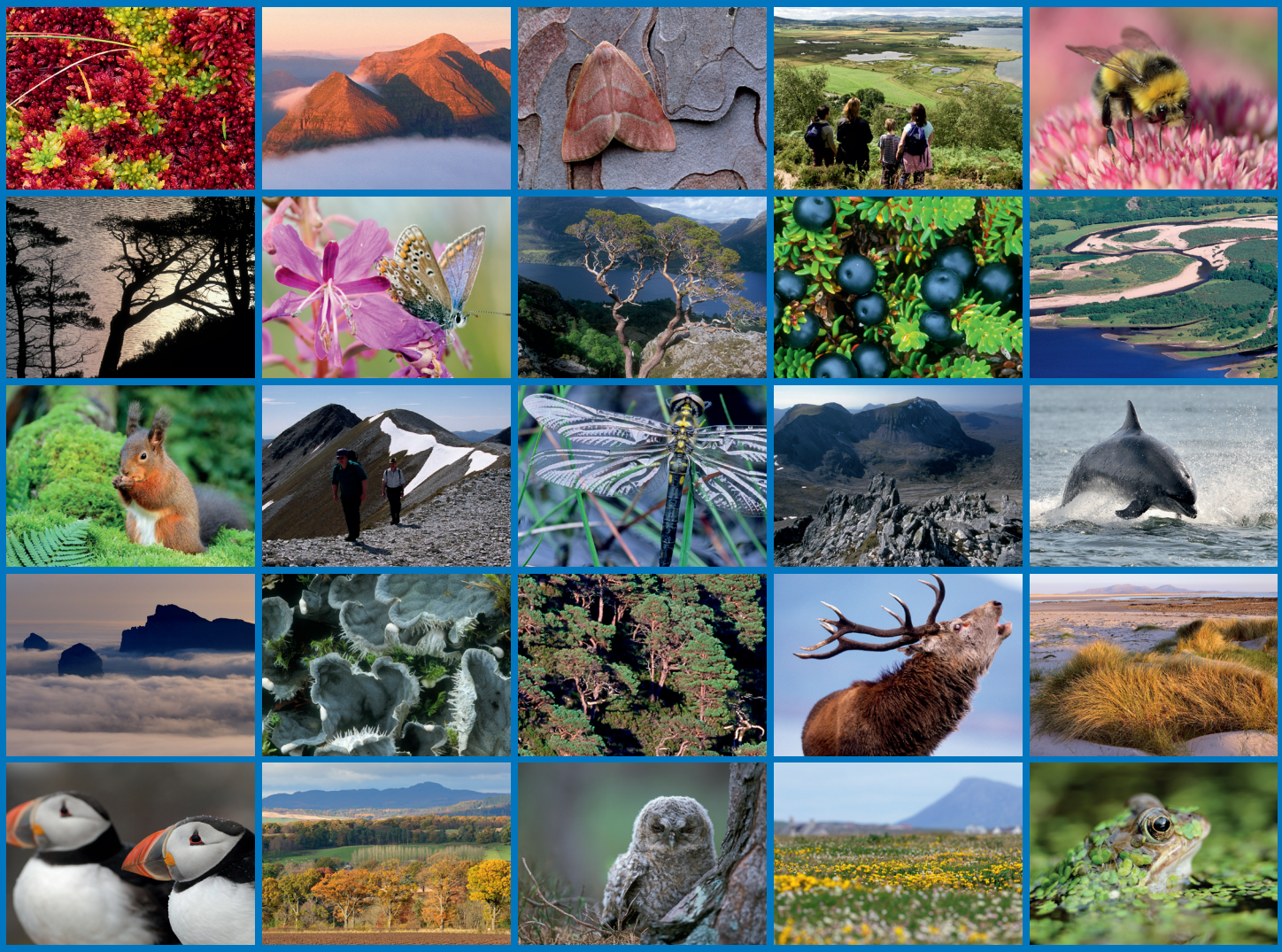
Scottish Natural Heritage
Research Report No. 1063

Scotland's People and Nature Survey 2017/18 – outdoor recreation and health modules – technical report



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RESEARCH REPORT

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Scotland's People and Nature Survey 2017/18 – outdoor recreation and health modules – technical report

