East Lindsey Active

Green Exercise Project Evaluation
Acknowledgements and contact info

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1. Introduction

1.1 Background
The aim of East Lindsey Active is to improve the health and well-being of local residents, and to connect people to nature in their local area. The main focus of the project is on the coastal strip as this is proven to have the highest levels of obesity and the lowest levels of physical activity in the region.

The Green Exercise element of the project involves working closely with local GPs and exercise referral specialists to support individuals in making lifestyle changes by using the outdoors to improve their physical and mental health.

The project involves two primary activities, to which participants are referred by health professionals:
- Walking for Health, in which participants join groups for regular, led walks
- Goes Green, in which participants join in with conservation activity in local green spaces such as nature reserves

The aims of the project are to encourage East Lindsey residents to participate in regular physical activity and to address sedentary lifestyles and related diseases including obesity, diabetes, coronary heart disease, cancer, osteoporosis, and mental health issues. East Lindsey Active is delivered by Sustrans in partnership with The Big Lottery, East Lindsey District Council, Natural England and NHS Lincolnshire. This evaluation has been commissioned by the East Lindsey Active partnership, focusing on both individuals and groups involved in the programme starting in May 2010.

1.2 Research Objectives
The above-named organisations are keen to evaluate the Green Exercise project in East Lindsey in order to demonstrate the benefits and impacts of their work. Many of these impacts will be long-term, such as changes in participants’ attitudes and behaviour, and this presents some problems for evaluation efforts.

The focus of this evaluation is on a number of aspects of participants’ attitudes and is based on the principles of sustainability. For sustainability to be achieved, a change in attitude and in environmental values is required of the population at large. Minimising impacts on the environment and acting responsibly in order to make positive changes are two important examples of such changes. In this evaluation, we focus on:

- participants’ connection with the natural environment through the green exercise activities (i.e. their experiences, perceptions, attitudes and any changes in these over the duration of the project) and participants’ access to green space outside the led activities;
- production of two case studies - one about East Lindsay Goes Green (conservation group), and one about East Lindsay Active Walking for Health in order to compare the different interventions in terms of their effectiveness in connecting people to nature and encouraging access to green space.
2. Methodology

Figure 1 represents the research approach used for the evaluation. This section sets out the methodology used to explore the impact of the programme on the participants and to develop good practice examples in the form of two case studies.

**Figure 1 – East Lindsey Active – Green Exercise Project Evaluation**

The project evaluation comprised four discrete stages:

- **Stage 1:** Inception and Set-Up
- **Stage 2:** Literature and Policy Review
- **Stage 3:** Participant Interviews and Survey of Experiences
- **Stage 4:** Development of Case Studies and Final Report

**Stage 1** ensured an agreed understanding of the purpose and objectives of the evaluation, and confirmed timescales and reporting requirements. The output of this inception meeting was a clear, agreed understanding of the objectives.

**Stage 2** comprised a brief review of existing policy and academic literature and discussions with key stakeholders to provide context for East Lindsey Active, and to explore and understand:

- initiatives to increase physical activity/wellbeing of inactive East Lindsey residents;
- provision of promotion/support to ensure their take up and success;
- perceived barriers to participation amongst residents; and
• how underrepresented groups and residents of deprived areas can best be engaged

The review included analysis of previous evaluations conducted by Hine, Peacock and Pretty (2008) for BCTV Cymru, and is outlined in the following section. This informed the questionnaire design for the interview process with participants of the current initiatives within East Lindsey Programme.

Stage 3 involved face-to-face interviews to explore the environmental experiences and attitudes of participants at (i) project inception and (ii) project completion.

On each occasion, the interviews took place with a sample of participants, comprising those referred to the project by health professionals. A semi-structured questionnaire was developed to provide the researchers with a flexible approach to ensure the most important issues identified by the interviewee were fully explored.

(i) At project inception;
The researchers met the group of participants at the inception of the green exercise project and health walks programme to provide assurances of anonymity, and that no financial issues will be discussed, and to address any concerns they may have had about participating. The aim was to gather data on

- Demographic information
- Outdoor activity undertaken before and during/ after the programme
- Attitudes to their local natural environment, and wider environmental issues
- Participation in environmentally-friendly practices

The identities of interviewees are not disclosed in any reports or case studies that are shared with the client or partners.

