Monitor of Engagement with the Natural Environment

The national survey on people and the natural environment

Annual Report from the 2013-14 survey

www.naturalengland.org.uk

Natural England Joint Report JP009
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Foreword

Natural England produces a range of reports providing evidence and advice to assist us in delivering our duties.

Background

In 2009 Natural England, Defra and the Forestry Commission commissioned TNS to undertake the Monitor of Engagement with the Natural Environment (MENE) survey for the first time.

The data enables Natural England, its partners and data users to:

- Understand how people use, enjoy and are motivated to protect the natural environment.
- Monitor changes in use of the natural environment over time, at a range of different spatial scales and for key groups within the population.
- Inform on-the-ground initiatives to help them link more closely to people's needs.
- Evaluate the impact and effectiveness of related policy and initiatives.
- Measure the impact of and inform policy relating to the natural environment.

The MENE thematic report

This report presents the findings for the fifth year of MENE fieldwork from March 2013 to February 2014. In addition to providing descriptive statistics on people's use and enjoyment of the outdoors, new analysis of the survey findings was undertaken to look deeper at several key topics such as health and wellbeing, expenditure, and the gap between valuing the natural environment, and taking action to conserve it.

In doing so, Natural England has broadened the range of experts involved in the production of the report to include specialists in economics, health, and marketing sciences. A summary of the authors can be found overleaf.

Published alongside this report are:

- A Technical Report providing full details of the survey methodology, sampling, grossing and weighting and estimates of confidence intervals.
- An electronic data table viewer: an interactive tool which allows detailed analysis of the MENE dataset.

Please see GOV.UK for further outputs from the survey:
https://www.gov.uk/government/collections/monitor-of-engagement-with-the-natural-environment-survey-purpose-and-results

National Statistics

The UK Statistics Authority has designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Official Statistics.

Designation can be broadly interpreted to mean that the statistics:

- Meet identified user needs.
- Are well explained and readily accessible.
- Are produced according to sound methods.
- Are managed impartially and objectively in the public interest.

Once statistics have been designated as National Statistics it is a statutory requirement that the Code of Practice shall continue to be observed.

The responsible Statistician for this publication is Stephen Herbert:
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Keywords: visits, engagement, natural environment, participation, motivations, barriers, activities and expenditure

This report can be downloaded from the Natural England website: www.gov.uk/government/statistics/monitor-of-engagement-with-the-natural-environment-2012-to-2013

For information on Natural England publications contact the Natural England Enquiry Service on 0845 600 3078 or e-mail **MENE@naturalengland.org.uk.**

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Report contributors

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Rebecca Clark is an environmental economist at Natural England. In this publication she provides a summary of key findings from analysis of MENE expenditure data and sets out what, in principle, the expenditure data tell us.

Lewis Elliott is a doctoral researcher at the University of Exeter interested in area-level, aesthetic, and marketing factors affecting recreational physical activity in natural environments. He has supplemented his studies with work at Natural England using the MENE dataset and in this report, he discusses the findings in relation to health, well-being and the natural environment.

Mark Hogan has worked at ONS for one year, spending the whole of that time in Time Series Analysis Branch, having previously worked as an Assistant Statistician in the Welsh Government for 4 years. In this report, Mark, under the quality assurance of Duncan Elliot, presents and discusses the seasonal adjustment work undertaken on the MENE data.

Duncan Stewart (Director at TNS) is an Associate Member of the Market Research Society with over 15 years of experience in undertaking tourism, leisure and outdoor recreation research. In his role as overall TNS MENE project lead, Duncan, in conjunction with Vicky Wilson, discusses the headline findings emerging from the MENE Year 5 data, as well as trends that have been seen to emerge from the first five survey years.

Russell Bradshaw is a director in TNS's Marketing Science Centre, an expert community of experienced quantitative researchers that specialise in and support a wide range of advanced analytical techniques. His contribution in this report has been in investigating the relationship between people's claimed concern for the environment and their actual behaviours.

Vicky Wilson is a Research Manager at TNS with over 11 years of experience in undertaking tourism, leisure and outdoor recreation research and is an Associate Member of the Market Research Society (MRS). In this publication, in conjunction with Duncan Stewart, she outlines the headline findings emerging from the MENE Year 5 data and discusses a number of trends that have been seen to emerge from the first five survey years.

Overview

58% of the English adult population claimed to visit the outdoors at least once a week (24 million adults)

2.93 billion

visits were taken to the outdoors in England between March 2013 and February 2014

1.36 billion to destinations in towns/cities

1.31 billion to countryside locations

778 million

visits to parks in towns/cities

% of adult population that strongly agree…

52% Having open greenspaces close to where I live is important

45% There are many natural places I may never visit but I am glad they exist

44% Spending time outdoors (including my garden) is an important part of my life

35% I am concerned about damage to the natural environment

78% less than 3 hours in duration

64% on foot

68% taken within 2 miles of start point

% of adult population that strongly agree that their local greenspaces…

38% …are within easy walking distance

36% …are easy to get to and around

29% …are of a high enough standard to want to spend more time there

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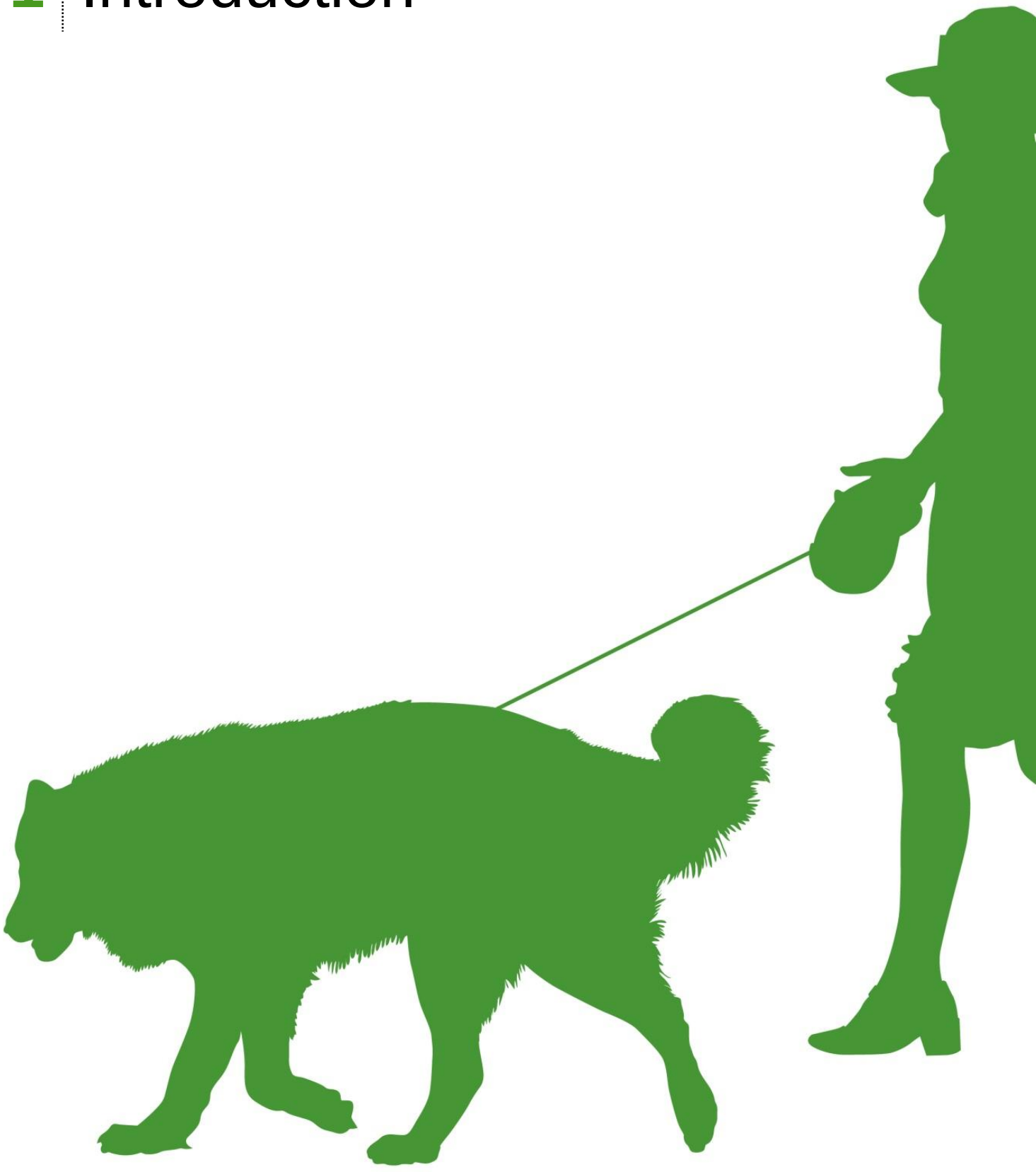


1 Introduction

1.1 This report summarises the findings from the fifth year of the Monitor of Engagement with the Natural Environment (MENE) survey. Where appropriate, comparisons have been made with previous survey years.

1.2 The format of the report has been revised from previous reports so that the survey findings are grouped around several key themes (see 1.13).

1.3 The survey was undertaken by TNS on behalf of Natural England, the Department for Environment, Food and Rural Affairs (Defra) and the Forestry Commission.

Background

1.4 Prior to the start of MENE, there was growing evidence of the benefits that contact with the natural environment offer, however there was also a lack of information about how and why people engage with the natural environment. Natural England, Defra and the Forestry Commission therefore commissioned TNS to undertake the Monitor of Engagement with the Natural Environment (MENE) survey.

1.5 In the five years since the survey commenced, a wealth of evidence on outdoor recreation behaviour and attitudes has been collected. In addition, the survey has provided a basis for specific analysis on areas such as how members of different societal groups and children engage with the outdoors. The data set also provides scope for deeper exploration of the data in relation to areas such as well-being, the impact of seasonality on visit taking and the relationship between valuing the natural environment and actions taken to protect it.


Holywell Bay, Cornwall

Survey aims and objectives

1.6 This survey aims to provide information about the relationship between people and the natural environment. Whilst the main focus of the survey is on visits to the natural environment, it also seeks to capture other ways of using or enjoying the natural environment such as time spent in the garden and watching nature programmes on television.

1.7 The objectives of the survey are to:

- Provide estimates of the number of visits to the natural environment by the English adult population (16 years and over).
- Measure the extent of participation in visits to the natural environment and identify the barriers and drivers that shape participation.
- Provide robust information on the characteristics of visitors and visits to the natural environment.
- Measure other ways of using and enjoying the natural environment.
- Identify patterns in use and participation for key groups within the population and at a range of spatial scales.

Survey scope

1.8 The survey relates to engagement with the natural environment. By natural environment we mean all green open spaces in and around towns and cities as well as the wider countryside and coastline.

1.9 The main focus of the survey is on leisure visits outdoors in the natural environment, away from home and private gardens. This could be anything from a few minutes to all day. These may include time spent close to a person's home or workplace, further afield or while on holiday in England. Routine shopping trips or time spent in a person's own garden are not included in the definition of a leisure visit in MENE.

1.10 The survey also includes a smaller section of questions regarding engagement with the natural environment other than that experienced during visits. This includes activities such as time spent in private gardens, watching nature programmes on television, undertaking pro-environmental activities such as recycling and access to a private garden.

1.11 Throughout this report, the following terminology is used to describe the timings of survey fieldwork:

- 2009/10, also written as "year one", refers to the period March 2009 to February 2010.
- 2010/11, also written as "year two", refers to the period March 2010 to February 2011.
- 2011/12, also written as "year three", refers to the period March 2011 to February 2012.
- 2012/13, also written as "year four", refers to the period March 2012 to February 2013.
- 2013/14, also written as "year five", refers to the period March 2013 to February 2014.

1.12 **Please note that any trends or variations between results highlighted in the text are statistically significant unless stated otherwise.** This means that differences between results, for example when comparing two years or two population groups, have been proven through statistical analysis as likely to be real differences at the 95 per cent confidence limits, as opposed to differences which are the result of sampling error or chance.

Structure of the report

1.13 This report presents findings from the 2013/14 survey under the following sections. Where appropriate, comparisons are made with the results from preceding years and statistically significant differences are highlighted. Results are also presented by key population groups.

1.14 **Section 3: Headline findings** – this summarises the main results from year five of MENE.

1.15 **Section 4: Variations within the population** – discusses key variations with the population in relation to visits and attitudes to the natural environment, as well as other engagement with the outdoors and participation in pro-environmental behaviours.

1.16 **Section 5: Visit trends** – an examination of trends recorded across the first five years of MENE, including a seasonal analysis review undertaken by the Office for National Statistics (ONS).

1.17 **Section 6**: **Key themes analysis introduction** – a short introduction to the subsequent sections of the report which have more of a thematic focus.

1.18 **Section 7: Visit expenditure** – an in-depth analysis of outdoor recreation related expenditure.

1.19 **Section 8: Health, Well-Being and the Natural Environment** – investigating the trends recorded over the last 5 years in relation to health, well-being and the natural environment.

1.20 **Section 9: The Value-Action Gap** – an examination of differences between stated value of the natural environment and actions taken to protect it.

Appendices

1.21 **Appendix 1: Survey scope and methods** – summarises the survey scope, method, fieldwork and approach to data analysis.

1.22 **Appendix 2: Definitions of social grades.**

1.23 **Appendix 3: References.**

Further publications from the survey

1.24 This annual report forms one part of a larger family of outputs from the survey. Published alongside this report are:

- **Monitor of Engagement with the Natural Environment Technical Report**– providing full details of the survey methodology, including approaches to sampling, grossing and weighting, estimates of confidence intervals and a copy of the full questionnaire.
- **Electronic data table viewer**– an interactive tool which allows detailed analysis of the MENE dataset at the England, Regional and County level for each of the first five survey years.
- **Quarterly reports –** brief reports which summarise the key figures and messages from the survey each quarter.

1.25 A series of further outputs based on additional analysis of the MENE data are also available from:

https://www.gov.uk/government/collections/monitor-of-engagement-with-the-natural-environment-survey-purpose-and-results

2 Executive summary

2 Executive summary

Introduction

2.1 This report summarises the findings from the fifth year of the Monitor of Engagement with the Natural Environment (MENE) survey. Where appropriate, comparisons have been made with previous survey years.

2.2 The format of the report has been revised from previous reports so that the survey findings are grouped around several key themes:

- **Headline findings** – from year 5 of the MENE survey.
- **Variations within the population** – a discussion of key variations within the population that have emerged through an analysis of MENE data.
- **Visit trends** – an examination of trends recorded across the first five years of MENE.
- **Visit expenditure** – an in-depth analysis of outdoor recreation related expenditure.
- **Health, Well-Being and the Natural Environment** – investigating trends recorded over the last five years of MENE.
- **The Value-Action Gap –** an examination of differences between stated value of the natural environment and actions taken to protect it.


The Cotswolds

Headline findings

- Around nine in ten members of the English adult population visited the outdoors at least once in the last twelve months, while around two-fifths had taken a visit within the last seven days.
- It is estimated that between March 2013 and February 2014, the 42.3 million adults resident in England took a total of 2.93 billion visits to the natural environment[1]. The majority were taken to destinations within towns/cities (1.36 billion) or countryside locations (1.31 billion).
- Around a quarter of visits involved some form of expenditure – resulting in an estimated spend of £17 billion between March 2013 and February 2014.
- Parks in towns and cities were the most frequently visited destination type, accounting for 778 million visits.
- Walking was by far the most frequently undertaken activity. Half of visits (an estimated 1.5 billion visits) involved walking with a dog while around a quarter (an estimated 775 million visits) involved walking without a dog.
- Three-quarters of visits were less than two hours in duration, while two-thirds involved walking to the visit destination. Almost four-fifths were taken within two miles of the visit start point.
- Visiting the natural environment for health or exercise accounted for an estimated 1.3 billion visits to the natural environment between March 2013 and February 2014. Factors relating to a lack of time were most likely to be cited as reasons for not visiting more often or at all.

Variations within the population

- Across the topic areas covered by MENE, several demographic factors revealed variations in visit behaviour and attitudes to the natural environment, namely age, social grade, ethnic origin, levels of deprivation and whether or not a person had a limiting illness or disability.
- Those who were less likely to have taken a visit to the natural environment in the last seven days were those of Black & Minority Ethnic (BAME) origin, those aged 65 and over, those with a long-term illness or disability and those in the lower DE social grades.
- Population groups that generally visit the outdoors less overall, tend to take visits to towns and cities when they do visit, particularly those of BAME origin, those between the ages of 16 and 24 and those in the DE social grades.
- Around two-thirds of visits taken by those in the DE social grades were taken alone while those of White ethnic origin were much more likely to visit alone than those in the BAME population.
- The influence of health or exercise on visits to the outdoors increased with age. Around two-fifths of visits taken by 16-44 year olds were motivated by this compared to just over half taken by those aged 55 and over.
- Those in the AB social grades were more likely to agree strongly that their local greenspaces were within easy walking distance, easy to get to and around and that they were of a high enough standard than those in the DE social grades.
- Younger people were more open to making changes to their lifestyle to protect the natural environment, as were members of the BAME population.

Trends

- Over the five years of MENE, there has been a statistically significant increase in the frequency with which visits are taken. During 2009/10, half of the population claimed to visit at least once a week – rising to around six in ten in 2013/14.
- The role of locations in towns and cities for outdoor recreation visits has increased over time. The annual estimate for visits taken to towns and cities was 1.36 billion in 2013/14, a significant increase on the estimate of 1.22 billion recorded in 2012/13 and an overall increase of 17 per cent on the 2009/10 estimate of 1.16 billion visits.
- To better understand the trends in visit taking recorded by MENE, Natural England commissioned the Time Series Analysis Branch at the Office for National Statistics to carry out a Seasonal Adjustment Review of the number of visits to the natural environment.
- The data suggested a possible trend for decreased visits to countryside destinations, which corresponds with evidence of a trend towards increased visit levels to destinations in towns and cities.
- The seasonally adjusted data demonstrated that the Easter holiday period impacts on visits to towns and cities, while visits to seaside resorts and towns were more likely to be taken at weekends.

Expenditure

- Some form of expenditure was recorded during a quarter of visits to the natural environment, with food and drink the category for which expenditure was most likely to be recorded.
- Expenditure was more likely on visits taken by infrequent visitors to the natural environment – that is those who visited less often than once a month. Other visits more likely to include some form of spend were those taken by members of the BAME population, those with children in the party, those where the visit did not start from home and those involving a journey of six miles or more.
- Spend on food and drink was most likely to be reported by members of the BAME population, those accompanied by children, those travelling over 20 miles to the visit destination and those where the visit did not start from home.

Health, well-being and the natural environment

- There is an overall upward trend in visits taken for health or exercise, with this motivation cited for around two-fifths of visits taken in 2013/14. Those aged 55 and over were most likely to be motivated to visit the natural environment for this reason.
- At face value, evidence of correlations between life satisfaction, self-worth, happiness and lower levels of anxiety with the regularity with which a person visits the natural environment seem to be apparent. However, as the relationship is merely associative, whether frequency of visiting natural environments influences well-being or having higher well-being causes more natural environment visits, is unclear.
- The results show that the number of visits made to the natural environment in the last week is connected to the relationship between the amount of local greenspace and levels of physical activity, irrespective of where the physical activity takes place. An increase of one visit to the natural environment in the last week was associated with a significant increase of 0.23 days of 30 minutes physical activity in the last week.

Value-Action Gap

- On average, members of the English adult population undertook around two of the nine actions included in MENE as pro-environmental behaviours. However, this average masks a fair degree of variation with some people not undertaking any of these pro-environmental actions at all.
- There is a considerable gap between the value attributed to the natural environment and the level of action taken to preserve it, particularly in relation to actions that require a higher investment of time or money.
- Most people were modestly involved in pro-environmental behaviours; five out of seven undertook one or a combination of the following actions: recycling, encouraging other people to protect the natural environment or purchasing local and eco-friendly products. In contrast, one in seven people were engaged in some form of high involvement action such as donating time or money to conservation projects or organisations.
- When asked about willingness to change lifestyles to protect the natural environment, those who undertook no actions or recycling only indicated least willingness to change their lifestyles, as did those under 35 years old, men, single people, those of White British ethnic origin, in the lower social grades, living in rental accommodation and those living in London.
- Around a fifth of the population indicated either a desire to change or a willingness to change if others were to do so. In these instances, a lack of understanding as to how to change their lifestyle, a perception that it is difficult to do so or a requirement to also perceive that others are making changes were the stated barriers to making a change.

3 Headline findings

3 Headline findings

Key findings

- Around nine in ten members of the English adult population visited the outdoors at least once in the last twelve months, while around two-fifths had taken a visit within the last seven days.
- It is estimated that between March 2013 and February 2014, the 42.3 million adults resident in England took a total of 2.93 billion visits to the natural environment[2]. The majority were taken to destinations within towns and cities (1.36 billion) or countryside locations (1.31 billion).
- Around a quarter of visits involved some form of expenditure – resulting in an estimated spend of £17 billion between March 2013 and February 2014.
- Parks in towns and cities were the most frequently visited destination type, accounting for 778 million visits
- Walking was by far the most frequently undertaken activity. Half of visits (an estimated 1.5 billion visits) involved walking with a dog while around a quarter (an estimated 775 million visits) involved walking without a dog.
- Three-quarters of visits were less than 2 hours in duration, while two-thirds involved walking to the visit destination. Almost four-fifths were taken within two miles of the visit start point.
- Visiting the natural environment for health or exercise accounted for an estimated 1.3 billion visits to the natural environment between March 2013 and February 2014. Factors relating to a lack of time were most likely to be cited as reasons for not visiting more often or at all.

Langdale, Lake District

Frequency of visits

3.1 MENE collects data on visits to the natural environment taken for leisure purposes (for a full definition of what constitutes a visit (see 1.9). Over half of the population were 'frequent' visitors to the outdoors, claiming that, on average, they visited at least once a week. This equates to 24 million people visiting per week during the fifth year of the survey.

3.2 Around three million adults did not visit the natural environment at all, while around 15 million adults visited once or twice a month or less frequently.

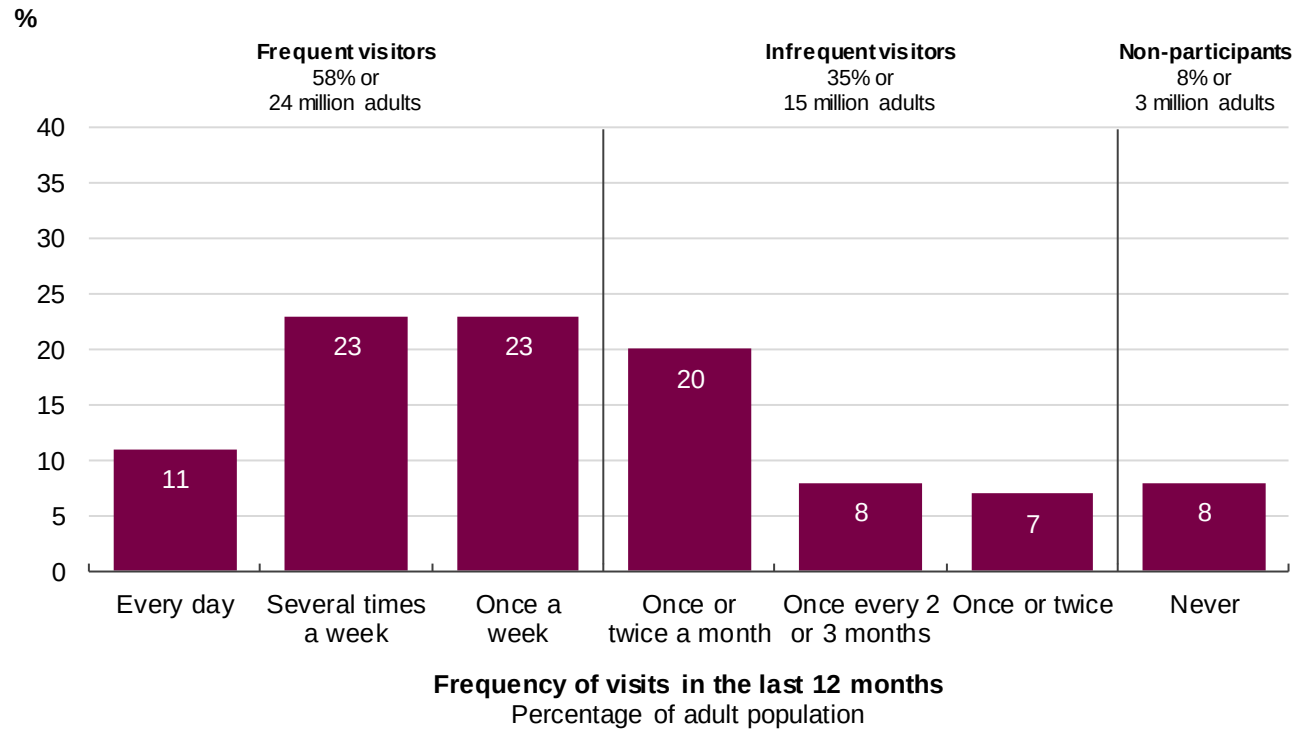


Figure 3.1 – Frequency of visits to the natural environment

Q17: Thinking about the last 12 months, how often on average have you spent your leisure time out of doors, away from home? (Base: All respondents, monthly questions March to February 2013/14 N=10,552)
Note: Percentage of adult population

Volumes of visits

3.3 As well as recording general visit-taking over the previous year, MENE also gathers information about actual visits over the previous week. Figure 3.2 illustrates that on average, two-fifths of the population took at least one visit in the last seven days in the most recent survey.

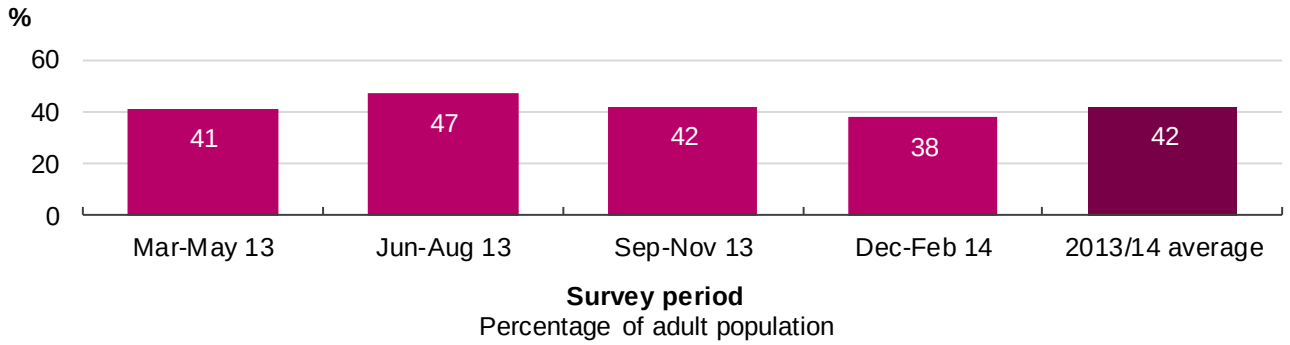


Figure 3.2 – Percentage of adult population taking visits to the natural environment in the previous seven days

Q1 How many times, if at all, did you make this type of visit? (Base: All respondents, weekly questions Mar-May 13 N=11,268; Jun-Aug 13 N=12,475; Sep-Nov 13 N=11,771; Dec 13-Feb 14 N=11,271; March to February 2013/14 N=46,785)

3.4 When the weather is warmer and daylight hours increase, the level of visit taking is at its most frequent. It follows therefore that visit taking levels were highest during the summer months from June to August and lowest between December and February. While many factors can influence propensity to visit, it is interesting to note that between June and August 2013 there was a period of particularly mild summer weather[3].

Types of place visited

3.5 It is estimated that between March 2013 and February 2014, the 42.3 million adults resident in England took a total of 2.93 billion visits to the natural environment[4]. Destinations within a town or city made up just under half of these visits, while a similar proportion were taken to countryside locations. Small proportions of visits were taken to seaside resorts and towns or to other coastal areas.

3.6 Around a quarter of visits involved some form of expenditure – resulting in an estimated spend of £17 billion between March 2013 and February 2014.

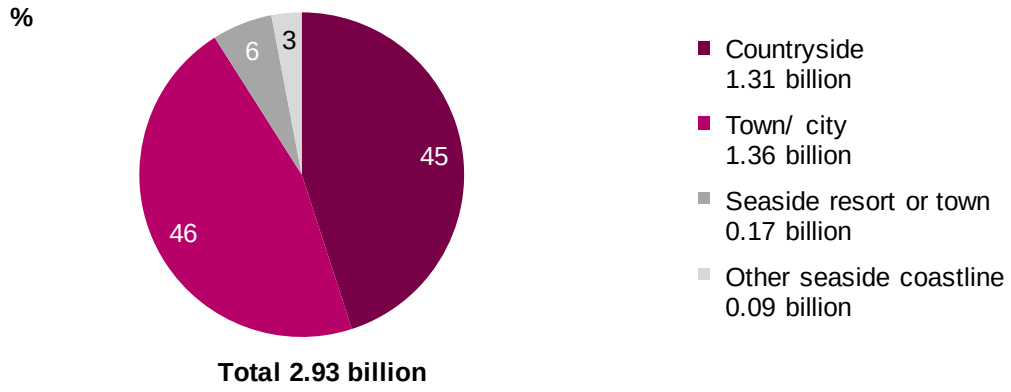


Figure 3.3 – General type of place visited

Q2 Which of the following best describes where you spent most of your time on this visit? (Base: All visits, weekly questions March to February 2013/14 N=55,897)

3.7 As shown in Figure 3.4[5] parks in towns and cities were the most frequently visited destination type. In total, visits to parks accounted for an estimated 778 million visits or 27 per cent of visits taken to the natural environment in England last year.

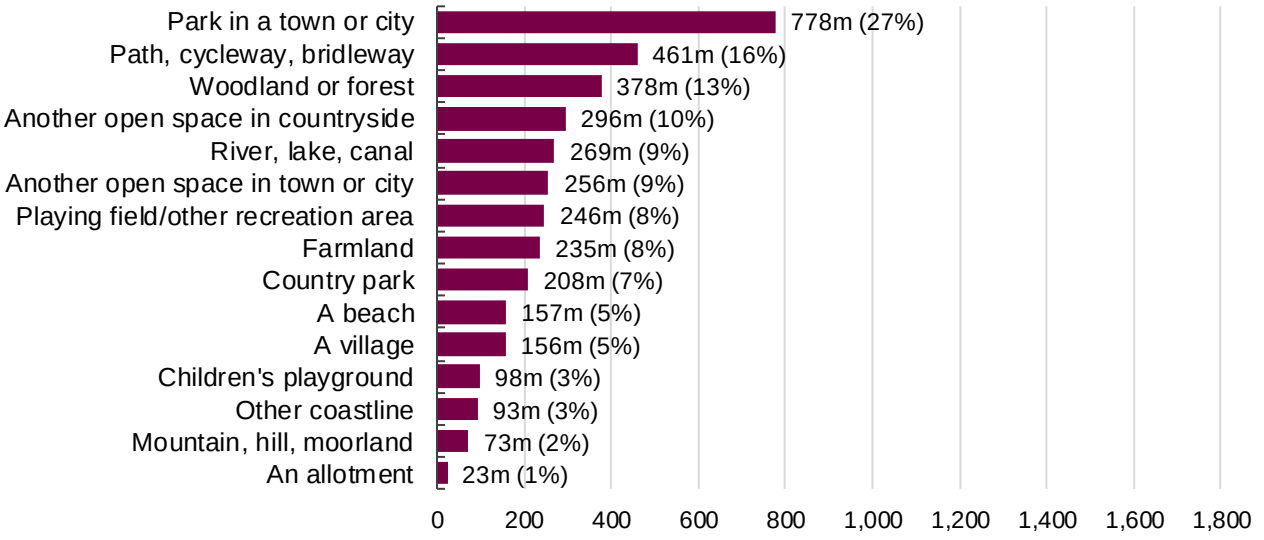


Figure 3.4 – Specific place visited (millions)

Q5 Which of the following list of places best describes where you spent your time during your visit? (Base: All respondents, weekly questions March to February 2013/14 N=18,808).
Note: Sum of totals is more than 100% as visits could have included more than one type of place.

Activities undertaken

3.8 Figure 3.5 illustrates the activities undertaken during visits to the natural environment in England[6]. Walking was by far the most frequently undertaken activity, with half of visits involving a walk with a dog and around a quarter involving walking without a dog.

