p> <p>"I have had some ill health in recent years and a trip here is always uplifting."</p> <p>"Has a positive impact on my day."</p> <p>"I always feel better for a walk in the woods."</p> <p>"It has really given me a lot more confidence and improved my social skills."</p> <p>"It's made me want to come to exercise more and inspired me to eat well. It feels like a healthy activity."</p> <p>"Sense of worth via altruism."</p> <p>"I enjoy interacting with like-minded people and feel very useful and fulfilled."</p>	<p>"Gets me out of the house and improves my depression."</p> <p>"Made me feel better during hard times and ameliorates depression."</p> <p>"Keeps me ticking over."</p> <p>"It has given me a new purpose and focus in life."</p> <p>"Pride in achievements. Feel like a valued member of society."</p> <p>"Improved confidence, more responsibility, appreciated for my abilities that I take for granted."</p> <p>"Improved self-confidence, more self-worth, feel good about helping others."</p>
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Box 4. Changes in participants' feelings about nature

<p>"More involved with the natural environment."</p> <p>"Constantly looking at nature in the environment."</p> <p>"A greater understanding of nature locally."</p> <p>"More aware of nature around the area."</p> <p>"Tend to notice more when out and about, especially birds."</p> <p>"More interested in nature and its protection."</p> <p>"I have always loved nature but I feel it has made me understand and appreciate nature more."</p> <p>"More responsible for looking after habitats."</p>	<p>"More enthused and interested than before."</p> <p>"It's broadened my outlook towards nature and the crucial aspects of biodiversity."</p> <p>"It has enabled me to deepen my knowledge about what is involved in the conservation of nature and broadened my knowledge of the biodiversity of species."</p> <p>"Increased awareness of importance of nature, brings you back in touch with nature and yourself."</p> <p>"A lot. Didn't think about nature before but now think about it and care about it."</p>
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Box 5. Changes in participants' feelings about other people

"It is interesting to chat to like-minded people."

"Feel that people should appreciate wildlife more and look after it."

"People need to clear up their litter more and be more caring."

"Meet new people with the same interests."

"Get to see a lot more people and particularly those with mental issues, it's given me a greater insight."

"Sense of community and team cohesion."

"It is nice to see how many other people care about the protection and conservation of nature and wildlife."

"Easier to get to know people, broken down boundaries to meet new people."

"Great for confidence, communication and meeting new people."

"After a long period of illness it has helped me to re-engage with society and socialise in a constructive way."

"Since retirement I feel more comfortable with people from different background."

"I've met very interesting people and made friends."

"It's helped to build my confidence which was very low after redundancy."

3.3.5 Future Wildlife Trust Activities

As part of the survey participants were also asked to identify any activities they would be interested in taking part in the future. A large number of participants reported they would like more of the same or would be happy to get involved with any activities. However, commonly reported activities included conservation, bird watching, activities for families or children, artwork, walks, woodwork and astronomy.

3.3.6 Key findings of Part C - Community Perception Study

- Eighty six participants from the communities of two Wildlife Trusts took part in the study; 62% of which reported being involved with the Trust by visiting Wildlife Trust sits. Around one third of participants also reported having a Wildlife Trust membership or being a volunteer;
- The main reasons for participant involvement with their local Trust were to be active, get fresh air and help wildlife;
- Participants perceived that the main role of Wildlife Trust sites was to protect wildlife and to help people access and engage with nature. The least commonly reported role was to improve human health. Despite this, at least 96% of participants reported that involvement with their local trust improved their physical and mental health, skills and social interaction.



3.4 Part D - Wildlife Trusts' views on evaluating health and wellbeing

This section refers to the views of the Trusts concerning to the evaluation of the impact of Trust activities on health and well-being.

3.4.1 Advantages to evaluating health and wellbeing outcomes

Trusts were asked about the advantages of evaluating the impact of their work on health and wellbeing. Over 90% of participating Trusts felt that evaluation helps to generate income for future work and demonstrates the impact of Wildlife Trust activities. Many Trusts also felt that evaluation was useful for improving services (74%) and attracting participants (55%). A number of Trusts also provided further comments as to the benefits of evaluating the impact of their work (Box 6). Trusts felt that evaluation helped to secure longer-term income, build partnerships and also that people like to see the impact of engaging in activities on their own health and wellbeing.

Box 6. Trust comments regarding the advantages of evaluating health and wellbeing impact.