This approach also enabled detailed information to be gathered on the development of individuals’ attitudes, and provide the researchers with the opportunity to engage with each unique story. The role of the interviewers was to facilitate this story-telling while using probing questions to delve more deeply into the influences affecting key attitudes.

(ii) At project completion.
The experiences and perceptions of each individual are seen to be key determinants of their environmental attitudes. One of the success factors for the green exercise project is whether these perceptions have changed during the course of the participants’ involvement. It was therefore important to explore interviewees’ attitudes and behaviour towards the natural environment in a two-step interview process; at the inception of the project and again at the project’s conclusion.

Stage 4: the quantitative and qualitative findings gathered in stages 2-3 have been analysed and presented in this final report. The report includes examples and case studies from the two initiatives and sets out our conclusions and recommendations for improvement.

The final report and case study material is available in electronic format for distribution to partners.
3. Literature Review

3.1 Physical Activity
Physical activity is known to have beneficial effects on physical and mental health. Despite this, in Europe and the USA, levels of physical activity amongst the general populace have been declining steadily for decades (Dustin et al. 2010). In the UK, this decline has been particularly steep. The trend is in part explained by changes in working practices, increasing use of cars for short trips and relatively low levels of participation in sports (Pretty et al. 2003).

3.2 Attitudes to the Environment
A number of academic studies show there is a link between spending time in nature and environmental attitudes. Recent thinking on sustainability and sustainable development shows that people are rooted in the natural world – they are, essentially, part of nature. This thinking was absent in earlier 20th century science. Current themes of social responsibility and sustainable development subtly encourage a reconnection with nature and an increase in environmental advocacy (Dustin et al. 2010). It is argued that this can be assisted by schemes such as green exercise programmes (Mansfield 2009): encouraging people to exercise outdoors has the side-effect of encouraging them to connect with nature. Further connection is made if the exercise or activity has a beneficial impact on the environment in which it takes place – for example through environmental remediation or conservation work (Mansfield 2009).

Furthermore, Hinds and Sparks (2008) argue that a disconnection from the environment (due to urban living or a lack of green exercise activity, for example) can lead to a self-reinforcing apathetic attitude towards ecological issues. In other words, those who do not spend time in the natural environment fail to see its value. Hinds and Sparks (2008) found correlations between time spent in nature and simple environmentally friendly behaviours such as recycling, buying eco-friendly products or using public transport. It was also found to be true in many cases that those with regular contact or experience with nature had an increased attachment to or value for nature.

Hine et al.’s (2008) report for the British Trust for Conservation Volunteers in Wales (BCTV Cymru) provides further detail on behaviour and attitudes to the environment. Their findings demonstrated an increased motivation to improve their community, meet people, learn new skills and get involved with the environment among those who participated in BCTV voluntary schemes. The study also found a link between participation in volunteering and changes in everyday behaviour to more “environmentally friendly” practices. They concluded that an increase in connectedness with nature increased the sense of individual responsibility for the environment and its protection (Hine et al. 2008).

3.3 Health and the Environment
In its Health and Wellbeing Position Statement, Natural England states “better health and wellbeing are two of the major social and economic benefits we can secure through good management of the natural environment in both rural and urban settings” and that “adults should be offered increased contact with the natural environment resulting in reduced stress and more fulfilling lives”. Green Exercise has been developed from the premise that encouraging people to spend time in nature is one of the most cost effective ways to improve physical and mental wellbeing. This is supported by Bird (2007) who demonstrates, in a report for the RSPB, that contact with nature may be an effective method for coping with anxiety, strengthening
communities, reducing crime, and giving a sense of improved wellbeing and mental health.