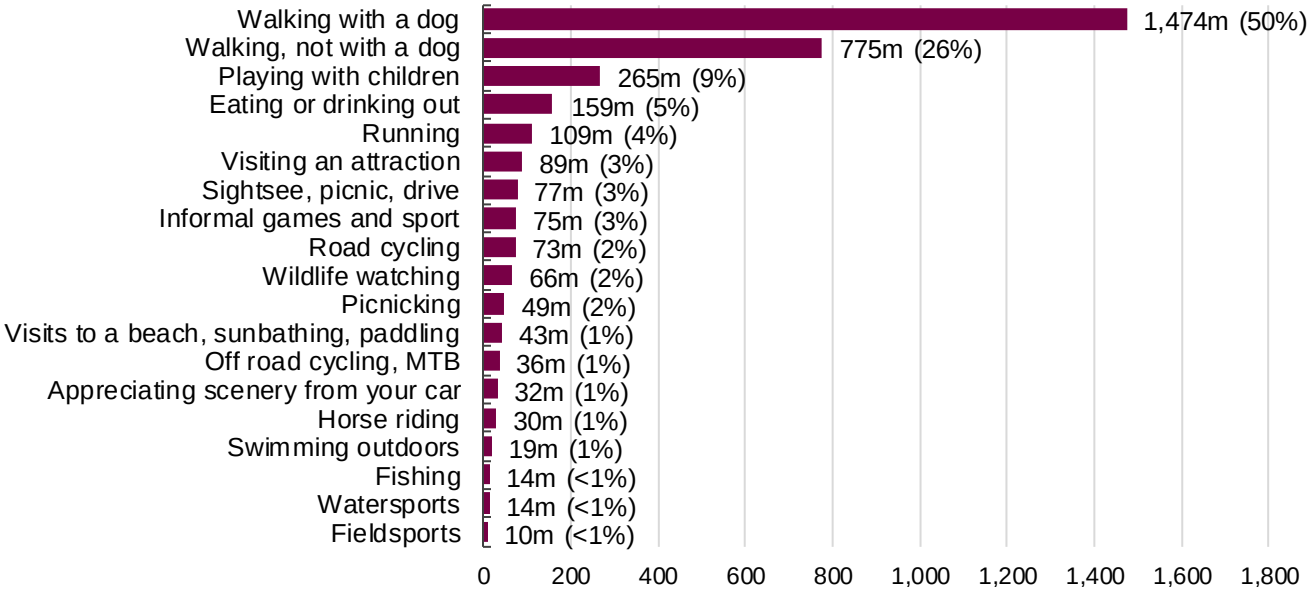


Figure 3.5 – Activities undertaken (millions)

Base: All visits, weekly questions March to February 2013/14 N=55,897

Attitudes to local greenspaces

3.9 The majority of the population viewed their local greenspaces in a favourable light, particularly in relation to proximity and ease of access. Overall, around two-fifths agreed strongly that their local greenspaces were 'within easy walking distance' and a similar proportion that they were 'easy to get to and around'.

3.10 Three in ten agreed strongly that these were 'of high enough quality to make me want to spend time there', a lower agreement level than was given for the ease and proximity within which such spaces can be accessed. Please note that trend data is not yet available for this question.

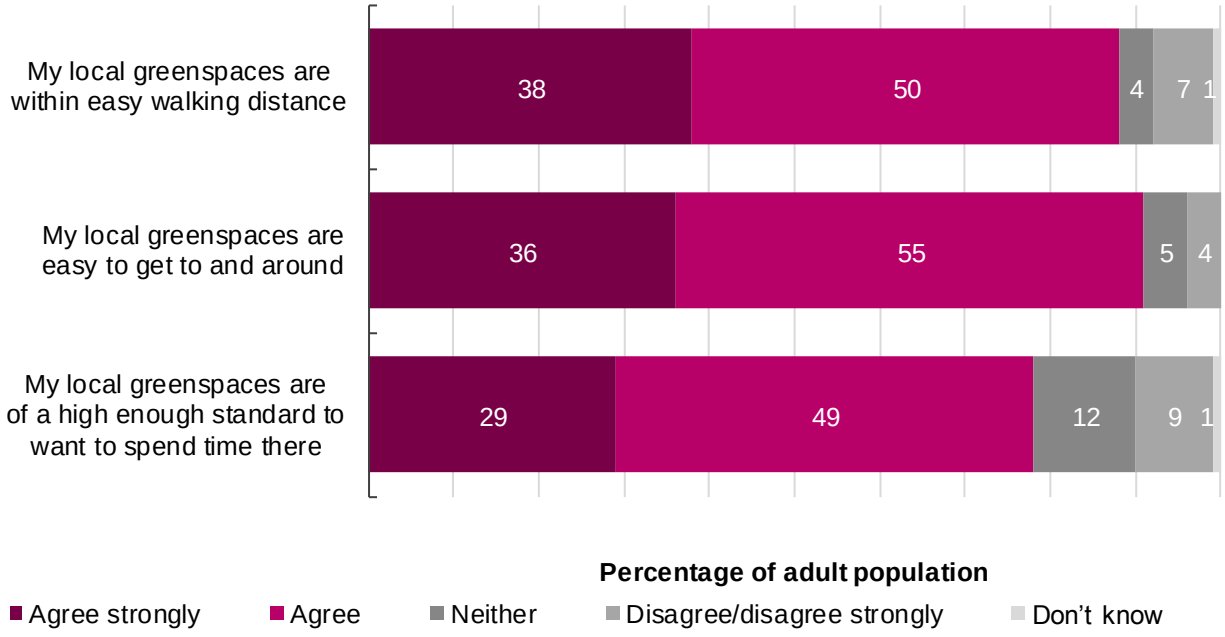


Figure 3.6 – Attitudes towards local greenspaces

E6 How much do you agree or disagree with the following statements relating to your nearest greenspace areas? (Base: All respondents, quarterly questions March to February 2013/14 N=3,535).
Note: due to the sample size for this question, not all differences are statistically significant.

3.11 Figure 3.7 demonstrates variations in the level of strong agreement with each of the greenspace attitude statements by former Government Office Region (GOR) area. The data indicated that strong agreement that local greenspaces were within easy walking distance, easy to get into/around and were of a high enough standard was more likely in the South of England, particularly the South East, South West and East England. Conversely, this was less likely to be the case amongst residents of the North East and Yorkshire and Humberside regions.

3.12 Please note that due to the small sample size for this question, the results shown and discussed are not statistically significant and should be treated as indicative only.

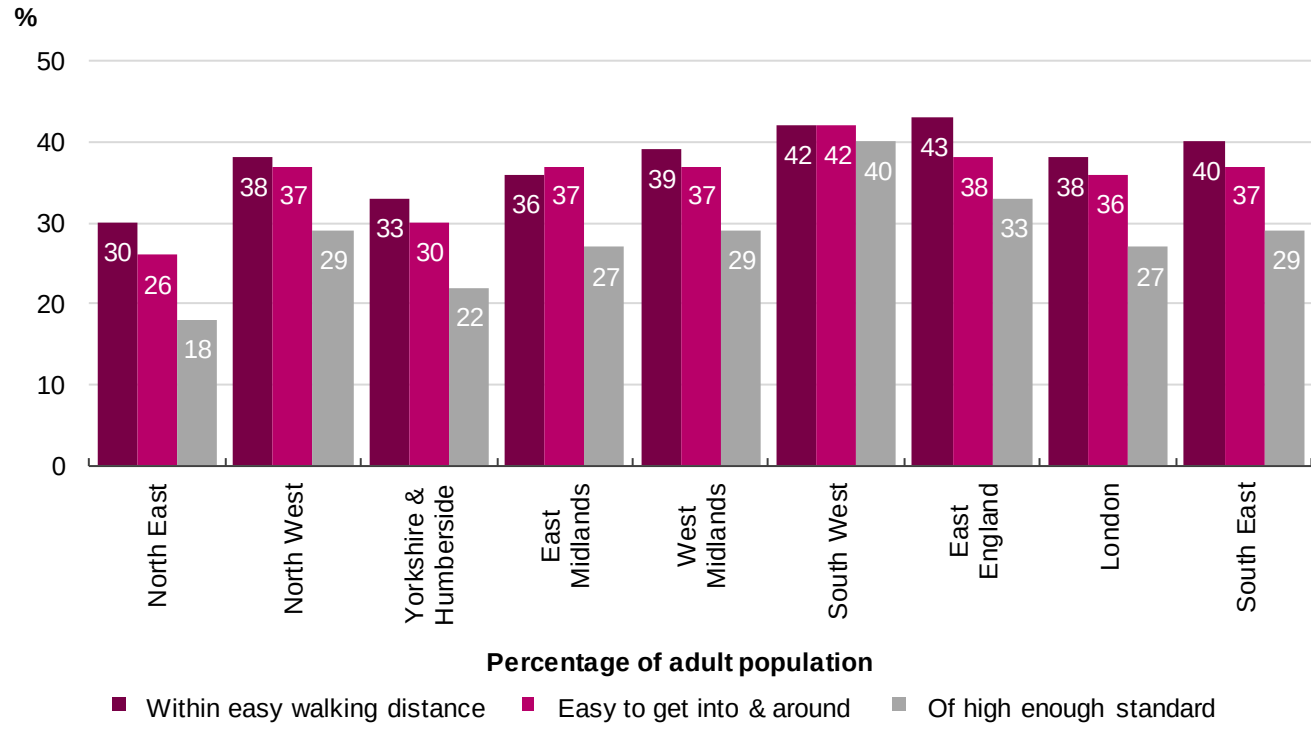


Figure 3.7 – Strong agreement with greenspace statements by Government Office Region

E6 How much do you agree or disagree with the following statements relating to your nearest greenspace areas? (Base: All respondents, quarterly questions March to February 2013/14 N=3,535)
Note: due to the sample size for this question, not all differences are statistically significant.

Other visit characteristics

3.13 Table 3.1 overleaf provides further details on the profile of visits taken to the natural environment between March 2013 and February 2014 including duration, the mode of transport used and distances travelled.

3.14 The average visit length was two hours and one minute[7]. Just over a quarter of visits taken lasted less than an hour, while half were between one hour and two hours fifty-nine minutes in duration. The remainder lasted for three hours or more.

Table 3.1 – Visit duration, main transport used and distance travelled

Base: Random visit, weekly questions March to February 2013/14 N=18,808

	2013/14 %
Visit duration	
Less than 1 hour	28
1 hour to 2 hours 59 mins	50
3 hours or more	22
Transport	
On foot	64
Car/van	28
Public transport (bus/rail)	3
Other	4
Distance travelled	
Less than 1 mile	43
1 to 2 miles	25
3 to 5 miles	15
5 miles or more	17

3.15 As shown in the table above, walking was the dominant mode of transport used, with almost two-thirds of visit destinations having been reached on foot. While around two-fifths of visits were taken to a destination less than a mile away, a further quarter were taken to a destination between one and two miles away and a fifth involved a journey of five miles or more.

3.16 As shown in Table 3.2, half of visits were taken alone, while around a fifth included children in the party. The average total party size was 2.4.

Table 3.2– Party composition (row)

(Base: Random visits, monthly questions 2013/14 N=4,309)

	None %	1 %	2 %	3 %	4 + %	Total %	Average
Adults (aged 16 and over)	-	58	31	4	7	**100**	1.9
Children (aged under 16)	78	9	8	2	3	**100**	2.3
Total party size	**-**	**50**	**25**	**9**	**16**	**100**	**2.4**

Motivations[8]

3.17 Almost half of visits were taken to exercise a dog. Other frequently cited reasons for visiting the outdoors included health or exercise, relaxing and unwinding and for fresh air or to enjoy pleasant weather. Around a fifth of visits were taken to enjoy scenery.

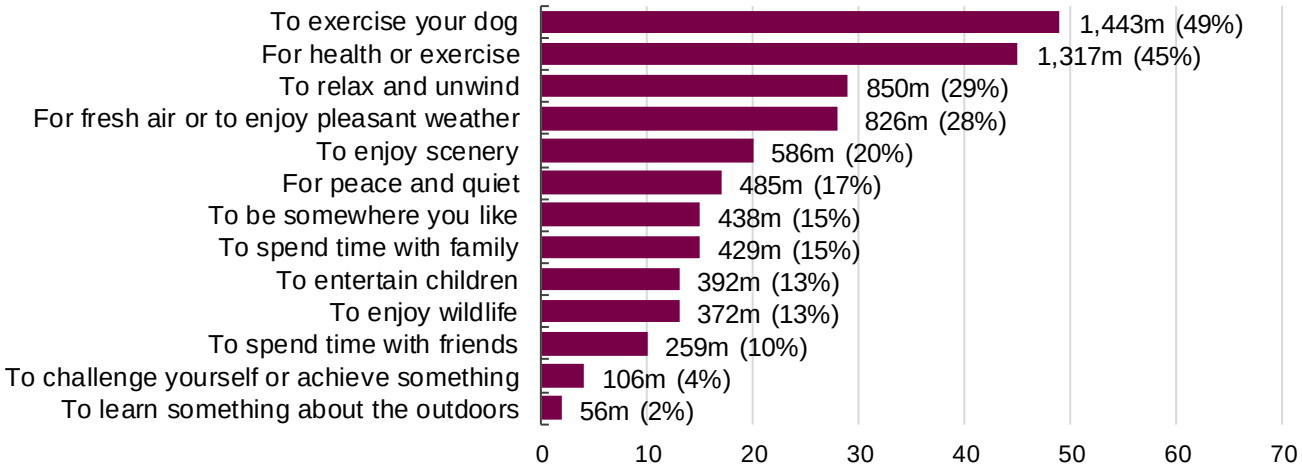


Figure 3.8 – Reasons for taking visits to the natural environment

Q12 Which of the following, if any, best describe your reasons for this visit? (Base: Random visits, weekly questions March to February 2013/14 N=18,808)
Note: Sum of totals is more than 100% as visits could have been taken for more than one reason.

Reasons for not visiting

3.18 Factors relating to a lack of time were among the most frequently cited barriers to visiting the natural environment with a quarter of infrequent/non-participants citing being busy at work and around a fifth being too busy at home. Around two in ten mentioned poor health as a barrier to visiting the outdoors, while around one in ten cited poor weather and/or old age.

3.19 Data regarding reasons for visiting has not varied significantly over the first five years of MENE.

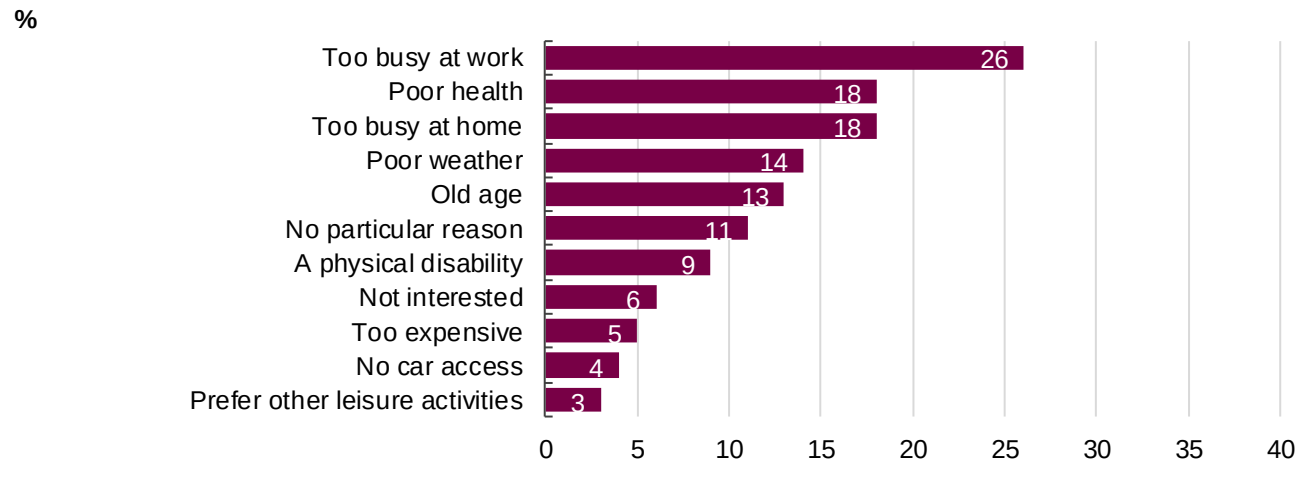


Figure 3.9 – Barriers to participation

Q18 Why have you not spent any/more of your time out of doors? (Base: Infrequent and non-participants (visit once/twice every 2-3 months or less often) March to February 2013/14 N=2,642)
Note: Sum of totals is more than 100% as respondents could specify more than one reason. Those given by 3% or more of respondents are shown in the chart.
Source: Percentage of population group

Outcomes of visits[9]

3.20 As shown in Figure 3.10 below, when respondents were asked about the outcomes of visits to the natural environment, agreement was strongest with the statement 'I enjoyed my visit'. Around a third agreed strongly that their visit made them feel 'refreshed or revitalised', 'calm and relaxed' and/or that they took time to appreciate their surroundings.

3.21 While agreement was lowest for learning 'something new about the natural world', around three in ten agreed that this was an outcome of their visit. By comparison, just two percent of visits were taken in order to learn something about the natural environment (see Figure 3.10).

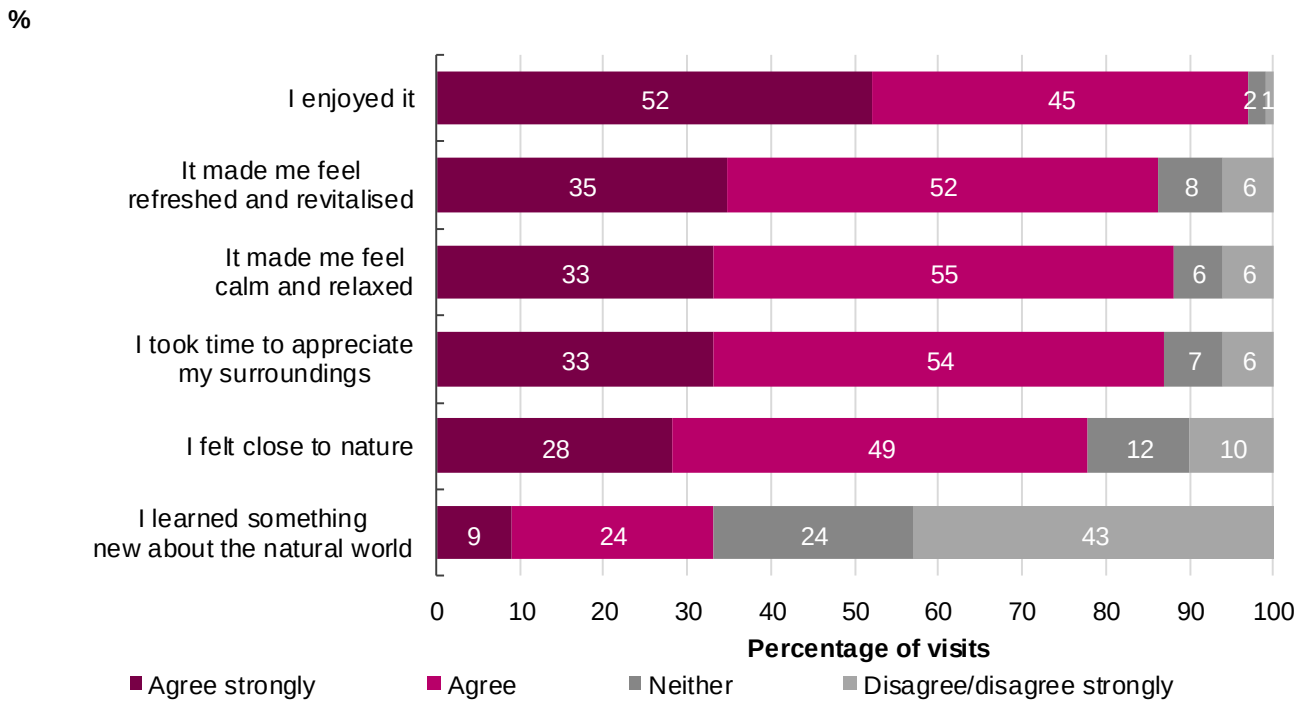


Figure 3.10 – Outcomes of visits to the natural environment

E1 Thinking of this visit, how much do you agree or disagree with the following statements? (Base: Random visits, quarterly questions March to February 2013/14 N=1,472)
Note: Disagree and disagree strongly categories are aggregated as very small proportions provided the disagree strongly response.

Attitudes to the natural environment

3.22 The value placed on local greenspaces was evident with half of the population strongly agreeing with the statement 'having open spaces close to where I live is important'. That the natural environment has value beyond simply being a visit destination was also clear with just under half agreeing strongly that there are many natural places they may never visit but they are glad they exist.

3.23 While the majority agreed that damage to the natural environment concerned them, agreement with this statement was not as strong as for the others shown in Figure 3.11. 15 per cent of adults living in England stated that they disagreed with this statement.

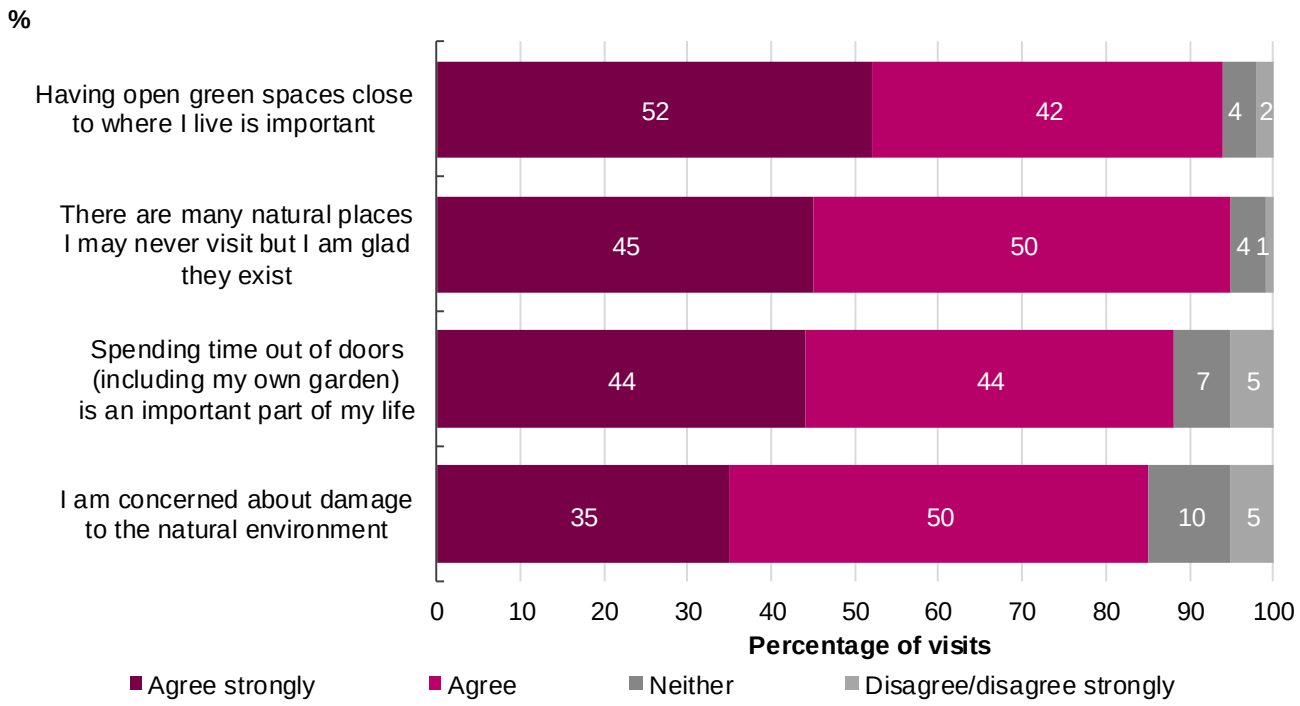
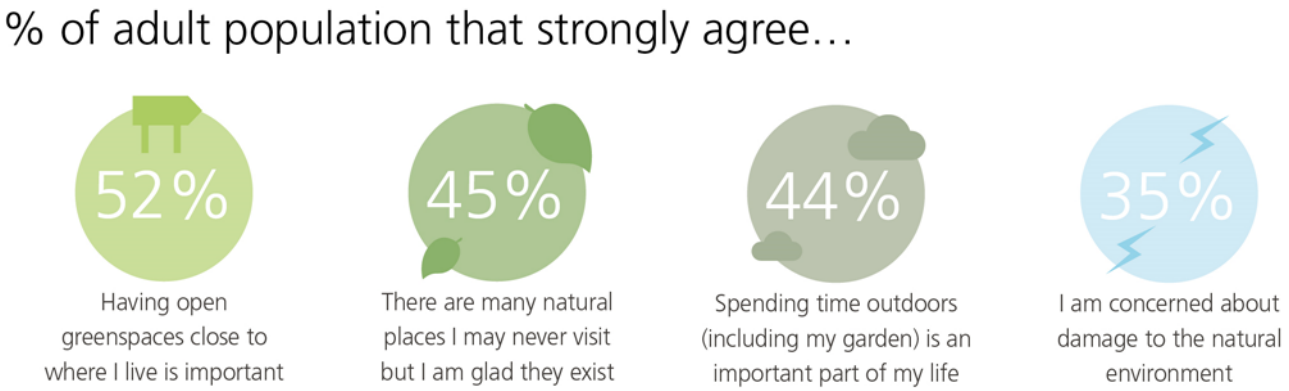


Figure 3.11 – Attitudes to the natural environment

E2 How much do you agree or disagree with the following statements? (Base: All respondents, quarterly questions March to February 2013/14 N=3,535)
Note: Disagree and disagree strongly categories are aggregated as very small proportions provided the disagree strongly response.



Other engagement with the natural environment

3.24 Overall, the vast majority of the population undertook one or more of the activities shown in Figure 3.12 below. The most commonly undertaken activity was sitting or relaxing in a garden, an activity engaged in by around two-thirds of the population. These proportions have not varied significantly over the first five years of MENE.

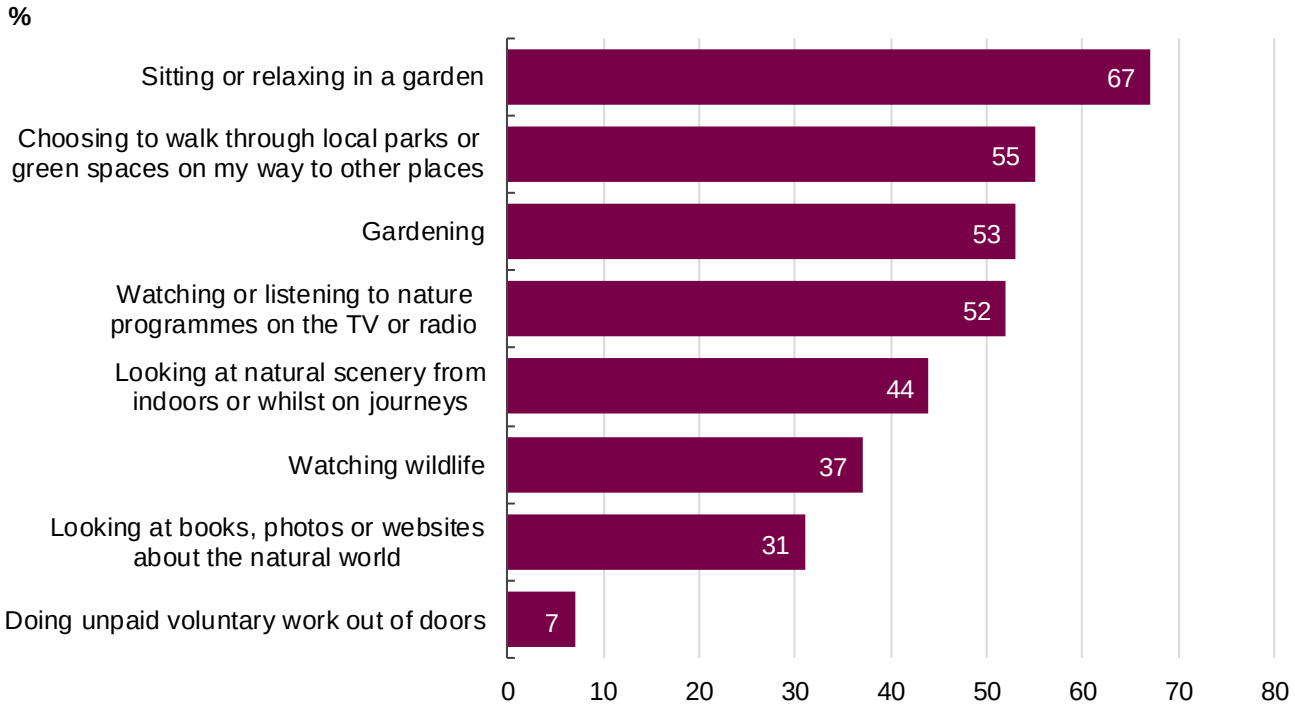


Figure 3.12 – Other activities involving the natural environment

E3 Which of the following activities involving the natural environment do you take part in? (Base: All respondents, quarterly questions 2013/14 N=3,535)
Note: Sum of totals is more than 100% as respondents could have undertaken more than one activity.

Pro-environmental behaviours

3.25 Respondents were also asked about any pro-environmental activities they undertook. The relationship between the value placed on the natural environment and actions taken to protect it is explored further in section 9 later in this report.

3.26 Overall, around nine in ten members of the adult population in England engaged in one or more of the pro-environmental behaviours shown in Figure 3.13.

3.27 The most commonly undertaken behaviour was recycling, an activity which around three-quarters of the population claimed to undertake. Around two-fifths indicated claimed that, where possible, they chose to walk/cycle rather than take the car and/or that they bought seasonal/locally grown food.

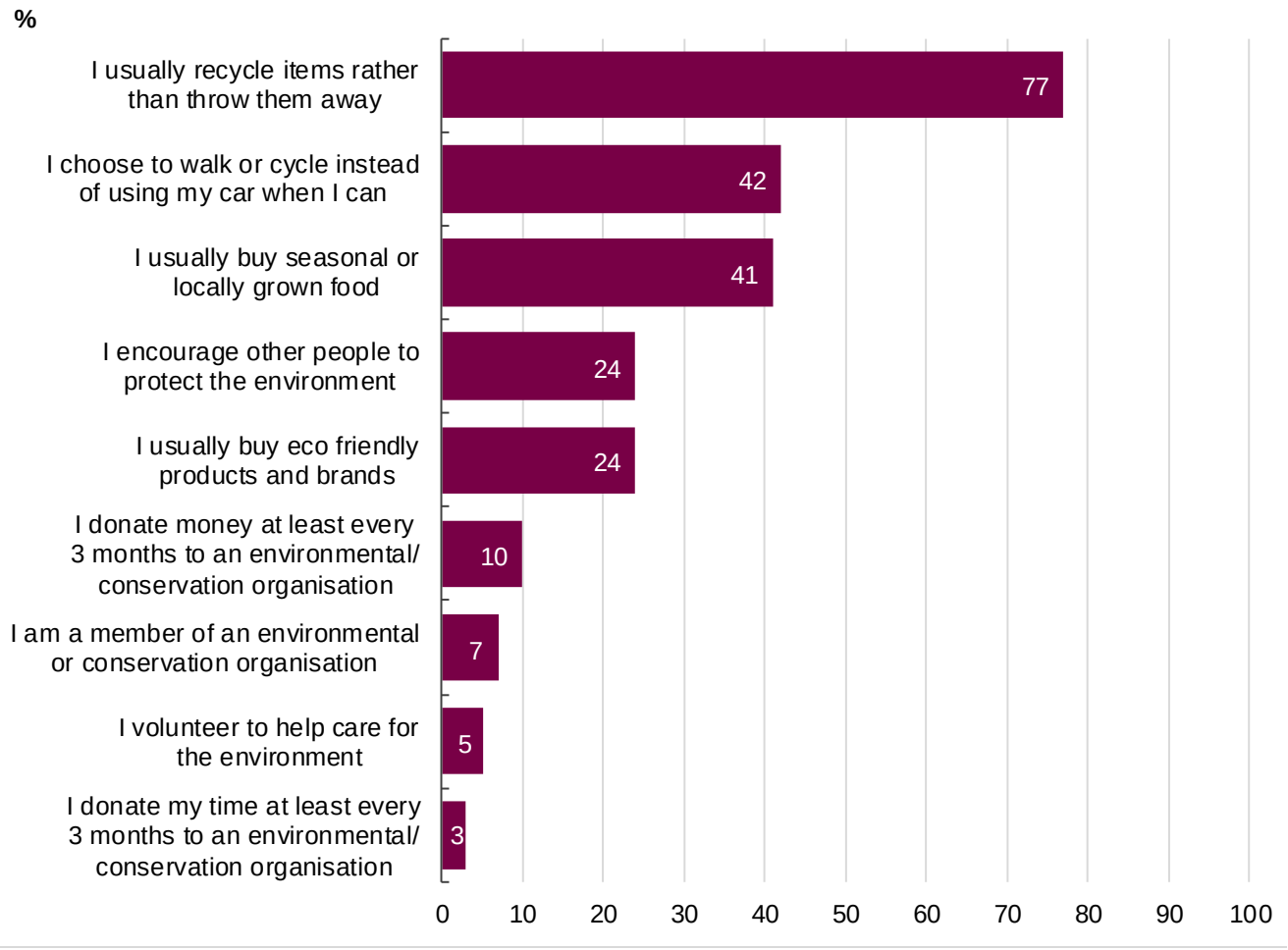


Figure 3.13 – Pro-environmental behaviours

E4 Which of the following environment related activities do you do? (Base: All respondents, quarterly questions 2013/14 N=3,535)
Note: Sum of totals is more than 100% as respondents could have undertaken more than one activity

3.28 The least frequently undertaken pro-environmental behaviours related to membership or support for an environmental or conservation organisation. One in ten indicated that they donated money to such an organisation at least once a quarter, while smaller proportions were members, volunteers or donated time once a quarter or more often.