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RESEARCH REPORT

Summary

Scotland's People and Nature Survey 2017/18 – outdoor recreation and health modules – technical report

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Background

Scotland's People and Nature Survey (SPANS) provides information on how people living in Scotland use, value and enjoy the natural environment. SPANS was undertaken for the first time in 2013/14 when it included questions on a variety of topics ranging from outdoor recreation, to forests and woodland, urban greenspace, national parks, Scotland's landscapes and the health and well-being benefits associated with visiting the outdoors. A second survey was undertaken in 2017/18 with the questionnaire content reduced to include only questions on participation in outdoor recreation and the associated health and well-being benefits.

This technical report describes the methodology used for the 2017/18 survey, including details of fieldwork approaches, sampling and data analysis methods. A separate technical report is available for the 2013/14 survey.

Summary of survey method

- SPANS comprises of a series of questions inserted in the Kantar TNS consumer omnibus survey, the Scottish Opinion Survey (SOS).
- The SPANS questions are organised into question sets, with each set of questions inserted in the SOS on a rotational basis. Some questions are asked every month but most are asked less frequently.
- Interviewing for the SOS is undertaken in the homes of respondents using Computer Assisted Personal Interviewing (CAPI) hardware.
- In every month of the SOS, around 1,000 interviews are undertaken with a representative sample of adults (aged 16 and over) in Scotland. Between May 2017 and April 2018, a total of 12,502 interviews were undertaken.

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1. BACKGROUND

Visiting the outdoors for recreation, learning or volunteering is enjoyable in its own right but it can also make a positive contribution to health and well-being, foster a greater awareness and understanding of the natural world and bring economic benefits in the form of expenditure incurred on outdoor visits.

Encouraging participation in outdoor recreation contributes to the delivery of a number of the National Outcomes in the Scottish Government's National Performance Framework,[1] including 'We value, enjoy, protect and enhance our environment', 'We are healthy and active', and 'We live in communities that are inclusive, empowered, resilient and safe'. Increasing the proportion of adults making one or more visits to the outdoors per week is also one of the Scottish Government's 81 National Indicators.

Ensuring that everyone in Scotland has the opportunity to enjoy the outdoors forms a major part of the work undertaken by Scottish Natural Heritage and its partners. Undertaking regular research into how people in Scotland use, value and enjoy the natural environment helps us identify key audiences and monitor trends as well as helping inform policy and the implementation of appropriate programmes of work.

Scotland's People and Nature Survey (SPANS) was first undertaken in 2013/14 to provide a single, comprehensive source of information on people's use of the natural environment and to complement outputs from Scottish Government surveys such as the Scottish Household Survey and the Scottish Health Survey. The 2017/18 survey, commissioned by Scottish Natural Heritage with support from Forestry Commission Scotland, updates the findings from two of the question modules included in the 2013/14 survey: outdoor recreation and the health and well-being benefits associated with visiting the outdoors.

A copy of the 2017/18 survey questionnaire is included in Annex 1.

The sections of this report are structured as follows:

- *Method of data collection* – a description of the fieldwork approaches, sampling procedures and timings of the Scottish Opinion Survey.
- *Questionnaire content* – details of the questions asked in each SPANS module and the frequency with which they are asked.
- *Analysis of data* – a description of the approach followed during the analysis of the data collected for SPANS, including weighting procedures and how results have been grossed up to produce volume and value estimates.
- *Levels of accuracy* – estimates of the accuracy of the outputs produced for SPANS.

[1] http://nationalperformance.gov.scot/

2. METHOD OF DATA COLLECTION

The first year of Scotland's People and Nature Survey (SPANS) ran between March 2013 and February 2014, while the most recent survey ran between May 2017 and April 2018. During these months, SPANS was delivered through the inclusion of a series of questions in every monthly wave of the Kantar TNS consumer omnibus survey, the Scottish Opinion Survey (SOS).

An omnibus survey is a quantitative survey in which questions on a range of different subjects are asked during the same interview. These questions, along with a series of demographic questions, are included in the survey on behalf of a number of organisations, with the relevant results shared between these clients. An omnibus survey represents a cost-effective approach as survey costs are shared.