The most recent Monitor of Engagement in the Natural Environment (MENE) Survey conducted on behalf of Natural England suggests that the level of participation in visits to the natural environment varies considerably across the English population. Participation is highest among those aged 45-64, those in employment, and people within higher socio-economic groups. It is shown to be significantly lower among the oldest age group (over 65), within Black and Minority Ethnic groups, and those in lower socio-economic groups. People with a long term illness or disability are also shown to be less likely to visit the natural environment compared with those with no illness or disability.
4. Results

4.1 About the Participants
The results of primary research obtained baseline data from a small longitudinal survey in which participants were interviewed at the beginning and end of a programme. A total of fourteen volunteers from two Green Exercise groups took part in this research. The gender balance of participants was skewed towards males (10 men and 4 women were surveyed).

<table>
<thead>
<tr>
<th>Gender</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>4</td>
<td>29</td>
</tr>
<tr>
<td>Male</td>
<td>10</td>
<td>71</td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
<td>100</td>
</tr>
</tbody>
</table>

The age range was more evenly distributed, with three aged 31-40, four each in the 41-50 and 51-60 age groups and three over the age of 60.

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>31-40</td>
<td>3</td>
<td>21</td>
</tr>
<tr>
<td>41-50</td>
<td>4</td>
<td>29</td>
</tr>
<tr>
<td>51-60</td>
<td>4</td>
<td>29</td>
</tr>
<tr>
<td>over 60</td>
<td>3</td>
<td>21</td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
<td>100</td>
</tr>
</tbody>
</table>

Eight of the participants were new to the Green Exercise programme, never having participated in similar schemes before the first interviews in May 2010.

4.2 Motivations for joining Green Exercise
All participants had joined the Green Exercise programme on the recommendation of their doctor or health trainer. This recommendation may have been based on reasons of physical or mental health. However, many participants also gave additional reasons for participation. There were four mentions of the programme providing “something to do”; four also listed increasing knowledge and learning about wildlife; there were three comments about meeting new friends and socialising; three noted the programme helped with improving fitness and weight loss and three also commented on improved confidence. Please note that this was an open-ended question and some respondents therefore listed more than one reason for participation.

These motivations did shift over the course of the 12-week programme, and the changes are shown in the graph below. The biggest move is away from participation being simply “something to do” towards it being a way of learning about wildlife and increasing knowledge.
Graph 1 – Changes in Motivation over Time

4.3 Time Spent Outdoors
At the start of the programme, participants were asked how much time they spent outdoors. This question was repeated at the end of the programme to explore whether the Green Exercise initiative had encouraged the participants to spend more time outdoors.

Graph 2 shows that 7 out of the original 10 participants interviewed spent not much time or a bit of time outdoors. Just three participants felt that they spent a lot of time outdoors at the start of the programme.

Graph 2 – Amount of Time Spent Outside at Start of Programme

At the end of the programme, the majority of participants (10 out of the 12 interviewed) identified that they did spend more time outdoors. For some, this extra time spent outdoors was solely because of time spent at the Green Exercise programme. For
example, one participant said “I spend more time outdoors because of the scheme, but I don’t go outside much when I’m at home”. This suggests that the scheme provides the opportunity or encouragement to spend time outdoors when participants would otherwise not be inclined to be outdoors as part of their daily activities.

Graph 3 – Change in Time Spent Outdoors

4.4 Attitudes to Exercise
Participants were asked if they were looking forward to the outdoor exercise element of the activity at the start of the programme, and if they had enjoyed the outdoor exercise at the end of the programme. Graph 4 suggests that participants were mostly looking forward to outdoor exercise, with around two thirds saying that they were really looking forward to this aspect of the programme.

Graph 4 – Attitude of participants to the outdoor exercise element of the Green Exercise initiative at the start of the programme

The response at the end of the programme suggests that all participants had enjoyed the programme, with all but one saying they had really enjoyed exercising outdoors. Comparison with Graph 4 suggests that some participants enjoyed the outdoor exercise element of the initiative more than they anticipated at the start. When asked whether they would continue with outdoor exercise after the programme ends, all but one participant said, “yes, definitely”.