Lifestyle changes

3.29 When asked about the extent to which they were willing or able to change their current behaviour to address environmental concerns (see Table 3.3 below), just over a third of the population indicated that they were not likely to make any changes to their lifestyle in order to protect the environment and two in ten said that they would find it difficult to do more.

3.30 In total, less than a fifth of the population stated that they intended to make changes to their current lifestyle to protect the natural environment, while a small proportion stated that the willingness of others to change would encourage them to do so.

Table 3.3 – Changing lifestyle to protect the natural environment

E5. Which of these statements best describes your intentions? (Base: All respondents, quarterly questions March to February 2013/14 N=3,535)

	2013/14 %
I intend to make changes to my lifestyle	15
I'd make changes to my lifestyle if I knew other people were willing to make changes	4
I'd like to make changes to my lifestyle but it's too difficult	9
I'd like to make changes to my lifestyle but I don't know what to do	7
I already do a lot to protect the environment so it would be difficult to do more	21
I like my lifestyle the way it is and not likely to change it	36

4 Variations within the population

4 Variations within the population

Key findings

- Across the topic areas covered by MENE, several demographic factors revealed variations in visit behaviour and attitudes to the natural environment, namely age, social grade, ethnic origin, levels of deprivation and whether or not a person had a limiting illness or disability.
- Those who were less likely to have taken a visit to the natural environment in the last seven days were those of Black or Minority Ethnic (BAME) origin, those aged 65 and over, those with a long-term illness or disability and those in the DE social grades.
- Population groups that generally visit the outdoors less overall, tend to take visits to towns and cities when they do visit, particularly those of BAME origin, those between the ages of 16 and 24 and those in the DE social grades.
- Around two-thirds of visits taken by those in the DE social grades were taken alone while those of White ethnic origin were much more likely to visit alone than those in the BAME population.
- The influence of health or exercise on visits to the outdoors increased with age. Around two-fifths of visits taken by 16-44 year olds were motivated by this compared to just over half taken by those aged 55 and over.
- Those in the AB social grades were more likely to agree strongly that their local greenspaces were within easy walking distance, easy to get to and around and that they were of a high enough standard than those in the DE social grades.
- Younger people were more open to making changes to their lifestyle to protect the natural environment, as were members of the BAME population.

Dovedale, Peak District

Frequency of visits

4.1 Analysis below the overall population level revealed a number of consistent groups within the population where variations were recorded in relation to outdoor recreation visits, attitudes and behaviours.

4.2 As may be expected, the population groups who were less likely to have visited the outdoors at all in the last 12 months were also those who were less likely to have taken a visit in the last seven days. In comparison to the population as a whole, where around two-fifths had taken a visit in the last week, smaller proportions of those of BAME origin, aged 65 and over, with a long-term illness or disability and/or those in the DE social grades had visited in the last seven days.

Table 4.1 – Variations in visits to the natural environment by demographic groups

(Base: All respondents, March to February 2013/14 weekly question visits in last 7 days (N=46,785); monthly question visits in last 12 months (once a week or more column) N=10,552)

	Any visits in last 7 days %	Visit once a week or more %
Age		
16-24	40	62
25-44	46	61
45-64	45	57
65+	34*	50*
Social grade		
AB	52	68
C1	44	60
C2	40	54
DE	31*	48*
Ethnicity		
White	44	60
BAME	28*	41*
Illness/disability		
Any	33*	43*
None	44	61

* Indicates a significant variation from the overall population figure

4.3 The likelihood of frequently visiting the outdoors largely depended on a person's health, age, ethnicity and social grade. For example, those with a long-term illness or disability, those aged 65 and over, those in the lower social grades and those of Black or Minority Ethnic (BAME) origin were much less likely to visit at least once a week.

Places visited

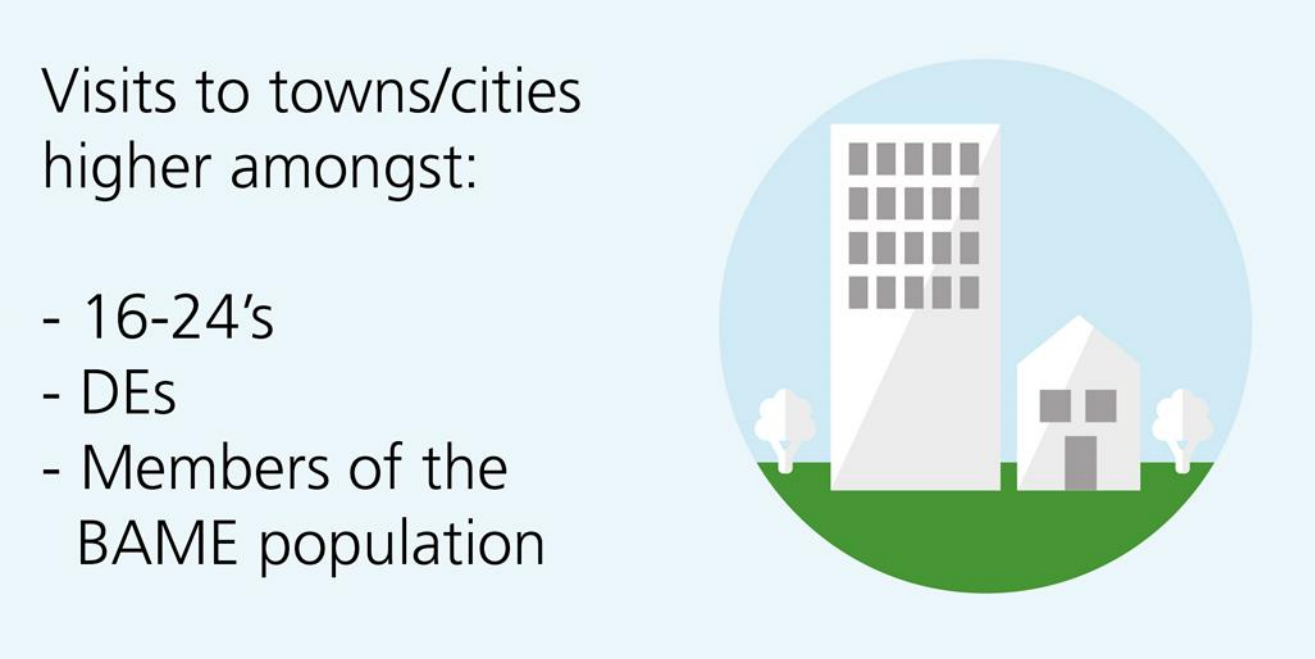
4.4 Population groups that generally visit the outdoors less overall, tend to take visits to towns and cities when they do visit, particularly those of BAME origin, those between the ages of 16 and 24 and those in the DE social grades (see Table 4.2).

Table 4.2 – Percentages of visits taken by demographic groups to towns/cities

(Base: All visits, weekly questions March to February 2013/14 N=55,897)

	Visits to towns/cities 2013/14 %
Age	
16-24	60*
25-44	53
45-64	40
65+	38
Social grade	
AB	38
C1	49
C2	48
DE	56*
Ethnicity	
White	44
BAME	83*

* Indicates a significant variation from the overall population figure



4.5 Parks in towns and cities were most likely to be included on visits taken by those in the BAME population, those living in the ten per cent most deprived areas and younger members of the population aged 16-24. In addition, variations were evident by social grade, with the proportion of visits taken by those in the DE social grades that included parks in towns and cities higher than amongst visits taken by those in the AB social grades (see Table 4.3 below).

Table 4.3 – Visits to selected parks in towns/cities and woodlands forests by demographic group

(Base: All respondents, weekly questions March to February 2013/14 N=18, 808)

	Visits to parks in towns/cities 2013/14 %	Visits to woodlands/forests 2013/14 %
Age		
16-24	36*	10
25-44	32	12
45-64	22	15
65+	20	11
Social grade		
AB	23	15**
C1	29	12
C2	26	13
DE	30**	10
Ethnicity		
White	25	13
BAME	56*	4
Deprivation index		
10% most deprived areas	37*	6
10% least deprived areas	22	16

* Indicates a significant variation from the overall population figure
**indicates a significant variation between the AB and DE social grades

4.6 In contrast, woodlands and forests were more likely to be included in the visits taken by those in the AB social grades than by those in the DE groups.

Activities undertaken

4.7 Across the English adult population, there were variations in the types of activities undertaken during visits to the natural environment. For example, higher than average proportions of visits taken by those of BAME origin, by those between the ages of 25 and 44 and by those in the DE social grades included playing with children. Also dog walking was more likely to be undertaken on visits taken by those aged 45 and over, those with a long-term illness or disability and those in the C2DE social grades.

Table 4.4 – Variations in activities undertaken by demographic group

(Base: All visits, weekly questions March to February 2013/14 N=55,897)

	Dog walking 2013/14 %	Playing with children 2013/14 %
Age		
16-24	38	7
25-44	44	19*
45-64	59*	4
65+	52*	2
Social grade		
AB	48	8
C1	49	8
C2	54*	9
DE	53*	11*
Ethnicity		
White	53	8
BAME	11	20*
Limiting illness/disability		
Any	56*	5
None	49	10

* Indicates significant variation from the overall population figure (please refer to the text above for groupings by age and social grade that apply in this instance)

Party composition

4.8 Around two-thirds of visits taken by those in the DE social grades were taken alone while those of White ethnic origin were much more likely to visit alone than those in the BAME population.

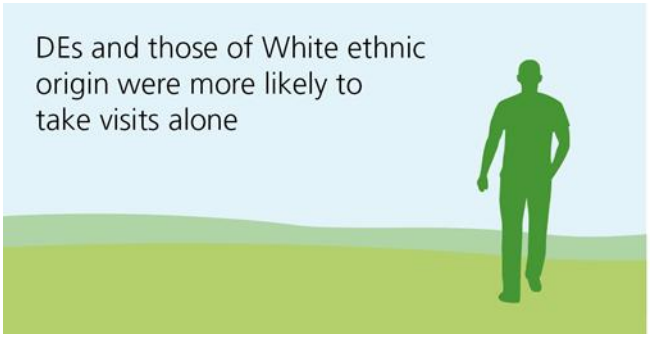
4.9 Visits most likely to have included children in the party were those taken by members of the BAME population and those taken by 25 to 44 year olds. Visits taken by those with a long-term illness or disability and those aged 55 and over were least likely to have included children in the party.

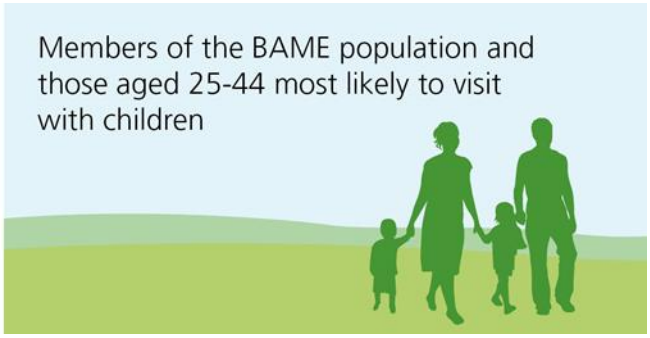
Table 4.5 – Variations in party composition by demographic group

(Base: Randomly selected visit, monthly questions March to February 2013/14 N=4,309)

	Alone %	Children in party %
Age		
16-24	54	15
25-44	54	43*
45-64	60	13
65+	64	7*
Social grade		
AB	55	20
C1	57	20
C2	56	25
DE	66*	22
Ethnicity		
White	59**	20
BAME	46	43*
Limiting illness/disability		
Any	62	14*
None	57	23

* Indicates a significant variation from the overall population figure
** Indicates a significant variation between ethnicity groups





Visit motivations

4.10 Over half of visits taken by those aged 45-64 and over were taken to exercise a dog. Reflecting patterns of dog ownership, this motivation was also much more likely to be cited on visits taken by those of White ethnic origin than by members of the BAME population.

4.11 The influence of health or exercise on visits to the outdoors increased with age. Around two-fifths of visits taken by 16-44 year olds were motivated by this compared to just over half taken by those aged 55 and over.

Table 4.6 – Demographic variations visits to the natural environment to exercise or for health/ exercise

Q12 Which of the following, if any, best describe your reasons for this visit? (Base: Random visits, weekly questions March to February 2013/14 N=18,808)

	Exercise a dog %	Health/exercise %
Age		
16-44	41	39**
45+	56*	50**
Social grade		
AB	47	48**
C1	47	46**
C2	53	41**
DE	52	42**
Ethnicity		
White	52*	45
BAME	10	41
Limiting illness/disability		
Any	54	49**
None	48	44**

* Indicates a significant variation from the overall population figure
**Indicates a significant variation between the 16-44 and 45+ age categories; between ABC1s and C2DEs; between those with and without a long-term illness or disability

4.12 Visits taken for health or exercise were also more likely to be taken by those with a long-term illness or disability than by those without and by those in the ABC1 social grades than those in the C2DE grades.

Barriers to visiting

4.13 Work commitments were cited as a barrier by around four in ten infrequent/non-visitors aged 16-44 and by a similar proportion of those in the BAME population (see Table 4.7).

4.14 Almost half of those with a disability cited poor health as a barrier, as did around a third of those aged 65 and over and a quarter of those in the DE social grades. Perceptions of poor health as a barrier were higher amongst those of White ethnic origin than amongst those in the BAME population.

Table 4.7 – Demographic variations in reasons for not visiting

Q18 Why have you not spent any/more of your time out of doors? (Base: Infrequent and non-participants (visit once/twice every 2-3 months or less often) March to February 2013/14 N=2,642)

	Busy at work %	Poor health %
Age		
16-24	36*	1
25-44	41*	4
45-64	34	18
65+	2	34
Social grade		
AB	33	17
C1	29	14
C2	33	13
DE	16	24*
Ethnicity		
White	23	20*
BAME	38*	7
Limiting illness/disability		
Any	6	45*
None	36	4

* Indicates a significant variation from the overall population figure. Please refer to the text above for the age category referenced there.

Mentions of poor health as a barrier were higher amongst those:

With an illness/disability
Aged 65+
DE social grades
Of White ethnic origin

Attitudes towards local greenspaces

4.15 Those in the AB social grades were more likely to agree strongly that their local greenspaces were within easy walking distance, easy to get to and around and that they were of a high enough standard than those in the DE social grades. It is important to bear in mind when interpreting these results that differences in attitudes can be influenced by a range of factors such as actual greenspace access or a person's awareness of local greenspace provision.

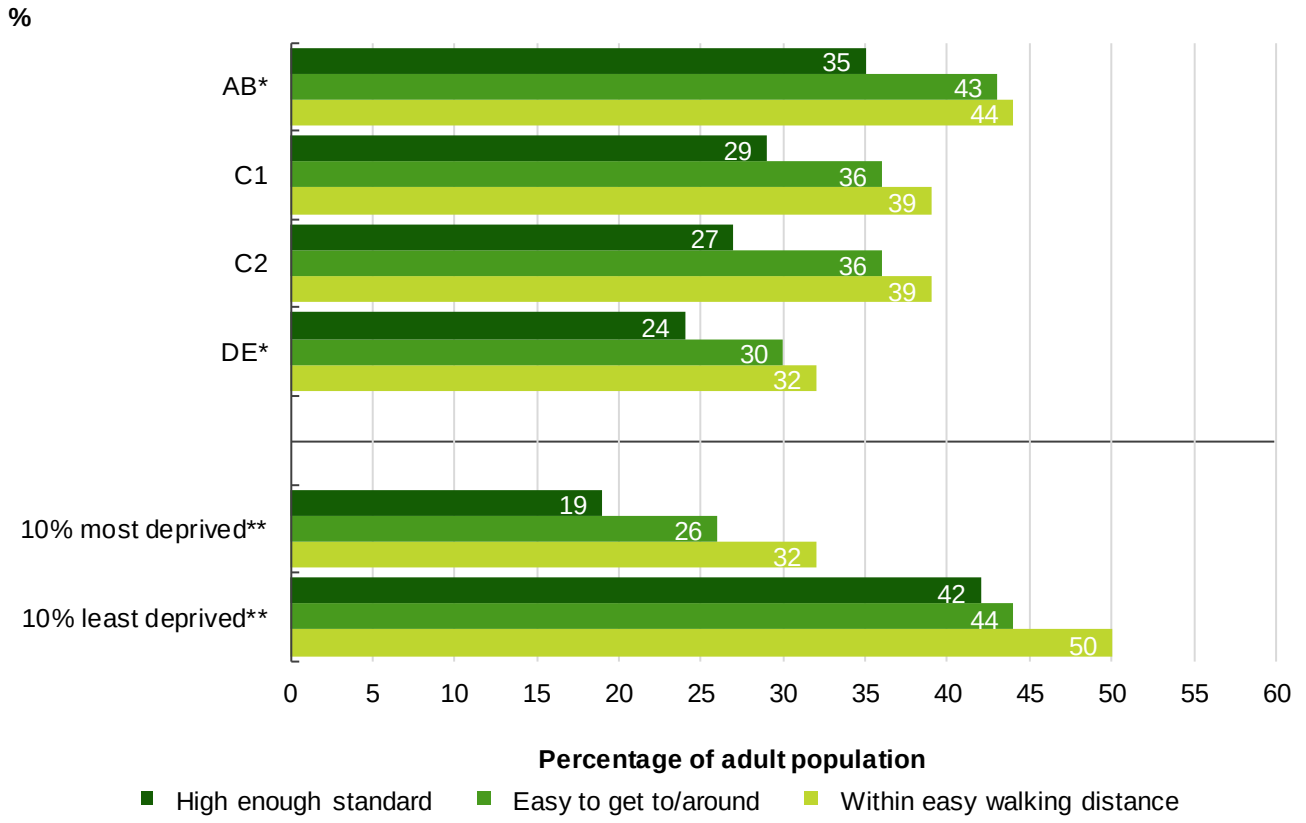


Figure 4.1 – Attitudes towards local greenspaces

E6 How much do you agree or disagree with the following statements relating to your nearest greenspace areas? (Base: All respondents, quarterly questions March to February 2013/14 N=3,535).
Note: due to the sample size for this question, not all differences are statistically significant.
* Indicates significant differences between the AB and DE social grades (all statements.
** Indicates a significant difference between levels of deprivation for greenspaces of a high enough standard

4.16 Variations in agreement were also recorded by levels of deprivation. A significant variation was recorded for local greenspaces being of a high enough standard with around two-fifths of those living in the ten per cent least deprived areas agreeing strongly that this was the case compared to around a fifth of those living in the ten per cent most deprived areas.

Attitudes towards the natural environment

4.17 For all of the attitude statements shown in Table 4.8, variations were evident by age, social grade, ethnicity and levels of deprivation. Strong agreement was lower amongst younger members of the population aged 16-24, those in the C2DE social grades, members of the BAME population and those living in the ten per cent most deprived areas in England.

Table 4.8 – Attitudes to the natural environment (% strongly agree)

E2 How much do you agree or disagree with the following statements? (Base: All respondents, quarterly questions March to February 2013/14 N=3,535)

	Having green spaces close to where I live is important %	There are many natural places I may never visit but I am glad they exist %	Spending time out of doors (including in my own garden) is an important part of my life %	I am concerned about damage to the natural environment %
Age				
16-24	34*	32*	27*	24*
25-44	54	44	45	34
45-64	57	49	48	39
65+	55	49	50	39
Socio-economic group				
AB	60	49	52	39
C1	55	49	47	39
C2	49*	42*	41*	33*
DE	44*	39*	36*	30*
Ethnicity				
White	54	47	46	36
BAME	42*	34*	32*	31*
Deprivation				
10% least deprived	66	58	59	45
10% most deprived	43*	36*	36*	29*

* Indicates a significant variation from the overall population figure. Please refer to the commentary above for the social grade grouping referenced.

Participation in other activities related to the natural environment

4.18 Participation in the activities related to the natural environment was more likely amongst the higher social grades, those of White ethnic origin and those living in the ten per cent least deprived areas in England. The largest differences tended to be recorded for activities that involved being in or looking at the natural environment such as gardening or relaxing in a garden, looking at scenery and choosing to walk through parks/greenspaces.

Table 4.9 – Other activities involving the natural environment

E3 Which of the following activities involving the natural environment do you take part in? (Base: All respondents, quarterly questions 2013/14 N=3,535)
Note: Sum of totals is more than 100% as respondents could have undertaken more than one activity.

	Gardening %	Sitting/relaxing in a garden %	Looking at natural scenery (indoors/whilst on journeys) %	Choosing to walk through local parks/green spaces on way elsewhere %
Age				
16-24	22	57	28	54
25-44	49	65	41	60
45-64	62**	72**	53	60
65+	64**	69**	50	42
Social grade				
AB	63*	77*	57*	67*
C1	53	69	47	57
C2	50	64	41	54
DE	43	57	31	42
Ethnicity				
White	56*	70*	48*	58*
BAME	32	50	24	40
Deprivation				
10% least deprived	65*	77*	53*	68*
10% most deprived	40	56	32	45

* Indicates a significant variation from the overall population figure
** Indicates a significant variation between those aged 16-24 and those aged 45+

4.19 An interesting pattern was also observed by age. Participation in the activities shown tended to be higher the older a person was. For example, a fifth of 16-24 year olds took part in gardening compared to around six in ten of those aged 45+, while six in ten and seven in ten respectively took part in sitting or relaxing in a garden.

Pro-environmental behaviours

4.20 Participation in pro-environmental behaviours varied significantly by age, social grade and ethnicity with those aged 25 and over, those in the higher social grades and those of White ethnic origin most likely to indicate participation in these behaviours.

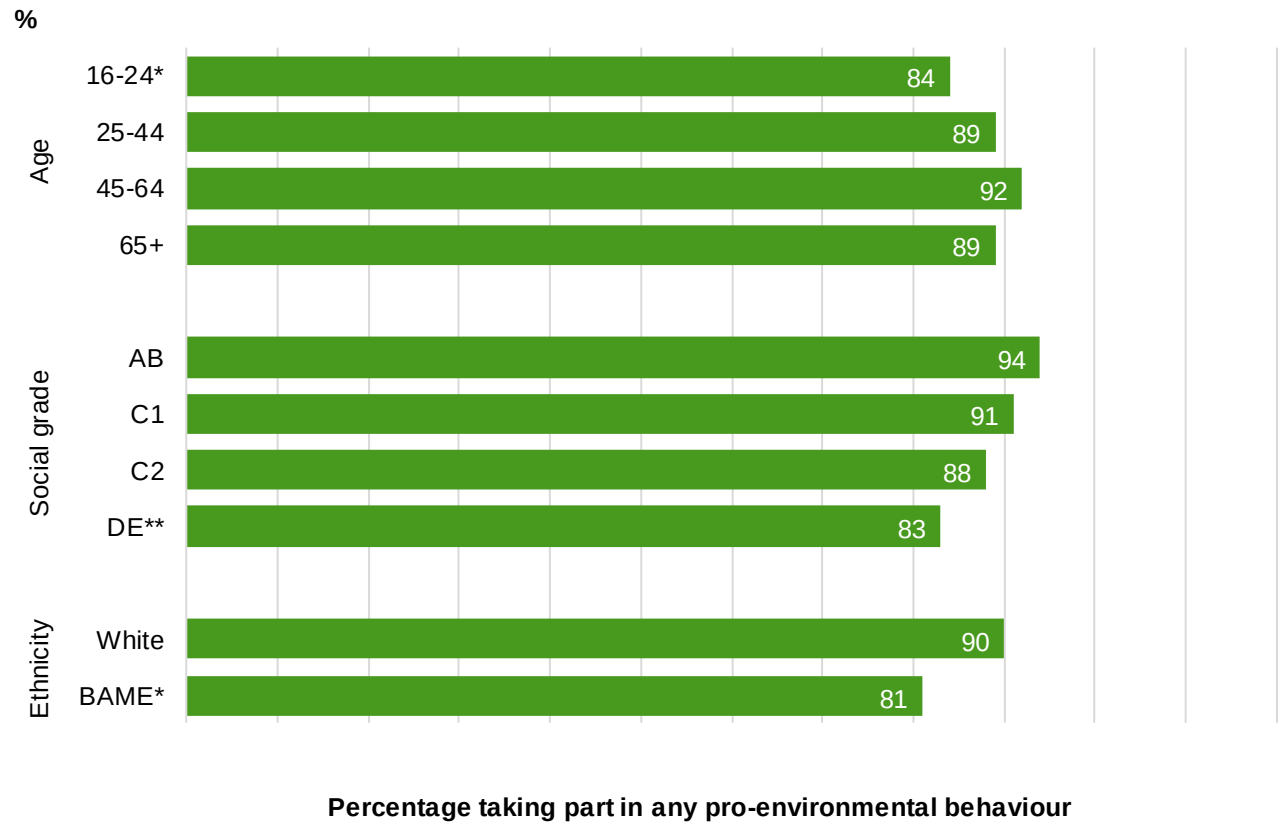


Figure 4.2 – Pro-environmental behaviours

E4 Which of the following environment related activities do you do? (Base: All respondents, quarterly questions 2013/14 N=3,535)
* Indicates a significant variation from other categories within the relevant demographic group
** Indicates a significant variation between those in the AB and DE social grades

Lifestyle changes

4.21 There were significant variations recorded with regards to lifestyle changes by age and ethnicity. Younger people were more open to making changes to their lifestyle with around a fifth of 16-44 year olds intending to make changes compared to one in twenty of those aged 65 and over. A quarter of those aged 45 and over indicated that it would be difficult for them to do more.

4.22 Members of the BAME population indicated greater willingness to adjust their lifestyle compared to those of White ethnic origin. Around three in ten BAME respondents intended to change their lifestyle compared to just over one in ten of those of White ethnic origin. Conversely, a fifth of White respondents indicated that they 'already do a lot' compared to around one in ten of those in the BAME population.

Table 4.10 – Changing lifestyle to protect the natural environment by age and ethnicity

E5. Which of these statements best describes your intentions? (Base: All respondents, quarterly questions March to February 2013/14 N=3,535)

	Intend to make changes %	Would be difficult to do more %
Age		
16-24	22**	13
25-44	22**	17
45-64	13	24**
65+	5	25**
Ethnicity		
White	13	28*
BAME	28*	12

* Indicates a significant variation between ethnic origin categories
** Indicates a variation between those aged 16-44 and those aged 65+ or a variation between those aged 44+ and other age categories

To protect the natural environment

16-44 year olds and members of the BAME population were most likely to intend to make changes to their lifestyle

5 Visit trends

5 Visit trends

Key findings

- Over the five years of MENE, there has been a statistically significant increase in the frequency with which visits are taken. During 2009/10, half of the population claimed to visit at least once a week – rising to around six in ten in 2013/14.
- The role of locations in towns/cities for outdoor recreation visits has increased over time. The annual estimate for visits taken to towns and cities was 1.36 billion in 2013/14, a significant increase on the estimate of 1.22 billion recorded in 2012/13 and an overall increase of 17 per cent on the 2009/10 estimate of 1.16 billion visits.
- To better understand the trends in visit taking recorded by MENE Natural England commissioned the Time Series Analysis Branch at the Office for National Statistics to carry out a Seasonal Adjustment Review of the number of visits to the natural environment
- The data suggested a possible trend for decreased visits to countryside destinations, which corresponds with evidence of a trend towards increased visit levels to destinations in towns/cities.
- The seasonally adjusted data demonstrated that the Easter holiday period impacts on visits to towns and cities, while visits to seaside resorts/towns were more likely to be taken at weekends.


Hyde Park, London

5.1 The 2013/14 survey represents the fifth year of MENE, with data collected continuously since March 2009, affording the opportunity to examine the key trends over this period of time. This section examines these trends, including a seasonal analysis review undertaken by the Office for National Statistics (ONS) on behalf of Natural England.

Trends in frequency of visits

5.2 In each survey year, respondents are asked to provide details of their general propensity to take visits to the natural environment in the last 12 months. Responses to this question may be used to divide the English adult population into discrete groups according to their level of participation:

- Frequent visitors – those who state that on average they normally visit at least once a week.
- Infrequent visitors – those who state that on average they normally visit once or twice a month or less often.
- Non-participants – those who state that they have not visited in the last 12 months.

5.3 Over the five years of MENE, there has also been a statistically significant increase in the frequency with which visits are taken. During 2009/10, half of the population claimed to visit at least once a week – rising to around six in ten in 2013/14.

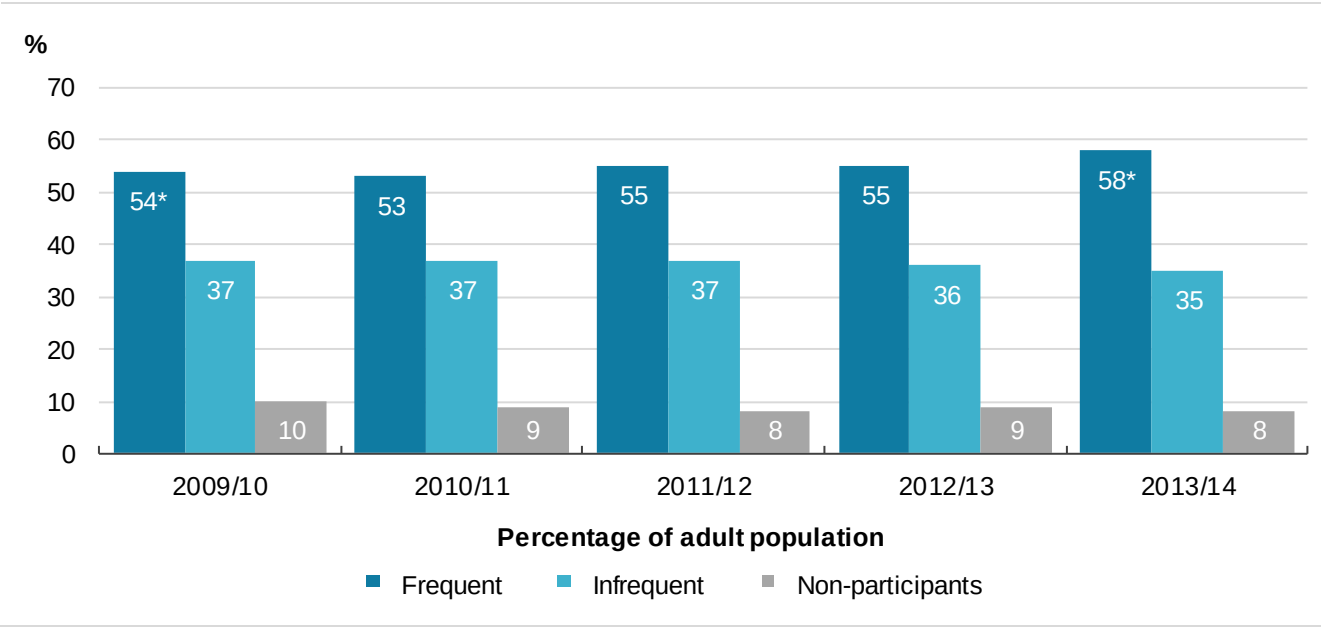


Figure 5.1 – Frequency of participation in visits to the natural environment

Q17 Thinking about the last 12 months, how often on average have you spent your leisure time out of doors, away from home? (Base: 2009/10 N=11,107; 2010/11 N=10,630; 2011/12 N= 10,587; 2012/13 N=10,544; 2013/14 N=10,552)
* Indicates a significant variation between the highlighted results

5.4 As shown in Figure 5.2, the proportion taking visits to the natural environment several times a week or more has been relatively consistent over the past five years, with around a third of the English adult population indicating that they visited with this frequency in each survey year.

