## **Natural England Commissioned Report NECR050**

# Monitor of Engagement with the Natural Environment: The national survey on people and the natural environment

**Technical Report** 

NATURAL

## **Foreword**

Natural England commission a range of reports from external contractors to provide evidence and advice to assist us in delivering our duties. The views in this report are those of the authors and do not necessarily represent those of Natural England.

### **Background**

Although there is a growing evidence base about the benefits that people derive from contact with the natural environment, there is a lack of information about how and why people currently engage with the natural environment.

In the past, a series of surveys have been carried out by Government and its partners to track participation in leisure day visits. The Leisure Day Visits Survey Series (undertaken in 1994, 1996, 1998, 2002/03 and 2005) collected information on the extent of participation in leisure day visits and provided estimates of the volume of visits. Whilst these surveys included 'days out' in the countryside, they did not provide up to date and robust information on people's day to day use and enjoyment of the natural environment.

Natural England, Defra and the Forestry Commission therefore commissioned TNS Research International to undertake this survey.

#### The survey was commissioned in order to:

- Understand how people use, enjoy and are motivated to protect the natural environment.
- Provide data that monitors changes in use and enjoyment of the natural environment over time at a range of different spatial scales and for key groups within the population.

#### **How will Natural England use the findings?**

In relation to its remit for promoting public understanding, conservation and enjoyment of the

natural environment, Natural England will use the findings to:-

- Inform its own work, and that of other interested parties, to link it more closely to need.
- Evaluate the impact and effectiveness of this work.

The technical report provides full details of the survey methodology including approaches to sampling, grossing and weighting, estimates of confidence intervals.

Published alongside this report are:

- An annual report (NECR049) presenting the headline findings for 2009-10.
- Summary data tables (as an annex to the annual report) which provide cross tabulations of all survey questions against standard socio-economic variables.

Further reports are planned from the 2009-10 survey and will be available from the Natural England website.

#### **Official Statistics**

The information within this report is categorised as 'Official Statistics', and has been produced and published according to arrangements approved by the UK Statistics Authority. A document detailing Natural England's compliance with the Code of Practice for Official Statistics is available separately on the Natural England website.

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Keywords - visits, engagement, natural environment, participation, motivations, barriers

#### **Further information**

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ISSN 2040-5545

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## 1 Introduction

- 1.1 This report summarises the headline findings from the first year of the Monitor of Engagement with the Natural Environment (MENE) survey. The survey collects detailed information on people's use and enjoyment of the natural environment, focusing on visits to the natural environment. Fieldwork took place between March 2009 and February 2010.
- 1.2 The survey was undertaken by TNS Research International on behalf of Natural England, the Department for Environment, Food and Rural Affairs (Defra) and the Forestry Commission.

### **Background**

- 1.3 Although there is a growing evidence base about the benefits that people derive from contact with the natural environment there is a lack of information on how and why people currently engage with the natural environment.
- 1.4 A series of previous surveys have been carried out by Government and its partners to track participation in leisure day visits. The leisure day visits survey series (undertaken in 1994, 1996, 1998, 2002/03 and 2005) collected information on the extent of participation in leisure day visits and provided estimates of the volume of visits. While these surveys included 'days out' in the countryside, they did not provide up to date and robust information on people's day to day use and enjoyment of the natural environment.
- 1.5 Natural England, Defra and the Forestry Commission therefore commissioned TNS Research International to undertake the MENE survey.
- 1.6 This survey provides the most comprehensive dataset yet available on people's use and enjoyment of the natural environment. It includes information on visits to the natural environment (including short, close to home visits) as well as other ways of using and enjoying the natural environment such as gardening, watching wildlife and volunteering.

### Survey aims and objectives

- 1.7 This survey has been commissioned 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.
- 1.8 The aims of the survey are to:
  - provide estimates of the number of visits to the natural environment by the adult (16 years and over) population in England;
  - measure the extent of participation in visits to the natural environment and find out 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; and
  - find out patterns in use and participation for key groups within the population and at a range of spatial scales.

### **Survey definitions**

1.9 The survey focuses upon people's use and enjoyment of the natural environment. By natural environment we mean the green open spaces in and around towns and cities as well as the wider countryside and coastline. It does not include time spent in private gardens.

### Structure of the report

- 1.10 This technical report provides details of the methods used in MENE and the levels of accuracy of the survey outputs, under the following section headings:
  - **Section 2: Data collection** covering the rationale for the survey approach, a description of the TNS-RI in-home omnibus, sampling approach, questionnaire and interviewer training.
  - **Section 3: Data analysis** covering data checking and coding, geocoding and the weighting and grossing of survey data.
  - **Section 4: Levels of accuracy** the results of an analysis of the Complex Standard Errors associated with the first year of MENE.

#### Appendices:

- Appendix 1: MENE Questionnaire including details of base, timing and additional notes
- 2. Appendix 2: Standard classification questions included in the TNS-RI Omnibus.
- 3. Appendix 3: Weighting targets
- 4. Appendix 4: Review of demographics used in weighting of results

## 2 Data collection

2.1 This section of the report describes the approach to data collection. Areas covered survey scoping and piloting, sampling approach, achieved sample size, questionnaire design and interviewer briefing.

## Scoping stages and piloting

2.2 The methods used in MENE were developed through a scoping study undertaken in 2007. The aim of the study was to identify the most appropriate survey methods to use in a study which aimed to measure participation in visits to the natural environment amongst the English adult population.

#### 2.3 It involved:

- Consultations with the organisations likely to be end users of a study of this type, 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.
- Pilot surveys using online, telephone and face-to-face survey approaches, allowing a direct comparison of the results obtained using each method.
- 2.4 The study concluded that an in-home interview method was the most appropriate method and that the inclusion of a series of questions on a weekly basis in a consumer omnibus survey would represent the most cost effective approach for a future study.
- 2.5 Undertaking interviewing using a face to face approach was recommended as, for a study of this type, it would provide the best quality of data, with interviewers able to clarify points to respondents. This approach also facilitated the use of show prompts, such as lists of answer options.
- 2.6 Including the questions on every wave of a weekly omnibus survey meant that respondents could be asked about any visit they had taken during the last seven days, providing better quality data than if a longer recall period was used<sup>1</sup>. Also, the nationally representative sample obtained in every week of the survey allowed for the questionnaire to be split into modules with certain questions asked every week, some asked once a month and others asked less often or on a one off, 'ad hoc' basis.
- 2.7 Following the recommendations of the scoping study, data collection for the first year of MENE commenced with a pilot wave of fieldwork in February 2009, prior to the launch of the main survey period.
- 2.8 This pilot survey involved 1,763 interviews undertaken between 13<sup>th</sup> February 2009 and 17<sup>th</sup> February 2009 and allowed for final testing of the questionnaire. The purpose of this phase was to verify certain key elements of the survey approach including:
  - Refining the definitions used in the survey including 'a visit', 'the outdoors' and 'the
    natural environment'. This included agreeing the best ways to communicate these
    definitions to survey respondents and finalising the relevant introductory wording in the
    questionnaire.

<sup>&</sup>lt;sup>1</sup> A review of the 2002/03 Great Britain Day Visits Survey concluded that 'a two week recall period is simply too long for respondents' see Day Visits Quality Assurance, National Centre, 2004.

 Refining other parts of the questionnaire including decisions on which questions should be asked on a weekly, monthly or quarterly basis.

### **Summary of approach**

- 2.9 The main stage of data collection commenced on 6th March 2009. The survey involves weekly waves of interviewing on the TNS-RI 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 100 sample points.
- 2.10 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.
- 2.11 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.
- 2.12 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. In the March 2009 to February 2010 period, the TNS Omnibus survey operated 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 was included in the survey wave undertaken in the first week of 2010 to collect data on this 'gap' period (see below for further details on the Christmas Gap).

## TNS-RI in-home omnibus survey

- 2.13 Two face-to-face omnibus surveys are operated by TNS-RI, one with a weekly fieldwork period from Wednesday to Sunday inclusive, the other with a fieldwork period from Friday to Tuesday inclusive. In every wave, representative samples of 2,000 UK adults aged 16 years and over a total of 4,000 interviews per week are achieved. Both surveys use the latest in Computer Assisted Personal Interviewing (CAPI) software and PEN PCs.
- 2.14 The MENE questions are included in every week of the in-home omnibus which operates from Friday to Tuesday inclusive. Questions are asked of respondents in England only (at least 80 per cent of the total sample) and of around half the sample in each sampling point. Therefore, at least 800 respondents are asked the MENE questions each week.
- 2.15 The MENE question set is consistently included in the second position of the omnibus questionnaire and asked within the first minute of the interview.

## Sampling approach

2.16 The TNS-RI in-home Omnibus Survey uses a computerised sampling system which integrates the Post Office Address (PAF) file with the 2001 Census small area data at output area level. This enables replicated waves of multi-stage stratified samples to be drawn with accurate and up to date address selection using PPS methods (probability proportional to size). This is explained in greater detail below.