Graph 5 – Attitude of participants to the outdoor exercise element of the Green Exercise initiative at the end of the programme

4.5 Environmental Awareness and Attitudes
Participants were asked to rate their level of agreement or disagreement with a number of statements related to environmental awareness and sense of responsibility towards the environment, as listed in the table below. Similar questions were used in Hines, Peacock and Pretty’s (2008) evaluation. The statements relate to environmental issues at various scales, from international to local. The scale used was 1-10, with 1 representing the strongest agreement and 10 strongest disagreement.

Graph 6– Agreement/Disagreement with Set Statements
Number | Statement
--- | ---
1 | Climate change is one of the world’s major environmental problems
2 | Maintaining biodiversity is one of the main environmental challenges of the century
3 | I believe that environmental problems are less important than economic problems
4 | Destruction of the world's rainforests does not affect me
5 | I can do nothing to prevent global warming
6 | I am worried about over-fishing in the North Sea
7 | I think we should be doing more to prevent loss of rare species of plants and animals in the UK
8 | Protecting the environment is not my responsibility
9 | I would be willing to pay money for environmental cleanup or conservation programs in my area
10 | I am willing to change my life to a more environmentally sustainable way of living
11 | Donating money is the only way people can help solve environmental problems

The graph above shows the average (mean) score for each statement across the whole group, highlighted in pink; the average scores at the start of the programme in May only (yellow); and the average score at the end of the programme in July only (blue).

Taking the total scores first, it can be seen that statements 5, 8 and 11 prompted the strongest disagreement and statement 7 the strongest agreement. These are environmental action statements – those which mention doing something about a particular environmental concern. (Statement 7 refers to a non-specific “we” which can include government or other official bodies.)

The scores for May only are generally closer to the neutral score of 5 – in other words, they are less extreme, indicating that participants felt less strongly or were less sure of their responses. Strongest responses were elicited by statements 5 (disagreement) and 7 (agreement), which are also mentioned above.

The scores for July only are comparatively more “extreme” and indicate a stronger commitment or great understanding. Strong disagreement was registered for statements 11, 8 and 4. It is worth noting that a global-scale environmental issue, in the shape of rainforest destruction also drew a strong response here. The strongest recorded agreements were with statements 1, 2 and 7. As before, statements 1 and 2 deal with global-scale environmental concerns. The increasing awareness of these international issues may suggest a broadening of participants’ knowledge and awareness.

It is also interesting to consider the change in participants’ views over the course of their participation. The greatest change was recorded for statement 11: participants disagreed with this statement in May and July, but the strength of their convictions increased over the course of the programme. This would seem to suggest that active participation in conservation work and environmental activities demonstrates to participants that there is more to environmental protection than spending or donating money to the cause. However, other shifts in opinion were also noted. Statement 6 received neutral
responses in May, but general (if not strong) agreement by July. Statements 4 and 8 moved from mild disagreement in May to stronger disagreement in July, while statement 2 received notably stronger agreement in July than in May. This again may indicate an increasing knowledge or interest in the wider environment and environmental issues, or a growing awareness of global issues.

4.6 Spending Time in Nature

Respondents were asked a number of open ended questions about whether it was important to spend time in nature, and the purpose of the natural environment. Not all participants answered these questions. The boxes below show some examples of answers given:

<table>
<thead>
<tr>
<th>Do you think it’s important to spend time in nature?</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Yes, it grounds you. We are part of nature”</td>
</tr>
<tr>
<td>“Yes, looking at different animals is good. The pigs and cows are interesting”</td>
</tr>
<tr>
<td>“Definitely – we are natural beings. Our natural environment isn’t urban.”</td>
</tr>
<tr>
<td>“Yes, it’s good to know the environment and the animals”</td>
</tr>
<tr>
<td>“Yes, more people should do it. You get pleasure from it and it’s free!”</td>
</tr>
<tr>
<td>“Yes, it makes you think what nature is and appreciate nature”</td>
</tr>
<tr>
<td>“Yes, especially when you can contribute to nature – such as putting up nesting boxes”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What is the purpose of the natural environment?</th>
</tr>
</thead>
<tbody>
<tr>
<td>“To preserve rare species that depend on that environment”</td>
</tr>
<tr>
<td>“To maintain these places for everything – and maintain diversity”</td>
</tr>
<tr>
<td>“To keep it balanced”</td>
</tr>
<tr>
<td>“It sustains us. Trees take on carbon dioxide and it balances the atmosphere. Even bugs are useful”</td>
</tr>
<tr>
<td>“Aren’t we all part of the natural environment?”</td>
</tr>
<tr>
<td>“To make the planet better”</td>
</tr>
<tr>
<td>“It’s to ensure the continuation of life”</td>
</tr>
</tbody>
</table>