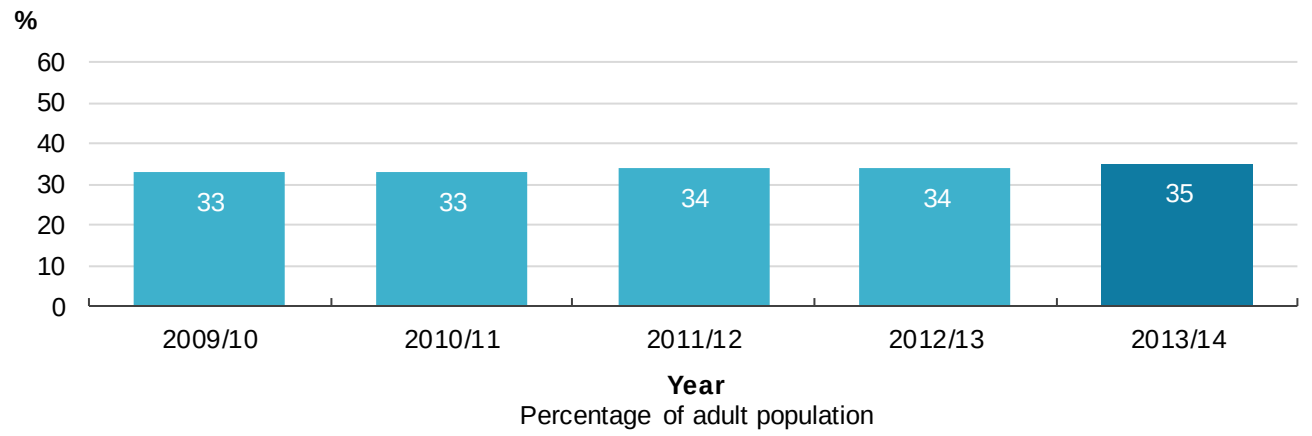


Figure 5.2 – Percentage of adult population taking visits to the natural environment several times a week or more in last 12 months

Q17 Thinking about the last 12 months, how often on average have you spent your leisure time out of doors, away from home? (Base: 2009/10 N=11,107; 2010/11 N=10,630; 2011/12 N= 10,587; 2012/13 N=10,544; 2013/14 N=10,552)

5.5 MENE also records the number of visits taken per adult during the last seven days. This allows estimates of the total volume of visits taken in each week of the survey period to be calculated (see Figure 5.3).

5.6 Between March 2013 and February 2014, around two-fifths of the population had taken at least one visit to the natural environment in the last seven days. This proportion has been relatively consistent over the last five years with the exception of 2010/11 where a decrease was recorded.

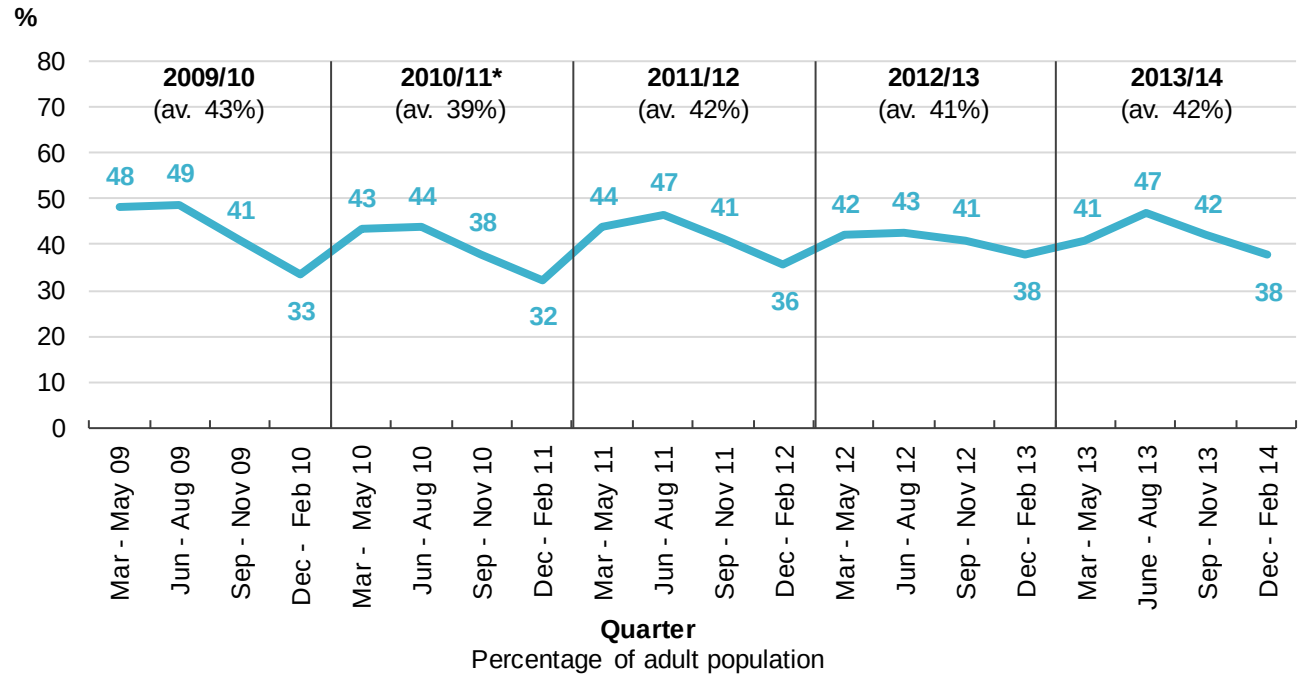


Figure 5.3 – Percentage of adult population taking visits to the natural environment in the previous seven days

Q1 How many times, if at all, did you make this type of visit? (Base: All respondents, weekly questions 2009/10 N=48,514; 2010/11 N=46,099; 2011/12 N=47,418; 2012/13 N=46,749; 2013/14 N=46,785)
* Indicates a significant variation compared to other survey years

5.7 As might be expected, across all five years, visits to the natural environment have been highest during the spring and summer months. This seasonal variation was particularly pronounced in year five where around half the population visited the outdoors between June and August 2013 during a period of particularly mild summer weather[10]. By comparison, two-fifths of those interviewed between March and May 2013 and in September to November of the same year had taken at least one visit to the outdoors in the last seven days.

5.8 It is estimated that between March 2013 and February 2014, the 42.3 million adults resident in England took a total of 2.93 billion visits to the natural environment[11]. As shown in Figure 5.4 below, this estimate is the highest 12 month total recorded to date.

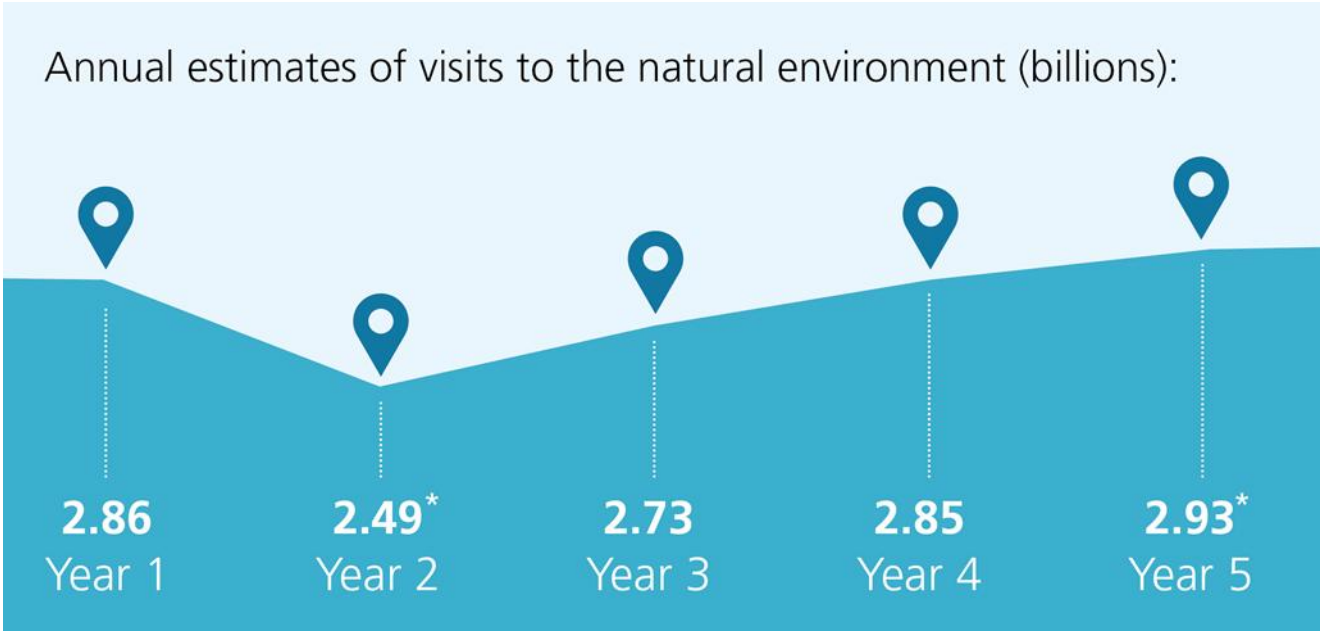


Figure 5.4 – Estimated annual volume of visits by year

(Base: All respondents, weekly questions 2009/10 N=48,514; 2010/11 N=46,099; 2011/12 N=47,418; 2012/13 N=46,749; 2013/14 N=46,785)
* Indicates a significant difference between the survey years highlighted

5.9 While the increase between years four and five is within statistical margins of error, the increase in the estimated volume of visits taken to the natural environment amongst the adult population in England since year two is significant.

5.10 In contrast to subsequent years, 2010/11 recorded a decrease in the estimated volume of visits. In this survey year, the decrease in visit numbers was not consistent across all population groups. The largest decreases were recorded amongst the 16-24 and 65 and over age groups, members of the DE social grade, unemployed people and members of the black and minority ethnic (BAME) population.

Trends in places visited

5.11 The role of locations in towns/cities for outdoor recreation visits has increased over time. In 2013/14, just under half of outdoor recreation visits were taken to a destination within a town or city compared to two-fifths in 2010/11. There has been a corresponding decrease in the proportion of visits taken to countryside locations while the proportions of visits to seaside/coastal areas have remained relatively consistent.

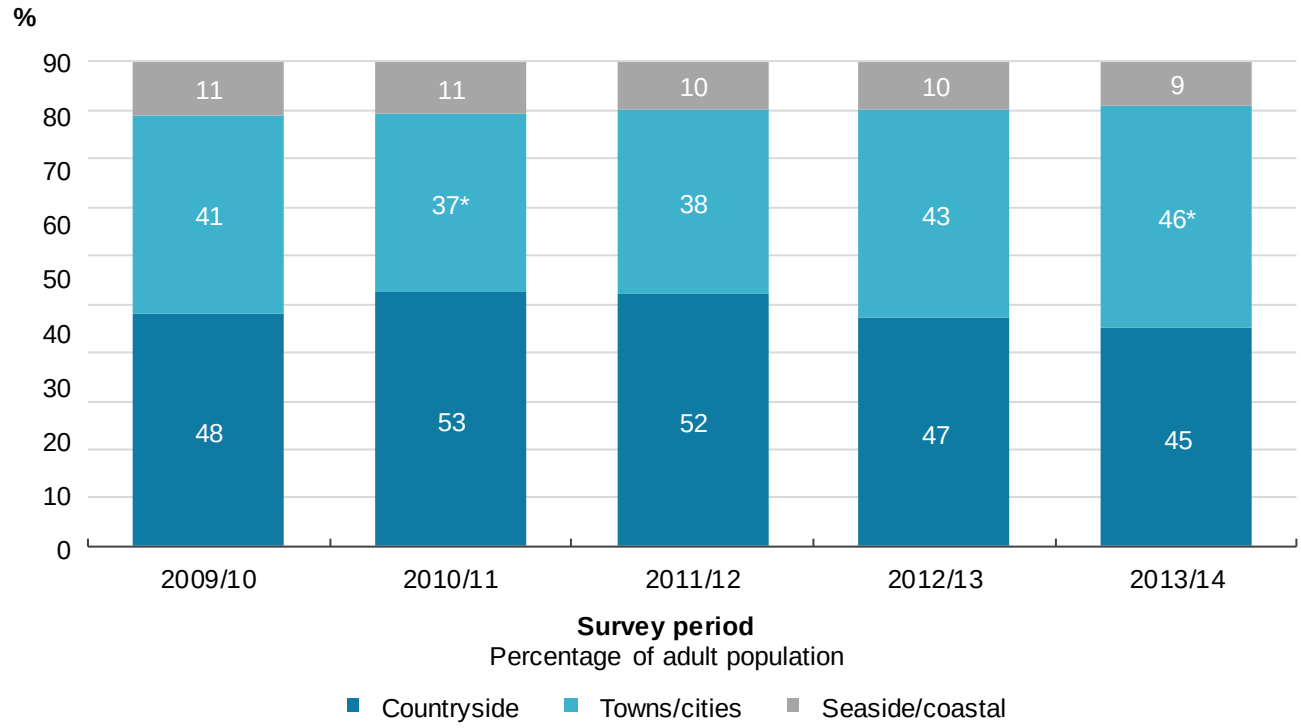


Figure 5.5 – General type of place visited by year

Q2 Which of the following best describes where you spent most of your time on this visit? (Base: All visits, weekly questions 2009/10 N= 58,653; 2010/11 N=47,825; 2011/12 N=53,898; 2012/13 N=53,208; 2013/14 N=55,897)
* Indicates a significant variation for that category between the survey years highlighted

5.12 As shown in Table 5.1, the annual estimate for visits taken to towns and cities was 1.36 billion in 2013/14, a significant increase on the estimate of 1.22 billion recorded in 2012/13 and an overall increase of 17 per cent on the 2009/10 estimate of 1.16 billion visits.

Table 5.1 – Proportion of visits by general place visited by survey year

Q2 Which of the following best describes where you spent most of your time on this visit? (Base: All visits, weekly questions 2009/10 N=58,653; 2010/11 N=47,825; 2011/12 N=53,898; 2012/13 N=53,208; 2013/14 N=55,897)

	Volume of visits (billions)				
	2009/10	**2010/11**	**2011/12**	**2012/13**	**2013/14**
Countryside	1.38	1.31	1.41	1.35	1.31
Towns and cities	1.16	0.92*	1.05*	1.22*	1.36*
Seaside resort	0.21	0.17*	0.16	0.19	0.17
Other coastal	0.11	0.09	0.10	0.10	0.09
Total (billions)	**2.86**	**2.49***	**2.73***	**2.85**	**2.93**

* Denotes a significant variation from previous year

5.13 Overall, across the full March 2009 to February 2014 period, the English adult population participated in an estimated 13.86 billion visits to the natural environment.

MENE Time Series analysis

5.14 To better understand the trends in visit taking recorded by MENE Natural England commissioned the Time Series Analysis Branch at the Office for National Statistics to carry out a Seasonal Adjustment Review of the number of visits to the natural environment. The analysis focused on visits taken since March 2009.

5.15 The variation in a time series can be broken down into the long term variation or trend, the seasonal variation and the short term irregular variation. The seasonal variation is often not of much interest as it is easily explained and predictable, therefore seasonal adjustment was performed to remove the seasonality of a series and determine the real underlying trend. The result produces a time series from which it is easier to interpret long term variations.

5.16 The review analysed the seasonality of each series and also any effects due to trading days, leap years, Easter and outliers. Here the non-seasonally adjusted series' are presented first, followed by the seasonally adjusted series alongside an assessment of seasonality and discussion of the long-term trends.

Total visits

5.17 The non-seasonally adjusted data for total visits shows a general positive trend, however, evidence of seasonality is weak with considerable variation in the data. In year one, there appeared to be a general decline in total visits, however, numbers appear to have increased from March 2010 onwards.

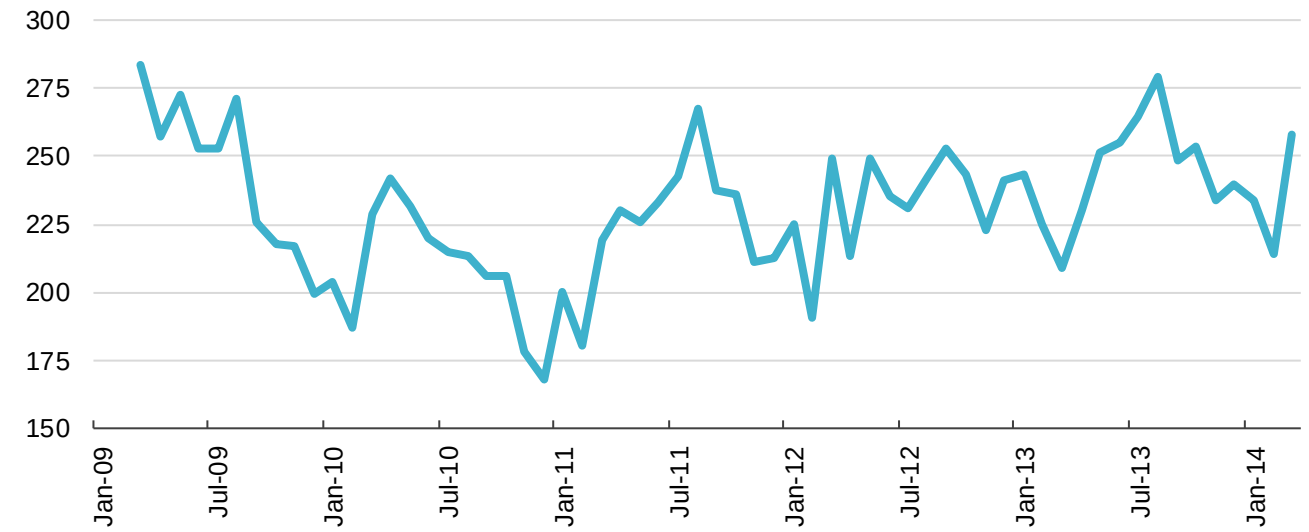


Figure 5.6 – Non-seasonally adjusted time series – total visits (March 2009 to February 2014)

5.18 Evidence of seasonality was apparent after running the time-series analysis, with Easter having an effect on the data. The effect of Easter was distributed over the eight days leading up to Easter Sunday and as such the series was adjusted (Figure 5.7).

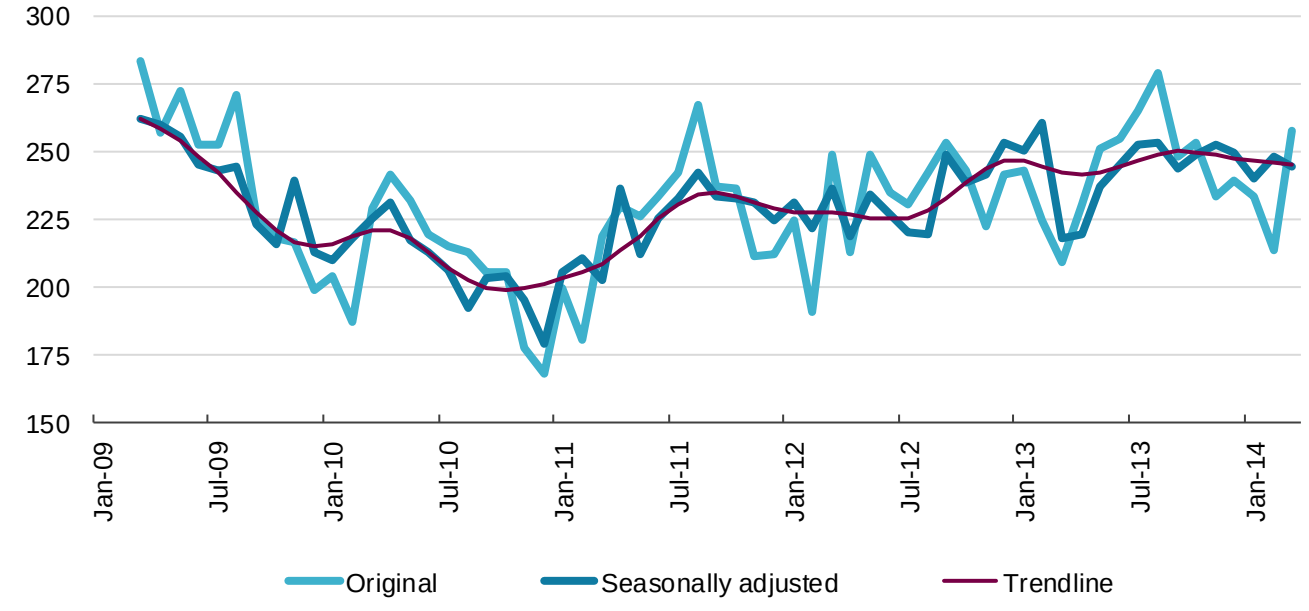


Figure 5.7 – Seasonally adjusted time series – total visits (March 2009 to February 2014)

5.19 The seasonally adjusted series shows that following a general decline over 2009/10, total visit numbers have increased in recent years, although the growth appears to have slowed down in 2013.

Visits to towns and cities

5.20 The first analysis focused on visits to towns and cities (Figure 5.8). A plot of the original non-seasonally adjusted series shows a noisy series with a general 'U' shape trend and no obvious seasonality.

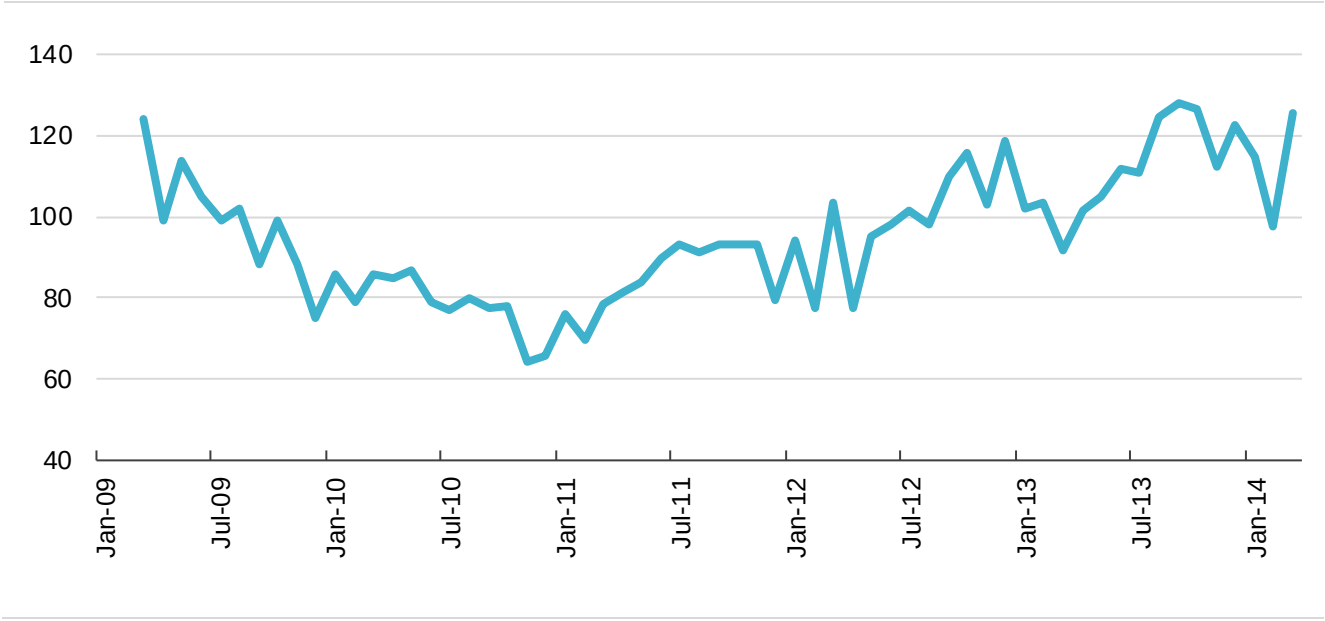


Figure 5.8 – Non-seasonally adjusted time series – Towns/cities (March 2009 to February 2014)

5.21 During the analysis, there was marginal evidence of seasonality, therefore, a simple seasonal adjustment model was used. When new data is available, the seasonality will be evaluated further.

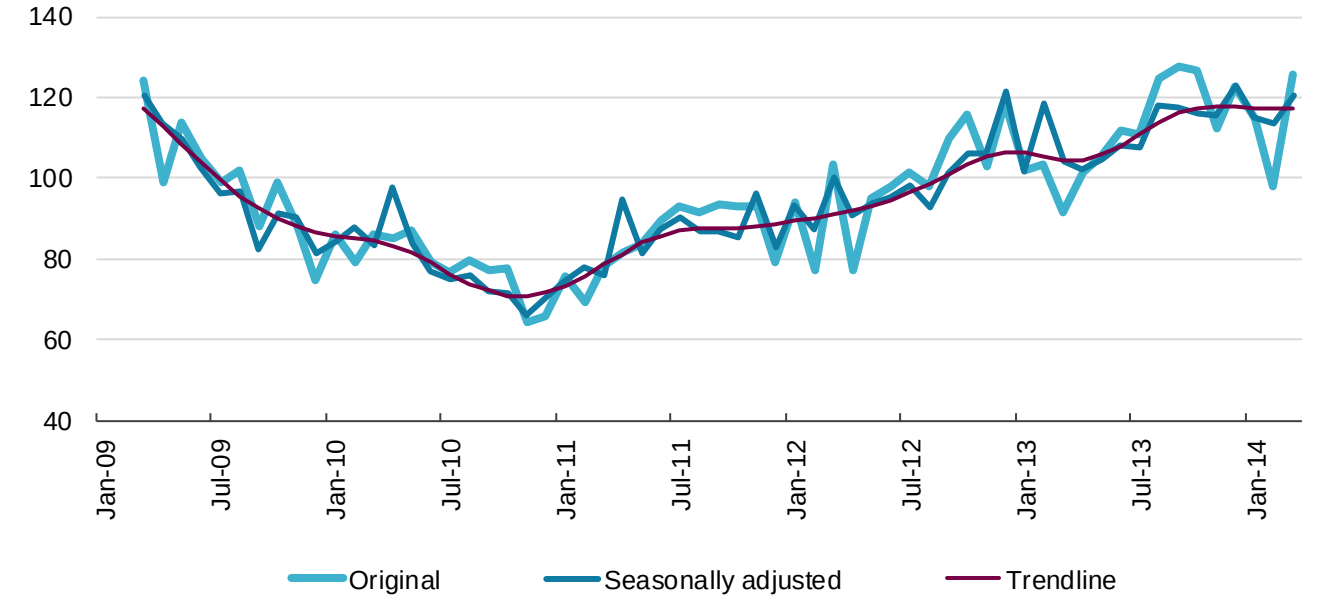


Figure 5.9 – Seasonally adjusted time series (March 2009 to February 2014)

5.22 In the seasonally adjusted series, Easter was found to have an effect on visits to town/city locations, with the day before Easter Sunday the time at which this effect was seen to be making an impact on visit behaviour.

5.23 The seasonally adjusted series showed that, following a general decline in 2009/10, visitor numbers to towns and cities have shown fairly strong growth. The latest quarterly figures from November 2013 to February 2014 show growth of 75.3 per cent (seasonally adjusted) from the same period in 2010/11.

Seaside resorts/towns

5.24 The next analysis looks at visits to seaside resorts and towns. The plot of the original non-seasonally adjusted series (Figure 5.10) shows a series with a slight positive trend, strong seasonality and possibly a level shift[12] at December 2009.

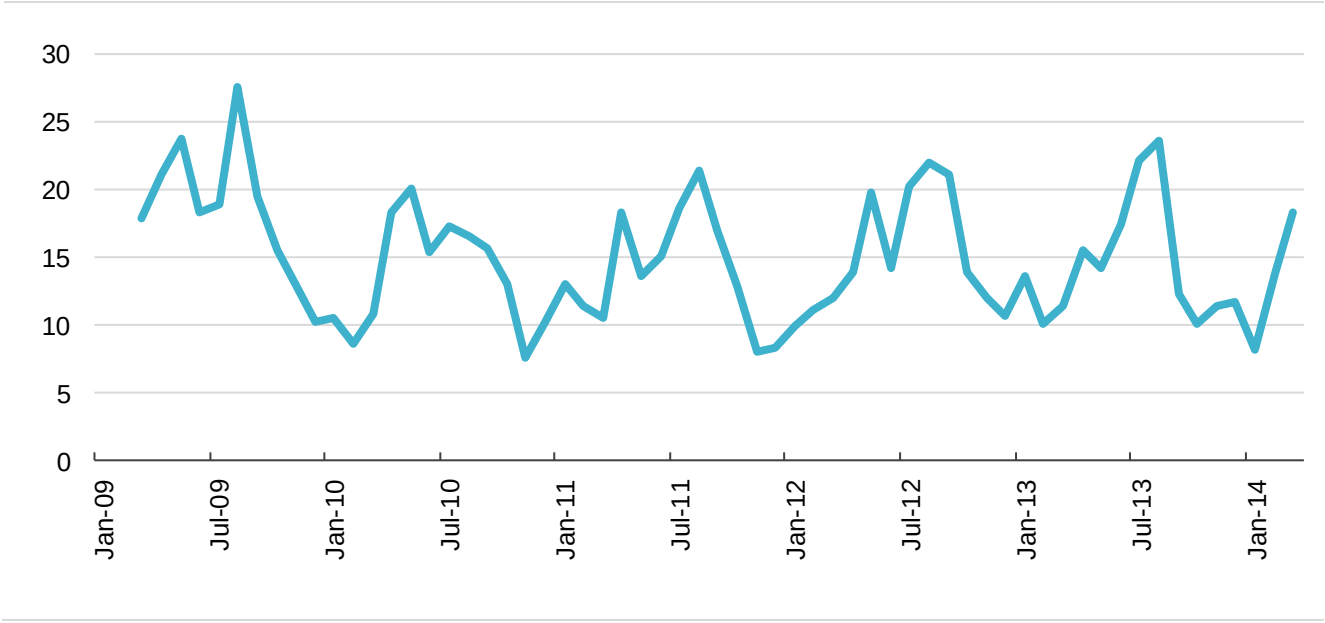


Figure 5.10 – Non-seasonally adjusted time series – Seaside resorts/towns (March 2009 to February 2014)

5.25 The unadjusted data showed strong seasonality with clear peaks in summer and troughs in winter. As such it was unsurprising that further analysis confirmed the presence of clearly discernible seasonality.

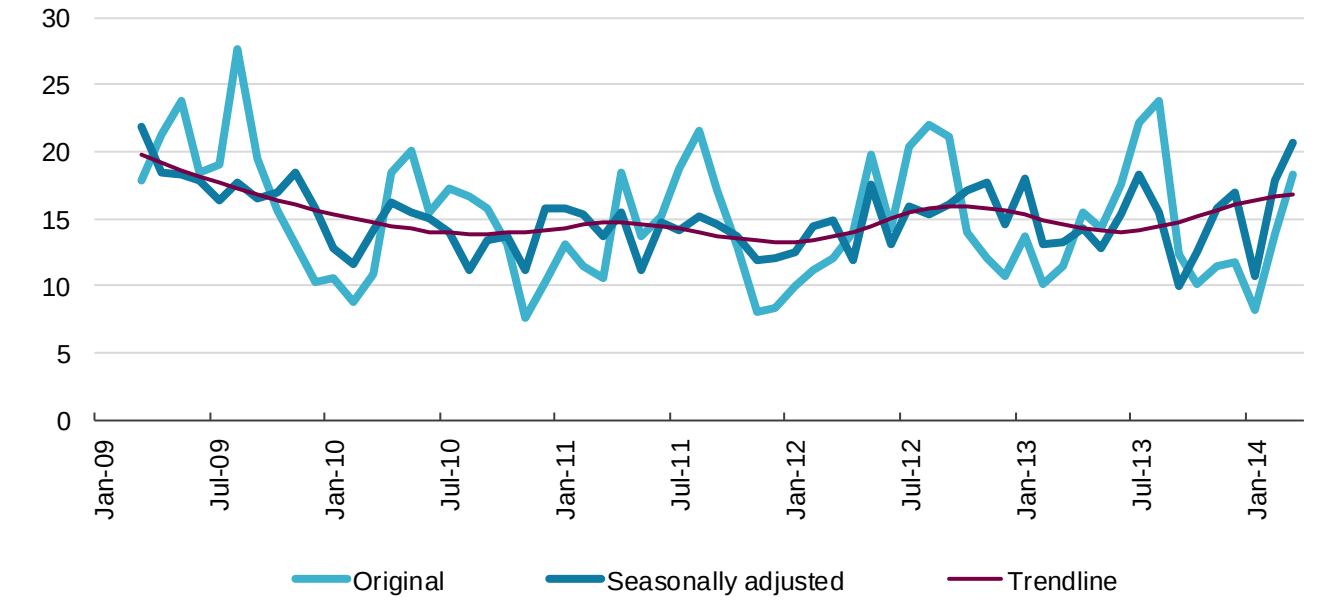


Figure 5.11 – Seasonally adjusted time series – Seaside resorts/towns (March 2009 to February 2014)

5.26 The number of business days (Monday – Friday) was found to have an impact on visits to these locations meaning that months with a higher number of weekend days (Saturdays and Sundays) tended to have higher numbers of visits. This is to be expected given that seaside trips tend to involve longer journeys, with weekends providing one of the few practical opportunities for this type of visit.

5.27 The seasonally adjusted data demonstrates that, following a decline during 2009, visit to seaside resorts and towns held steady with no strong trend either increasing or decreasing.

Visits to other seaside coastline

5.28 A plot of the non-seasonally adjusted data shows a slight negative trend for visits to other seaside coastline areas (Figure 5.12). Some evidence of a seasonal pattern appeared although it is not immediately obvious with several potential outliers.