- 2.17 The TNS-RI in-home Omnibus Survey has Random Location Sampling as its sampling basis and a unique sampling system has been developed for this purpose. Utilising 2001 UK Census small area statistics and the Post Office Address File (PAF), Great Britain south of the Caledonian Canal has been divided into 600 areas of equal population. From these 600 areas, a master sampling frame of 300 sample points has been selected to reflect the country's geographical and socio-economic profile. The areas within each Standard Region are stratified into population density bands and within band, in descending order by percentage of the population in socio-economic Grade I and II.
- 2.18 To maximise the statistical accuracy of the sampling, sequential waves of fieldwork are allocated systematically across the sampling frame to ensure maximum geographical dispersion. The 300 primary sampling units are allocated to 12 sub-samples of 25 points each, with each sub-sample in itself being a representative drawing from the frame. For each wave of fieldwork, a set of sub-samples is selected in order to provide the number of sample points required (typically c. 139 for 2,000 interviews). Across sequential waves of fieldwork all sub-samples are systematically worked, thereby reducing the clustering effects on questionnaires asked for two or more consecutive weeks.
- 2.19 Each primary sampling unit is divided into two geographically distinct segments, both containing, as far as possible, equal populations. The segments comprise aggregations of complete postcode sectors. Within each half (known as the A and B halves) postcode sectors have been sorted by the percentage of the population in socio-economic groups I and II. One postcode sector from each primary sampling unit is selected for each survey wave, alternating on successive selections between the A and B halves of the primary sampling unit, again to reduce clustering effects. For each wave of interviewing, each interviewer is supplied with two blocks of 70 addresses, drawn from different parts of the sector.
- 2.20 To ensure a balanced sample of adults within the effective contacted addresses, a quota is set by sex (male, female housewife, female non-housewife); within the female housewife quota, presence of children and working status and within the male quota, working status. In each weekly wave of the survey, a target of 2,000 interviews is set and the survey data is weighted to ensure that the sample is representative of the UK population in terms of the standard demographic characteristics (see Section 3 for details of the bespoke weighting procedures used in MENE).
- 2.21 In each weekly wave, at least 1,600 interviews are undertaken in England. The MENE survey is included within a half sample of the English element of the survey, generating at least 800 interviews per week across at least 100 sample points. The half sample is obtained by automatically asking the questions of every other respondent included in an interviewing shift.
- 2.22 Within each sample point, only one interview is undertaken per household and a minimum of three households is left between each successful interview. As the MENE questions are asked in every other interview, this interval is increased to at least six households. This procedure ensures that interviewing in each sample point is not restricted to a small geographic area containing individuals with similar demographic and lifestyle characteristics thereby further minimising the effects of clustering within the sample.

## Sample sizes achieved

2.23 The total samples of respondents and visits asked about over the 12 months, including the Christmas gap additional survey wave are shown in Table 2-1 below.

**Table 2-1** Total samples achieved – respondents and visits

	Weekly questions included in every weekly survey wave	Monthly questions asked in one survey wave per month. Included during last week of each month.	Quarterly questions asked in 4 survey waves. Included during last week of June 2009, August 2009, November 2009, February 2010.
Total respondents	48,514	11,107	3,549
Visit takers (last 7 days)	20,374	4,755	1,452
All visits asked about (key details Q2 to Q4)	58,653	n/a	n/a
Randomly selected visits asked about (1 visit per visit taker, Q5 –Q11/Q16)	20,374	4,755	1,452

- 2.24 Over the 12 months' period, a total of 48,514 interviews was undertaken and of this total, 20,374 respondents had taken a visit to the natural environment in the seven days prior to the interview (42 per cent of the total).
- 2.25 Key details (duration of visits, general type of place visited and activities) were asked for up to ten of the visits taken by each respondent. As such, these details were recorded for 58,653 visits.
- 2.26 Three per cent of the 20,374 visit takers had taken more than ten visits in the previous seven days but, to prevent an excessively long interview duration, these respondents were not asked for details of all of the visits they had taken. In these cases, the total volume of visits taken was recorded and this data was used in the weighing stages to ensure that the survey results were as representative as possible of all visits taken (see Section 3). The 58,653 visits for which details have been recorded represents 93 per cent of the total number of 62,962 visits taken by respondents during the survey period.
- 2.27 Each visit-taking respondent was asked to provide further information on one of the visits they had taken (the visit is automatically selected at random by the CAPI script). As such further details were collected for a total of 20,374 visits.
- 2.28 As described in more detail below, while most questions were asked every week, certain questions were only asked in the last week of each month while others were asked once a quarter (in the last week of interviewing in June 2009, August 2009, November 2009, February 2010). Table 2-1 illustrates the respondent and visit base sizes for these question modules.

#### Sample sizes by region and groups of interest

2.29 Table 2-2 below illustrates the respondent and visit sample sizes achieved by Government Office Region and for certain key demographic groups of interest to Natural England.

**Table 2-2** Total samples achieved by Government Office Region and groups of interest March 2009 to February 2010

	Total respondents	All visits asked about (key details Q2 to Q4)	Randomly selected visits asked about (1 visit per visit taker)
By Government Office Region			
North East	2,452	3,026	992
North West	6,563	6,408	2,463
Yorkshire and the Humber	4,917	5,600	1,891
East Midlands	4,148	5,256	1,718
West Midlands	5,206	4,921	1,816
South West	4,765	8,315	2,492
East England	5,407	8,011	2,636
London	7,020	5,690	2,475
South East	8,036	11,426	3,891
By groups of interest			
Black and Minority Ethnic Population	5,581	2,985	1,506
People with a disability or long term illness	10,294	10,141	3,228
Residents of bottom 10 per cent of Index of Multiple Deprivation	5,462	4,035	1,589
People aged 16 to 24	6,241	6,212	2,673

## **Questionnaire design**

2.30 The MENE questionnaire was divided into a series of modules with certain questions included in every weekly survey wave while others were included in one survey wave per month or once every three months. Table 2-3 below details the question areas included at each level of frequency and the base of respondents asked each question. A copy of the questionnaire is provided in Appendix 1.

#### Table 2-3 Questionnaire topics and frequency of inclusion in survey fieldwork Questions included in Questions asked in 1 survey Questions asked in 4 survey every weekly survey wave wave per month. waves. Included during last week of Included during last week of June 2009, August 2009, each month. November 2009, February 2010. Questions asked of visit Question asked of visit takers Question asked of all respondents takers regarding single regarding single randomly randomly selected visit only selected visit only Q1 – Volume of visits per day over last 7 days Q12 – Reasons for visit E1 Outcomes of visit Q13 – Party composition **Environmental attitudes and** Questions asked of visit Q14 – Whether a dog/dogs takers regarding all visits were taken on visit behaviours questions asked of all respondents taken Q15/16 – Expenditure during (up to a maximum of 10 E2 – attitudes to environment visit visits) E3 – activities in the natural Q2 – Type of place visited environment Visit participation question (general) asked of all respondents E4 – pro-environmental activities Q3 – Visit duration Q17 – Frequency of visits E5 – changes in lifestyle Q4 – Activities undertaken during last 12 months Questions asked of visit Barriers question asked of takers regarding single respondents who normally randomly selected visit take visits less than once a only month Q5 – Type of place visited Q18 – Barriers to visits during (specific) last 12 months Q6 - Village/town/city visited Q7 - Name of actual place visited or details of location if no name Q8 - Distance travelled to place visited Q9/10 – Where journey started from Q11 – Mode of transport used Profile questions asked of all respondents Q19 - Access to car Q20 – Dog ownership

Q21 – Frequency of undertaking exercise Q22 – Disability and long

term illness

- 2.31 The approach followed involved respondents firstly being asked about the volume of visits taken in each of the seven days preceding the interview (Q1). Key details of up to ten of these visits (Q2 type of place visited, Q3 duration of visit, Q4 activities undertaken) were then recorded. In practice, the vast majority of respondents took ten or less visits (97 per cent of respondents).
- 2.32 If more than one visit had been taken in the last seven days (24 per cent of respondents), one of the visits was randomly selected as the basis for further questions. This approach ensured that there was no bias in the visit selection and the CAPI software was used to automatically make the random selection of one of the visits taken by each respondent.
- 2.33 In each wave, the questionnaire also contained profiling questions which are asked of all respondents regarding access to a car, dog ownership, frequency of undertaking exercise and disabilities and long term illnesses. These are in addition to the classification questions included as standard in the TNS-RI in-home Omnibus Survey the following data being collected for all respondents (also see Appendix 2):
  - Age;
  - Sex:
  - Socio-economic status (A, B, C1, C2, D and E groups);
  - Working status;
  - Marital status:
  - Children in home/ life stage (for example, Young Independents, Family, Empty Nester);
  - Region of residence (GOR or other regions);
  - Full home postcode (available for all respondents, used for ACORN classification, Index of Multiple Deprivation, urban rural classification and other classifications); and
  - Ethnicity.
- 2.34 Other questions are asked of all respondents once a month regarding their normal frequency of visit taking and (if less than once a month), barriers to participation. In each quarter, other questions are asked of all respondents regarding other forms of engagement with the natural environment, attitudes to the environment and pro-environmental behaviours.

## A seven day recall period

- 2.35 Evaluations of previous studies undertaken for Natural England and its predecessors have recognised there is trade-off between the recall period people are asked about in the questionnaire and the number of visits that can be recorded within the interview.
- 2.36 In the 2002 Great Britain Day Visits Survey (GBDVS), respondents were asked about visits taken during the two weeks before the interview. An independent review of the results, undertaken by the National Centre for Social Research in 2004<sup>2</sup>, found that respondents were likely to have a higher level of recall of trips taken in the seven days immediately prior to the interview than for the preceding seven days. This issue related particularly to shorter, more regularly taken visits, which were less likely to be recalled for the earlier period. Given the conclusions of this review and experience in other surveys of participation, it was decided that a seven day recall period provided the best approach for MENE, collecting accurate data for a large base of visits.

<sup>&</sup>lt;sup>2</sup> Day Visits Quality Assurance, National Centre, 2004.

2.37 Ensuring the accurate collection of data on all of the visits taken on every day in the recall period was a priority at the questionnaire design stage and an area covered extensively in the interviewer briefings.