4.6 Views on the Green Exercise Initiative

A number of open-ended questions were included in the questionnaire and participants were encouraged to talk freely around topics related to the environment and the Green Exercise scheme. Participants were asked what (if anything) is special about being part of the Green Exercise scheme. Results were as follows:

- Seven mentioned social aspects and satisfaction gleaned from helping others.
Four mentioned the opportunities for learning and increasing knowledge and one also noted that the scheme had increased their awareness of Natural England.

Participants also praised the programme leader in Saltfleetby-Theddlethorpe for his patience, organisational skills and approachability.

Case Studies
The following case studies illustrate the experiences of the participants that took part in (1) the walking group and (2) the conservation group.

CASE STUDY 1
Name: Walking group (Ron & Susan)

The walking group attracts participants aiming to get fit and lose weight. Typically, outdoor exercise appeals to them and the group nature of activity acted as an additional motivator to participate every week in Susan’s case. The greatest benefit of the programme is, in her eyes, the chance to meet new people and to have regular social contact, however, rather than noticeable weight loss or improved fitness. Both Ron and Susan enjoyed company on walks and were keen to see numbers increase, but worried that many people “couldn’t be bothered to go on a walk,” causing concern that the scheme was dwindling and lacking public support.

The walking group has “made life a bit fuller and more interesting” for Ron and, in combination with gym and Slimming World membership, he noted improvements in physical health and quality of life. Ron is a particularly successful participant and has recently been nominated for Sports Personality of the Year and other awards, based on his enthusiasm and achievements over the course of the walking programme. He recognises that the walking group has acted as an introduction or spring board to other forms of activity. Most notably, this includes organising walks, leading similar outdoor activities and increasing charitable and community links in the local area.

All of these activities began with a doctor’s referral to the Green Exercise Scheme, but Ron has maintained motivation and the activities are now self-directed. However, input from his GP or other health professional is still sought, in order to maintain some contact. Payment for gym and Slimming World membership was initially covered by the health authority but becomes the individual’s responsibility after a period of approx 20 weeks and, without some input from the GP, the participants commented that they can feel let down or isolated as the scheme progresses.
Further feedback from the participants is outlined below. They do not necessarily relate directly to the environmental attitudes of participants, but are a valuable source of supplementary information about the effectiveness and value of the Green Exercise project.

- One participant got a job through contacts initially made on the conservation programme. He describes Green Exercise as the “best thing I ever did” and has also brought the rest of his family to the nature reserve to share the experience.

- Others described participation as confidence-building or “empowering” and giving a “sense of belonging” as well as giving back to the environment or to the local community.

- The conservation scheme is credited with opening participants’ eyes to local environmental issues and natural habitats.

- Five participants mentioned wishing to continue their involvement in Green Exercise by becoming volunteer leaders.

CASE STUDY 2
Name: Conservation group (Nicola & Peter)

Nicola started on the conservation programme at the recommendation of her doctor. She hoped to lose weight, improve her mobility (she suffers from arthritis) and make new friends through participation in the scheme. Having participated for a number of weeks, she has seen improvement in all three of those initial factors, and is now hoping to become a volunteer leader. She found the work hard at first and is very proud to have walked 8 miles in one day as part of the scheme. She plans to stay with the conservation group “as long as they’ll have me” and is exercising more than ever before, as a result of confidence gained during the scheme. She particularly enjoys the social contact and opportunities to interact with other participants.