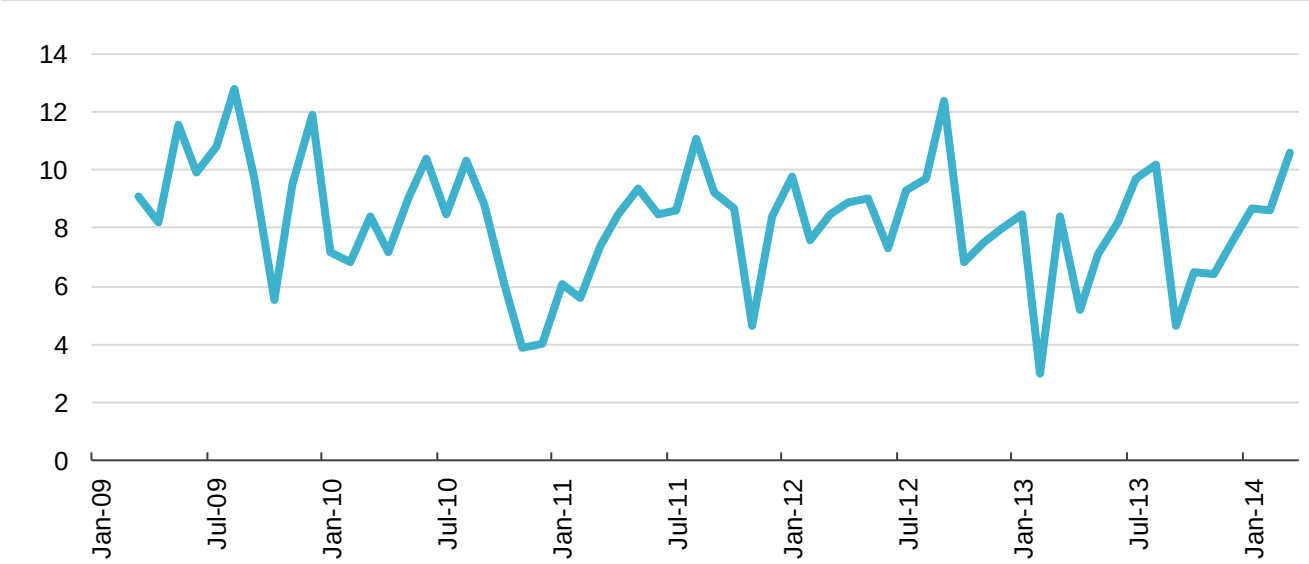


Figure 5.12 – Non-seasonally adjusted time series – Other seaside coastline (March 2009 to February 2014)

5.29 After running a time-series analysis, a seasonal pattern was not immediately obvious. Mixed results for the presence of seasonality were taken to be an indication of marginal seasonality for this type of location. As with other series, the seasonality will be evaluated further once more data becomes available.

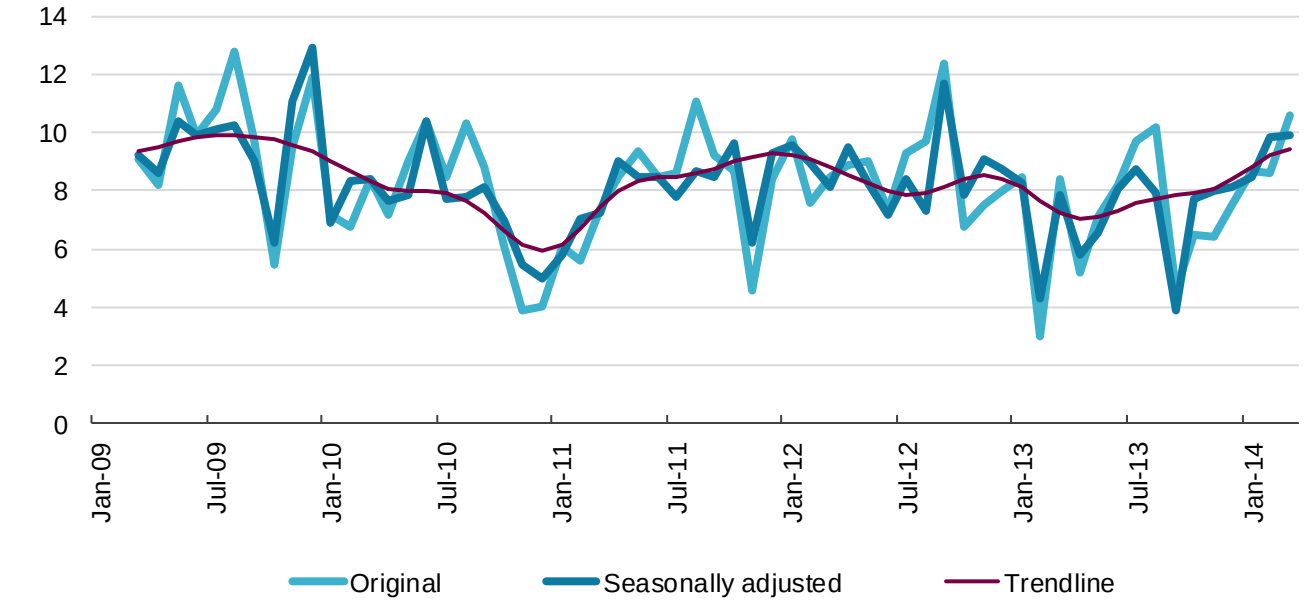


Figure 5.13 – Seasonally adjusted time series – Other seaside coastline (March 2009 to February 2014)

5.30 The analysis concluded that visit numbers to other seaside coastline areas have decreased slightly from the 2009 values and appear to not have any strong trend – neither increasing nor decreasing over the past five years.

Visits to the countryside

5.31 The non-seasonally adjusted countryside visit data did not present a discernible trend (Figure 5.14). Evidence of seasonality is weak/potentially evolving and there has been considerable variation in the data over time.

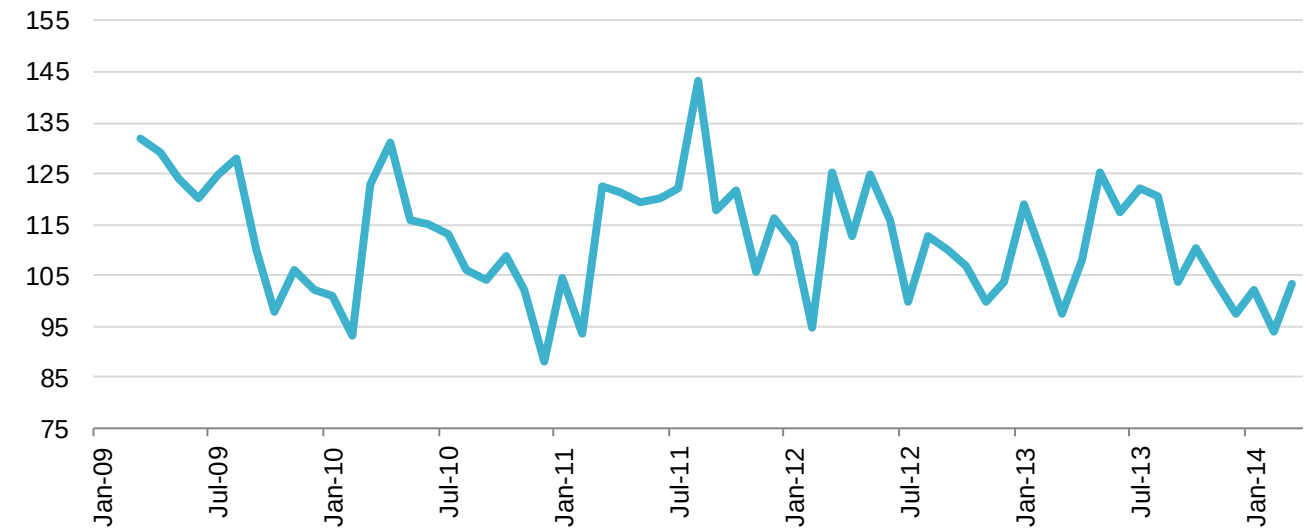


Figure 5.14 – Non-seasonally adjusted time series – countryside (March 2009 to February 2014)

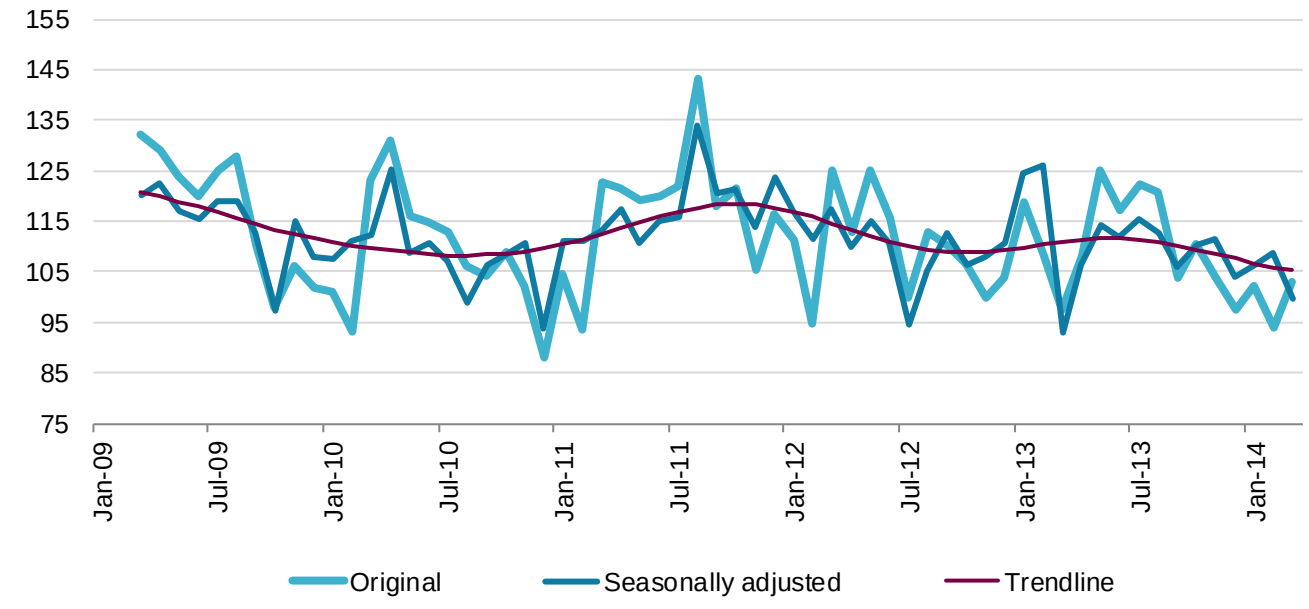


Figure 5.15 – Seasonally adjusted time series – countryside (March 2009 to February 2014)

5.32 Seasonality is difficult to discern when looking at the non-seasonally adjusted data. There is evidence that seasonality may exist, however, it is difficult to robustly estimate the seasonality at present.

5.33 Following examination of the seasonally adjusted series, there appears to be no discernible trend in the early years of the survey period, however there may be a decreasing trend in countryside visits in the latest 12 months of data. This is consistent with the evidence of a shift towards visit-taking in towns and cities over the past few years.

Key findings

5.34 Overall, the seasonally adjusted data demonstrated that, following a general decline over 2009/10, visit numbers have increased in recent years, although the growth appears to have slowed down in 2013/14.

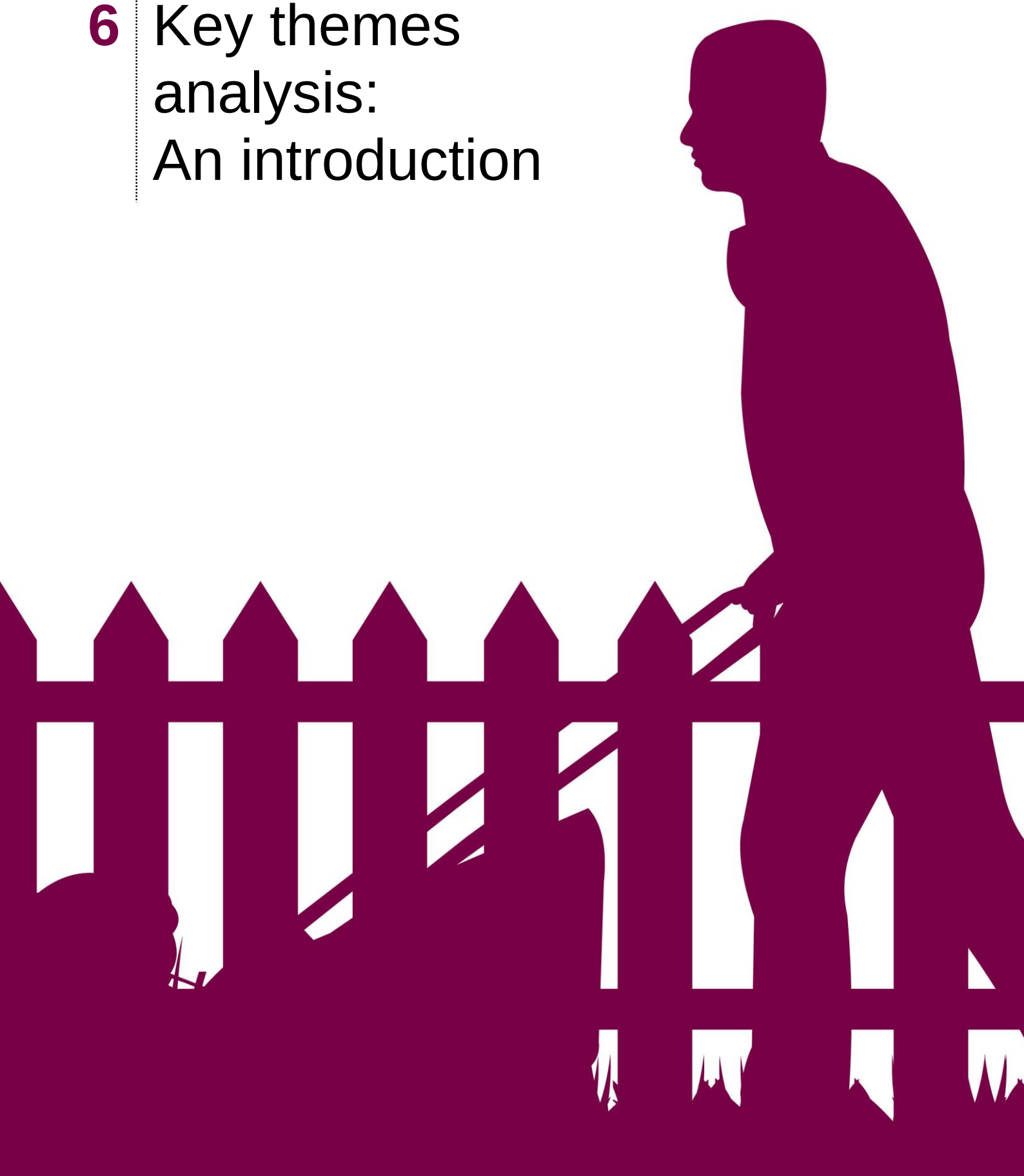
5.35 Visits to towns and cities have shown fairly strong growth over the past four years of MENE. The seasonally adjusted data showed the impact of the Easter holiday period on visits to these destinations.

5.36 A pattern was clearly evident in regards to visits to seaside resorts/towns in the seasonally adjusted data. Visits to this type of destination were more likely to be taken at weekends, therefore, months with a higher number of weekend days tended to have higher numbers of visits. There was no discernible trend for visits to other seaside coastal destinations.

5.37 The data suggested a possible trend for decreased visits to countryside destinations, which corresponds with evidence of a trend towards increased visit levels to destinations in towns/cities.


Greenwich Park, London

6 Key themes analysis: An introduction



6 Key themes analysis: An introduction

6.1 Up to this point, the report has focused on a descriptive overall discussion of the results of the MENE survey. Section 3 presented the headline survey results and variations within the population for key questions from the survey, while section 4 examined variations within the population and section 5 key trend data from the first five years of the survey.

6.2 In addition to the descriptive analysis of the survey findings, analysis was undertaken to look deeper as three key themes within the data:

6.3 **Section 7: Expenditure – who is spending money while visiting the natural environment and what are they spending it on?** This section examines who is more likely to spend money while visiting the outdoors and the types of trips where expenditure is most likely to occur. It also explores what this data actually tells us and how to interpret data on spending collected through MENE.

6.4 **Section 8: Health, Well-Being and the natural environment. MENE collects data relating to health and well-being in relation to visiting the natural environment, which is examined in greater detail in this section**. Here visits where the motivation is given to be health or exercise are considered at an overall level and in the light of variations within the English adult population. The results of the four ONS well-being measures (see section 8 for more detail) are also investigated further in relation to visits taken to the natural environment, as well as trends in general levels of physical activity and the relationship between this and greenspace access.

6.5 **Section 9: The Value-Action Gap – an examination of how value for the natural environment relates to the actions taken to preserve it**. MENE records both data around the value that people say they place on the natural environment and participation in actions that are connected to conserving it. This section examines the value placed on the natural environment and whether a disconnect becomes apparent between this stated importance and levels of pro-environmental action.

7 Visit expenditure

7 Visit expenditure

Key findings

- Some form of expenditure was recorded during a quarter of visits to the natural environment, with food and drink the category for which expenditure was most likely to be recorded.
- People who visited the natural environment but did so less frequently than once a month were more likely to spend money when visiting the natural environment than those taking visits at least weekly. Other visits more likely to include some form of spend were those taken by members of the BAME population, those with children in the party, those where the visit did not start from home and those involving a journey of six miles or more.
- Spend on food and drink was most likely to be reported by members of the BAME population, those accompanied by children, those travelling over 20 miles to the visit destination and those where the visit did not start from home.

The Morpeth Bluebell Wood, Northumberland

Visit spend

7.1 The MENE data reveals that people spent money during 24 percent of their visits – a similar percentage to previous years of the survey. On these visits, it was most likely that money was spent on food and drink, with money spent on fuel, parking and admissions during a much lower percentage of visits. The percentages (Figure 7.1) are similar to those recorded in previous years of the survey.

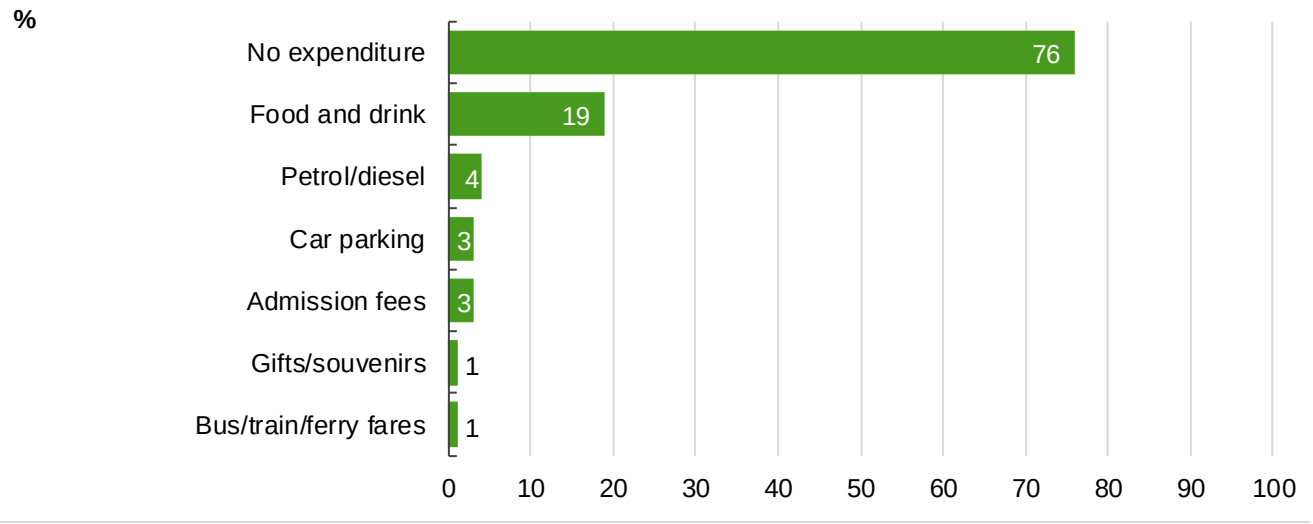
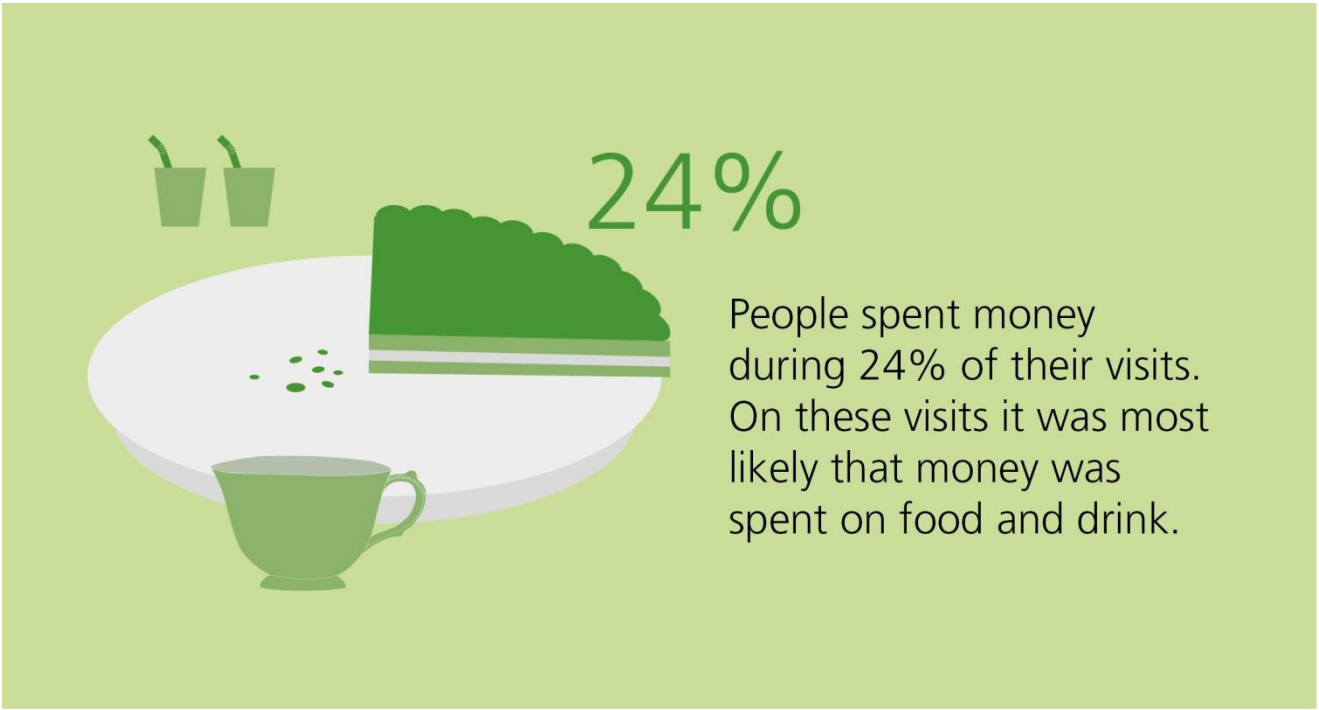


Figure 7.1 – Percentage of visits to the natural environment in which expenditure was made

Q15 During this visit did you personally spend any money on any of the items listed on the screen? (Base: Random visit, monthly questions 2013/14 N=4,309)
Note: No expenditure includes responses where people did not know what they had spent (which applied to 1% of visits).
Expenditure was incurred on the following items in less than 0.5% of visits: hire of equipment, purchase of equipment and maps/guidebooks/leaflets. This is not shown in the diagram.



Groups more likely to spend money on a visit

7.2 People who visited the natural environment but did so less frequently than once a month were more likely to spend money when visiting the natural environment than those taking visits at least weekly. They were more likely to purchase food and drink and pay for parking.

7.3 Similarly, the following groups were more likely to spend money, to purchase food and drink and pay for parking (a pattern observed this year and last year). (Figure 7.2):

- People who described themselves as being BAME compared with people who described themselves as being White (however, there was no significant difference in whether they were likely to pay to park last year);
- People accompanied by children compared with people who were not;
- People who did not start their visit from home (who might have been on holiday) compared with people whose visits started from home;
- People who travelled a long way compared with people who travelled short distances.

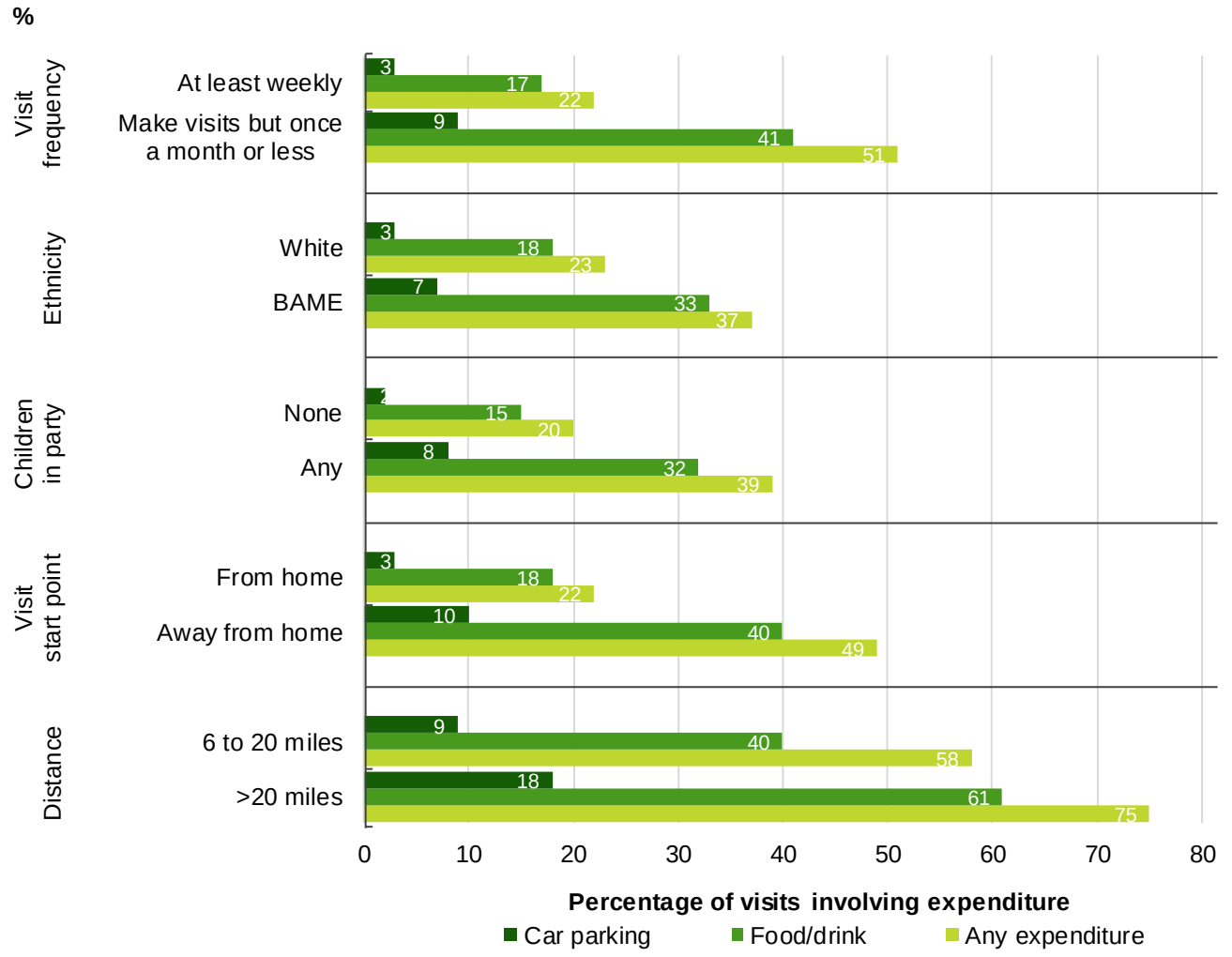


Figure 7.2 – Percentage of visits to the natural environment involving expenditure by group

Q15 During this visit did you personally spend any money on any of the items listed on the screen? Base: Random visit, monthly questions 2013/14 N=4,309)

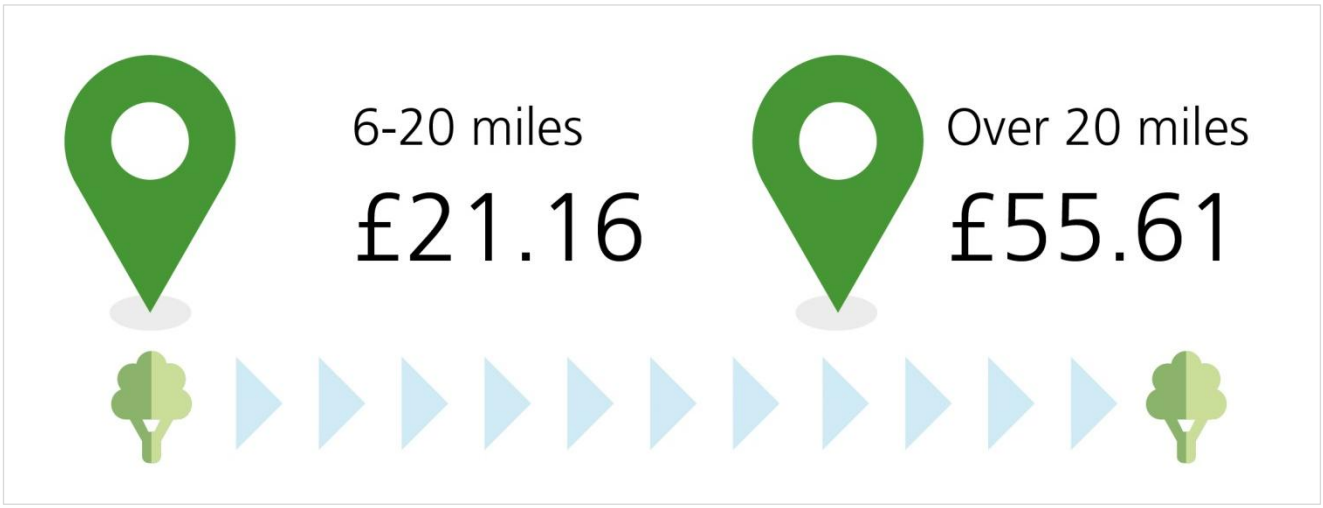
7.4 Turning to the amount spent, people who made visits to the natural environment but visited less frequently than once a month were not only more likely to incur expenditure, but those who incurred expenditure spent more during a visit compared with more frequent visitors. On average, they spent £35.30 during a visit whereas people who visited at least weekly spent £21.49. Part of this difference is due to greater spending on food and drink by people who purchase these items. For people who paid to park, the average amount spent on parking was not significantly different between the two groups.

7.5 Of those who incurred expenditure, people who described themselves as BAME spent more during a visit – £32.99 on average – than people who described themselves as being White – £23.06 on average.

7.6 People who spent money who were accompanied by children spent more during a visit – £28.52 on average – than people who were not accompanied by children – £21.50 on average.

7.7 Though they were more likely to spend money, people whose visit did not start from home who incurred expenditure spent £2.31 on average, which is much less than people whose visit started from home, who spent £21.64 on average.

7.8 As would be expected, people who travelled long distances for their visit spent more than those who travelled short distances. People who spent money who travelled over twenty miles on average spent a total of £55.61 during a visit whereas those who travelled six to twenty miles spent £21.16 on average.



Average amount spent on all visits

7.9 During visits that incurred expenditure the average spend was £23.95. This is slightly less than the average spend in Year 4 (£27.23) (and less than in Year 3). When visits with no expenditure are included, average total expenditure per visit was £5.63. This is less than in Year 4 (average of £7.40 per visit) and less than in Year 3. Average spend on a selection of categories is illustrated in Figure 7.3.

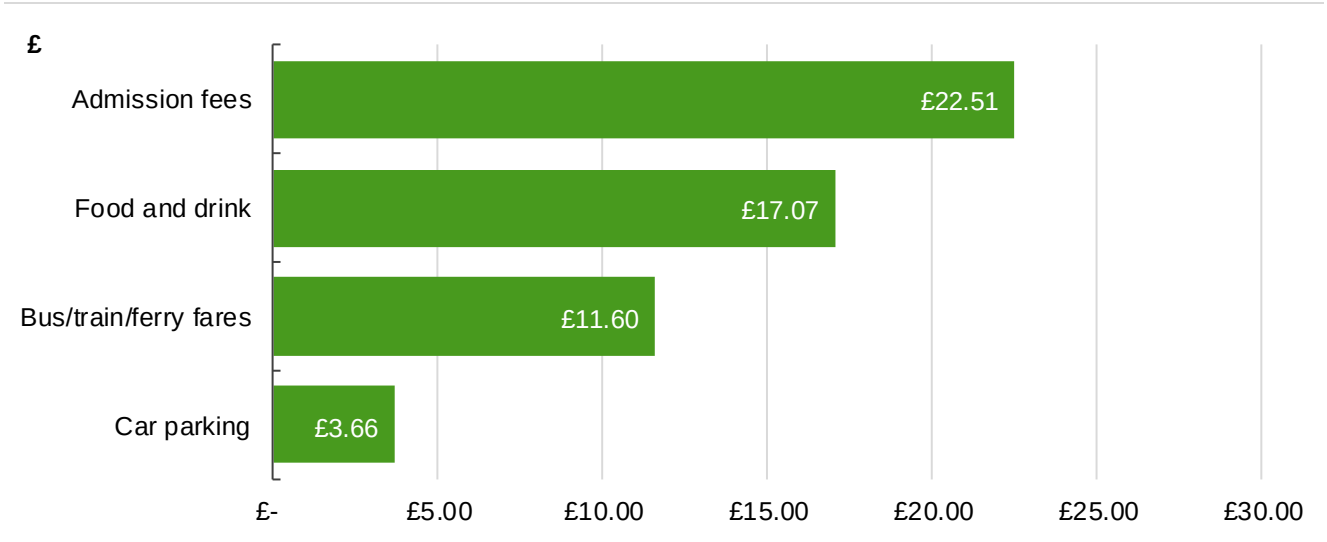


Figure 7.3 – For each category, average expenditure by people who spent money on that category. This is focussed on a selection of categories.