“Demonstrates the clear link between nature and wellbeing to key decision makers- politicians, funders etc. People are generally interested in themselves and this approach demonstrates what a difference a healthy natural environment means to them. Helps to promote the work of the trust, introduces new people to the trust- they may participate in the first place as they have mental ill-health and over time develop an interest in wildlife. Demonstrates that the Wildlife Trust is inclusive, welcoming, and friendly and that we are about people as well as wildlife. Most people will say that being outdoors on a sunny day looking at flowers/birds will make them feel better- but evaluation of activities can put some quantum to this and provide the evidence that decision makers/funders like to see. Evaluation also means that we are able to learn from past experience and adjust future activities accordingly.”

“Secures longer term commissions rather than time limited grant funding.”

“Useful to promote our work and build new partnerships.”

3.4.2 Barriers to evaluating health and wellbeing outcomes

Trusts were asked what they thought the barriers were to evaluating the impact of their work. Approximately 81% of Trusts reported that they had a lack of time, whilst many also reported having a lack of staff (67%) and a lack of funding (67%) to conduct an evaluation. Half of responding Trusts reported that they had limited knowledge (52%), whilst 36% were not aware of evaluation techniques. Only 26% of Trusts felt that difficulty in recruiting participants was a barrier to health and wellbeing evaluation. Several Trusts provided comments regarding the barriers to evaluating health and wellbeing outcomes (Box 7). Many Trusts felt that it would be beneficial for Trusts to use a consistent outcome measure to evaluate the impact of their work, but that their staff are generally too busy to conduct evaluations and some participants reluctant to take part.

Box 7. Trust comments regarding the barriers to evaluating health and wellbeing impact.

“Evaluation of the impact of the Trusts activities on health and wellbeing is difficult to measure because there are so many factors at play that also influence people's lives. Moreover to be statistically meaningful evaluation needs to run over a series of years/numbers of people. National evaluation through all the wildlife trusts is therefore of value. The challenge I think is to try to out a quantitative measure on what we all know- that being outdoors amongst nature, contributing to society, giving up your time, being with people all make you feel better. This fits with the five ways to wellbeing and the Wildlife Trusts contribute to all of these. Qualitative measures may be easier- we will use for instance surveys of satisfaction/happiness levels at the end of an event. I would like to know before evaluation is carried out why we are doing it. If funders/government are looking for something specific, then let's make sure we tailor our evaluation accordingly.”

“The busiest centre for this work in Cumbria is on our Northern site at Gosling Site where over 400 sessions are delivered annually to thousands of Cumbrian people of all ages and backgrounds. They simply do not have time or the expertise to look at long-term impact and to follow up the paths taken by those who have visited though know it would be a great place to have a PhD student at work there to do so, but the truth is, those delivering are just too busy with delivery to step back and reflect (especially when such delivery generally struggles to break-even financially and hard to sustain).”

“Requires input from staff in user organisations who don’t have time or formal evaluation methods.”

“Individuals who recognise that they are unwell (e.g. those who are referred to us via Mind or community health teams) are generally keen to participate in monitoring; those who have found their way via other routes (who typically will not self-identify as suffering illness, but may recognise that improving wellbeing will be of benefit) are typically extremely reluctant.”

“Been difficult to secure evaluation in smaller scale delivery projects.”

Box 8. Trust comments regarding evaluation and assistance required.

“This would be dependent on project requirements to some extent, a lot of which we are currently able to do in-house. No resources to evaluate longer term impacts on vulnerable groups.”

“We can contract this type of work out locally, but would need to feel it was vital to do so, e.g. is it a pre-requisite for funding? It is seen as a luxury beyond our budgets- for our purposes, we are happy to collect anecdotal evidence as we go to keep us on track and inform our next moves.”

“If we were successful in a current HLF bid to develop access opportunities at...then we should have 2 staff in post over two years who will have real emphasis on the health and wellbeing agenda. We may also be able to grow our capacity in terms of developing some of the exciting project ideas that exist within our 5 year (12-17) plan- especially opportunities that exist to work with members of the British Somali community who visit Radnorshire from many British cities. Currently we just do not have the scope to develop these ideas.”

“Support on common evaluation.”

“We have been most successful when working in partnership with mental health services or probation services etc, who can help provide clients and who will have their own evaluation requirements, which they are usually happy to share/feedback outcomes with us.”