### Communicating the survey scope

- 2.38 Reflecting the survey aims, the main focus of MENE is on time spent in the natural environment for leisure purposes. However, unlike previous surveys, MENE collects details of both visits to the natural environment such as on 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 taken in urban green spaces. Whilst previous studies including the 2005 England Leisure Visits Survey are likely to have under-represented close to home visits to the natural environment, significant efforts have been made to ensure that MENE records the full spectrum of recreation in the natural environment undertaken by adults in England.
- 2.39 The outcomes of the aforementioned scoping study informed the wording of the introductory text used in MENE, as shown in Figure 2-1. The wording used aims to ensure that survey respondents are clear that participation in activities 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 provide to respondents who may be uncertain of what is and is not included within the definition of a visit.

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.

Figure 2-1 Introduction to MENE interview

### Interviewer briefings

- 2.40 It is particularly important that interviewers who undertake the MENE fieldwork are clear regarding key areas such as the definition of a visit and the level of detail to be recorded in questions regarding destinations visited, visit start points and visit expenditure.
- 2.41 Therefore, during the first 12 months of the study, interviewer briefings have been undertaken by means of the following channels:
  - Written instructions displayed to interviewers via their CAPI machine. These must be read prior to commencing every interviewing shift and can be referred to at any time during the interview.
  - A video 'pod cast' provided on a DVD to all interviewers who work on the survey. This
    short training video communicates key points regarding the survey scope and the
    importance of collecting the correct data regarding visit destinations and start points
    and expenditure.

- A presentation in March 2009 to regional fieldwork supervisors outlining the survey objectives and the importance of their interviewing teams following the instructions with a focus on the key areas mentioned above. A similar presentation was undertaken again in early 2010 providing an update on survey progress and a reminder of the guidelines which interviewers must follow.
- Articles in the newsletter which is distributed to interviewers updating them on the survey progress, reinforcing the key areas to focus on in the interview.
- 2.42 Also, on two occasions during the first 12 months of the survey, interviewers have been sent feedback forms inviting them to comment on the questionnaire design and any issues from both the interviewer's and respondent's perspectives.

### **Christmas gap**

- 2.43 During the March 2009 to February 2010 period, fieldwork for the TNS-RI in-home omnibus took place from Friday to Tuesday every week with the exception of the period between 25<sup>th</sup> December and 29<sup>th</sup> December.
- 2.44 As MENE records details of visits taken during the seven days prior to interview, this gap in fieldwork coverage meant that full data could not collected through the normal survey process for the period 18<sup>th</sup> to 28<sup>th</sup> December 2009.
- 2.45 It was anticipated that, given the timing of this gap in the fieldwork, the volume and characteristics of visit taking could differ from other periods. As such, it was important to find a way to collect data for this period whilst recognising that it was not viable to continue normal interviewing over the Christmas weekend.
- 2.46 The solution adopted was to undertake additional interviewing during the 1<sup>st</sup> January to 5<sup>th</sup> January 2010 omnibus wave, with the half of the English sample who were not asked the normal MENE questions asked a similar series of questions regarding the visits they had taken in the period between 14 days and eight days prior to the interview date.
- 2.47 Questions identical to those normally asked regarding the previous seven days were asked of this sample, the only difference being the period asked about and the addition of extra prompts to ensure that respondents were clear about the days for which they were being asked about. Given the aforementioned issues regarding poor recall of visits taken more than seven days prior to interview, additional efforts were made to ensure that respondents were prompted to recall the correct day and also given adequate time to consider their responses. The 'special' nature of the period being asked about was used with respondents given prompts such as 'this was the day before Christmas Day' to remind them of what they had done during each of the seven days within the survey period.
- 2.48 A total of 846 interviews were undertaken for this exercise, recording the key details of 811 visits (questions 2 to 4) and further details of 291 of these visits (randomly selected as in the main fieldwork). The results of these interviews were reviewed and have been integrated into the main monthly, quarterly and annual datasets.

## 3 Data analysis

3.1 This section of the report describes the approach followed to check, code and analyse the data following its collection. Areas covered include the coding of standard survey responses, geocoding, weighting and grossing procedures.

### Data checking and coding of 'other' responses

- 3.2 The CAPI (Computer Assisted Personal Interviewing) approach allows for checks on the validity of the data to be incorporated into the script programming and conducted 'live' in the course of the interview. For MENE this includes a check at Question 1 where the interviewer is prompted to 'double check' if a respondent claims to have taken five or more natural environment visits in a single day.
- 3.3 While the MENE questionnaire does not include any fully open-ended questions, a number of questions provide an 'other' option which, if selected, requires the interviewer to record a response by handwriting this on their CAPI machine screen so that it can be digitally recorded. Following the interview, these responses are then reviewed and either 'back coded' to one of the existing answer options, if any are appropriate, or allocated a new code so that they can be included within the subsequent data analysis. This coding is undertaken for the 'other' responses to the following questions:
  - Question 4 Activities undertaken;
  - Question 5 Type of place visited (specific);
  - Question 11 Mode of transport used;
  - Question 12 Reasons for visit; and
  - Question 18 Barriers to visits during last 12 months.

## **Destination geocoding**

- 3.4 Respondents are asked the following two questions regarding the location of the main destination of their visit. These questions are asked only of the single, randomly selected visit:
  - Question 6 "What is the name of the city, town or village or nearest city, town or village to the place you visited?"
  - Question 7 "Now please provide the name of the actual place you visited, for example the park, wood or canal".
- 3.5 At Question 6, a Gazetteer which contains the names of all of England's cities, towns and villages is used. Around 21,000 places are included in this Gazetteer. The interviewer selects the place named by the respondent from this list and it is then possible to analyse responses at a range of geographical levels including Government Office Region, County or Local Authority. Following this approach, over the first 12 months' fieldwork period, 19,964 of the 20,374 visits recorded were 'allocated' to a city, town or village (98 per cent).
- 3.6 At Question 7, a place name Gazetteer containing details of places which could be the main destination of visits to the natural environment is used. This Gazetteer was compiled on the basis of a number of existing sources provided to TNS-RI by Natural England including the Ordnance Survey 1: 50,000 Scale Gazetteer, and listings of designated areas and other potential outdoor recreation sites including Open Access Land, woodland and allotments. As well as place names, the Gazetteer contains location details in terms of six figure

- Eastings and Northings (using the Universal Transverse Mercator (UTM) coordinate system).
- 3.7 A total of 42,993 places are included in this Gazetteer, including over 7,000 woodland areas, around 6,000 water features (rivers, lakes, canals and other inland water), around 2,500 hills and mountains, over 2,000 Commons and over 250 Country Parks.
- 3.8 During the interview, the interviewers aim to initially find the name of the place visited from the Gazetteer. However, where the visit destination cannot be found or is not included in the Gazetteer, the interviewer records as many details as possible on the place visited (name, address and places close to destination such as shops, pubs, etc.) to facilitate the subsequent identification of the location after the interview, as discussed in the next section.
- 3.9 Where necessary, interviewers provide respondents with the following guidance to ensure that they are clear of how to respond and the appropriate details are recorded:
  - If the place does not have a name, provide a nearby street name or landmarks which would help us to find it on a map.
  - If you were on a walk with no particular 'destination', tell us the location of the furthest away place reached.
  - If you visited more than one place, provide the name of the place that was your final destination, for example, furthest away.
- 3.10 Following the completion of each week of interviewing, the responses provided are reviewed and locations are identified and verified using a variety of sources including Internet search engines, online mapping websites and the place name gazetteer mentioned above. Once the location is verified using these sources, Eastings and Nothings are added to the survey data file.
- 3.11 By pursuing this detailed approach, it was possible to apply destination grid references to 16,109 of the 20,374 visits asked about in the first 12 months of interviewing, a 'success' rate of 79 per cent. In the remaining 21 per cent of cases it has not been possible to obtain a destination geocode. This is usually due to a lack of sufficient information being provided by the respondent to allow the place to be identified with sufficient accuracy to allocate a geocode. As described in Section Two, continuous efforts are made to ensure that the level of detail collected from respondents and recorded by interviewers is sufficient to identify the visit destination for the purposes of geocoding. The 79 per cent of visits allocated a grid reference exceeds the target for the first year of MENE.

#### **Error checking**

- 3.12 To ensure the accuracy of the destination geocodes applied, the outputs of the above processes have been profiled by Natural England to identify the following types of potential error:
  - Grid references which are outside of England.
  - Grid references which are offshore and so are unlikely to be the main visit destination.
  - Grid references which have an identical Easting and Northing.
  - Grid references in positions which have a markedly different distance from the start point than recorded as the distance travelled in the main survey (at Question 8).
- 3.13 These checks have been undertaken at a six months' interim and 12 months' final stage with potential errors flagged and checked. Where necessary data has then been corrected and further checks have been added at the data collection and coding stages to reduce the incidence of these types of error.

### Start point geocoding

- 3.14 In addition to the identification of the position of visit destinations, efforts have been made to identify the location of visit start points.
- 3.15 For the majority of visits taken (95 per cent) the start point was the survey respondent's home. In most of these cases, the address and full postcode included in the survey sample file has been used to identify the Easting and Northing of this point. This is done by matching the respondent's address to the corresponding record in OS Address Layer (provided by Natural England for this purpose). Following this approach it has been possible to obtain a precise grid reference for 85 per cent of addresses.
- 3.16 For a further 14 per cent of addresses, it has not been possible to obtain a precise grid reference for the address, usually because the format of the address in the sample file varied significantly from that used in the OS Address Layer file. In these cases it has been possible to obtain the geocode for the centre point of the respondent's home postcode. The remaining 1 per cent of addresses could not be matched with an address or postcode.
- 3.17 Five per cent of visits started from a point other than the respondent's home. In these cases, the survey respondent was asked to specify the address and postcode of the start point or, if they did not know these details, to provide other information which could then be used to identify the address. OS Address Layer was then used to obtain an Easting and Northing for this point.
- 3.18 Following this approach it has been possible to obtain a grid reference for 36 per cent of visit start points which were not the respondent's home. It was not possible to obtain a geocode for the remaining 64 per cent of visits as insufficient information was provided by the respondent to allow for the point to be accurately identified. Recording more detailed information regarding start points other than home is a priority in the ongoing survey and a focus of interviewer briefings (see Section 2).
- 3.19 In total over the 12 months of interviewing, it has been possible to obtain a start point grid reference for 19,481 of the 20,374 visits recorded, a 'success' rate of 96 per cent.