Peter also joined the group following a recommendation by health professionals, and participates specifically for the social contact it allows. The conservation group has enabled him to meet people in a relaxed and comfortable setting while also “doing something useful” and constructive in the form of conservation work. The sense of achievement gained from completing task and helping on the nature reserve is important to many of the participants. He hopes that this conservation scheme will act as a personal stepping stone to “other volunteering activities.” It has also acted as a positive means of addressing physical health and exercise issues as well as increasing his environmental awareness and his sense of happiness and personal satisfaction.
5. Discussion and Recommendations

5.1 Discussion
This study has attempted to evaluate the Green Exercise programme and the environmental attitudes of the participants involved. This was achieved by investigating participants’ connectedness to nature and their environmental awareness at various scales.

Connection to nature is noted in the published academic literature as an important aspect when predicting environmental awareness and attitudes. The results of the primary research conducted in East Lindsey suggest that the participants are moderately connected to nature, but that this sense of connection increased during the course of the 12-week Green Exercise programme. Similarly, levels of environmental awareness appear to have increased during participation. It should be noted that the participants stated that they were reasonably knowledgeable about environmental issues before the programme started and it could, therefore, be argued that the programme has served to support or reinforce existing attitudes rather than making wholesale changes.

Motivations for participation in the Green Exercise programmes were also investigated. Our study revealed an interest in environmental issues at the local level, general interest, curiosity and a desire to learn, and also a desire for social contact. The social impacts of this programme were outside the remit of study, but it should be noted that social aspects were mentioned throughout participants’ interviews and in survey responses, and should not be discounted. It is very clear that all participants gain substantially in terms of social confidence, making new friends, acquiring new skills and adding structure to their week. None of these benefits would have been achieved without a group setting.

The results also show that building environmental awareness and connections with nature are likely to increase participants’ desire to continue with Green Exercise or other outdoor exercise activities. Many participants were keen on outdoor activities to start with, but their strength of conviction appears to increase over the course of the 12-week programme. The results show a general increase in the amount of time spent outdoors, too, which may hint at an increasing desire to exercise or an increasing awareness of the outdoors.

The conservation group, in which participants undertake conservation and environmental protection measures on a nature reserve, has more obvious links to the environment and to environmental awareness and appreciation. The walking group respondents did not make such clear connections with the environment, and one possible means of developing these links would be to guide walks in local nature reserves or to provide some verbal environmental interpretation during the walk.

Other important themes which emerged from the qualitative results were the desire to do something useful or constructive, the desire for social contact and the opportunity to progress or achieve something. The conservation work clearly also has greater benefits in instances, too. Participating in a project (such as footpath repairs, for example) gives participations an achievable goal and a real sense of satisfaction when the work is complete. It also gives a sense of giving something back, or of doing something for the wider community. This cannot be easily achieved during a regular walking programme unless other activities are incorporated.
Social contact and the opportunity to make friends is clearly something which many of the participants are seeking. Given that numbers of participants in the walking group had fallen, there are obviously few opportunities to mix with new people there. Additionally, the structure of the walking group, with one leader, does not allow for a sense of progress or promotion. One of the noted benefits of the conservation group was that experienced participants could help new members and could also become volunteer leaders. Although one successful member of the walking group is now also leading his own group walks, this seems to be a rarity. The informal “promotion” to volunteer leader seems to be more common in the conservation group.

5.2 Summary & Overview

Physical activity has a proven beneficial effect on physical and mental health. However, activity levels in the UK are declining, owing to changes in lifestyle to a more sedentary style.

Contact with nature is known to increase people’s sense of connection with nature and, consequently, their sense of value and responsibility for nature.

Respondents’ motivations to participate in the Green Exercise programmes changed over the course of their 12-week commitment. At inception, more respondents saw the programme as simply “something to do” but by the end of the 12 weeks, it was seen as a means of increasing their knowledge.

Participation in the scheme seems to encourage participants to spend time outdoors more generally. All but two respondents reported an increase in the amount of time they spent outside; the remaining 2 seeing no change in their habits in this regard. Most also looked forward to the outdoor element of the exercise programme and were keen to continue outdoor exercise in particular.