“It is no secret that efficiency and cost-saving are crucial for local authorities commissioning health services and for the NHS in particular. Local health professionals have told us we need to develop our business case and have a firm idea of the potential economic value of what we are doing. Calculating cost-benefit in this way is difficult, while social return on investment can be time-consuming, complex and very expensive, but we know we do need to do more on this.”

3.4.3 Further support required in order to evaluate health and wellbeing outcomes

The Trusts who took part in the survey were finally asked what help they would require to evaluate the health and wellbeing impact of their work. Approximately 55% of Trusts said they would require help with selection of methodology and analysis of data, whilst 59% reported wanting help with the design of the evaluation. The majority of Trusts (86%) also wanted help with identifying opportunities for funding for future health and wellbeing projects, whilst 50% wanted help with reporting the findings of their evaluation. Only 18% reported wanting help with recruiting participants. Additional comments were provided by some Trusts who felt that evaluation was largely dependent on project outcomes and funding. One Trust also reported that working in partnership with mental health or probationary services had been useful as they were often happy to share evaluation findings (Box 8).

3.4.4 Key findings of Part D – Wildlife Trusts’ views on evaluating health and wellbeing

- The Wildlife Trusts identified that there are a number of benefits to evaluating the health and wellbeing impact of their work, namely the enhanced opportunities for income generation and the ability to demonstrate the impact of Wildlife Trust activities;
- However, the Trusts largely felt that they had a lack of time, staffing and funding to enable them to carry out evaluations and that in order to more fully evaluate the impact of their work they would need help with generating funding, designing evaluation methodologies and analysing data.

4. Key Findings

4.1 Part A- Wildlife Trusts' current nature-based activities

- Overall, 17 responding Wildlife Trusts reported typically running more than 14,400 activities for the general public and 2,965 activities for vulnerable groups (individuals with defined needs) each year, covering a wide range of activity, from nature-based art and bush craft to wildlife surveying, outdoor exercise and practical conservation;
- Green Care services for vulnerable groups primarily cater for those experiencing social disadvantage, people with mental ill-health and the unemployed;
- All activity types are typically funded through individual giving, lottery grants, donations from charitable organisations and corporate sponsorship;
- The primary intended outcome of activities for the general public is to engage people with nature; whilst the intended outcome of Green Care services for vulnerable groups is to improve physical and mental health and promote social inclusion;
- Considered together with the key findings from the Phase 1 literature review, the results suggest that Wildlife Trusts provide significant and important contributions to both health promotion and to Green Care in the UK.

4.2 Part B- Review of existing health and wellbeing data collected by the Wildlife Trusts

- Seventeen Wildlife Trusts sent provided the findings of existing evaluations, six of which (35%) were for the general public and 11 of which (65%) were for vulnerable groups;
- Evaluations with the general public identified that the Wildlife Trust activities facilitated each of the five ways to well-being: participants connected to nature and other people, engaged in physical activity, took notice of their surroundings, volunteered on projects and developed skills;
- Evaluations with vulnerable groups also identified that the Wildlife Trust activities promoted each of the five ways to wellbeing. In addition, participants' specifically reported improvements in confidence, self-esteem and mood and the ability to manage medication more effectively.

4.3 Part C- Community Perception study

- Members of the public from Essex and Lancashire Wildlife Trust reported that they were primarily involved with their local Trusts through visits to Wildlife Trust sites, Wildlife Trust memberships and through volunteering;
- A very large minority of visitors to the Wildlife Trust sites where community perception studies were carried out do not perceive those visits as 'involvement with their local Trust';

- Involvement that was recognised largely took place in order to be active, get fresh air and help wildlife;
- Members of the public perceived that the main role of the Wildlife Trust was to protect nature and to help people to access and engage with nature. The least frequently reported role was to improve human health;
- At least 96% of participants who took part in the community perception study reported that involvement with their local Wildlife Trust had improved their physical and mental health, skills and social interaction.

4.4 Part D - Wildlife Trusts' views on evaluating health and wellbeing

The individual Wildlife Trusts perceive that evaluating the health and wellbeing benefits of their work is beneficial for demonstrating impact and enhancing opportunities for income generation. However, the majority of Trusts report a lack of time, staff and funds to carry out extensive evaluation; and would require help generating funding, designing evaluations/methodologies and analysing data in order to do so.