### Weighting and grossing up of the survey data

- 3.20 This section provides details of the approaches taken to weight and gross up the MENE data. The outputs of this process are estimates of the total volume of visits taken to the natural environment by the English adult population and results representative of the adult population and the visits they have taken over the study period.
- 3.21 Reviews of these procedures were undertaken following the first six months of data collection and again after 12 months. The results of this latest review are provided later in this section.

#### Weighting and grossing procedures

#### A) Questions asked every week

3.22 Monthly data is based on the results of survey weeks which fell entirely or mainly within the reporting month. As such, for the March 2009 to February 2010 period, monthly outputs were based on the following periods (week numbers shown are weeks of the year).

Table 3-1 Weeks included in each MENE month

Month	Calendar weeks
March 2009	10-13
April 2009	14-18
May 2009	19-22
June 2009	23-26
July 2009	27-31
August 2009	32-35
September 2009	36-39
October 2009	40-44
November 2009	45-48
December 2009	49-53
January 2010	1-4
February 2010	5-8

- 3.23 The steps followed to weight the results of questions which are included in every week of fieldwork are as follows:
  - 1) Each month's data is weighted on the basis of age and sex (for example, males 16-24, females 85+), Government Office Region of residence, social grade, presence of children in the household, sex and working status (for example, male full time), presence of a dog in the household and urban/rural residence.
  - 2) The weighting targets used are representative of the English adult population and use the latest data available (see Appendix 3 for details). The resultant Demographic Weight (DW) is used to weight respondent based data from questions asked every week (Question 1 and classification questions).
  - 3) The total claimed number of trips is calculated for each respondent (TCT). That is the sum of the claimed trips in the seven days preceding the interview as recorded at Question 1.
  - 4) The total number of trips with details given is calculated for each respondent (TDT). This is the sum of the trips taken in the seven days preceding the interview as recorded at Question 2 to Question 4. Each respondent can provide details of up to ten visits taken during the previous seven days.
  - 5) The Trip Correction Factor (TCF) for each respondent is calculated as follows: TCF=TCT/TDT.
  - 6) A Calendar Month Factor (CMF) is calculated as the total days in the reporting month divided by seven (i.e. the number of days for which visits have been collected for each respondent).
  - 7) The Overall Trip Weight (OTW) is calculated for each respondent as the product of their Demographic Weight (DW), Trip Correction Factor (TCF) and Calendar Month Factor (CMF).
  - 8) The estimate of the total number of visits taken in the month by the English adult population is the sum of each respondent's Overall Trip Weight. This weight is applied to visit based results which are collected for up to ten visits taken in the last seven days at Question 2 to Question 4.

9) A Randomly Selected Trip Weight is calculated for each respondent as the product of their Demographic Weight (DW), Total Claimed Trips (TCT) and the Calendar Month Factor (CMF). This weight is applied to visit based results which are collected for a single randomly selected visit from Question 5 to Question 11.

#### B) Questions asked once a month and once a quarter

- 3.24 The steps followed to weight the results of questions which are included in one wave of fieldwork per month or one wave of fieldwork every three months are as follows:
  - Questions asked once a month and once a quarter are only included in quarterly tables with results based on the March to May, June to August, September to November and December to February periods.
  - 2) For each of the quarterly periods, the combined three months' sample (for example, March, April and May) is weighted to the same demographic targets as the monthly data. This Quarterly Demographic Weight (QDW) is used to weight respondent based data from questions asked once a month or once a quarter.
  - 3) A Quarter Factor (QF) is calculated as the number of days in the quarter divided by seven.
  - 4) The Initial Quarterly Weights (IQW) to be applied to the monthly questions is then calculated for each respondent as the product of their Quarterly Demographic Weight (QDW), the Quarter Factor (QF) and their Total Claimed Trips (TCT).
  - 5) An estimate of the total trips made in the quarter is calculated as a sum of the Initial Quarterly Weights. This sum will differ from the sum of the total trips in the quarter produced from the analysis of data collected every week (i.e. as described in bullet 8 above).
  - 6) It is therefore necessary to calculate a Processing Correction (PC) as the estimate of trips taken in the quarter as estimated in the analysis of data collected every week divided by the estimate obtained in bullet 5 above.
  - 7) The Final Quarterly Weight (FQW) for each individual is calculated as their IQW x PC. This weight is applied to visit based results which are collected on a monthly basis for a single randomly selected visit from Question 12 to Question 16.
- 3.25 In summary the following outputs are produced by undertaking the above weighting processes:
  - Estimates of the total volume of visits taken by the English adult population during each month – this is the sum of every respondent's Overall Trip Weight which takes account of the volume of adults resident in England (through the Demographic Weight), the number of visits taken by each respondent in the previous seven days (Total Claimed Trips) and the number of days in the month (through the Calendar Month Factor). The monthly estimates of visits are added together to obtain estimates of visits for longer periods.
  - Results which relate to the English adult population such as percentages of the
    population taking visits at a certain level of frequency. These 'respondent based'
    results are produced for Question 1 (number of visits in last 7 days), Question 17
    (normal frequency of visits in last 12 months), Question 18 (reasons for not taking visits)
    and all of the demographic classification questions. These results are obtained by
    applying the Demographic Weight.
  - Results which relate to visits taken by English adult population such as the percentages of all visits involving a certain activity or taken to a particular type of place. These 'visit based' results are produced for Questions 2 to 4 for all of the visits taken by respondents (up to a maximum of ten per respondent) and for Questions 5 to 16 for questions asked about a single randomly selected visit. These results are obtained by applying the Overall Trip Weight to questions 2 to 4, Randomly Selected

- Trip Weight to questions 5 to 11 which are asked every week and Final Quarterly Weight to questions are asked monthly or quarterly.
- 3.26 The MENE Annual Report includes an estimate of total expenditure during visits to the natural environment. This estimate is obtained by multiplying the estimate of total visits taken by the mean expenditure per visit (i.e. as collected at question 15).

#### **Results of weighting review**

- 3.27 The purpose of weighting survey data is to ensure that outputs are representative of the population. In the case of MENE, the approaches outlined on the previous pages aim to ensure that the survey results are representative of the visits taken by the English adult population, in terms of volume and characteristics.
- 3.28 In designing the weighting approach for MENE, the demographic variables which were considered to be most closely related to levels and types of visit taking and those which were expected to be important reporting categories were selected. These consist of a combination of 'standard' demographic characteristics (such as age and sex) and other characteristics expected to be closely related to participation levels, such as having a dog in the home.

#### Review of demographics currently used in weighting

- 3.29 The table in Appendix 4 provides details of the unweighted number of visits reported by respondents during the first 12 months of interviewing and estimates of total visits following the application of weights. Comparing the unweighted and weighted profiles of visits illustrates the following:
  - The application of weighting inflates the visit estimates for men aged 16 to 64 (from 36 per cent of unweighted visits to 40 per cent with weighting), members of the ABC1 socio-economic group (from 51 per cent to 56 per cent) and men who work full time (from 23 per cent to 29 per cent).
  - Conversely, the application of weighting deflates the visit estimates for women aged 65 and over (from 11 per cent to 8 per cent), those in the E socio-economic group (from 16 per cent to 10 per cent) and women who work part time or are not working (from 40 per cent to 35 per cent).
- 3.30 The above variations reflect varying response rates amongst these population groups, with those listed in the second bullet above more likely to be available for interview and therefore included in the survey. The demographic weighting corrects for these variations.
- 3.31 The next stage of the review involved an analysis of the average number of visits per adult amongst the groups which weighting is based upon. Across the population as a whole an estimated 68.7 visits were taken per adult during the first 12 months of interviewing.
- 3.32 As the table in Appendix 4 illustrates (see column furthest to right), there are significant differences in average levels of visit-taking across all of the categories used in the weighting except for children in household. One of the most notable differences relates to having a dog in the household.
- 3.33 Most of the differences confirm preconceptions, for example, smaller numbers of visits taken by residents of London and the elderly population.
- 3.34 These large differences in visit taking levels indicate that these characteristics are relevant variables to use in the MENE weighting. Therefore, our recommendation is for these characteristics to continue to be used in the weighting of future years' outputs.

#### Review of other demographics considered for weighting

- 3.35 A similar review was undertaken with a focus on a further two demographic characteristics which were considered as potential weighting factors but not applied - access to a car and having a long standing illness or disability.
- 3.36 While these characteristics were seen as potential weighting factors due to their likely influence on the ability to take visits, they were not used due to a lack of accurate and up to date population data (data on car access and long standing illness were collected in the Census in 2001 but it was felt that weighting to such out of date targets could produce a bias in the results).
- 3.37 As the table in Appendix 4 illustrates, unsurprisingly, more visits are taken by those with access to a car than those without and fewer trips are taken by those with a long term illness or disability than those in good health.
- 3.38 Twenty per cent of the sample during the first 12 months of interviewing had a long term illness or disability. This group represented 18 per cent of the weighted sample and made 16 per cent of the weighted visits. By comparison this group formed 21 per cent of the population at the time of the 2001 Census.
- 3.39 As we know that those aged over 65 years are over represented in the unweighted data and are more likely to have a limiting long term illness or disability, the reduction of this group following weighting by age is to be expected. The Census data is out of date by nine years now and therefore the percentage of the population with a limiting long term illness or disability may have changed. Also, as this is a self certification question, the perception amongst respondents of what constitutes a limiting long term illness or disability may well have changed since the Census.
- 3.40 Given the lack of up to date targets for weighting and the fact the percentage in the weighted sample has reduced as expected given the demographics of the unweighted sample, we would recommend not including this as a variable in the weighting.
- 3.41 In terms of car access, 68 per cent of the sample had access to a car. This group represented 70 per cent of the weighted sample and made 83 per cent of the weighted visits. By comparison the 2001 Census recorded 73 per cent of *households* as having access to a car data for adults was not published. No more recent data is available.
- 3.42 Weighting to the 2001 Census data could be incorrect as car ownership levels will almost certainly have changed and would be different for individuals compared to household. Car ownership is linked to other demographics and the existing weighting using other demographics already increases the unweighted sample of those with car ownership from 68 per cent to 70 per cent.
- 3.43 Given the fact we do not have up to date information on car ownership, the fact that the Census data is at the household level and not at the individual level and as the differences in visit taking frequency between those with and without car access are smaller than for some other characteristics, we would recommend not including this as a variable in the weighting.