2.1 Fieldwork approach

Interviewing for the SOS is undertaken in the homes of respondents using Computer Assisted Personal Interviewing (CAPI) hardware. For the 2017/18 survey, each month's fieldwork was conducted in four separate waves across the four week period, with each wave running from Wednesday to Sunday. A total of 12,502 interviews were achieved across the 12 month fieldwork period of the survey.

Personal, face-to-face interviewing provides advantages over other approaches, such as telephone, postal or web-based surveying, because of its ability to deliver a high quality of data from the interaction between the interviewer and the respondent. Personal interviewing also permits the use of show prompts such as lists of potential responses or images. For SPANS, this allowed the presentation of fairly long lists of potential responses to questions on, for example, activities undertaken on recreation visits or motivations for visiting the outdoors.

CAPI technology involves the use of light-weight tablet computers for interviewing instead of the traditional paper and pen approach. The advantages of CAPI over the traditional approach include improved accuracy in the overall quality of data collected and routing of questions and the ability to show the respondent a wider range of prompt materials. CAPI also provides speedy 'turn-around' of results from data collection to reporting, facilitating regular and timely interim reporting of results and fieldwork progress.

The questions asked in SPANS formed the first main section of each month's SOS. The only occasions on which other questions preceded the SPANS questions were those months in which the omnibus included a short section on political polling or questions on other sensitive Scottish Government topics.

The length of SPANS varied each month, depending on the number of questions asked. The total length of the SOS interview, including SPANS and other questions asked, was consistently capped at around 30 minutes to reduce the potential for interview fatigue.

The methodology used for SPANS is very similar to the methodology previously used for the Scottish Recreation Survey (which ran between 2003 and 2012) ensuring comparability of key findings.

2.2 Sampling

Interviews for SPANS were undertaken using a non-probability, quota sampling approach, ensuring that each monthly sample of respondents broadly reflected the Scottish adult population in terms of gender, working status, principle shopper and the presence of children

in the household.[2] In each survey month, interviews were conducted with a representative sample of around 1,000 adults aged 16 and over living in Scotland, providing an annual sample of more than 12,000 respondents. This sample size was sufficient to allow for analysis by key demographic and geographic population groups.

2.2.1 Selection of sample points

Interviews were conducted in 17 to 27 different sampling points in each weekly wave of fieldwork and in a total of 68 to 108 different sampling points across Scotland in each four week fieldwork period. A target of 250 interviews was set per week across all sampling points used. At the analysis stage, data were weighted and grossed up to be representative of the adult population in Scotland and the visits they take each month and over the 12 month period of the survey.

Population data for the 8 Scottish Parliament electoral regions were used to determine the correct number of sampling points required in each region and to ensure that the geographical distribution of these sampling points was representative of the geographical distribution of the Scottish population. The island constituencies were included in the sampling frame.

In the 2013/14 survey, interviewing was undertaken across 55 sampling points in each four week fieldwork period. The main benefit of increasing the number of sampling points is a decrease in the effects of clustering within the sample and therefore the provision of more accurate results. As sampling points have always been selected to ensure a geographically representative spread of the Scottish adult population, Scottish Recreation Survey data collected before this change are comparable with SPANS data.

While the sample was stratified using the 8 Scottish Parliament electoral regions, the numbers of interviews achieved in each local authority area were also monitored throughout the survey year to ensure adequate coverage and to minimise the under or over representation of any particular area. Table 2.1 (overleaf) shows the geographical distribution of the 12,502 interviews undertaken over the May 2017 to April 2018 period. With the exception of Orkney and Shetland (where no interviewing took place), the proportion of interviews conducted in each Local Authority area is broadly similar to the proportion of the Scottish population resident in each Local Authority area.

[2] The quotas used for this report were derived from the Omnibus survey, and differ from the quotas used in SPANS 2013/14, in which respondents were sampled in terms of sex, age, working status and social grade. Despite these changes, the weighting approach has remained the same.