Environmental attitudes were also found to change over the 12 weeks. Participation appears to strengthen environmental convictions and broaden environmental awareness and knowledge. Qualitative results also demonstrated some depth of understanding of the environment and its value.

Respondents gained a personal sense of satisfaction from participation in Green Exercise. Social contact and increased confidence were also mentioned.

A greater sense of connection to the environment and, by inference, greater environmental awareness and responsibility is achieved through conservation work. If the walking group wishes to emulate this, some additions to the walk content or changes to the route should be considered.

Respondents gain a sense of satisfaction from participation. This could be built upon by emphasising or celebrating completed projects or goals achieved.

Group size must be maintained or increased if participants are to benefit from social contact.
5.3 Recommendations

i. Connection to nature is an important means of increasing the individual’s sense of environmental responsibility. Therefore, the Walking for Health programme in particular should work towards increasing the connections with the natural world. This might mean including some environmental interpretation or learning in the walk, or routing walks through nature reserves or similar green spaces.

ii. Participants in this study mentioned the sense of achievement they gain from completing projects. It may be worthwhile to make more of these completed projects or to identify other milestones which could be acknowledged and celebrated, in order to increase the sense of completion and achievement.

iii. Social contact was also listed many times as a benefit in a variety of contexts. The opportunity to socialise is important to participants and groups therefore need a critical mass of people in order to build a group atmosphere and sense of community. In the case of the healthy walks, it might be desirable to merge some smaller walking groups in order to achieve greater efficiency as well as boosting numbers. For example, community walks (a separate programme taking place on the same morning in the study site of Mablethorpe) and healthy walks could potentially combine.

iv. Opportunities to progress also appeal to some of the participants. Groups with an informal hierarchical structure in which participants can become assistants or volunteer leaders enable this sense of progress or promotion within the scheme.

v. The gender balance in the conservation programme was tipped in favour of males in our study. This may reflect a broader trend. If so, greater attention needs to be given to the recruitment and retention of female participants. Those who do participate appear to benefit from the programme, but it may not initially appeal to women as much as men. Some additional marketing or support which is orientated specifically to women may be helpful in this instance.
References


Appendices

1. East Lindsey Green Exercise Evaluation: Inception Questionnaire, May 2010

Part A
1. Name: 

<table>
<thead>
<tr>
<th>Age group:</th>
<th>under 20</th>
<th>21-30</th>
<th>31-40</th>
<th>41-50</th>
<th>51-60</th>
<th>Over 60</th>
</tr>
</thead>
</table>

2. Gender: M F 

Type of programme: Conservation work Walking Other

Part B
3. Why are you participating in this exercise programme? 

4. What do you hope to get out of it? 

Part C
5. Would you consider yourself to know a lot about environmental issues? 

<table>
<thead>
<tr>
<th>I know a lot</th>
<th>I know a bit</th>
<th>neutral</th>
<th>I don’t know much</th>
<th>I don’t know anything</th>
</tr>
</thead>
</table>

6. Is this something which interests you? 

7. Do you behave in an environmentally-friendly way? 

<table>
<thead>
<tr>
<th>very environmentally friendly</th>
<th>Quite environmentally friendly</th>
<th>neutral</th>
<th>not very environmentally friendly</th>
<th>not at all environmentally friendly</th>
</tr>
</thead>
</table>

8. If so, can you give any examples?¹ 

9. Do you already spend time outdoors? 

<table>
<thead>
<tr>
<th>a lot of time</th>
<th>a bit of time</th>
<th>neutral</th>
<th>Not much time</th>
<th>no time</th>
</tr>
</thead>
</table>

¹ Possible examples include: Recycle glass, paper & metal; Composting; Buy organic; Energy saving light bulbs; Turn off power at plug; Renewable power; Prefer to walk, etc; Environmentally friendly cleaning products; Turn off tap while brushing teeth; Showers instead of baths; Collect rainwater; Water efficient toilet; Leave food out for birds, etc; Garden for wildlife
10. Is this something you enjoy?