#### **Conclusions of weighting review**

3.44 The results of this review suggest that the demographics used in the weighting procedures are appropriate. In particular, the variations in frequency of visit taking on the basis of presence of a dog in the household demonstrate the importance of including this characteristic in the weighting.

3.45	We do not recommend any significant changes to the current procedures being followed but this approach will be kept under review.

## 4 Levels of accuracy

- 4.1 This section of the report provides details of the outputs of an analysis of Complex Standard Errors associated with the MENE data undertaken following the first twelve months of interviewing. As described in detail in section 2.4, during this period some 48,514 interviews were completed, key details were collected on 58,653 visits and full details were collected on 20,374 selected visits.
- 4.2 Normal confidence intervals and standard errors assume that the data has come from a Simple Random Sample (SRS). In such a sample, every individual in the population (for MENE, the English adult population) has an equal chance of being included in the survey sample.
- 4.3 In most surveys, however including MENE the sampling approach followed means that the survey sample is not a SRS. Complex Standard Errors (CSE) therefore take into account the extra information from the sampling design. Two sources of sample design are taken into account:
  - Strata showing homogenous groups, for example, gender, region.
  - Clusters points where the data was sampled from (if not an SRS).
- 4.4 The following estimates have been produced using a resampling method which resamples the original sample 1,000 times and then takes an average of all the estimates calculated in order to provide a more robust estimate of variance, taking account of the complex survey design.

### **Analysis of respondent-based data**

- 4.5 Some of the MENE results are analysed and presented as proportions of the adult population in England. For example the percentages taking visits in the last 7 days or last 12 months. At an overall level these results are based on the full annual sample of 48,514 respondents.
- 4.6 Table 4-1 overleaf illustrates the design effect associated with this overall sample and the sub-samples obtained in each of the English regions. The design effect is an indication of how much larger the sample variance is with the complex survey design used in MENE than it would be if the survey was based on the same sample size but selected randomly (i.e. a Simple Random Sample (SRS)).
- 4.7 The table also includes the design factor which is an inflation factor for the standard errors obtained using a complex survey design. The design factor at the all respondent level of 1.31 indicates that standard errors for the 12 months' data are 1.31 times as large as they would have been had the design been an SRS.
- 4.8 The design factor is used to obtain the effective sample size which gives, for a complex survey design, an estimate of the sample size that would have been required to obtain the same level of precision in an SRS. The estimated effective sample size for respondent based results after twelve months of interviewing is 28,297 around 57 per cent of the actual achieved sample.

**Table 4-1** Levels of accuracy – respondent based results

	Sample size (respondents)	Design effect	Design factor	Effective sample size
All respondents	48,514	1.74	1.32	27,813
By Government Office Region				
East Midlands	4,148	1.42	1.19	2,912
East of England	5,407	1.31	1.15	4,121
London	7,020	1.91	1.38	3,668
North East	2,452	1.39	1.18	1,768
North West	6,563	1.41	1.19	4,663
South East	8,036	1.44	1.2	5,597
South West	4,765	1.52	1.23	3,137
West Midlands	5,206	1.36	1.17	3,817
Yorkshire & the Humber	4,917	1.38	1.28	3,560

- 4.9 The design factor may be used to obtain an indication of the levels of accuracy of results obtained at a total sample level and for certain sub sets of the data. For example with an SRS, a result of 50 per cent with the total sample of 48,514 would have a margin of error of +/-0.44 percentage points at the 95 per cent levels of confidence. Multiplying this value by 1.32 provides us with the margin of error when taking account of the MENE sample design i.e. +/-0.58 percentage points. This is equal to the margin of error that would be obtained for this result with a simple random sample of 27,813. The design factors may be applied in a similar way to the results obtained for the sub samples obtained in each region.
- 4.10 Following this approach the following margins of error may be estimated for certain key respondent based results from the first year of data collection:
  - 43.3 per cent of the population had visited the natural environment in the last seven days. This result ranges from 42.7 per cent to 43.9 per cent.
  - 53.5 per cent of the population stated that they normally visited the natural environment for leisure at least once a week. This result ranges from 52.9 per cent to 54.1 per cent.
- 4.11 It should be borne in mind that those questions which were included in the survey once a month (Q17 and Q18) and once a quarter (E2 to E5) have smaller sample sizes. A similar design factor is applicable to these sub-samples.
- 4.12 On the basis of the overall respondent based data design factor of 1.32, the following provides an indication of the general levels of accuracy of respondent based MENE results:
  - Where the sample size is in excess of 40,000 respondents, the data will generally be accurate to around +/-0.6% at the 95% confidence level.
  - When the sample size is around 10,000 respondents, the data will generally be accurate to around +/-1.3% at the 95% confidence level.
  - Where the sample size is around 5,000 respondents, the data will generally be accurate to around +/-1.8% at the 95% confidence level.
  - Where the sample size is around 1,000 respondents, the data will generally be accurate to around +/-4.1% at the 95% confidence level.

#### Analysis of visit-based data

- 4.13 Some of the MENE results are analysed and presented as proportions of the visits taken by the adult population in England. For example the percentages of the visits taken in the last week which involved time spent in countryside or the percentage of visits involving dog walking. At an overall level some of these results are based on all 58,653 visits for which key details were collected (at questions two to four, referred to below as 'all visit' data) while other results are based on the randomly selected 20,374 visits which more details were collected for (question five to eleven, referred to below as 'selected visit' data).
- 4.14 Table 4-2 illustrates the design effects and design factors associated with the all visits data obtain from the overall sample of 58,653 visits which were asked about at questions two to four. The design factors relating to sub-samples of visits to different general types of place are also shown (as recorded at question two). These may be applied as outlined for the respondent based results. For example, with an SRS sample, a result of 50 per cent of visits taken to seaside coastline would be accurate to around +/-2.1 percentage points at the 95% levels of confidence. Applying the seaside coastline visits design factor of 1.19 provides the margin of error when taking account of the MENE sample design i.e. +/-2.46 percentage points.

Table 4-2 Levels of accuracy – all visit based results

	Sample size	Design effect	Design factor	Effective sample size
All visits	58,653	1.74	1.32	33,700
By general place visited				
Town or city	24,328	1.74	1.32	13,990
Seaside resort or town	4,469	1.89	1.37	2,367
Seaside coastline	2,256	1.72	1.19	3,149
Countryside	27,600	1.79	1.34	15,425

- 4.15 On the basis of this all visit based data design factor of 1.32, the following provides an indication of the general levels of accuracy of all visit based MENE results:
  - When the sample size is around 50,000 visits, the data will generally be accurate to around +/-0.6% at the 95% confidence level.
  - When the sample size is around 20,000 visits, the data will generally be accurate to around +/-0.9% at the 95% confidence level.
  - When the sample size is around 10,000 visits, the data will generally be accurate to around +/-1.3% at the 95% confidence level.
  - Where the sample size is around 5,000 visits, the data will generally be accurate to around +/-1.8% at the 95% confidence level.
- 4.16 Table 4-3 illustrates the design effects and design factors associated with the sample of 20,374 selected visits and the sub-samples of visits taken to different specific types of place (as recorded at question five).

**Table 4-3** Levels of accuracy – selected visit based results

	Sample size	Design effect	Design factor	Effective sample size
All selected visits	20,374	2.26	1.50	9,024
By specific place visited				
A playing field or other recreation area	1,206	1.09	1.04	1,108
Another open space in a town or city	1,362	1.23	1.11	1,110
Another open space in the countryside	1,830	1.18	1.09	1,540
Beach	1,541	1.68	1.30	916
Children's Playground	786	1.29	1.13	611
Country Park	1,710	1.31	1.15	1,302
Farmland	1,051	1.75	1.32	600
Mountain, hill or moorland	464	1.18	1.08	395
Park in town or city	5,532	1.74	1.32	3,184
Path, cycleway or bridleways	1,981	1.52	1.23	1,306
River, lake or canal	1,718	1.43	1.20	1,199
Village	1,202	1.47	1.21	817
Woodland or forest	1,747	1.34	1.16	1,308

- 4.17 On the basis of the selected visit based data design factor of 1.5, the following provides an indication of the general levels of accuracy of selected visit based MENE results:
  - When the sample size is around 20,000 visits, the data will generally be accurate to around +/-1% at the 95% confidence level.
  - When the sample size is around 10,000 visits, the data will generally be accurate to around +/-1.5% at the 95% confidence level.
  - Where the sample size is around 5,000 visits, the data will generally be accurate to around +/-2.1% at the 95% confidence level.
  - Where the sample size is around 1,000 visits, the data will generally be accurate to around +/-4.6% at the 95% confidence level.