Q16 How much did you spend on…? Base: Random visit, monthly questions 2013/14 N=4,309)

What the data tells us

7.10 This section describes what the MENE expenditure data tell us in principle (further detail is provided in a separate note in the MENE Technical Report[13]). It applies to data collected in previous years as well as this year. This has been provided to inform applications of the data.

7.11 The data on expenditure currently collected by MENE tells us the amount of money that people spend during a visit to the natural environment. This is different to the expense that people incur in making the visit – which is not specifically collected by MENE. Some of the expense that is incurred – such as food, fuel and public transport – may be met through purchases made before the trip.

7.12 During the trip people may spend money on goods such as equipment, food and fuel that they use after the visit. Expenditure on car parking, admission fees and gifts and souvenirs are likely to be incurred as part of the trip (Figure 7.4).

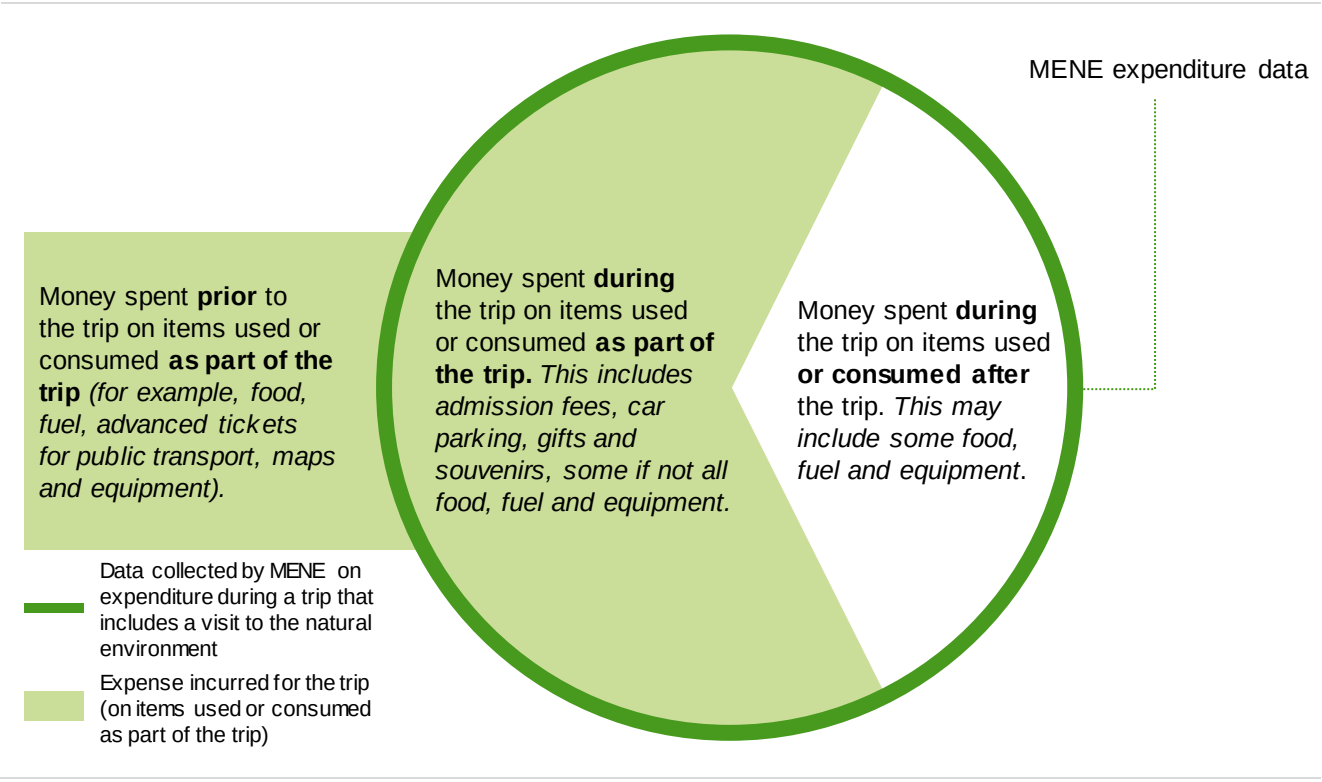


Figure 7.4 – Conceptual diagram of how expenditure on items used or consumed for a trip relates to expenditure during a trip.

Note that the relative proportions shown are illustrative (they are not based on MENE data) and are likely to be specific to each trip

7.13 It is important to remember that the MENE data does not tell us where people spend money on many of the items. For example, they may purchase food and fuel from close to where they set off from, on the way or at the place that they visit[14].

7.14 Also people may undertake their visit to the natural environment as part of a trip that includes other activities such as visiting a relative. Additional information is needed if we are to attribute expenditure specifically to visits to the natural environment (Figure 7.5).

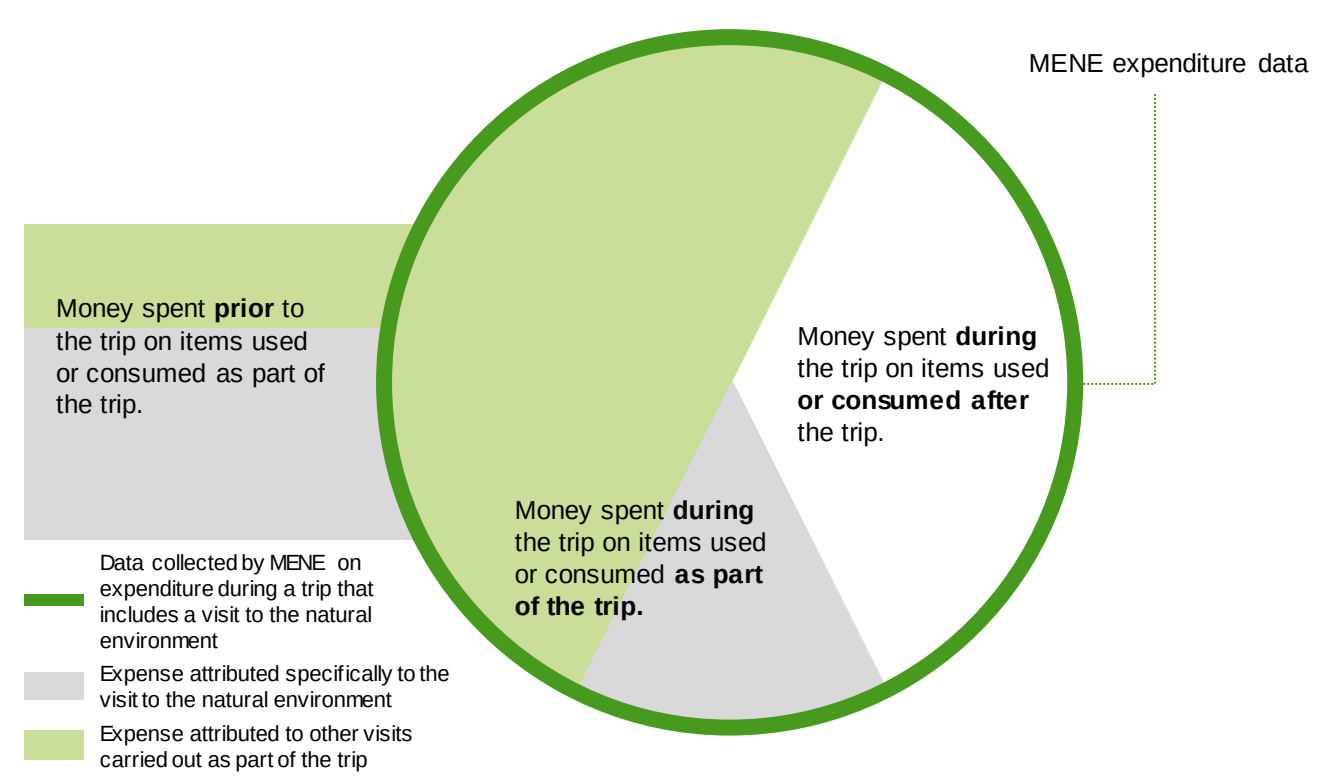


Figure 7.5 – Conceptual diagram of how expense attributed to a visit to the natural environment relates to expenditure for a trip

Note that the relative proportions shown are illustrative (they are not based on MENE data) and are likely to be specific to each trip

How can we estimate the economic impacts of expenditure made as part of visits to the natural environment?

7.15 Recreational expenditure has potential to increase a regional economy's income. Unfortunately, the MENE expenditure data is not sufficient to assess the impact of expenditure incurred in making visits to the natural environment on a region's economy. This is because it does not tell us:

- Where the expenditure took place.
- How much of the expenditure can be attributed to visits to the natural environment as opposed to other visits that were undertaken as part of a trip.

7.16 Also, to assess the economic impact of recreational expenditure in a region, not only are data on recreational expenditure needed, but also data on the further rounds of spending in the region's economy that are stimulated by the injection of expenditure.

How can we estimate the economic value of recreational visits to the natural environment?

7.17 Economic value quantifies the impacts of a visit on people's wellbeing. Because an admission fee is not charged for many sites used for recreation in the natural environment, there is no obvious market price that we can use to estimate the economic value of a visit[15].

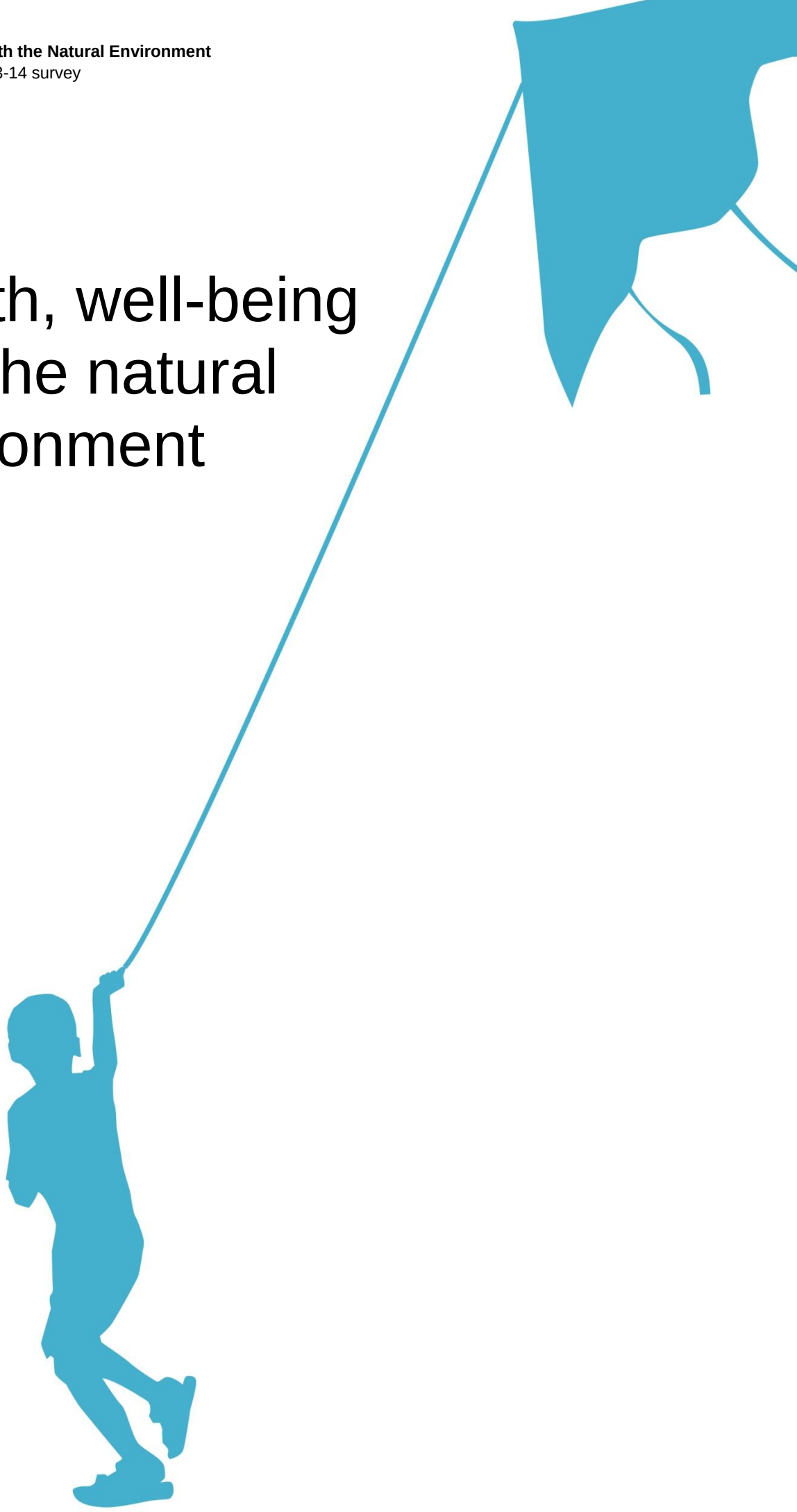
7.18 The economic value of recreational visits to the natural environment can be estimated using the travel cost method based on the costs and time that people expend for the visits. The technique uses transport costs, the price of any admission fees, the length and value of time associated with visits, information on the type and quality of sites visited, and the availability and quality of alternative sites. Using statistical analysis, the travel cost method assesses visitors' choices regarding sites and observes the trade-off between site quality, costs and visit frequency.

What do expenditure data currently collected by MENE tell us?

7.19 The data provides us with information on the expenditure that people make during trips that include a visit to the natural environment. The data reveals how spending behaviour during trips differs according to people's characteristics and the nature of their visit. Also, the data can be assumed to provide information on parking costs and admission fees that people incur in making a visit to the natural environment.

7.20 As explained above, further information is needed to estimate expenditure on other items that is incurred specifically as part of a visit to the natural environment. When it is combined with additional information, such data could be used to estimate the economic value or the regional economic impact of visits to the natural environment.

8 Health, well-being and the natural environment



8 Health, well-being and the natural environment

Key findings

- The overall trend for visits taken for health or exercise is an upward one, with this motivation cited for around two-fifths of visits taken in 2013/14.Those aged 55 and over were most likely to be motivated to visit the natural environment for this reason.
- At face value, evidence of correlations between life satisfaction, self-worth, happiness and lower levels of anxiety with the regularity with which a person visits the natural environment seem to be apparent. However, as the relationship is merely associative, whether frequency of visiting natural environments influences well-being or having higher well-being causes more natural environment visits, is unclear.
- The results show that the number of visits made to the natural environment in the last week is connected to the relationship between the amount of local area greenspace and levels of physical activity, irrespective of where the physical activity takes place. An increase of one visit to the natural environment in the last week was associated with a significant increase of 0.23 days of 30 minutes physical activity in the last week.


Peak District, Derbyshire

8.1 Visiting natural environments can be beneficial for one's health and well-being in a number of ways. A recent review of the health benefits of natural environments[16] outlines a number of mechanisms by which contact with natural spaces may enhance health. These most frequently include the ability of natural environments to provide opportunities for physical activity and exercise; mitigation of air quality or urban heat problems; the physiologically and psychologically restorative properties the environments provide; and the social cohesion that can arise through such shared spaces.

8.2 In this section of the annual report, a number of the health and wellbeing variables in MENE are examined. Trends over the last five years of the survey are investigated and there is some more in-depth analysis regarding particular variables. In all cases, trends are analysed using weighted data to give an estimate of overall patterns at the English population level (aged 16+)[17].

Health and exercise motivations

8.3 MENE asks respondents whether their visit to a natural environment was motivated by health or exercise. The following graphs represent the percentage who reported that they were motivated by health or exercise when visiting a natural environment.[18] Statistically significant comparisons with the previous years are flagged with an asterisk and non-significant comparisons are denoted by 'n.s'.[19]

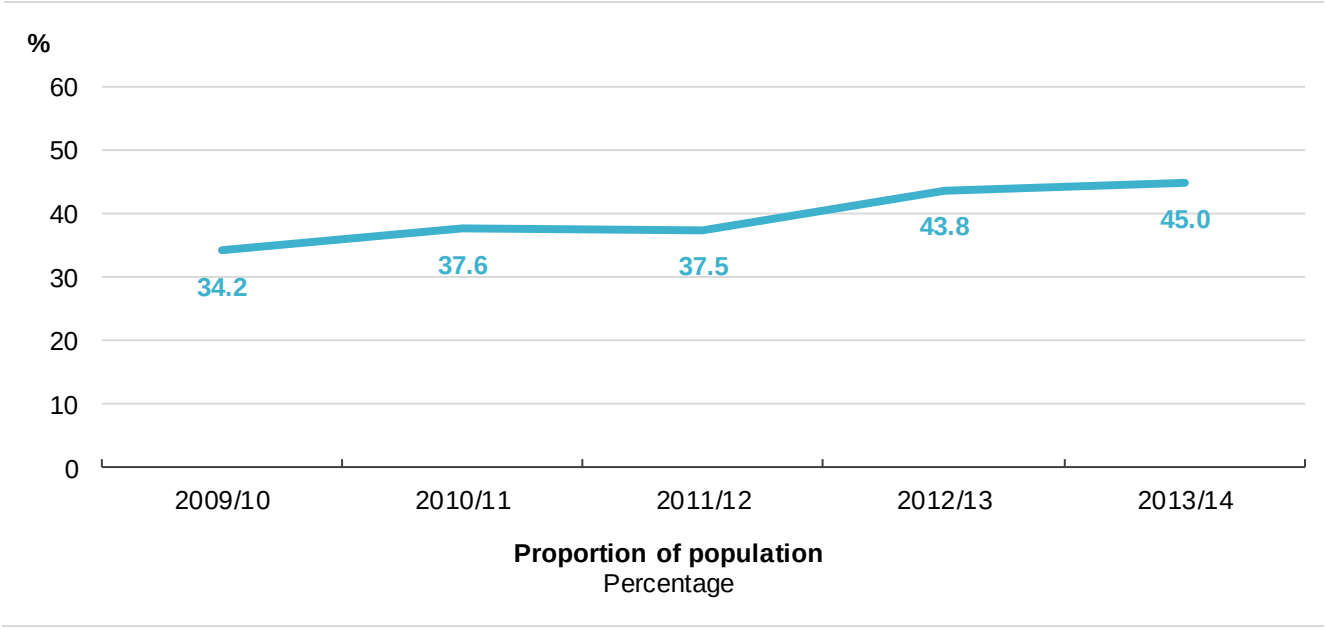


Figure 8.1 – Proportion of respondents reporting health and exercise motivations.

Q12_05 Which of the following, if any, best describe your reasons for this visit? For health or exercise
(Base: 2009/10 N=4,755, 2010/11 N=3,973, 2011/12 N=4,421, 2012/13 N=16,429, 2013/14 N=18,808)

8.4 The overall trend is an upward one, with more people taking visits motivated by health or exercise over consecutive survey years. In 2013/14, 45 per cent of visits were taken for health and exercise – the highest level since the survey began in 2009.

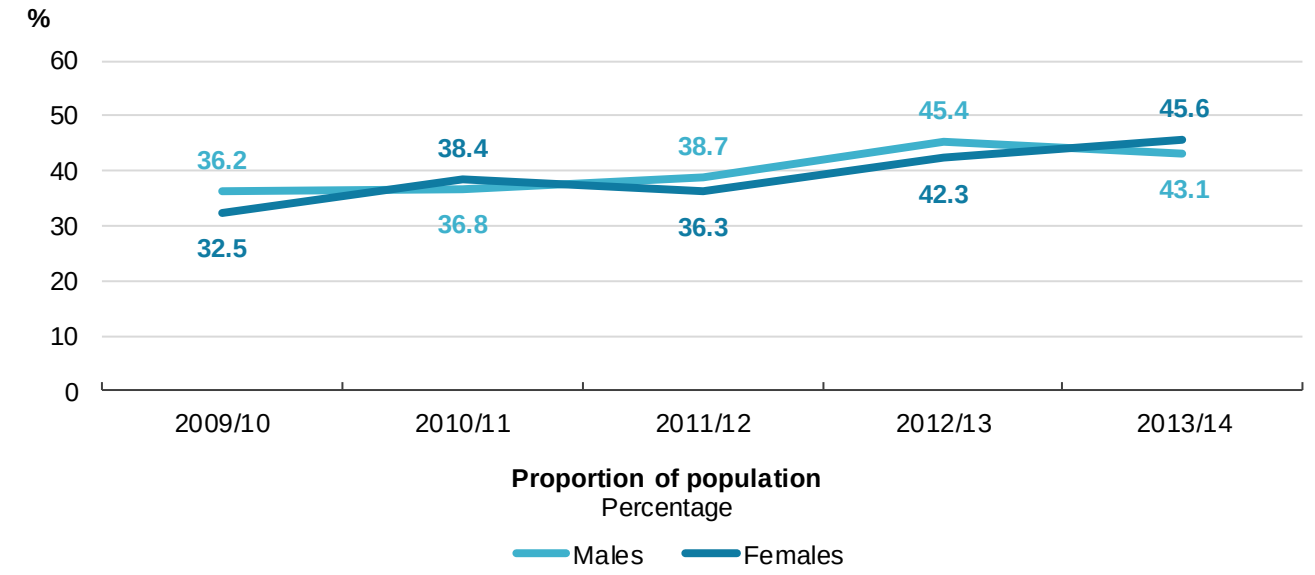


Figure 8.2 – Proportion of respondents reporting health and exercise motivations

Q12_05 Which of the following, if any, best describe your reasons for this visit? For health or exercise (Base: 2009/10 N=4,755, 2010/11 N=3,973, 2011/12 N=4,421, 2012/13 N=16,429, 2013/14 N=18,808)

8.5 Whilst both males and females show an overall upward trend, females suffer a dip in health and exercise motivations between 2010/11 and 2011/12 and males suffer a dip between 2012/13-2013/14.

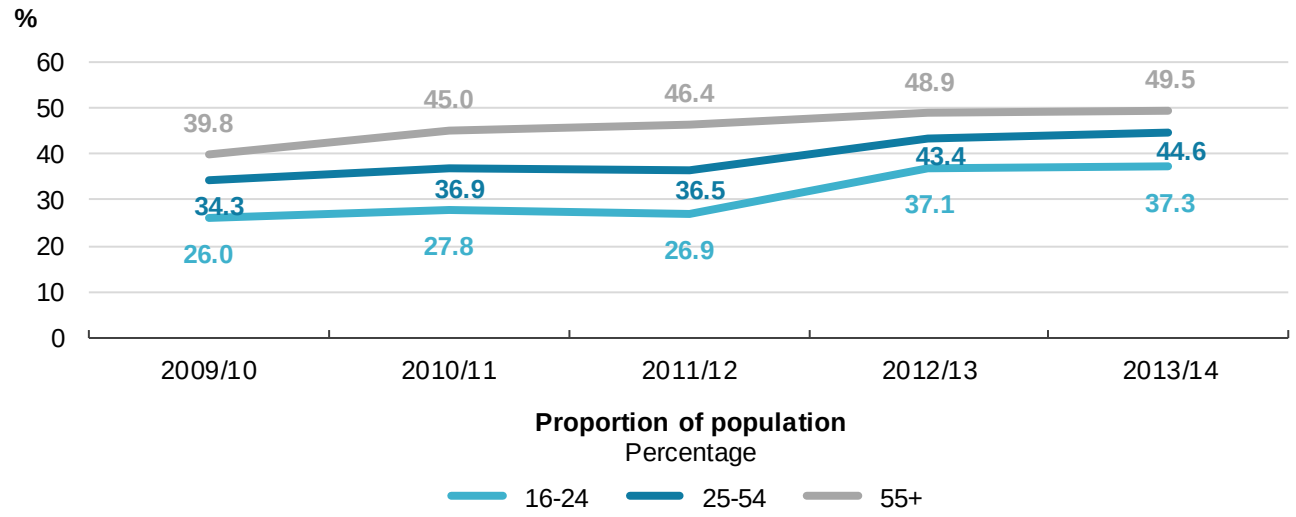


Figure 8.3 – Proportion of respondents reporting health and exercise motivations

Q12_05 Which of the following, if any, best describe your reasons for this visit? For health or exercise (Base: 2009/10 N=4,755, 2010/11 N=3,973, 2011/12 N=4,421, 2012/13 N=16,429, 2013/14 N=18,808)

8.6 All age groups also show an overall upward trend, with people aged 55 and over being the group most motivated by health and exercise. Health and exercise motivations were at their highest for all age groups in 2013/14. These age differences may be because older people feel that a wider variety of outdoor visit types could be health-enhancing.

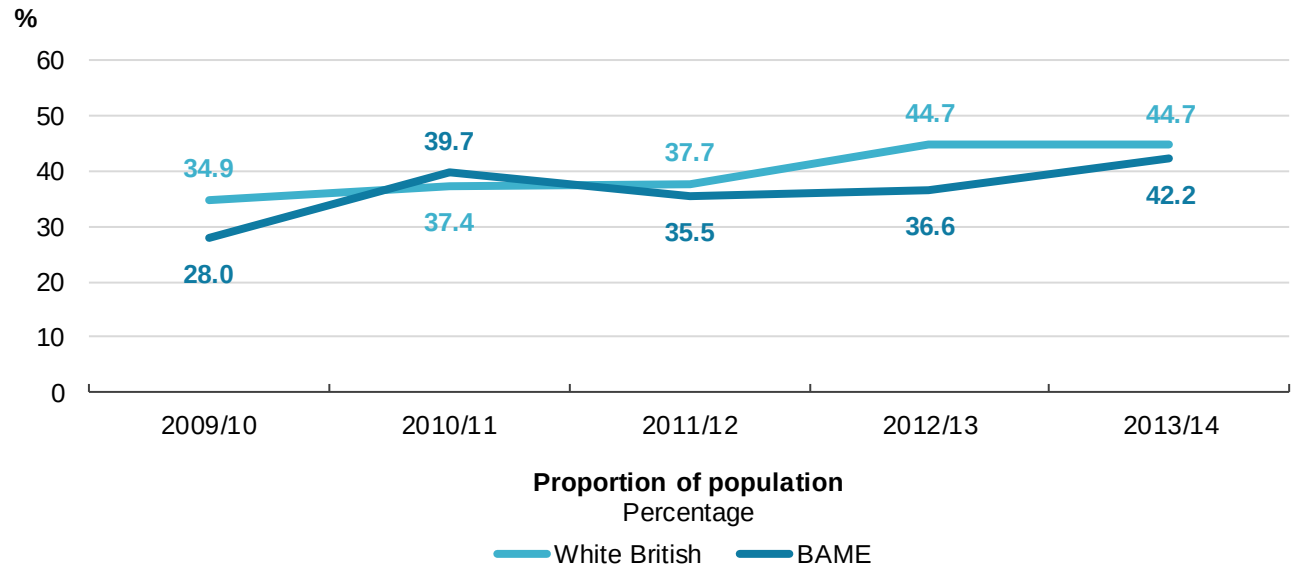


Figure 8.4 – Proportion of respondents reporting health and exercise motivations

Q12_05 Which of the following, if any, best describe your reasons for this visit? For health or exercise (Base: 2009/10 N=4,755, 2010/11 N=3,973, 2011/12 N=4,421, 2012/13 N=16,429, 2013/14 N=18,808)

8.7 White-British respondents show a similar upward trend to the overall pattern, whilst BAME respondents show a more fluctuating pattern. A smaller sample size of BAME respondents is responsible for the marginally larger confidence intervals.

8.8 Across all demographic groups, there is a rise in health and exercise motivations from the 2011/12 to the 2012/13 survey year. For example, people aged 16-34 experience just over a ten per cent increase. As this pattern is consistent across all demographic groups, it is plausible that a particular change affected everyone. Precisely what this is could be explored in future research.

Well-being outcomes

8.9 MENE asks respondents about the extent to which they "enjoyed" a particular visit, "felt calm and relaxed" during the visit, and "felt refreshed and revitalised" during the visit. All comparisons in the graph below are significant.

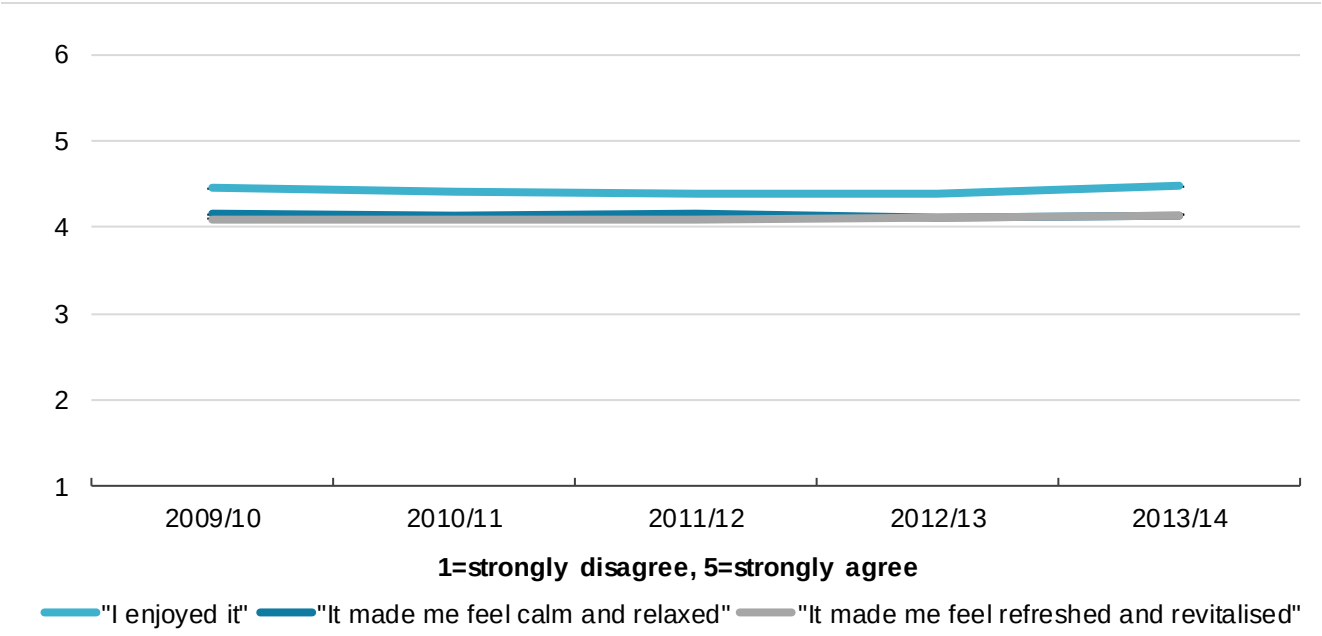


Figure 8.5 – Outcomes of visits to the natural environment by survey year (mean score)

E1 Thinking of this visit, how much do you agree or disagree with the following statements? (Base: Random visits, quarterly questions 2009/10 N=1,452, 2010/11 N=1,297, 2011/12 N=1,506, 2012/13 N=1,328, 2013/14 N= 1,472)

8.10 Overall, people more strongly agree that they enjoyed their visit than they felt calm and relaxed or refreshed and revitalised. However the pattern has not changed much over time for all three outcomes; agreement has remained high and stable over the last five survey years. The proportion agreeing that a visit was refreshing and revitalising was at its highest in the most recent survey year.

The proportion agreeing that a visit was refreshing and revitalising was at its highest in the most recent survey year

Well-being and visit taking

8.11 This section explores whether people who visit nature more often; a) express more satisfaction with their life in general; b) feel that their life is more worthwhile; c) express greater happiness the day before the interview, and; d) express less anxiety on the day before the interview. These four items have only been asked in MENE in the past two survey years, thus we are using only data collected from 2012/13 and 2013/14.

8.12 To do this, respondents were classed into three different groups based on question 17 of MENE: "Now thinking about the last 12 months, how often, on average, have you spent your leisure time out of doors, away from your home?

Again, by out of doors we mean open spaces in and around towns and cities, the coast and the countryside. This could be anything from a few minutes to all day. It may include time spent close to your home, further afield or while on holiday in England. However this does not include routine shopping trips or time spent in your own garden."

8.13 People responding with more than once per day, every day, or several times a week, were classed as most regular visitors; people responding with once a week or one or twice a month were classed as less regular visitors; and people responding with once every two to three months, once or twice, or never were classed as least regular visitors. Please note that these 'regularity' indicators are different to the 'frequency' groups used in sections defined in Section 3.2.