Table 2.1 Number of interviews undertaken by Local Authority area

	Interviews achieved 2017/18		% of Scottish population resident in local authority area[3]
	Number	% of total	
Aberdeen City	612	4.9%	4.2%
Aberdeenshire	478	3.8%	4.8%
Angus	226	1.8%	2.1%
Argyll & Bute	281	2.2%	1.6%
Clackmannanshire	47	0.4%	0.9%
Dumfries & Galloway	235	1.9%	2.8%
Dundee City	466	3.7%	2.7%
East Ayrshire	448	3.6%	2.2%
East Dunbartonshire	261	2.1%	2.0%
East Lothian	158	1.3%	1.9%
East Renfrewshire	131	1.0%	1.7%
City of Edinburgh	1,040	8.3%	9.5%
Falkirk	266	2.1%	3.0%
Fife	822	6.6%	6.8%
City of Glasgow	1,402	11.2%	11.4%
Highland	658	5.3%	4.3%
Inverclyde	208	1.7%	1.5%
Midlothian	134	1.1%	1.7%
Moray	296	2.4%	1.8%
North Ayrshire	236	1.9%	2.5%
North Lanarkshire	897	7.2%	6.3%
Orkney	-	-	0.4%
Perth & Kinross	400	3.2%	2.8%
Renfrewshire	337	2.7%	3.3%
Scottish Borders	379	3.0%	2.1%
Shetland	-	-	0.4%
South Ayrshire	376	3.0%	2.1%
South Lanarkshire	697	5.6%	5.9%
Stirling	186	1.5%	1.7%
West Dunbartonshire	283	2.3%	1.7%
West Lothian	424	3.4%	3.3%
Western Isles	113	0.9%	0.5%
Not stated	5	*	N/A
TOTAL	**12,502**	**100%**	**100%**

* Denotes less than 1%

2.2.2 Selection of respondents within sample points

Only one interview was undertaken per household and a random route procedure was adopted within each sampling point, requiring a minimum of three households being left between each successful interview. This procedure helps ensure that interviewing in each sample point is not restricted to a small geographic area only containing individuals with

[3] Mid-2017 population estimates.

similar demographic and lifestyle characteristics,[4] thereby reducing the effects of clustering within the sample.

2.3 Timing

For the 2017/18 survey, each month's fieldwork was conducted in four waves over a four week period with each wave running from Wednesday to Sunday. This provided interviewers with enough time to complete sample quotas and enabled them to contact respondents during both weekdays and weekends and at different times of day. In the context of SPANS, this distribution of fieldwork also helped ensure coverage of respondents more likely to be away from home during weekends on recreation day trips or overnight tourist trips.

The fieldwork dates for the 2017/18 SPANS survey are shown in Table 2.2 below.

Table 2.2 Frequency of SPANS question sets

Month	Fieldwork dates
May 2017	5th – 21st May
June 2017	31st May – 25th June
July 2017	5th – 30th July
August 2017	2nd – 28th August
September 2017	30th August – 24th September
October 2017	27th September – 22nd October
November 2017	25th October – 19th November
December 2017	22nd November – 17th December
January 2018	10th January – 4th February
February 2018	7th February – 4th March
March 2018	7th March – 1st April
April 2018	4th – 29th April

[4] The similar characteristics of people who live in the same neighbourhood is widely recognised and employed in geodemographic segmentation classifications such as ACORN and MOSAIC.

3. QUESTIONNAIRE

A copy of the 2017/18 SPANS questionnaire is included in Annex 1.

3.1 Question modules and frequency

The questionnaire was divided into sections, or question sets. Some questions were included in every month of surveying (Set A) and others were included on a set rotational basis.

Table 3.1 below shows the question sets included in SPANS and the months in which each was included.

Table 3.1 Frequency of SPANS question sets

SET	January	February	March	April	May	June	July	August	September	October	November	December
A	■	■	■	■	■	■	■	■	■	■	■	■
B	■		■		■		■		■		■	
C			■			■			■			■
D		■			■			■			■	
E					■						■	
F						■						■

3.2 Specific questions included in SPANS

Table 3.2 (below) details the individual questions included in each SPANS question set in 2017/18. Please note that the 2017/18 SPANS included fewer questions than the 2013/14 survey.