## **Accuracy of visit estimates**

- 4.18 An output of the weighting and grossing procedures used in MENE (see Section 3) is a series of estimates of the total number of visits taken by adults in England between March 2009 and February 2010. Estimates are produced at various different levels including visits taken by residents of particular regions and visits taken to general and specific types of place.
- 4.19 Table 4-4 overleaf illustrates the upper and lower confidence limits associated with these estimates. These estimates take account of two sources of variation: the uncertainty

- associated with respondent based results and the sample variation in terms of the number of visits respondents report to have taken in the 7 days prior to interview.
- 4.20 The regional estimates shown relate to visits taken by residents of each region rather than visits where the destination is within the region. The confidence limits associated with estimates of visits taken within destinations which are included in the annual results report are slightly wider than those shown overleaf.

**Table 4-4** Visit estimates – total, by Government Office Region of residence and by specific and general places visited

	12 month visit estimate '000s visits	Lower confidence limit '000s visits	Upper confidence limit '000s visits
All visits	2,857,759	2,785,840	2,929,678
By GOR of residence			
East Midlands	265,514	242,682	288,346
East of England	371,514	346,355	396,673
London	275,195	253,442	296,948
North East	157,498	138,605	176,391
North West	310,530	288,863	332,197
South East	530,961	502,335	559,587
South West	417,131	388,555	445,707
West Midlands	242,041	220,375	263,707
Yorkshire & the Humber	287,375	262,147	312,603
By specific place visited			
A playing field or other recreation area	195,411	168,693	222,129
Allotment or Community Garden	17,205	11,923	22,487
Another open space in a town or city	226,280	198,148	254,412
Another open space in the countryside	319,011	288,213	349,809
Beach	174,137	159,038	189,236
Children's Playground	82,157	73,116	91,198
Country Park	198,630	182,662	214,598
Farmland	208,953	187,641	230,265
Mountain, hill or moorland	61,126	53,172	69,080
Park in town or city	677,631	647,689	707,573
Path, cycleway or bridleways	369,187	341,782	396,592
River, lake or canal	253,373	230,815	275,931
Village	175,968	157,276	194,660
Woodland or forest	316,825	292,431	341,219

Table continued...

	12 month visit estimate '000s visits	Lower confidence limit '000s visits	Upper confidence limit '000s visits
By general place visited			
Town or city	1,157,932	1,113,597	1,200,945
Seaside resort or town	207,101	190,725	223,237
Seaside coastline	112,820	97,830	127,684
Countryside	1,379,905	1,325,345	1,432,896

## **Accuracy of expenditure estimates**

- 4.21 MENE also collects data on the amounts spent during visits to the natural environment. This data is then applied to estimates of the total volume of visits taken to obtain an estimate of the total amount spent on all visits taken over a 12 month period.
- 4.22 Table 4-5 below illustrates the confidence limits associated with these estimates.

Table 4-5 Expenditure estimates

	12 month visit estimate	Lower confidence limit	Upper confidence limit
Average spend per visit (excluding visits with no spend)	£28.78	£24.48	£33.04
Average spend per visit (including visits with no spend)	£7.14	£6.08	£8.20
Estimated total spend all visits over 12 month period	£20.4 billion	£17.4 billion	£23.5 billion

# **Appendix 1 – MENE questionnaire**

#### Table A

	Asked of	Frequency	Notes
INTRODUCTION			
READ THE FOLLOWING TEXT IN FULL TO RESPONDENTS AND ENSURE THAT THEY UNDERSTAND.			Interviewer to check respondent is clear over definition.
SEE INSTRUCTIONS FOR FURTHER CLARIFICATION.			More detailed briefing note provided to
Now I am going to ask you about occasions in the last week when you spent your time out of doors.			interviewer.
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 <b>does not include</b> :			
- routine shopping trips or;			
- time spent in your own garden.			
7 DAY TRIP DIARY SECTION			
			Set up so the
1) Firstly I would like to record details of occasions when you made out of door visits during each of the last 7 days.	ALL RESPONDENTS	WEEKLY – 51 WAVES	number of visits taken on each of last 7 days, starting with yesterday, is
How many times, if at all, did you make this type of visit yesterday/on <day>?</day>			asked separately, from most recent day to 7 days before interview.

	Asked of	Frequency	Notes
INSERT TEXT IF MORE THAN ONE VISIT IN DAY BEING ASKED ABOUT: So, thinking of the [first/second/third] of the visits you took on that day.		WEEKLY – 51 WAVES	
2) Which of the following best describes where you spent most of your time on this visit?  SHOW SCREEN. RANDOM ORDER. SINGLE CODE.			
In a town or city			
<ul> <li>In a seaside resort or town</li> </ul>			
<ul> <li>Other seaside coastline (including beaches and cliffs)</li> </ul>			
<ul> <li>In the countryside (including areas around towns and cities)</li> </ul>			
3) How long did this visit last altogether – that is from the time you left to when you returned?	ALL VISIT TAKERS	WEEKLY – 51 WAVES	
RECORD IN HOURS AND MINUTES			
Hours Minutes			

		Asked of	Frequency	Notes
un	Which of these activities, if any, did you dertake?	ALL VISIT TAKERS	WEEKLY – 51 WAVES	
	IOW SCREEN. RANDOM ORDER. DDE ALL MENTIONED.			
•	Eating or drinking out			
•	Fieldsports (for example, shooting and hunting)			
•	Fishing			
•	Horse riding			
•	Off-road cycling or mountain biking			
•	Off-road driving or motorcycling			
•	Picnicking			
•	Playing with children			
•	Road cycling			
•	Running			
•	Appreciating scenery from your car (for example, at a viewpoint)			
•	Swimming outdoors			
•	Visits to a beach, sunbathing or paddling in the sea			
•	Visiting an attraction			
•	Walking, not with a dog (including short walks, rambling and hill walking)?			
•	Walking, with a dog (including short walks, rambling and hill walking)?			
•	Watersports			
•	Wildlife watching			
	PTIONS BELOW NOT RANDOMISED – WAYS AT END OF LIST:			
•	Informal games and sport (for example, frisbee or golf) (SPECIFY)			
•	Any other outdoor activities (for example, climbing) (SPECIFY)			

ABOVE QUESTIONS 2 TO 4 REPEATED FOR SECOND AND THIRD VISIT ON EACH DAY IF APPLICABLE.

QUESTION 1 THEN ASKED AGAIN FOR EACH DAY OF WEEK, WORKING BACKWARDS.

QUESTION 1 ASKED FOR ALL 7 DAYS BUT QUESTIONS 2 TO 4 ASKED FOR A MAXIMUM OF 10 VISITS.

IF NO VISITS TAKEN IN ANY OF LAST 7 DAYS SKIP TO Q17

MORE DETAIL ON SINGLE RANDOMLY SELECTED VISIT SECTION

	Asked of	Frequency	Notes
I would now like to ask you some further questions about the [first/second/third] visit to the out of doors you took Yesterday/ on <day>. This visit was to [location from Q2] and involved [activities from Q4].</day>			Script set up so that one of the visits taken in last 7 days is randomly selected and asked about in Q6 to Q16
5) Which of the following list of types of place best describe where you spent your time during this visit?	ALL VISIT TAKERS	WEEKLY – 51 WAVES	
Select more than one if necessary.  SHOW SCREEN. RANDOM ORDER.  CODE ALL MENTIONED.			
<ul> <li>A woodland or forest (including community woodland)</li> </ul>			
<ul> <li>Farmland</li> </ul>			
A mountain, hill or moorland			
A river, lake or canal			
A village			
<ul> <li>A path, cycleway or bridleway</li> </ul>			
<ul> <li>Country park</li> </ul>			
<ul> <li>Another open space in the countryside</li> </ul>			
KEEP TOGETHER IN THIS ORDER:			
A park in a town or city			
An allotment or community garden			
A children's playground			
A playing field or other recreation area			
Another open space in a town or city			
KEEP TOGETHER IN THIS ORDER:			
A beach			
Other coastline			
ALWAYS AT END:			

Other (specify)

	Asked of	Frequency	Notes
6) What is the name of the city, town or village or nearest city, town or village to the place you visited?  FOLLOW UP IF NECESSARY: This may be the place you live in. If you visited more than one city, town or village provide the name of the place nearest your final destination.  NAME OF (NEAREST) TOWN OR VILLAGE:  (USES LIST OF TOWNS AND VILLAGES AS IN UKTS SURVEY – INCLUDES	ALL VISIT TAKERS	WEEKLY – 51 WAVES	towns and cities Gazetteer used for part a) of question  Interviewer briefed to clarify 'final destination'. Respondents to self select - this is likely to be the place most time spent in and/or furthest away from start point.
SCOTTISH AND WELSH PLACES TO ALLOW FOR CROSS BORDER TRIPS)			
7) Now please provide the name of the actual place you visited, for example the park, wood or canal.	ALL VISIT TAKERS	WEEKLY – 51 WAVES	Places Gazetteer of visit destinations used.
ADD AS NECESSARY, IMPORTANT!:			Interviewers briefed
<ul> <li>If the place does not have a name, provide a nearby street name or landmarks which would help us to find it on a map.</li> <li>If you were on a walk with no particular</li> </ul>			to clarify 'final destination' and to probe for as much detail as possible.
'destination', tell us the location of the furthest away place reached.			
<ul> <li>If you visited more than one place, provide the name of the place that was you final destination, for example, furthest away.</li> </ul>			
PLACE VISITED (IF JUST TOWN OR VILLAGE NAME GIVEN PROBE FOR MORE DETAIL).			
INTERVIER NOTE: IF RESPONDENT DOES NOT KNOW NAME OF PLACE VISITED PROBE FOR AS MUCH DETAIL AS POSSIBLE TO ALLOW US TO IDENTIFY THE LOCATION AFTER INTERVIEW, FOR EXAMPLE, ADDRESS, STREET NAME, NEARBY LANDMARKS, ETC. – THE MORE DETAIL THE BETTER!			