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5. Conclusions and recommendations

5.1 The contribution of Wildlife Trusts to improving health and wellbeing

The results of the review of current Wildlife Trust activities (Part A) have demonstrated that the UK Wildlife Trusts run an extensive range of activities for the general public and vulnerable groups and in doing so provide a range of health and wellbeing benefits for both health promotion and Green Care contexts. Indeed, as the findings of the review of existing health and wellbeing data (Part B) attest, these Wildlife Trust activities facilitated the five ways to wellbeing for both general populations and vulnerable groups (NEF, 2009). This finding was concurrent with those of the community perception study (Part C), whereby high proportions of respondents attended their local Wildlife Trust with motivations to improve their physical, mental and social wellbeing; and similarly, high proportions perceived that they had they had experienced these benefits.

The findings of Part D allude that time and resources available within individual Wildlife Trusts for evaluative work offers a challenge to The Wildlife Trusts' on-going demonstration of the efficacies of the organisation's work.

The findings of this research are consistent with the conclusions of the Phase 1 Literature Review: that (i) there is considerable scientific evidence that nature improves wellbeing (Bragg et al., 2015); and (ii) that findings such as those presented in this report should be used to convince funders of public health and social care initiatives of the efficacy and value of nature-based activities, such as those run by The Wildlife Trusts.

Although not addressed in the current report, it may be useful to calculate the economic value of activities run by The Wildlife Trusts, particularly in terms of cost savings to the NHS.. In order to maximise the impact of Wildlife Trust activities, and to demonstrate and promote the role of Wildlife Trusts in improving human health and wellbeing, Wildlife Trusts' future steps should include:

- Encouraging the currently lesser-attending vulnerable groups to attend Green Care services;
- Evaluating health and wellbeing impacts more regularly, widely and consistently across activities and individual Trusts;
- Raising awareness of the role of the Wildlife Trusts in improving human health and wellbeing.

5.2 Recommendations

Recommendations stemming from this research have been organised under the following headings:

- i Consistent Health and Wellbeing Evaluation;
- ii Promoting the Role of the Wildlife Trusts in Enhancing Human Health;
- iii Extending Service Provision.

Consistent Health and Wellbeing Evaluation

Individual Wildlife Trusts reported having a lack of staff, funding and knowledge to evaluate the health and wellbeing impact of their work and that in order to do so they would require help in developing and designing evaluation methodologies, analysing data and obtaining funding.

In order to support individual Trusts in evaluating the impact of their work The Royal Society of Wildlife Trusts should:

- Adopt a standardised Wildlife Trusts health and wellbeing evaluation tool;
- Produce an online database to allow individual Wildlife Trusts to input data;
- Adopt a systematic approach that allows individual Wildlife Trusts to share and pool health and wellbeing data and evidence;
- Train individual Wildlife Trusts on how to use the evaluation tool and analyse the data collected;
- Provide a guidelines document to support Trusts in evaluating and writing up the findings of health and wellbeing evaluations.

Promoting the Role of the Wildlife Trusts in Enhancing Human Health

Currently members of the community engage with their local Wildlife Trusts for a number of reasons including to be active, protect wildlife and engage with nature. Members of the public also perceive that the Wildlife Trusts have a number of roles; however the least frequently reported role is to improve human health, despite the Wildlife Trusts' focus on health and wellbeing.

In order to promote their role in improving human health and wellbeing the Royal Society of Wildlife Trusts collectively, and individual Trusts should:

- Publicise their focus on health and wellbeing more widely;
- Promote and run activities specifically focused on human health and wellbeing;
- Calculate the economic values of activities run by Trusts for both the general public and vulnerable groups of individuals with defined needs;
- Present the findings of health and wellbeing evaluations to the general public through a range of strategically planned media channels.

Extending Service Provision

In order to further increase their service provision Wildlife Trusts should increase the provision of non-practical conservation activities, and provide Green Care services to currently lesser-attending vulnerable groups such as older people, those with dementia or addiction problems, and the overweight and obese.

The recommendations will enable the Wildlife Trusts to evaluate and demonstrate the impact of their activities more widely, to engage a broader range of participants and to obtain funding from a variety of different funding sources.

Ultimately, greater awareness and understanding of the relationship between nature-based activity and human health and wellbeing, based on high quality delivery and rigorous evaluation, will lead to greater support for nature-based approaches and a consequent improvement in the health and wellbeing of the UK's human population.

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