Table 3.2 SPANS question sets 2017/18

Set	Ref	Question
A	REC1	Frequency of visit outdoors in last 12 months
	REC3	Number of visits to outdoor in last 4 weeks
	CLASSIF3	Ethnicity
B	REC4	Activity (ies) on last outdoor visit
	REC5	Type of environment visited
	REC6	Type of destination(s) on last outdoor visit
C	CLASSIF1	Self-reported health
	CLASSIF2	Long-term illness/ disability
D	REC9	Transport used on last outdoor visit
	REC10	Distance travelled on last outdoor visit
	REC11	Duration of last outdoor visit
E	REC18	Whether problems encountered on last outdoor visit
	REC19	Whether heard of Scottish Outdoor Access Code
F	BEN1	Reasons for most recent outdoor visit
	BEN2	Attitudes regarding most recent outdoor visit
	BEN3	Number of days done 30 mins activity in outdoors in past week

3.3 Sample sizes achieved by month and question set

Tables 3.3 and 3.4, below, show the numbers of interviews achieved each month for the 2017/18 survey, with sample sizes provided as a whole and for each sub-set of questions. The question schedule used ensured that the number of respondents asked each question was large enough to permit detailed analysis of the results and that questions likely to be influenced by seasonal factors (such as frequency of visiting the outdoors) were asked in every quarter of the year.

Table 3.3 Sample by month

Month	Sample
May 2017	1,031
June 2017	1,052
July 2017	1,064
August 2017	1,030
September 2017	1,031
October 2017	1,049
November 2017	1,030
December 2017	1,039
January 2018	1,019
February 2018	1,062
March 2018	1,043
April 2018	1,052
Total	**12,502**

Table 3.4 Sample for SPANS question sets

Set	Sample*
A	12,502
B	4,113
C	4,165
D	2,713
E	1,337
F	1,335

* Maximum sample per set. Some questions were asked of a sub-sample of respondents e.g. those who have not visited the outdoors/ visit infrequently (for example, REC2 in SET E).

4. ANALYSIS OF DATA

4.1 Data weighting

4.1.1 Demographic weighting

As described in Section 2.2, interviews for SPANS were undertaken using a quota sampling approach. This approach ensured that each monthly sample of respondents broadly reflected the Scottish adult population in terms of gender, working status, principle shopper and the presence of children. At the analysis stage, demographic weighting was applied to correct for any variations which existed between the sample and the Scottish adult population. The demographic weighting targets used were based on 2011 Census data, mid-year population estimates for 2017 and TGI 2015 data.[5] The final weighted outputs from the survey can therefore be considered as representative of the Scottish adult population.

Table 4.1 provides details of the unweighted sample profile and the targets used to weight the 2017/18 SPANS data.

Table 4.1 Scottish Opinion Survey – unweighted and weighted sample profile

	Unweighted sample profile	Weighting targets
Sex and working status		
Working men	21%	26%
Non-working men	28%	22%
Working women	20%	24%
Non-working women	31%	28%
Age		
16-34	24%	30%
35-54	26%	33%
55+	50%	37%
Social Grade		
AB	21%	25%
C1	26%	28%
C2	22%	19%
DE	31%	29%

Rim weights are applied to each of the respondents included in the annual analysis to bring the sample distribution of each of these demographic variables into line with the population distribution.[6]

4.1.2 Visit weighting

In addition to demographic weighting, visit weighting was applied to those questions regarding visits taken to the outdoors. The data collected for all other questions were weighted using the demographic weighting only (see Table 4.2 for details of the weighting used for each question).

[5] TGI is a media and marketing survey which interviews 25,000 people a year on a range of subjects. Data is then weighted to PAMCo (formerly NRS) to ensure full weighted accuracy.

[6] Rim-weighting uses a mathematical algorithm to provide an even distribution of results across the entire dataset whilst balancing demographic variables to pre-determined totals. It weights the specified characteristics simultaneously and disturbs each variable as little as possible.

All respondents who had taken at least one outdoor recreation visit in the 4 weeks prior to interview were asked to provide the details of the visit they had taken most recently. This approach was used in preference to collecting details of all of the visits taken by respondents during the 4 week recall period. Collecting details of all visits taken would have been time consuming and burdensome for respondents, particularly frequent outdoor visitors, and may have affected the quality of the data recorded.