	Asked of	Frequency	Notes
8) Approximately how far, in miles, did you travel to reach this place? By that I mean the one way distance from where you set off to the place visited.  SHOW SCREEN. DO NOT RANDOMISE. SINGLE CODE. Less than 1 mile 1 or 2 miles 3 to 5 miles 6 to 10 miles 11 to 20 miles 21to 40 miles 41to 60 miles 51to 80 miles 81to100 miles More than 100 miles	ALL VISIT TAKERS	WEEKLY - 51 WAVES	
9) And did this journey start from  SHOW SCREEN. DO NOT RANDOMISE.  SINGLE CODE.  Your home  Someone else's home  Work  Holiday accommodation  Somewhere else	ALL VISIT TAKERS	WEEKLY – 51 WAVES	
IF JOURNEY DID NOT START FROM RESPONDENT'S HOME:  10) Please provide the address of where your journey started from?  INTERVIER NOTE: IDEALLY COLLECT POSTCODE (FOR EXAMPLE, FOR WORKPLACES). IF THIS IS NOT POSSIBLE ASK FOR AS MUCH DETAIL AS POSSIBLE ON ADDRESS FOR EXAMPLE, NAME OF HOTEL AND TOWN.	ALL VISIT TAKERS	WEEKLY – 51 WAVES	

	Asked of	Frequency	Notes
11) What form of transport did you use on this journey?	ALL VISIT TAKERS	WEEKLY – 51 WAVES	
INTERVIEWER NOTE: IF MORE THAN ONE FORM OF TRANSPORT USED RECORD THAT USED FOR LONGEST DISTANCE.			
SHOW SCREEN. RANDOM ORDER. SINGLE CODE.			
Car or van			
Train (includes tube/underground)			
• Public bus or coach (scheduled service)			
<ul> <li>Coach trip/ private coach</li> </ul>			
<ul> <li>Motorcycle/ scooter</li> </ul>			
Bicycle/ mountain bike			
On foot/ walking			
<ul> <li>Wheelchair/mobility scooter</li> </ul>			
<ul> <li>On horseback</li> </ul>			
Boat (sail or motor)			
• Taxi			
ALWAYS AT END:  Other			
12) Which of the following, if any, best describe your reasons for this visit?	ALL VISIT TAKERS	MONTHLY - 12 WAVES – EACH IN LAST WEEK	
Select all of those which apply to you.  SHOW SCREEN. RANDOM ORDER.  CODE ALL MENTIONED.		OF MONTH	
<ul> <li>To spend time with family</li> </ul>			
<ul> <li>To spend time with friends</li> </ul>			
To learn something about the outdoors			
<ul> <li>For fresh air or to enjoy pleasant weather</li> </ul>			
<ul> <li>For health or exercise</li> </ul>			
For peace and quiet			
To relax and unwind			
To exercise your dog			
<ul> <li>To enjoy scenery</li> </ul>			
To enjoy wildlife			
To entertain children			
<ul> <li>To challenge yourself or achieve something</li> </ul>			
To be somewhere you like			
<ul> <li>For other reasons (SPECIFY)</li> </ul>			

	A alread of	Fue aure 11 2 1	Notes
	Asked of	Frequency	Notes
<ul><li>13) On this visit</li><li>a) how many adults aged 16 or over, including yourself, were on this visit?</li></ul>	ALL VISIT TAKERS	MONTHLY - 12 WAVES – EACH IN LAST WEEK OF MONTH	
ZERO NOT ALLOWED AS INCLUDES RESPONDENT			
b) how many children aged under 16 were on this visit?			
MAY BE ZERO			
<ul><li>14) Were you accompanied by a dog on this visit?</li><li>Yes</li><li>No</li></ul>	ALL VISIT TAKERS	MONTHLY - 12 WAVES – EACH IN LAST WEEK OF MONTH	
15) During this visit, did you personally spend any money on any of the items listed on the screen? PROBE Any others?  SHOW SCREEN. RANDOM ORDER.  CODE ALL MENTIONED.	ALL VISIT TAKERS	MONTHLY - 12 WAVES – EACH IN LAST WEEK OF MONTH	
<ul> <li>Food and drink</li> <li>Petrol\diesel\LPG</li> <li>Car parking</li> <li>Bus\train\ferry fares</li> <li>Hire of equipment</li> <li>Purchase of equipment</li> <li>Maps\guidebooks\leaflets</li> <li>Gifts\souvenirs</li> <li>Admission fees</li> <li>Other items</li> <li>Didn't spend any money</li> </ul>			
16) How much did you spend on  ASKED FOR THOSE SELECTED AT Q17  Food and drink Petrol\diesel\LPG Car parking Bus\train\ferry fares Hire of equipment Purchase of equipment Maps\guidebooks\leaflets Gifts\souvenirs Admission fees	ALL VISIT TAKERS	MONTHLY - 12 WAVES – EACH IN LAST WEEK OF MONTH	

	Asked of	Frequency	Notes
E1) And still thinking of this visit, how much do you agree or disagree with the following statements?	ALL VISIT TAKERS QUARTERLY - 4 WAVES – LAST WEEK OF JUNE 09, AUGUST 09, NOVEMBER 09, FEBRUARY 10	WAVES – LAST WEEK OF JUNE	
SHOW SCREEN. SINGLE CODE			
I enjoyed it			
It made me feel calm and relaxed			
It made me feel refreshed and revitalised			
I took time to appreciate my surroundingsI learned something new about the natural world			
I felt close to nature			
Strongly agree			
<ul><li>Agree</li></ul>			
Neither agree nor disagree			
<ul> <li>Disagree</li> </ul>			
<ul> <li>Strongly disagree</li> </ul>			

#### LAST 12 MONTHS SECTION

17) Now thinking about the last 12 months, how often, on average, have you spent your leisure time out of doors, away from your home?

ALL RESPONDENTS MONTHLY - 12 WAVES - EACH IN LAST WEEK OF MONTH

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.

#### SHOW SCREEN. SINGLE CODE.

- More than once per day
- Every day
- Several times a week
- Once a week
- Once or twice a month

-----

- Once every 2-3 months
- Once or twice
- Never

	Asked of	Frequency	Notes
18) IF ONCE EVERY 2-3 OR ONCE OR TWICE AT Q17: Why have you not spent more of your time out of doors?	THOSE WHO HAVE TAKEN VISITS ONCE EVERY 2-3 MONTHS, ONCE OR	MONTHLY - 12 WAVES – EACH IN LAST WEEK OF MONTH	
IF NEVER AT Q17: Why have you not spent any of your time out of doors?	TWICE OR NEVER IN LAST 12 MONTHS		
DO NOT PROMPT - PROBE FULLY. SELECT ALL THAT APPLY. DO NOT RANDOMISE – KEEP IN GROUPINGS SHOWN BELOW.			
Bad\poor weather			
Old age Poor health A physical disability Pregnant Have young children Have other caring responsibilities			
Too busy at home Too busy at work Not interested This isn't something for me/people like me Don't like going on my own			
No access to a car Lack of public transport Too expensive Prefer to do other leisure activities			
Worried about safety/ doesn't feel safe Concerns about where allowed to go/restrictions I don't feel welcome/feel out of place Lack of suitable places to go/suitable paths Don't know where to go/lack of information			
Other (SPECIFY) No particular reason			
The following questions are about you and how you enjoy the natural environment. By natural environment we mean green open spaces in towns and cities as well as the coast and countryside.	ALL RESPONDENTS	QUARTERLY - 4 WAVES - LAST WEEK OF JUNE 09, AUGUST 09, NOVEMBER 09, FEBRUARY 10	

FEBRUARY 10

	Asked of	Frequency	Notes
E2) How much do you agree or disagree with the following statements?	ALL RESPONDENTS	QUARTERLY - 4 WAVES – LAST WEEK OF JUNE	
SHOW SCREEN. SINGLE CODE		09, AUGUST 09, NOVEMBER 09,	
Spending time out of doors (including my own garden) is an important part of my lifeI am concerned about damage to the natural environmentThere are many natural places I may		FEBRUARY 10	
never visit but I am glad they existHaving open green spaces close to where I live is important			
<ul><li>Strongly agree</li><li>Agree</li><li>Neither agree nor disagree</li><li>Disagree</li><li>Strongly disagree</li></ul>			
E3) Which of the following activities involving the natural environment do you take part in? Please choose everything you do, both regularly and occasionally.  SHOW SCREEN. RANDOM ORDER. CODE ALL MENTIONED	ALL RESPONDENTS	QUARTERLY - 4 WAVES – LAST WEEK OF JUNE 09, AUGUST 09, NOVEMBER 09, FEBRUARY 10	
Watching or listening to nature			
<ul> <li>programmes on the TV or radio</li> <li>Looking at books, photos or websites about the natural world</li> </ul>			
<ul> <li>Looking at natural scenery from indoors or whilst on journeys</li> </ul>			
Sitting or relaxing in a garden			
Gardening			
<ul> <li>Watching wildlife (including bird watching)</li> </ul>			
<ul> <li>Choosing to walk through local parks or green spaces on my way to other places</li> </ul>			
<ul> <li>Doing unpaid voluntary work out of doors</li> </ul>			

None of these (fix at bottom)