8.14 All results in this section account for various environmental, social, and demographic variables. Using the Lower-layer Super Output Area (LSOA)[20] codes in the MENE dataset, data were appended on the proportion of green space[21] in the respondent's LSOA, their proximity to the nearest coastline[22], and a multiple deprivation score.[23]

8.15 Several demographic variables were also accounted for which encompassed the amount of physical activity completed in the last week; the respondent's gender, age, ethnicity, social grade and work status; and whether they had a disability, car, child, dog and spouse. Such factors have previously been associated with subjective well-being[24].

Life satisfaction

8.16 The first well-being question in MENE asks:
"Overall, how satisfied are you with your life nowadays?"

8.17 The respondent answers with a number from 0 (not at all satisfied) to 10 (completely satisfied). A linear regression model was devised to determine whether people who visited natural environments more often were also more satisfied with their life nowadays. In doing so, all of the above variables, which may influence life satisfaction, were controlled for.

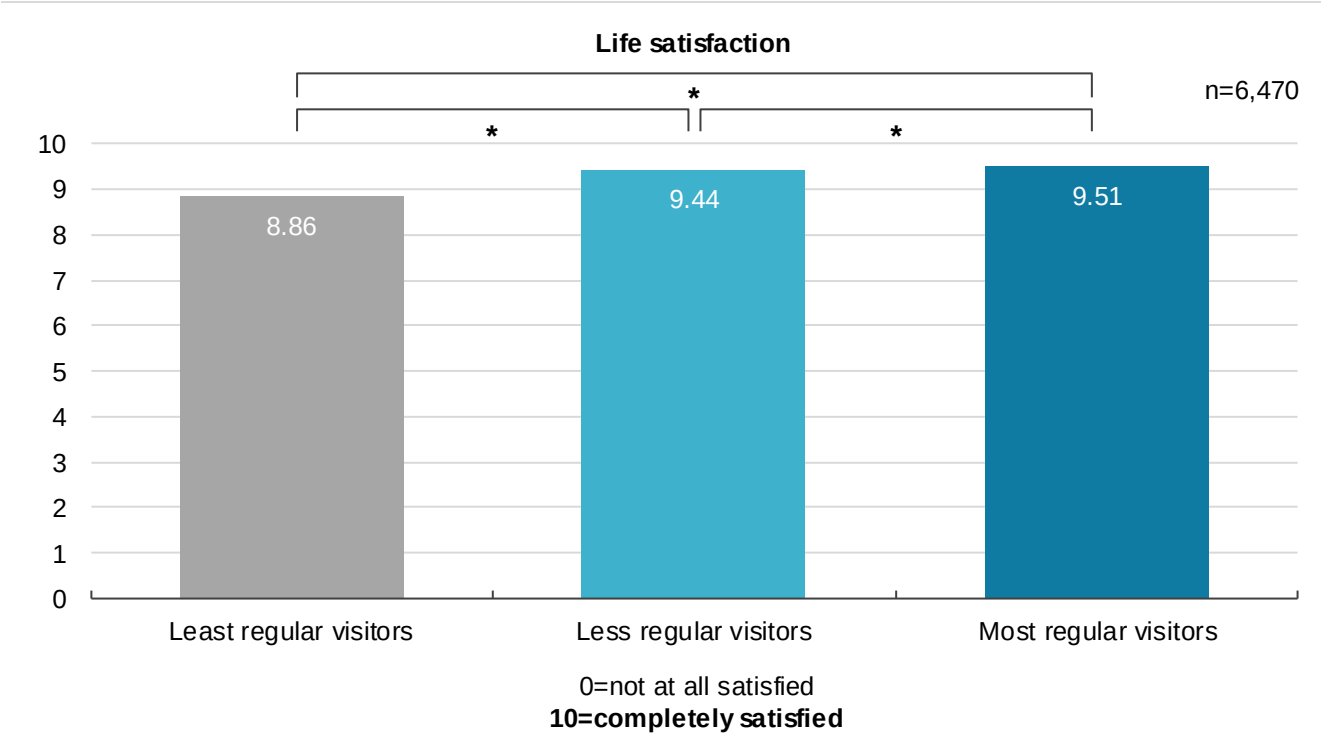


Figure 8.6 – Life satisfaction by frequency of visits to the natural environment (mean score)

(Base: all excluding don't know responses – Least regular visitors N=1,479; Less regular N=2,838; Most regular N=2,153)

8.18 The above graph shows that, controlling for a range of area-level environmental, social, and demographic variables, the most regular visitors to nature were also the most satisfied with their life; significantly more satisfied than the other two frequencies of visitors. Less regular visitors were still significantly more satisfied with their life than the least regular visitors.

8.19 Having said this, all types of visitors rate their life satisfaction as relatively high, and how much difference in life satisfaction is represented by ratings of 8.86 and 9.51 for example, is open to debate.

Self-worth

8.20 The second well-being question in MENE asks:
"Overall, to what extent do you feel the things that you do in your life are worthwhile?"

8.21 The respondent answers from 0 (not at all worthwhile) to 10 (completely worthwhile). A number of people answered that they "didn't know" to this question resulting in a smaller number of people in this analysis. Again, a linear regression model was devised to test the theory that those who visited nature more often also felt that the things that they do in their life were more worthwhile.

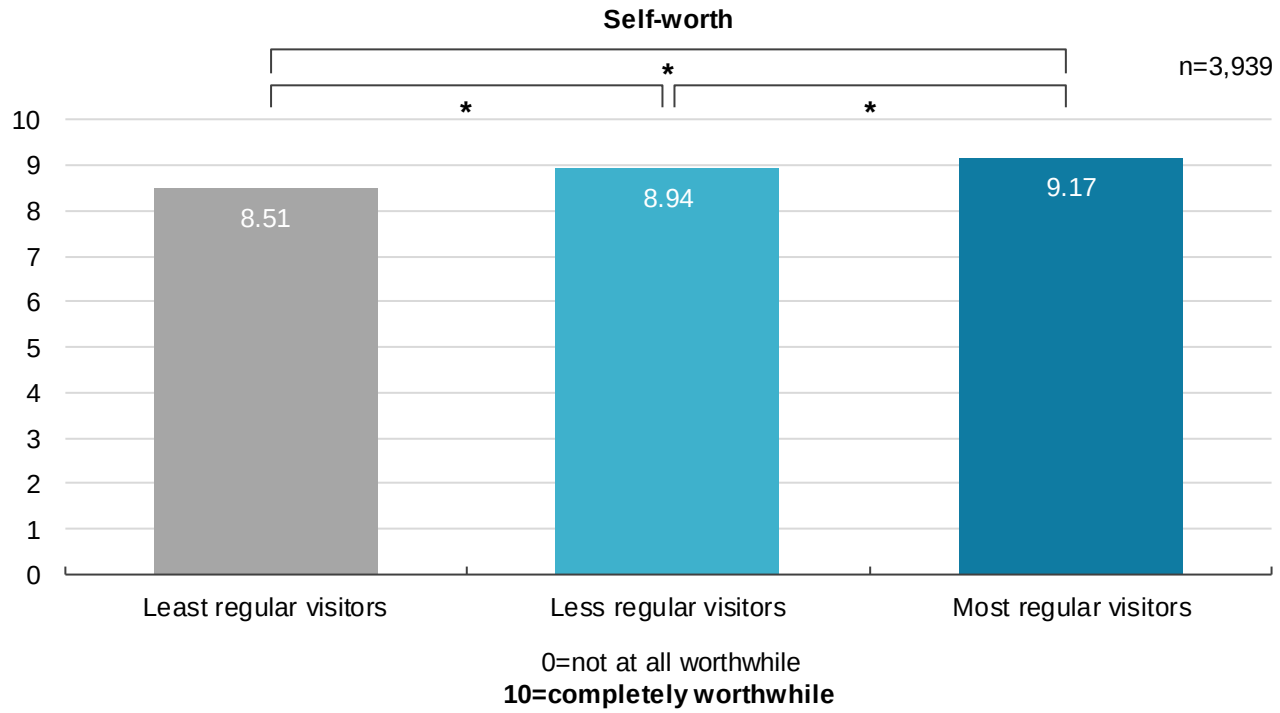


Figure 8.7 – Self-worth by frequency of visits to the natural environment (mean score)

(Base: all excluding don't know responses – Least regular visitors N=1,036; Less regular N=1,651; Most regular N=1,252)

8.22 Similarly to the previous item, the above graph shows that, controlling for a number of other possible predictors of self-worth, people who visit natural environments most regularly are also the people who most strongly agree that the things that they do in their life are worthwhile.

8.23 Once more though, all respondents on average rate their self-worth as rather high, and the numerical differences between the three groups, although statistically significant, may not represent practical increases in self-worth.

Happiness

8.24 The third well-being question in MENE asks:

"Overall, how happy did you feel yesterday?"

8.25 The respondent can answer from 0 (not at all happy) to 10 (completely happy). In a similar way to the last item, a number of people reported that they "didn't know" resulting in a smaller sample size. Also consistent with the previous two items, a linear regression model was devised to test the hypothesis that people who visited natural environments more frequently were also happier.

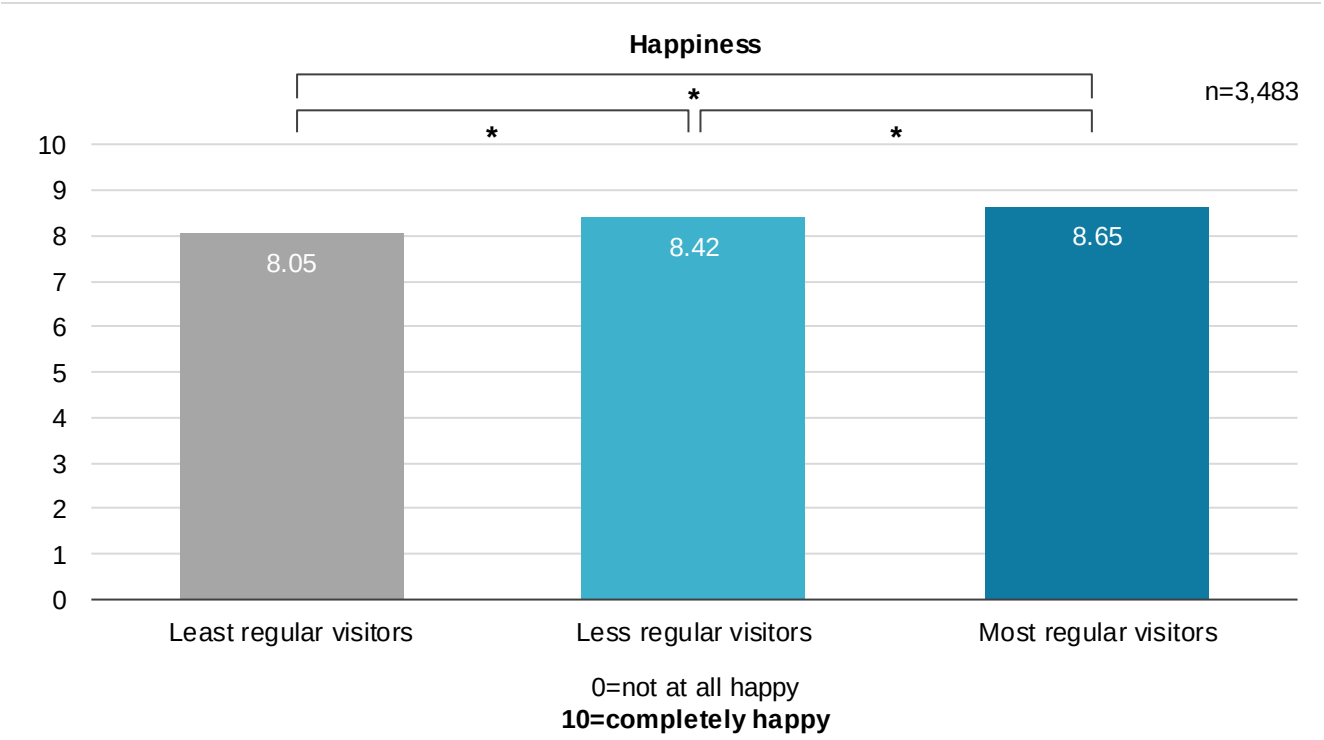


Figure 8.8 – Happiness by frequency of visits to the natural environment (mean score)

(Base: all excluding don't know responses – Least regular visitors N=948; Less regular N=1,442; Most regular N=1,093)

8.26 This prediction is confirmed in the above graph, the most regular visitors to natural environments also rated themselves as the happiest yesterday; significantly happier than less regular and the least regular visitors. Once more, less regular visitors were also rated themselves as significantly happier yesterday than the least regular visitors.

8.27 Once more, happiness is, on average, rated rather high for all types of respondents, and the difference between the least regular and most regular visitors was only 0.6. How much difference in happiness this represents is ambiguous.

Anxiety

8.28 The last well-being question in MENE asks:

"Overall, how anxious did you feel yesterday?"

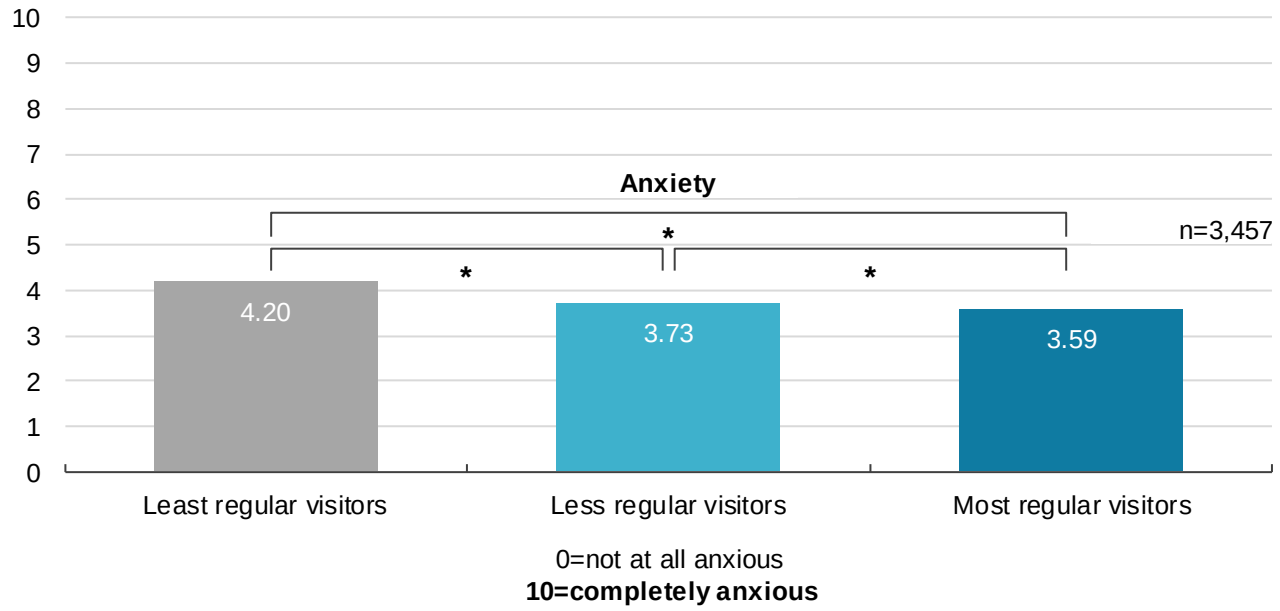


Figure 8.9 – Anxiety level by frequency of visits to the natural environment (mean score)

(Base: all excluding don't know responses – Least regular visitors N=939; Less regular N=1,430; Most regular N=1,088)

8.29 The graph above shows that the most regular visitors to natural environments were the least anxious on the day before they were interviewed; significantly less anxious than both less regular and the least regular visitors. Less regular visitors were significantly less anxious than the least regular visitors as well.

8.30 In a similar way to all other items, the difference between average anxiety scores is small and whether the statistically significant drop in anxiety with increasing visitation is meaningful is up for debate also.

8.31 The analysis in this section confirms that people who visited natural environments several times a day, every day, or several times a week rated themselves as having greater life satisfaction, more self-worth, more happiness and less anxiety than less regular visitors. This is true in spite of differences in the four items relating to environmental, social and demographic variables. However, as the relationship is merely associative, whether frequency of visiting natural environments influences well-being or having higher well-being causes more natural environment visits, is unclear.

8.32 Nevertheless, on average all ratings from all respondents were relatively favourable – i.e. in preference of higher life satisfaction, more self-worth, greater happiness, and lower anxiety. This means that the statistically significant differences found in these analyses may not represent demonstrable differences in happiness, anxiety etc. It also may be the case that these findings are explained by other confounding variables that were not controlled for.

Physical activity trends

8.34 MENE determines every respondent's level of physical activity in the past week by asking the following question:

> "In the past week, on how many days have you done a total of 30 minutes or more of physical activity, which was enough to raise your breathing rate? This may include sport, exercise, and brisk walking or cycling for recreation or to get to and from places, but should not include housework or physical activity that may be part of your job."[25]

8.35 The respondent answers from 0 to 7. In this section we used weighted data to estimate physical activity patterns over the last five survey years for the entire English population.

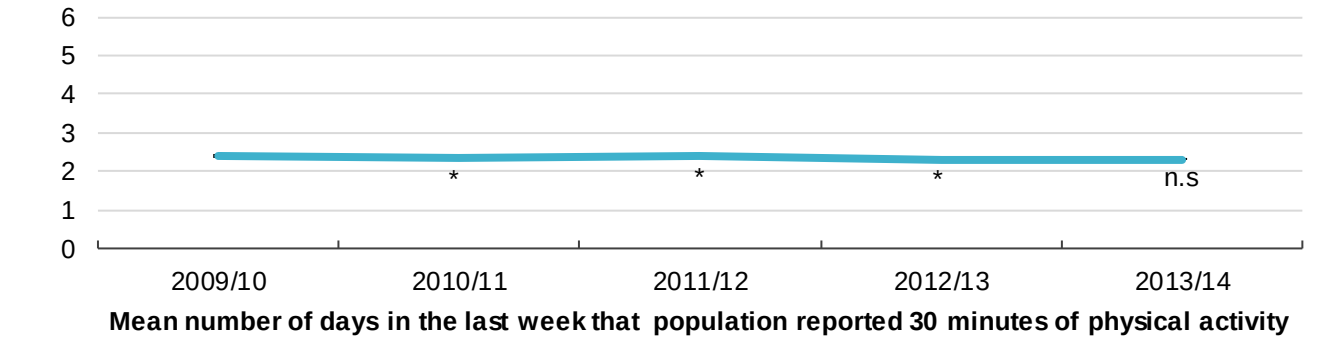


Figure 8.10 – Days on which physical activity was undertaken by year (mean score)

Q21 In the past week, on how many days have you done a total of 30 minutes or more of physical activity, which was enough to raise your breathing rate?
(Base: All respondents weekly questions 2009/10 N=48,514; 2010/11 N=46,099; 2011/12 N=47,418; 2012/13 N=46,749; 2013/14 N= 46,785)

8.36 The above chart shows that in 2013/14, the mean number of days that 30 minutes of physical activity was undertaken did not increase significantly from 2012/13. The overall trend is relatively stable with no definite change over the last five survey years. It is important to note that it is not possible to know the location of this physical activity; it may or may not have taken place in natural environments.

8.37 The general propensity of respondents to visit the natural environment over the last 12 months was divided into the same three categories as in 8.13: regular visitors, less regular visitors, and least regular visitors. The following chart shows the mean number of days of physical activity taken per year by each of the three groups.

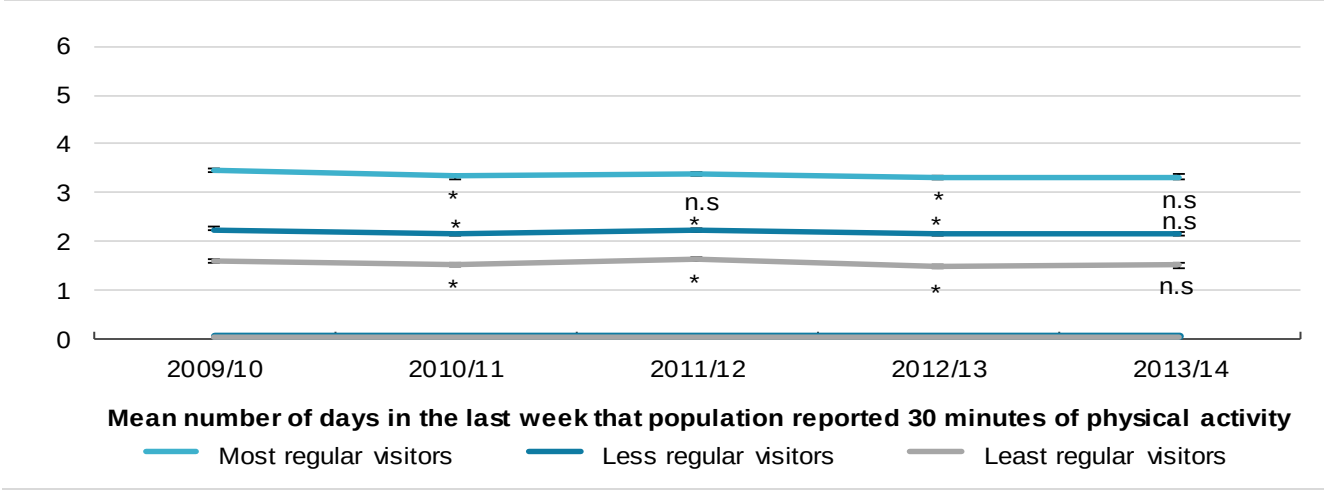


Figure 8.11 – Days on which physical activity was undertaken by frequency of visits to the natural environment (mean score)

Q21 In the past week, on how many days have you done a total of 30 minutes or more of physical activity, which was enough to raise your breathing rate?
(Base: All respondents weekly questions 2009/10 N=48,514; 2010/11 N=46,099; 2011/12 N=47,418; 2012/13 N=46,749; 2013/14 N= 46,785)

8.38 Although all groups' trends approximately follow the shape of the overall trend, there are marked differences between the three groups. People who visit natural environments more regularly tend to undertake more self-reported physical activity in the past week.

8.39 This pattern was then explored in more detail, observing firstly whether people who live in greener areas are more physically active, and secondly whether this is because such people visit natural environments more often (as we already know there is a relationship between visitation and physical activity).

8.40 To do this, data from the Generalised Land Use Database[26] which classifies every LSOA in England into different land use types, was used. One such land use type is green space (excluding private gardens). The proportion of green space (relative to other land use types) was determined for every participant in the MENE dataset with a valid residential LSOA code. Every respondent was then classed into one of five quintiles – equal groups according to the distribution of the percentages of greenspace associated with their LSOA – representing five divisions of green space density.

8.41 Using weighted data to determine estimates for the general population of England, a connection was established between the number of days in the last week on which the respondent undertook 30 minutes of physical activity and the green space quintile they were classed in.[27]

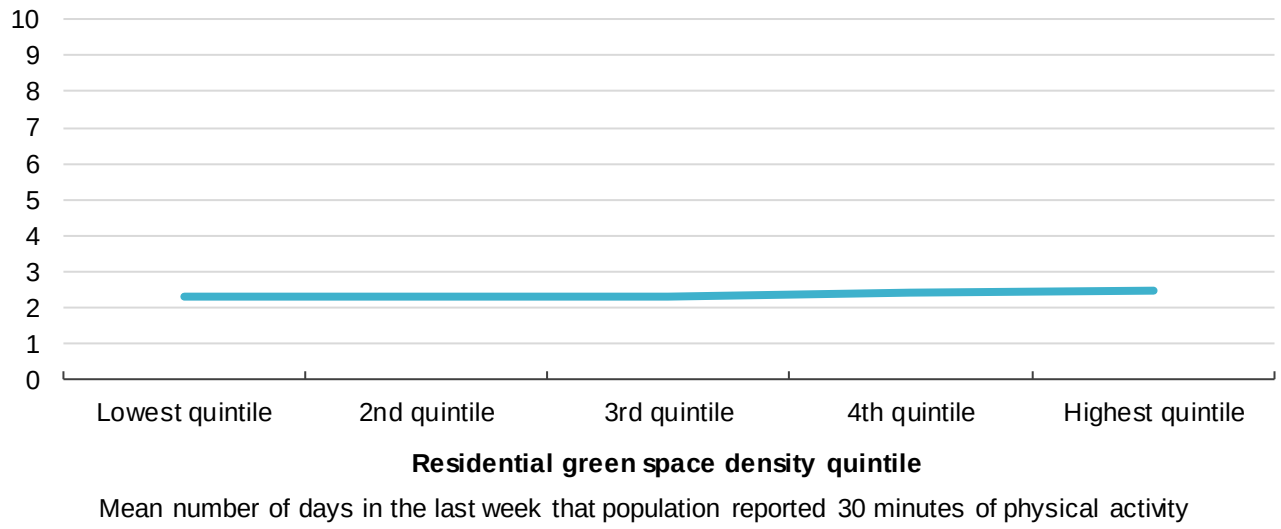


Figure 8.12 – Days on which physical activity was undertaken by residential green space category (mean score)

Q21 In the past week, on how many days have you done a total of 30 minutes or more of physical activity, which was enough to raise your breathing rate?
(Base: All respondents weekly questions 2009/10 N=48,514; 2010/11 N=46,099; 2011/12 N=47,418; 2012/13 N=46,749; 2013/14 N= 46,785)

8.42 Not controlling for any other variables, there is a very slight, but statistically significant, upward trend – more physical activity is practiced by respondents living in greener areas.[28]

8.43 Next the influence of natural environment visit frequency on physical activity in the last week was also investigated. For this, the number of visits made to the natural environment in the last week was plotted against increasing days of physical activity.

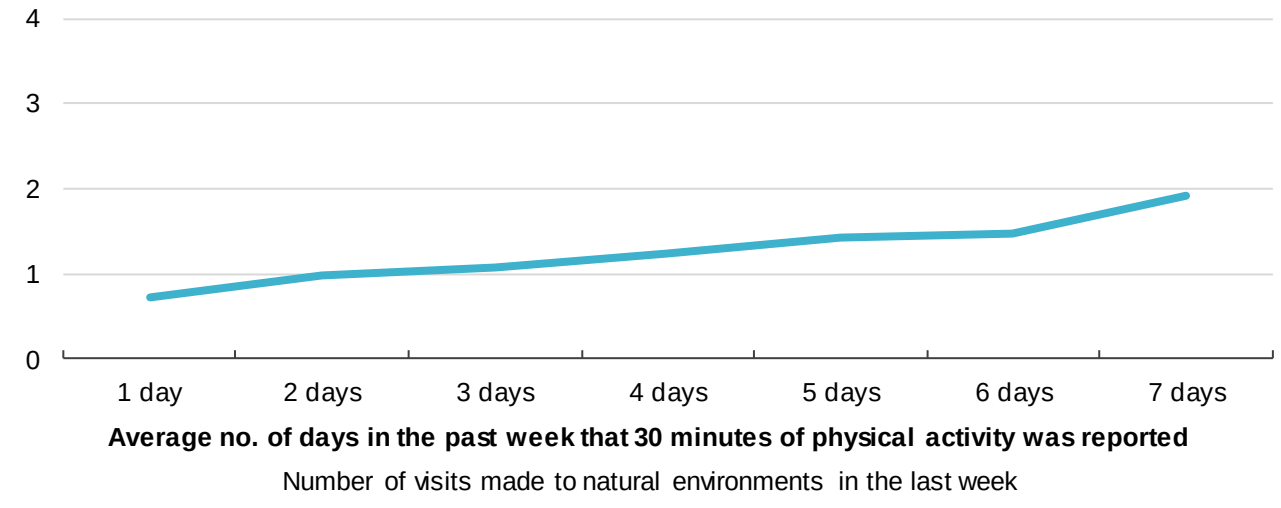


Figure 8.13 – Visits to the natural environment in the previous seven days by level of physical activity

Q1 How many times, if at all, did you make this type of visit? (Base: All respondents, weekly questions 2009/10 N=48,514; 2010/11 N=46,099; 2011/12 N=47,418; 2012/13 N=46,749; 2013/14 N=46,785)

8.44 Again, the number of days of 30 minutes physical activity in the last week was significantly correlated with the number of visits made to natural environments in the last week[29].

8.45 Before accounting for demographic variations, linear regression revealed that an increase of one quintile of green space density was associated with a significant increase of 0.05 days of 30 minutes physical activity in the last week[30]. After accounting for demographic variables, it was associated with a significant increase of 0.01 days of 30 minutes physical activity in the last week[31]. What this means is that, adjusting for other variables, people in the lowest quintile of green space density do on average 2.14 days of 30 minutes physical activity in the last week compared to people in the highest quintile who do on average 2.21 days. This may seem like a small difference but at a population level represents a large number of people doing more physical activity.

8.46 Next, a mediation model[32] was tested to examine whether the number of visits made to natural environments in the last week could be responsible for the relationship between the amount of green space in the individual's LSOA and the number of days of 30 minutes physical activity in the last week. Put simply, a question was asked stating:

> "Does the number of visits made to the natural environment in the last week explain why there is an association between local area green space and physical activity?"

8.47 In asking this question, demographic variables that could influence the relationship were also controlled for[33].

8.48 The results show that the number of visits made to the natural environment in the last week fully explains the statistical relationship between local area green space and physical activity. After completing this mediation we also found that an increase of one visit to the natural environment in the last week was associated with a significant increase of 0.23 days of 30 minutes physical activity in the last week. To put that in a comparative context, physical activity in the last week is predicted almost as well by visits to natural environments in the last week than it is by a respondent's ethnicity – a strong physical activity predictor in previous literature[34].

Figure 8.14 – Before adjusting for demographics and mediating variables, proportion of residential green space is associated with number of days of 30 minutes physical activity in the last week.

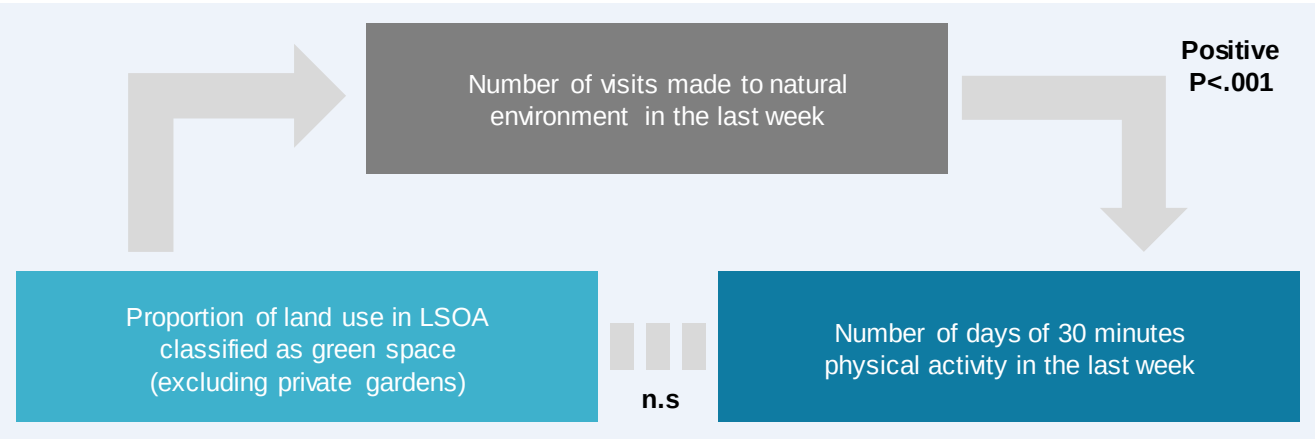


Figure 8.15 – After adjusting for demographics, the relationship between residential green space density and physical activity in the last week is fully explained by the number of visits made to natural environments in the last week

8.49 Despite this, levels of physical activity in the sample are still lower than recommended guidelines and whilst there is a strong association between green space density, outdoor visits, and physical activity, the direction of this relationship cannot be known. Additionally, whilst this mediation is statistically significant there may be other variables related to outdoor visitation that it is not possible to control for. For example, an alternative explanation of the results is that people who visit outdoor spaces more may also use gyms or indoor facilities more. Thus whilst the mediation still succeeds, the relationship between local green space and physical activity may exist for different reasons.

9 The Value-action Gap

9 The Value-action Gap

Key findings

- On average, members of the English adult population undertook around two of the nine actions included in MENE as pro-environmental behaviours, that is, those that aim to protect the natural environment. However, this average masks a fair degree of variation with some people not undertaking any of these pro-environmental actions at all.
- There is a considerable gap between the value attributed to the natural environment and the level of action taken to preserve it, particularly in relation to actions that require a higher investment of time or money.
- Most people were at least modestly involved in pro-environmental behaviours; five out of seven people undertook one or a combination of the following actions: recycling, encouraging other people to protect the natural environment, or purchasing local and eco-friendly products. In contrast, one in seven were engaged in some form of high involvement action such as donating time and/or money to conservation projects or organisations.
- When asked about willingness to change lifestyles to protect the natural environment, those who undertook no actions or recycling only indicated least willingness to change their lifestyles, as did those under 35 years old, men, single people, those of White British ethnic origin, in the lower social grades, living in rental accommodation and those living in London.
- Around a fifth of the population indicated either a desire to change or a willingness to change if others were to do so. In these instances, a lack of understanding as to how to change their lifestyle, a perception that it is difficult to do so or a requirement to also perceive others making changes were the stated barriers to making a change.