Collecting details only on the most recent visit meant that visits taken by frequent participants were under-represented within the sample while those taken by infrequent participants were over-represented. For example, someone who took a visit every day provided details of one of their 28 visits while someone who took a visit once a week provided details of one of their 4 visits.

The visit weighting approach was designed to make the results of these questions more representative of all of the visits taken during the survey period. This was achieved by upweighting the data by a factor equal to the number of visits taken by the respondent in the 4 weeks prior to interview (provided in response to Question REC3 "How many visits to the outdoors for leisure and recreation in Scotland have you made in the last 4 weeks?"). For example, the responses provided by a respondent who had taken 4 visits in the 4 week period were upweighted by a factor of 4, while the responses of a respondent who had taken 28 visits were upweighted by a factor of 28.

Table 4.2 (below) lists the questions weighted using demographic weights only and those weighted using both demographic and visit weighting.

Table 4.2 Application of demographic and visit weighting

Demographic weighting only	Demographic and visit weighting
Ethnicity (CLASSIF1)	Activity(ies) on last outdoor visit (REC4)
Self-reported health/ long-term illness/ disability (CLASSIF1 & 2)	Type of environment visited (REC5)
Number of days done physical activity in past week (BEN3)	Type of destination(s) on last outdoor visit (REC6)
Visits to outdoors in last 12 months and last 4 weeks (REC1 & 3)	Transport used on last outdoor visit (REC9)
Physical exercise done outdoors in last week (BEN3)	Distance travelled on last outdoor visit (REC10)
	Duration of last outdoor visit (REC11)
	Whether problems encountered on last outdoor visit (REC18)
	Reasons for most recent outdoor visit (BEN1)
	Attitudes towards most recent outdoor visit (BEN2)

4.1.3 Calculation of visit weights

An overall weight (i.e. the combination of the demographic and visit weight) was calculated by multiplying the demographic weight by the visit weight. This was then multiplied by a further correction to take account of the differing number of days in each month (Question REC3 asks about visits taken in the last 4 weeks/ 28 days). For example, the overall weights calculated for each of the following three respondents would be as follows:

Table 4.3 Calculation of visit survey weights

Respondent Number	Demographic weight	Visit Weight (response to REC3)	Month & weight	Overall weight
1	1.34	1	March – 1.107	**1.48338**
2	1.18	4	June – 1.071	**5.05512**
3	1.33	5	February - 1	**6.65**

At an individual respondent level, this approach to weighting visit data means that the characteristics of the most recently taken visit are applied to all of the visits taken by that respondent during the previous 4 weeks. This approach is considered to be valid as the survey results are presented at an aggregated level only, rather than for individual respondents.

4.2 Estimating the volume of visits taken over 12 months

In every month of the survey, all respondents who stated that they had taken any outdoor recreation visits during the previous 12 months were asked how many visits they had taken during the 4 weeks prior to the interview (see Question REC1 in Annex 1). To obtain an estimate of the total volume of visits taken during each month, the following series of calculations were undertaken (data from May 2017 is provided as an example in Table 4.4).

Table 4.4 Estimating the volume of visits taken in May 2017

	Source	Symbol	Estimate
Average proportion of survey respondents taking visits in 4 weeks prior to interview	SPANS result	A	66.3%
Scottish adult population	Mid-2017 population estimate	B	4.5 million adults
Estimated number of Scottish adults taking outdoor recreation visits during survey period	A x B	C	2.8 million adults
Average number visits taken during 4 weeks (28 days) prior to interview	SPANS result	D	14.3 visits per adult
Estimated total volume of visits taken during 4 weeks (28 days) prior to survey period	C x D	E	40.2 million visits
Estimated total volume of visits taken per day over survey period	E ÷ 28	F	1.4 million visits
Estimated total volume of visits taken during March 2014	F x 31	G	44.5 million visits

The same series of calculations were undertaken each month. The 2017/18 monthly estimates are given in Table 4.5 as an example:

Table 4.5 Estimating the volume of visits taken by month

Month	Estimated visits
May 2017	47.0m
June 2017	42.4m
July 2017	52.2m
August 2017	49.6m
September 2017	44.4m
October 2017	52.0m
November 2017	44.0m
December 2017	47.0m
January 2018	43.4m
February 2018	45.0m
March 2018	50.7m
April 2018	46.9m
Total*	**546.5m**

* Note, total does not exactly equal the sum of individual months due to rounding

To obtain estimates of the annual volume of visits taken to the different types of destinations recorded at Question REC5 (see Annex 1) the weighted results of this question have been applied to the estimates of the total volume of visits taken (e.g. 546.5 million visits in 2017/18).