	Asked of	Frequency	Notes
E4) Which of the following environment- related activities do you do? Please choose all that apply.  SHOW SCREEN. RANDOM ORDER.	ALL RESPONDENTS	WAVES – LAST WEEK OF JUNE 09, AUGUST 09, NOVEMBER 09,	
CODE ALL MENTIONED		FEBRUARY 10	
<ul> <li>I usually recycle items rather than throw them away</li> </ul>			
<ul> <li>I usually buy eco-friendly products and brands</li> </ul>			
<ul> <li>I usually buy seasonal or locally grown food</li> </ul>			
<ul> <li>I choose to walk or cycle instead of using my car when I can</li> </ul>			
<ul> <li>I encourage other people to protect the environment</li> </ul>			
<ul> <li>I am a member of an environmental or conservation organisation</li> </ul>			
<ul> <li>I volunteer to help care for the environment</li> </ul>			
None of these (fix at bottom)			
E5) Please think about whether or not you are likely to make changes to your lifestyle to protect the environment, for example by recycling rather than throwing things away, using your car less and buying local food. Which of these statements best describes your intentions?	ALL RESPONDENTS	QUARTERLY - 4 WAVES – LAST WEEK OF JUNE 09, AUGUST 09, NOVEMBER 09, FEBRUARY 10	
SHOW SCREEN. SINGLE CODE			
<ul> <li>I like my lifestyle the way it is and am not likely to change it</li> </ul>			
I'd like to make changes to my lifestyle but I don't know what to do			
<ul> <li>I'd like to make changes to my lifestyle but it's too difficult</li> </ul>			
<ul> <li>I'd make changes to my lifestyle if I knew other people were willing to make changes</li> </ul>			
<ul> <li>I intend to make changes to my lifestyle</li> </ul>			
<ul> <li>I already do a lot to protect the environment so it would be difficult to do more</li> </ul>			
Don't know (fix at bottom)			
CLASSIFICATION QUESTIONS			
19) Do you own or have access to a car?	ALL DEODONDENTS	MEERING	

ALL RESPONDENTS WEEKLY – 51 WAVES

Yes No

	Asked of	Frequency	Notes
20) Do you have a dog? Yes No	ALL RESPONDENTS	WEEKLY – 51 WAVES	
21) 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.  TYPE IN NUMBER BETWEEN O AND 7	ALL RESPONDENTS	WEEKLY – 51 WAVES	
22) Do you have any long standing illness, health problem or disability that limits your daily activities or the kind of work you can do?  Yes No	ALL RESPONDENTS	WEEKLY – 51 WAVES	

# **Appendix 2 – Standard classification questions included in TNS-RI Omnibus**

Question 1	
Sex of respond	lent?
1 🗆	MALE
2 🗆	FEMALE
0 11 0	
Question 2a	
What was your	age last birthday?
Question 2b	
Age of respond  1	R - ESTIMATE AGE GROUP OF RESPONDENT lent 16-17 18-24 25-34 35-44 45-54 55-64 65-74
8 🗆	75+
Question 3	
Question 5	
personally resp be bought from 1 \( \square	your household's food and grocery shopping, are you ponsible for selecting HALF OR MORE of the items to supermarkets and food shops ? YES - HALF OR MORE NO - LESS THAN HALF
Question 4	
Do you have an 1 $\Box$ 2 $\Box$	ny children under 16 ? YES NO
Question 5	
Working status  1	? FULL-TIME PAID WORK (30+ HOURS PER WEEK) PART-TIME PAID WORK (8-29 HOURS PER WEEK) PART-TIME PAID WORK (UNDER 8 HOURS PER WEEK) RETIRED STILL AT SCHOOL IN FULL TIME HIGHER EDUCATION UNEMPLOYED (SEEKING WORK) NOT IN PAID EMPLOYMENT (NOT SEEKING WORK)

Question 6
SHOW SCREEN - MULTI CHOICE Through which of the following ways, if any, do you receive television in your household? Please think about all the TV sets in your household.  1
Question 7
SHOW SCREEN - MULTI CHOICE Q.1 Do you have any of the following? INTERNET ACCESS E-MAIL  1
Question 8
Marital status of respondent  1 □ MARRIED\LIVING AS MARRIED  2 □ SINGLE  3 □ WIDOWED\DIVORCED\SEPARATED
Question 9
ENTER YOUR RESPONSE USING THE PAD ON SCREEN How many people are there in your household altogether, including any children and yourself?
And how many children under the age of 16 are there in the household?
Question 10

COLLECT SEX AND AGE OF CHILDREN STARTING WITH THE ELDEST

Question 11	
	EN - MULTICHOICE of the following apply to you?  A. I am currently up to 3 months pregnant B. I am currently 4-6 months pregnant C. I am currently 7-9 months pregnant D. My partner is currently up to 3 months pregnant E. My partner is currently 4-6 months pregnant F. My partner is currently 7-9 months pregnant G. I have a baby aged 0-3 months H. I have a baby aged 7-12 months I. I have a baby aged 7-12 months
Question 12	
Tenure  1	OWN OUTRIGHT OWN WITH A MORTGAGE RENT FROM COUNCIL RENT PRIVATELY OTHER
Question 13	
(IF NECESSAF  1	best describes your ethnic group ? RY: By this I mean your cultural background)  White British White Irish Any other white background White & Black Caribbean White & Black African White & Asian Any other mixed background Indian Pakistani Bangladeshi Any other Asian background Caribbean African Any other Black background Chinese Any other
Question 14	
Working status  1  2  4  5	of Chief Income Earner (CIE) EMPLOYED SELF-EMPLOYED NOT WORKING, DEPENDENT ON STATE BENEFIT NOT WORKING, OTHER INCOME

### Question 15

### Social grade

. A . . B .

1 <sub>□</sub> 2 <sub>□</sub>

. C1 . 3 □

4 🗆 . C2 . 5 🗆 . D .

6 □ .Е.

## **Appendix 3 – Weighting targets**

Table B

Weighting target	'000s
Age*Sex	
Male 16-24	2941
Male 25-34	3324
Male 35-44	3954
Male 45-54	3345
Male 55-64	3025
Male 65-74	2044
Male 75-84	1191
Male 85+	308
Female 16-24	2853
Female 25-34	3357
Female 35-44	4025
Female 45-54	3413
Female 55-64	3138
Female 65-74	2233
Female 75-84	1652
Female 85+	570
Total	41373
Government Office Region	
East Midlands	3551
East of England	4528
London	6183
North East	2098
North West	5602
South East	6690
South West	4220
West Midlands	4358
Yorkshire and the Humber	4143
Total	41373

Table continued...

Social Grade	
AB	9162
C1	11716
C2	8460
D	6796
E	5239
Total	41373
Children in Household	
Yes	29413
No	11960
Total	41373
Working Status	
Male Full Time	12214
Male Part Time	688
Male Not Working	7230
Female Full Time	6747
Female Part Time	3690
Female Not Working	10804
Total	41373
Dog in Household	
Yes	31766
No	9607
Total	41373
Urban/Rural	
Urban	33415
Rural	7958
Total	41373

# Appendix 4 – Review of demographics used in weighting

Table C

	Population Visits					
	'000s	Unweighted	Weighted '000s	Unweighted %	Weighted %	Visits per adult
TOTAL	41373	273452	2843169	100%	100%	68.7
Age*Gender						
Male 16-24	2941	14661	161953	5%	6%	55.1
Male 25-34	3324	15905	186053	6%	7%	56
Male 35-44	3954	21340	276660	8%	10%	70
Male 45-54	3345	23450	261273	9%	9%	78.1
Male 55-64	3025	22303	243057	8%	9%	80.3
Male 65-74	2044	19790	170354	7%	6%	83.3
Male 75-84	1191	8263	62290	3%	2%	52.3
Male 85+	308	812	7895	0%	0%	25.6
Female 16-24	2853	13410	151338	5%	5%	53
Female 25-34	3357	21728	219767	8%	8%	65.5
Female 35-44	4025	30676	332841	11%	12%	82.7
Female 45-54	3413	25732	277627	9%	10%	81.3
Female 55-64	3138	26147	258491	10%	9%	82.4
Female 65-74	2233	19979	155803	7%	5%	69.8
Female 75-84	1652	8420	69257	3%	2%	41.9
Female 85+	570	836	8510	0%	0%	14.9
GOR						
East Midlands	3551	25232	263162	9%	9%	74.1
East of England	4528	36801	369851	13%	13%	81.7
London	6183	25771	273246	9%	10%	44.2
North East	2098	14979	158680	5%	6%	75.6
North West	5602	29091	312709	11%	11%	55.8
South East	6690	52742	512479	19%	18%	76.6
South West	4220	38388	412582	14%	15%	97.8
West Midlands	4358	23063	240311	8%	8%	55.1
Yorkshire and the Humber	4143	27391	285734	10%	10%	69

Table continued...

Social Grade						
AB	9162	61847	766085	23%	27%	83.6
C1	11716	76732	823489	28%	29%	70.3
C2	8460	56279	567323	21%	20%	67.1
D	6796	35271	408904	13%	14%	60.2
E	5239	43332	277391	16%	10%	52.9
Children in Household						
Yes	11960	83105	836777	30%	29%	70
No	29413	190354	2006419	70%	71%	68.2
Working Status						
Male Full Time	12214	62149	811255	23%	29%	66.4
Male Part Time	688	6222	44998	2%	2%	65.4
Male Non Working	7230	58157	513314	21%	18%	71
Female Full Time	6747	37599	490768	14%	17%	72.7
Female Part Time	3690	31036	304328	11%	11%	82.5
Female Not Working	10804	78323	678536	29%	24%	62.8
Dog in Household						
Yes	9607	143762	1511580	53%	53%	157.3
No	31766	129697	1331617	47%	47%	41.9
Urban/Rural						
Urban	33415	202774	2123517	74%	75%	63.5
Rural	7958	70686	719683	26%	25%	90.4
Access to a Car						
Yes	30957	221386	2364810	81%	83%	76.4
No	10416	52072	478388	19%	17%	45.9
Long Standing Illness						
Yes	7626	49288	446844	18%	16%	58.6
No	33747	224173	2396352	82%	84%	71