11. Do you think you have good access to the outdoors?

<table>
<thead>
<tr>
<th>Very good access</th>
<th>good access</th>
<th>neutral</th>
<th>Poor access</th>
<th>very poor access</th>
</tr>
</thead>
</table>

12. Does exercising outdoors appeal to you/ are you looking forward to this aspect of the programme?

<table>
<thead>
<tr>
<th>Really looking forward to being outdoors</th>
<th>quite looking forward</th>
<th>neutral/ not bothered</th>
<th>do not like the idea of being outdoors</th>
<th>really dislike the idea of being outdoors</th>
</tr>
</thead>
</table>

13. Do you think it’s important to spend time in nature? Why?

14. In your opinion, what is the purpose of the natural environment?

15. Do you think you are part of the natural environment?
Part D

Please rate how strongly you feel about these issues from 1-10, where 1 = strongly agree and 10 = strongly disagree.

<table>
<thead>
<tr>
<th>Level or reasoning</th>
<th>Statements about environmental issues</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global awareness</td>
<td>1. Climate change is one of the world's major environmental problems</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Maintaining biodiversity is one of the main environmental challenges of the century</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. I believe that environmental problems are less important than economic problems</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Destruction of the world's rainforests does not affect me</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. I can do nothing to prevent global warming</td>
<td></td>
</tr>
<tr>
<td>National/ UK awareness</td>
<td>6. I am worried about over-fishing in the North Sea</td>
<td></td>
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<tr>
<td></td>
<td>7. I think we should be doing more to prevent loss of rare species of plants and animals in the UK</td>
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<tr>
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<td>8. Protecting the environment is not my responsibility</td>
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<tr>
<td></td>
<td>9. I would be willing to pay money for environmental cleanup or conservation programs in my area</td>
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<tr>
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<td>10. I am willing to change my life to a more environmentally sustainable way of living</td>
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</tr>
<tr>
<td>Perceptions of solutions</td>
<td>11. Donating money is the only way people can help solve environmental problems</td>
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</tr>
</tbody>
</table>
2. East Lindsey Green Exercise Evaluation: Exit Questionnaire, July 2010

Part A

16. Name: _____________________________

<table>
<thead>
<tr>
<th>Age group:</th>
<th>under 20</th>
<th>21-30</th>
<th>31-40</th>
<th>41-50</th>
<th>51-60</th>
<th>Over 60</th>
</tr>
</thead>
</table>

17. Gender: M F

Type of programme: Conservation work Walking Other

Part B

18. Why did you participate in this exercise programme? (What motivated you, and did this change over the course of the scheme?)

19. What have you got out of it?

Part C

20. Will you continue with outdoor exercise after the green exercise scheme ends?

<table>
<thead>
<tr>
<th>Yes, definitely</th>
<th>Yes, probably</th>
<th>Not sure</th>
<th>Probably not</th>
<th>Definitely not</th>
</tr>
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</table>

21. What (if anything) is special about being part of the green exercise scheme?

22. Do you now spend more or less time outdoors?

<table>
<thead>
<tr>
<th>Much more time</th>
<th>A little more time</th>
<th>About the same as before</th>
<th>A little less time</th>
<th>Much less time</th>
</tr>
</thead>
</table>

23. Do you think you have good access to the outdoors?

<table>
<thead>
<tr>
<th>Very good access</th>
<th>good access</th>
<th>neutral</th>
<th>Poor access</th>
<th>very poor access</th>
</tr>
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</table>

24. Have you enjoyed outdoor exercise as part of this scheme?

<table>
<thead>
<tr>
<th>Really enjoyed</th>
<th>quite enjoyed</th>
<th>neutral/ not bothered</th>
<th>Have not really enjoyed</th>
<th>Have not enjoyed at all</th>
</tr>
</thead>
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25. Do you think it’s important to spend time in nature? Why?

26. In your opinion, what is the purpose of the natural environment?
27. Do you think you are part of the natural environment?

**Part D**

Please rate how strongly you feel about these issues from 1-10, where 1 = strongly agree and 10 = strongly disagree

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Part E

Any further comments?
You may wish to suggest ways in which the scheme might be improved