Durdle Door, Dorset

9.1 It has been shown that differences can exist between the extent to which people say that they value the natural environment and the extent of their actual participation in activities to counter environmental problems. This discrepancy between attitudes and their behaviour has been referred to as the "Value-action Gap".[35]

9.2 The MENE survey contains a number of questions which reflect a variety of "Value" and "Action" topics. Using all five years' worth of data, this section aims to explore the relationship between these topics.

Measuring the Value-Action gap

9.3 The following statements from the MENE questionnaire were selected as relevant measures of "Value":

"Spending time out of doors (including my own garden) is an important part of my life"

"I am concerned about damage to the natural environment"

"There are many natural places I may never visit but I am glad they exist"

"Having open green spaces close to where I live is important"

9.4 Each of these questions represents some form of pro-environmental affinity, and covers more personal aspects as well as wider environmental concerns. They were all asked on a five point agreement scale.

9.5 Various "Action" measures were selected from the MENE questionnaire as follows:

"Doing unpaid voluntary work out of doors"

"I usually recycle items rather than throw them away"

"I usually buy eco-friendly products and brands"

"I usually buy seasonal or locally grown food"

"I choose to walk or cycle instead of using my car when I can"

"I encourage other people to protect the environment"

"I am a member of an environmental or conservation organisation"

"I volunteer to help care for the environment"

"I donate money at least once every three months to support an environmental or conservation organisation"

"I donate my time at least once every three months to an environmental or conservation organisation"

9.6 The statement "I choose to walk or cycle instead of using my car when I can" was excluded from the list of pro-environmental actions. It was felt that there was ambiguity over the reasons for undertaking this action. Health, financial or practical reasons could also motivate a person to undertake this action rather than solely environmental concern.

9.7 These questions were answered by respondents as a simple Yes/No to each activity. While the actions used for this analysis may not be an exhaustive list of all possible pro-environmental actions, they represent the key activities captured in MENE.

9.8 Taking the responses to these questions, analysis of five years' worth of data shows the size of the gap between Values and Action (see Figure 9.1 overleaf).

9.9 All of the value statements receive in excess of 80 per cent agreement from respondents, whereas the proportions providing positive responses to the action statements show much lower levels with some actions performed by as few as three percent of respondents. The only action to receive an agreement level close to the value statements was recycling.

9.10 These results seem to corroborate the following statement made by Blake (The International Journal of Justice and Sustainability, 1999):

"Environmental concern, and basic environmental action (such as recycling), are now becoming widespread throughout the population; but few people take environmental actions which involve changes to their lifestyle. Effectively, this means that the environmental actions that people take are tokenistic and may be unrelated to the particular concerns that they express about the environment."[36]

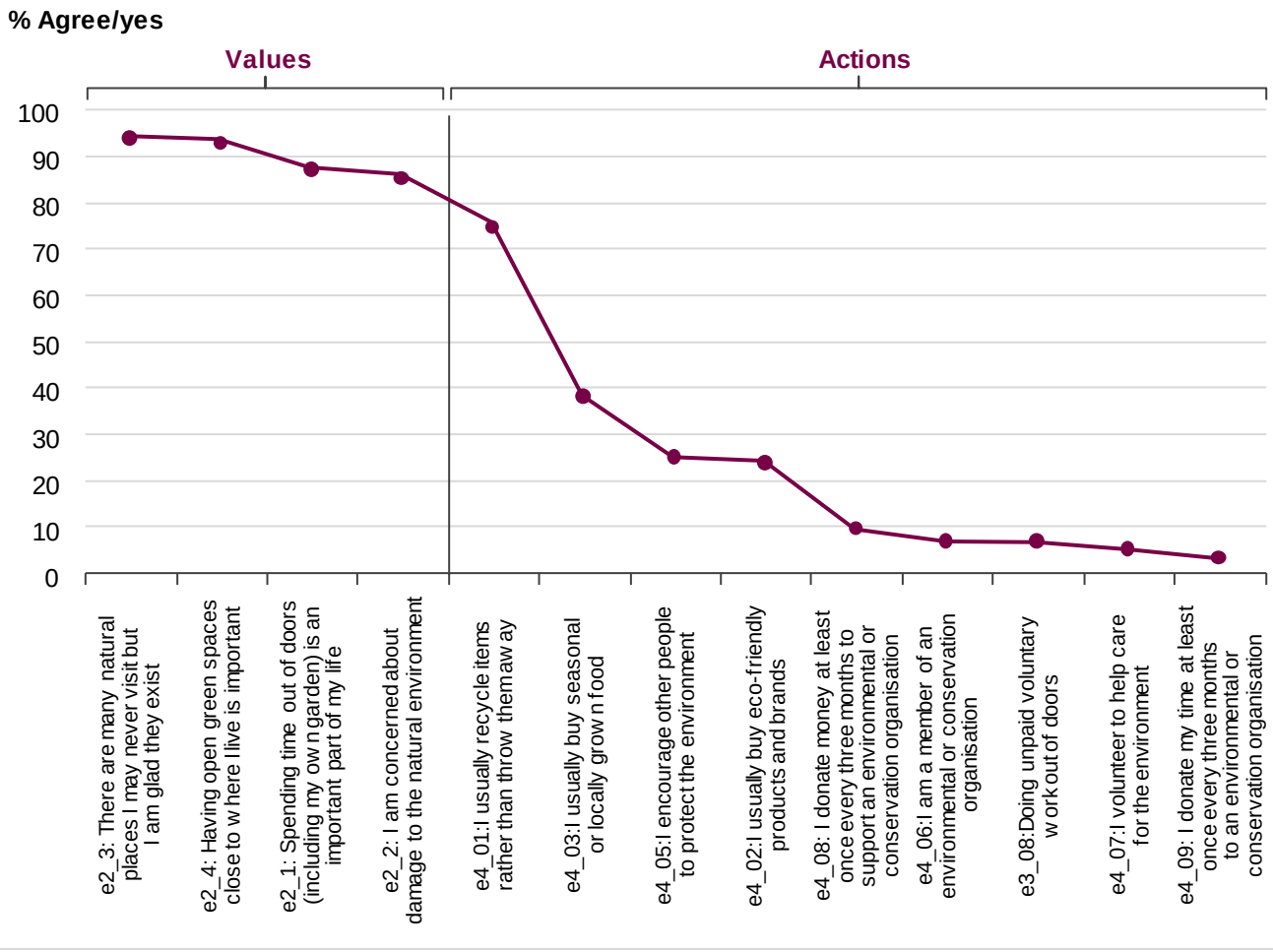


Figure 9.1 – Percentage of people agreeing with each Value and Action statement

Note: The statement E4_04 "I choose to walk or cycle instead of using my car when I can" has been excluded from the list of pro-environmental actions. This is mainly because of ambiguity over what may be leading to this action. Health, financial or practical reasons could also motivate a person to undertake this action rather than solely environmental concern.

Exploring the actions

9.11 The MENE study contains nine pro-environmental actions of varying prevalence. On average, people reported undertaking around two actions, with some people not undertaking any at all:

Table 9.1 – Number of pro-environmental actions taken (% of population)

Count of actions	% of population
0	14
1	34
2	23
3	15
4	8
5+	5

9.12 Variations in the extent to which people adopt pro-environmental actions can be roughly apportioned into three levels:

Table 9.2 – Levels of adoption of pro-environmental behaviours across population

Adoption level	% of population	Examples
High incidence actions	70+	Recycling
Medium incidence actions	20-40	Buying seasonal/local food, encouraging people to protect environment, buying eco-friendly products
Low incidence actions	under 10	Donating money, undertaking voluntary work, membership of an environmental organisation

9.13 The level to which an action is undertaken across the population (referred to in Table 9.2 as the 'incidence') generally related to the amount of involvement an action requires: i.e. the greater the amount of time or money that was required to perform the action, the less likely it was to be undertaken in general.

9.14 14 percent of people did not undertake any of the nine actions (as shown in Table 9.1). Of those who undertook only one action, the most common was recycling, with around a quarter of people stating that they undertook this action and no other. Around two-fifths of people were calculated to undertake at least one of the medium incidence actions, but none of the more substantive actions.

9.15 On this basis, it was possible to categorise people into the following four tiers:

Table 9.3 – Categorisation of involvement in pro-environmental behaviours

Tier	Criteria	Name	% of population	Avg. number of actions
Tier 0	No actions	Rejecter	14	0
Tier 1	Only recycling	Recycle only	27	1
Tier 2	At least one of the Medium Incidence activities (Buying seasonal/local food, encouraging people to protect environment, buying eco-friendly products)	Minor involvement	43	2.39
Tier 3	At least one of the Low Incidence activities (Donating money, undertaking voluntary work, membership of an environmental organisation)	Major involvement	16	3.75

9.16 This analysis demonstrated that most people were at least modestly involved in pro-environmental behaviours; five out of seven people were categorised as being in tier one or two and therefore as undertaking at recycling, encouraging other people to protect the environment and/or purchasing local and eco-friendly products. In contrast, one in seven engaged in some form of high involvement action.

9.17 The majority of people that undertook high Tiers actions also participated in lower Tier actions. For instance, more than four-fifths of Tier 2 people also reported taking part in recycling.

Relationship between valuing the environment and types of actions

9.18 The composite "Value score" was analysed in relation to each of the action tiers, as shown in Table 9.4 below:

Table 9.4 – Pro-environmental action tiers by value score

Tier	Name	%	Avg. number of actions	Value score
Tier 0	"Rejecter"	14	0	72
Tier 1	"Recycle only"	27	1	79
Tier 2	"Minor involvement"	43	2.39	85
Tier 3	"Major involvement"	16	3.75	87

9.19 This shows an increasing level of concern for the natural environment as the quantity of actions increase:

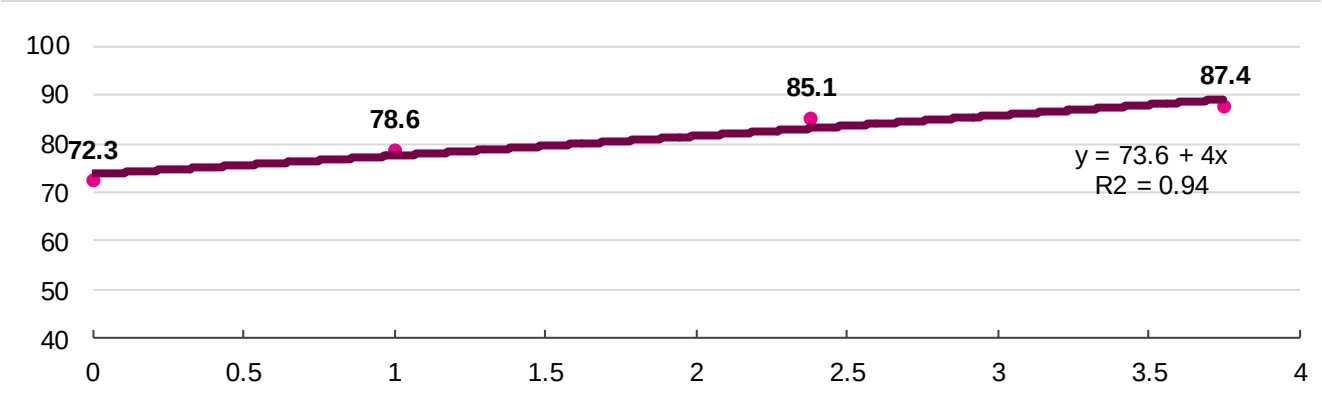


Figure 9.2 – Composite Value score and quantity of pro-environmental actions undertaken by Action Tier

Appended to the chart is a simple linear regression model, to ascertain a mathematical relationship between Attitudes & Behaviour. The model suggests quite a strong relationship, and can be interpreted as indicating a 4 point rise in pro-environmental score for every action increase.

9.20 The stated value attributed to the natural environment across the population was high, even amongst people in the lower action tiers. Therefore, the increase in the value score from 72 amongst those undertaking no pro-environmental actions to 87 amongst those undertaking the greatest number of actions was not significant.

9.21 However, higher levels of concern for the natural environment were accompanied by a higher quantity of, and intensity of pro-environmental actions. Correlation analysis undertaken was indicative of a moderately strong relationship between the number of actions undertaken and the composite value score[37]. However, this analysis cannot be used to determine the direction of causality. For example it is not possible to establish whether greater concern equates to greater action, or the other way around.

Exploring values

9.22 Having determined that the four potential measures of value from the MENE survey – the importance attributed to spending time out of doors, concern about environmental damage, valuing of natural places even if they are never visited and having open green spaces close to where a person lives – are essentially measuring the same underlying factor[38], a composite measure of the four value statements was created. This was based on the responses for all respondents, irrespective of whether they visited the natural environment or not.

9.23 Table 9.5 below shows the distribution of this composite value measure, scaled to range from 0 to 100. The measure was created by allocating points to each of the four questions as follows:

Table 9.5 – Points allocated to measures to create composite scores

	Points allocated
Strongly disagree	0
Disagree	6.25
Neither	12.50
Agree	18.75
Strongly agree	25

9.24 For example, a person who answered “strongly agree” to all four questions received a score of 100 (25 multiplied by four questions). Given that the majority of people have a composite value score over 70, this suggests that most people at least agree with all four statements.

Willingness to change and demographics

9.25 The final stage of the analysis, based on another question from the MENE survey, looked at whether people indicated a willingness to make changes to their lifestyle to protect the natural environment. As Table 9.6 shows, there was a degree of variation in openness to lifestyle changes when comparing the action Tiers:

Table 9.6 – Intention to change lifestyle by action tier (higher than average positive behaviour is highlighted in green, whereas higher than average negative behaviour is highlighted in orange)

	Tier 0	Tier 1	Tier 2	Tier 3
Changes in lifestyle	**Rejecter**	**Recycle only**	**Minor involvement**	**Major involvement**
1) I like my lifestyle the way it is and am not likely to change it	31	36	29	26
2) I'd like to make changes to my lifestyle but I don't know what to do	5	7	7	5
3) I'd like to make changes to my lifestyle but it's too difficult	7	8	8	6
4) I'd make changes to my lifestyle if I knew other people were willing to make changes	4	5	5	5
5) I intend to make changes to my lifestyle	12	15	18	20
6) I already do a lot to protect the environment; difficult to do more	10	19	28	33
7) Don't know	30	10	5	5

9.26 Across Tiers 1 to 3, the majority of people were able to state whether or not they were willing or intended to make changes to their lifestyle. The Tier 0 “Rejecters” were the least clear about their future intentions, with three in ten stating they did not know how their behaviour may change. Approximately a third of people in each of the tiers were happy with their lifestyle as it is. Tiers 2 and Tier 3 had the highest proportion of people reporting that they already do a lot to protect the environment, but also slightly higher proportions of people saying that they intended to make changes to their lifestyle.

9.27 “Rejecters” (Tier 0) and “Recyclers” (Tier 1) were those least inclined change their lifestyle. The data indicated that the proportion of those who recycle only (Tier 1) who were unwilling to change their lifestyle was around double the proportion this category who intended to make changes (as shown in the graphic below).

9.28 There were also some minor differences in demographics by Action Tiers. The most prominent were that Tier 0 (Rejecters) were more likely than other Tiers to be under 35 years old, Male, Single, White British, in the lower social grades, in rental accommodation (both private and local authority) and/or living in London (see Table 9.7).

Table 9.7 – Percentage of respondents in each demographic group in each of the pro-environmental action tiers (higher than average incidence is highlighted in green, whereas lower than average incidence is highlighted in orange)

Action Group	Tier 0	Tier 1	Tier 2	Tier 3
	Rejecter	Recycle only	Minor involvement	Major involvement
Total population	**14**	**27**	**43**	**16**
Age: 16-24	25	19	9	11
Age: 25-34	21	18	16	12
Male	57	52	44	48
White British	68	80	82	82
Married	43	56	63	63
Single	42	29	20	22
F/T higher educ	9	6	3	6
Unemployed	9	5	4	4
Not job seeking	11	9	8	6
AB	12	17	28	36
C1	25	29	29	30
C2	22	23	20	17
DE	41	30	23	17
Mortgage	20	32	32	30
Owned outright	22	26	34	40
Rent local authority	25	16	12	9
Rent private	26	21	18	16
London	23	13	13	15
South East	13	17	15	19

Discussion of findings

9.29 The majority of the English adult population indicated that they placed a high level of value on the natural environment. However, this analysis in this section has shown that there was a considerable gap between the value attributed to the natural environment and the level of action taken to preserve it, particularly in relation to actions that require a higher investment of time and/or finances.

9.30 It would be useful in future to consider whether additional analysis could produce a more robust measure of genuine emotional concern. It is worth noting that recent additions to the MENE survey have been included to gather opinions on topics such as biodiversity loss and so this topic could be re-visited in due course, once sufficient data has been collected.

9.31 Considering the amount of other competing pressures on people's time and money, one in seven people actually participating in high level actions is not perhaps unexpected. Studying the incidence level of actions within varying intensity can give an indication of how incidence of pro-environmental behaviours may increase within the population. The Action Tiers suggest that people may move along the scale, on tier at a time:

Figure 9.3 – Potential movement through pro-environmental action tiers

9.32 While there were some variations recorded in stated intention to change lifestyles to protect the environment, around a fifth of those in each of the action tiers indicated either a desire to change or a willingness to change if others were to do so. In these instances, a lack of understanding as to how to change their lifestyle, a perception that it is difficult to do so or a requirement to also perceive that others are making changes were the stated barriers to making a change.

9.33 As yet this analysis has not examined whether there a relationship between undertaking in pro-environmental behaviours, valuing the natural environment and frequency of visiting the outdoors. This could potentially be investigated in future research.

Appendix

Appendix 1: Summary of survey scope and methods

Survey scope

The main focus of the survey is on time spent visiting the natural environment. MENE collects details of both visits to the natural environment such as days out to the coast and countryside and more routine trips taken close to home for purposes such as dog walking or exercise, including those visits to urban green spaces.

The methods used in MENE were developed through a scoping study undertaken in 2007. This study involved consultations with users to ensure that their information needs were taken into account; qualitative research with members of the public to test their understanding of potential questionnaire wording options; and the piloting of a range of quantitative data collection approaches using online, telephone and face-to-face methodologies.

The scoping study informed the wording of the introductory text used in the survey (see below).

Now I am going to ask you about occasions in the last week when you spent your time out of doors.

By out of doors we mean open spaces in and around towns and cities, including parks, canals and nature areas; the coast and beaches; and the countryside including farmland, woodland, hills and rivers.

This could be anything from a few minutes to all day. It may include time spent close to your home or workplace, further afield or while on holiday in England.

However this does not include:

- Routine shopping trips; or
- Time spent in your own garden.

This description aims to ensure that survey respondents are clear that visits to the natural environment taken in both urban and rural locations are of interest and that there is no upper or lower time limit on the duration of the visit. Respondents are informed that routine shopping trips and time spent in the garden are not included in the definition of a visit. Interviewers are also provided with further guidance to offer respondents who may be uncertain of what is and is not included within the definition of “a visit”.

In comparison to previous leisure visits surveys, the broader scope of this survey provides a more complete picture of engagement with the natural environment including an accurate representation of levels of activity in close to home, informal visits, other forms of engagement with nature at home and pro-environmental behaviours. Collecting this data provides numerous opportunities for analysis and the development of a more informed understanding of how the population of England uses and enjoys the natural world.

Survey method

The main survey data collection commenced on 6th March 2009. The survey involves weekly waves of interviewing on the TNS in-home Omnibus Survey with respondents asked about visits taken in the seven days preceding the interview. In each wave, interviews are undertaken with a representative sample of the English adult population (aged 16 and over) with a sample of at least 800 achieved across at least 100 sample points.

The number of visits taken in each of the seven days and key details of these visits (type of place visited, duration of visit, activities undertaken) are recorded. One of the visits taken is then randomly selected and the respondent is asked to provide more details on this single visit (including type of place visited, specific location visited, distance travelled, where the visit started from and modes of transport used).

While the majority of survey questions are included in every weekly wave of the survey, some are asked on a monthly basis while a series of questions regarding other forms of engagement with the natural environment, such as watching nature programmes on television and engagement in pro-environmental activities such as recycling, are asked on a quarterly basis.

Each wave of fieldwork is conducted over five days of the week (Friday to Tuesday inclusive). Using a seven day recall period also makes it necessary to undertake interviewing in every week of the year. The TNS Omnibus survey operates over 51 weeks of the year, with no fieldwork for one week during the Christmas period. However, recognising that visits taken during the holiday week could vary somewhat from other times of year, an additional module of questions has been included in the survey wave undertaken in the following week to collect data on this 'gap' period.

Fieldwork

Fieldwork for Year 1 of MENE commenced in March 2009 and ran until February 2010. Year 2 fieldwork continued immediately without any break, running from March 2010 to February 2011, Year 3 continued from March 2011 to February 2012, Year 4 ran from March 2012 to February 2013 and Year 5 ran from March 2013 to February 2014.

During the 2013/14 survey period, 46,785 interviews were undertaken allowing the key details of 55,897 visits to be collected, and more detailed information from 18,808 visits to be gathered. As shown in Table A, similar sample sizes were achieved in each of the preceding years.

Table A – Annual sample sizes

	2009/10	2010/11	2011/12	2012/13	2013/14
Respondents	48,514	46,099	47,418	46,749	46,785
Visits	58,653	47,825	53,898	53,208	55,897
Selected visits	20,374	17,389	19.014	18,185	18,808

Strengths and limitations of the data

Sample sizes are much larger than those obtained in previous leisure visits surveys, offering the opportunity to analyse results at both a national level and at smaller geographic areas. Results can also be analysed for key groups within the population such as specific age groups, members of ethnic minorities and residents of particular types of geographic areas (for example, urban or rural). Also, the large sample of visits recorded in the survey facilitates analysis of results on the basis of a wide range of visit characteristics such as activities and places visited. The application of grid references (geocodes) to visit destinations provides opportunities for the mapping of results and the identification of visits taken to different types of place including designated areas.

Strengths

Face to face interviews provide the best quality of data:

The MENE data is collected through face to face personal interviews conducted in the respondent's home. The presence of the interviewer allows clear communication of requirements and the opportunity for the respondent to clarify points. The face to face approach also allows for the use of prompt materials to facilitate the interview (e.g. lists of answer options to be read from). Also, the in-home approach allows for a longer interview duration than the alternative telephone approach.

Consistency of weekly sampling:

The MENE question set is included on the weekly in-home TNS omnibus survey. This longstanding omnibus survey uses quota sampling approaches to provide a sample representative of the UK population on the basis of a number of demographic criteria including sex, age, working status, car ownership. Target weekly sample sizes are consistently achieved, providing a robust basis for the tracking the key survey measures.

Short recall period:

MENE respondents are asked to provide specific details of visits to the natural environment taken in the 7 days before the interview. This relatively short recall period has been proven to provide more accurate information on the volume and characteristics of visits taken than asking respondents to comment on visits taken over a longer period (e.g. last fortnight or month).

Limitations

Quota sampling approach:

MENE uses a sampling approach which involves the weekly selection of around 100 interviewing locations (sampling points) throughout England. In each of these locations interviewers find and interview a sample of respondents meeting demographic quota targets which reflect the wider population.

This approach could under represent those types of people less likely to be available when fieldwork is undertaken, including regular recreation participants who are generally less likely to be at home. To reduce this potential bias interviewing is conducted on a range of times of day and days of the week.

By comparison random probability sampling approaches which involve the random pre-selection of respondents from a source such as the Electoral Roll, appointments made in advance to interview these selected individuals and needed numerous visits made to the address to complete the interview successfully will ensure that all members of population have an equal chance of being included in survey. However random probability approaches are also significantly more expensive to conduct than the MENE approach.

Geographical clustering

The sampling approach used in MENE results in geographical clustering of respondents i.e. the weekly sample of 800 is focused on 100 locations rather than evenly distributed across England. As people who live in a neighbourhood tend to have similar demographics and lifestyles, this clustering of the sample can have an impact on the overall accuracy of results. To minimise this effect within each sample point, only one interview is undertaken per household and a minimum six households is left between each successful interview.

English language interviewing

As all MENE interviews are conducted in English, the survey will under represent those people who do not speak English. Also the face to face interview approach means that people who find it difficult to communicate on this basis will be under represented in the sample (e.g. deaf or with learning difficulties).

Geocoding success

In MENE all respondents who have taken a visit to the Natural Environment in the previous 7 days are asked to provide details of the final visit destination. This information is then used to source a geocode for the destination, identifying the specific visit destination. In around a fifth of cases it is not possible to allocate a geocode to the destination due to a lack of detail in the response provided in the interview.

Presentation of results

It should be noted that in some of the figures and tables included in this report the results do not total to 100 per cent. This can be due to a number of reasons as follows:

- Results are rounded to the nearest whole number. Therefore in some cases the totals of the rounded results may equal 99 per cent or 101 per cent.
- In some questions respondents could provide more than one response ("multiple choice" – for example, the activities undertaken during a visit). In these cases the total of percentages may be well over 100 per cent.
- In some figures and tables results relating to only some of the answer options are included. In these cases the percentages illustrated will total less than 100 per cent.

Appendix 2: Definition of social grades

A UK: 3% of the population

- These are professional people, very senior managers in business or commerce, or are top-level civil servants.
- Retired people, previously grade A, and their widows/widowers.

B UK: 18% of the population

- Middle management executives in large organisations, with appropriate qualifications.
- Principal officers in local government and civil service.
- Top managers or owners of small business concerns, educational and service establishments.
- Retired people, previously grade B, and their widows/widowers.

C1 UK: 27% of the population

- Junior management, owners of small establishments, and all others in non-manual positions.
- Jobs in this group have very varied responsibilities and educational requirements.
- Retired people, previously grade C1 and their widows/widowers.

C2 UK: 24% of the population

- All skilled manual workers, and those manual workers with responsibility for other people.
- Retired people previously grade C2, with a pension from their job.
- Widows/widowers, if receiving pensions from their late spouse's job.

D UK: 16% of the population

- All semi skilled and unskilled manual workers, and apprentices and trainees to skilled workers.
- Retired people, previously grade D, with a pension from their job.
- Widows/widowers, if receiving pensions from their late spouse's job.

E UK: 12% of the population

- All those entirely dependent on the state long term, through sickness, unemployment, old age or other reasons.
- Those unemployed for a period exceeding 6 months (otherwise classified on previous occupation).
- Casual workers and those without a regular income.
- Only households without a chief wage earner are coded in this group.

Appendix 3: References

Executive summary

[1] Taking account of margins of error, at the 95% confidence level estimated total visits range from 2.86 to 3.00 billion.

Headline findings

[2] Taking account of margins of error, at the 95% confidence level estimated total visits range from 2.86 to 3.00 billion.

[3] See http://www.metoffice.gov.uk/climate/uk/summaries.

[4] Taking account of margins of error, at the 95% confidence level estimated total visits range from 2.86 to 3.00 billion.

[5] It should be noted that respondents were asked to specify all of the types of place included in their visit and could select more than one of the answer options. Therefore in some cases, an individual visit is included in the total for more than one type of place. This means that the sum of the percentages is more than 100 per cent.

[6] It should be noted that respondents were asked to specify all of the activities undertaken during their visit and could select more than one of the answer options. Therefore, in some cases an individual visit is included in the total for more than one activity. This means that the sum of the percentages is more than 100 per cent.

[7] Note that respondents often provided rounded estimates – such as, half an hour, an hour or two hours rather than a precise figure. These are then grouped into the categories described. The median across all five years was 1 hour.

[8] It should be noted that respondents were asked to specify all of the motivations for their visit and could select more than one of the answer options. Therefore, in some cases an individual visit is included in the total for more than one motivation. This means that the sum of the percentages is more than 100 per cent.

[9] This question was included in the survey during one week of fieldwork per quarter. As such sample sizes are smaller than for other questions and results are subject to wider margins of error.

Variations within the population

No references.

Visit trends

[10] Period includes the July heatwave as recorded in MET Office Summer 2013 Climate Summary (see http://www.metoffice.gov.uk/climate/uk/summaries/2013/summer).

[11] Taking account of margins of error, at the 95% confidence level estimated total visits range from 2.86 to 3.00 billion.

[12] A sharp increase or decrease in a measure – in this case an increase.

Key themes analysis: an introduction

No references.

Visit expenditure

[13] https://www.gov.uk/government/collections/monitor-of-engagement-with-the-natural-environment-survey-purpose-and-results.

[14] For some items, such as car parking and entrance fees, it could be assumed that expenditure takes place at the site that is visited. For visits that are in the same region as where people set off from, expenditure is likely to be within that region. However, this is not necessarily the case; they may have travelled through and spent money in other regions as part of the overall trip.

Health, Well-Being and the natural environment

[16] Hartig, T., Mitchell, R., De Vries, S., & Frumkin, H. (2014). Nature and health. Annual review of public health, 35, 207-228.

[17] Significance is determined using repeated contrasts to examine year-on-year differences.

[18] This question was asked at different frequencies in the first three, and past two, survey years. Data was weighted according to the former three years (i.e. monthly weights) to account for this issue.

[19] Note, that these trends are not controlling for any other socio-demographic variables.

[20] Lower-layer-super-output-area. LSOAs are a way of classifying small areas and are widely used in geographical research.

[21] White, M. P., Alcock, I., Wheeler, B. W., & Depledge, M. H. (2013). Would you be happier living in a greener urban area? A fixed-effects analysis of panel data. Psychological science, 4(26), 920-928.

[22] White, M. P., Alcock, I., Wheeler, B. W., & Depledge, M. H. (2013). Coastal proximity, health and well-being: results from a longitudinal panel survey. Health & place, 23, 97-103. Credit to Dr Ben Wheeler at the European Centre for Environment and Human Health for providing both the coastal proximity and green space data. Proportion of greenspace was derived from the Generalised Land Use Database (GLUD) and represents the proportion of land use classified as 'green space' (excluding private gardens) relative to other types of land use. Coastal proximity was defined as the distance from the population-weighted centroid of the LSOA to the nearest coastline (the end of a coastline was defined as when a river mouth narrowed to less than 1km).

[23] Mitchell, R., & Popham, F. (2007). Greenspace, urbanity and health: relationships in England. Journal of Epidemiology and community health, 61(8), 681-683. These data were derived from the Indices of Multiple Deprivation (2010)

[24] Dolan, P., Peasgood, T., & White, M. (2008). Do we really know what makes us happy? A review of the economic literature on the factors associated with subjective well-being. Journal of economic psychology, 29(1), 94-122.

[25] N.B. this means that respondent's physical activity is self-reported and therefore prone to bias. It is well-researched that subjective estimates of physical activity rarely match objective measurements, so the above statistics and graphs should be read with consideration to this.

[26] Department for Communities and Local Government. Generalised Land Use Database Statistics for England 2005(Enhanced Basemap); London, 2007.

[27] Treating quintiles of green space as an ordinal variable.

[28] At the $p<.001$ alpha level.

[29] At the $p<.001$ alpha level.

[30] At the $p<.001$ level.

[31] Significant at the $p<.001$ level.

[32] Mediation models attempt to identify a process that is responsible for an existing relationship. In this analysis we theorise that the relationship between greenspace in one's area and physical activity is in some way caused by the number of visits one makes to natural environments.

[33] Findings controlled for coastal proximity of residence (0-1km, >1-5km, >5-20km, 20+km), sex (male, female), age (16-34, 35-54, 55+), socio-economic status (AB, C1 C2, DE), work status (full-time, part-time, retired, in education, not working), marital status (married, not married), children in household (any, none), ethnicity (White-British, BAME), disability status (has disability, does not have disability), car ownership (yes, no) and dog ownership (yes, no).

[34] Findings controlled for coastal proximity of residence (0-1km, >1-5km, >5-20km, 20+km), sex (male, female), age (16-34, 35-54, 55+), socio-economic status (AB, C1 C2, DE), work status (full-time, part-time, retired, in education, not working), marital status (married, not married), children in household (any, none), ethnicity (White-British, BAME), disability status (has disability, does not have disability), car ownership (yes, no) and dog ownership (yes, no).

The Value-Action Gap

[35] The following Wikipedia page has more background information on this subject: http://en.wikipedia.org/wiki/Value-action_gap

[36] Blake, J. (1999). "23. Overcoming the 'value-action gap' in environmental policy: Tensions between national policy and local experience". Local Environment: The International Journal of Justice and Sustainability 4 (3): 257–278

[37] Spearman's rho of 0.41. Highly significant ($p<0.05$)

[38] Scale Reliability analysis was conducted and although there are subtle differences between the measures, it has given good support for there being one coherent dimension behind the questions (Cronbach's Alpha of 0.77). See http://en.wikipedia.org/wiki/Internal_consistency.