For example, in 2017/18, respondents who made 40% of all visits indicated that their most recent outdoor recreation visit had been to a town or city destination. Respondents who made 49% of all visits had visited a countryside destination and those who made 11% of visits had visited the seaside. Taking these weighted results as representative of all visits, these percentages were applied to the estimate of all visits to obtain the following:

Town and city destinations 39.6% x 546.5= **216.3 million**
Countryside destinations 49.2% x 546.5m = **268.7 million**
Seaside destination 11.2% x 546.5m = **61.4 million**

The same approach was used to obtain estimates of trips taken to the more detailed types of destination as recorded at Question REC6.

5. LEVELS OF ACCURACY

As described in Section 2, the SOS follows a non-probability, quota sampling approach with strict controls in place to ensure that the sample achieved each month is representative of Scotland's adult population.

The consistency in the sampling and weighting procedures followed each month permits the longitudinal tracking of trends and also provides consistency with questions previously included in the 2013/14 SPANS and in the Scottish Recreation Survey (ScRS) which ran on the SOS between 2003 and 2012.

However, as a quota sampling approach does not permit measurement of the likelihood of members of the population being included in the survey, confidence intervals can only be estimated and should therefore be treated as indicative.

At the outset of this study, when the sampling approach was agreed, this shortcoming of quota sampling was considered against the issue of non-response which would have been likely to occur had probability sampling methods been employed. The level of non-response relates to instances where an interview is not obtained. This could be due to a refusal on the part of the potential respondent but can also be due to people or addresses not being found or those who are not at home.

On balance, it was agreed that quota sampling would provide the most cost-effective approach to achieving the objectives of SPANS.

The estimated level of accuracy of results is primarily dependent on the size of the sample. Whilst the total analytical sample is approximately 12,000 per year, the rotation of questions between survey waves means that some questions are asked of a lower number of potential respondents than others, as illustrated in Table 3.4 earlier in this report. Furthermore, the routing instructions used in some sections of the questionnaire can also reduce the number of potential respondents for some questions. In the set of questions about outdoor recreation, for example, questions about the characteristics of outdoor visits are only asked if the respondent has visited the outdoors in the previous 4 weeks; during 2017/18, 8,283 respondents out of a total of 12,502 had taken one or more outdoor recreation visits in the 4 weeks prior to interview.

As a result of these variations the margins of error associated with the findings may vary between survey years.

For illustration purposes, Table 5.1 shows the range associated with estimates of the numbers of visits taken to different outdoor destinations in 2017/18:

Table 5.1 Estimated range associated with results for destinations of outdoor visits 2017/18

	Estimated range		
	Estimate	Low	High
Annual volume of visits	546.5m	530.1m	562.8m
Local park or open space	230.4m	223.5m	237.3m
Any woodland/ forest	116.6m	113.1m	120.1m
Beach	68.8m	66.7m	70.9m
Village	55.4m	53.7m	57.1m
Any farmland	51.6m	50.1m	53.1m

Table 5.2 Percentage results

	Estimated percentage range		
	Percentage	Low	High
Percentage of population taking at least one trip to the outdoors in last 12 months	82%	81%	83%
Percentage of population normally taking trips to the outdoors at least once a week	70%	68.8%	71.2%

Confidence intervals (i.e. the percentage range within which an estimate is likely to fall) for those questions weighted using demographic weighting only (see section 4) have been estimated as being 1.5 times higher than those which would occur with an equivalent sized simple random sample. However, due to the additional design effect caused by the application of the visit weighting, confidence intervals for these questions are estimated as being 2.5 times higher than those which would occur with an equivalent sized simple random sample.

Table 5.3 provides the margins of error associated with an individual result given a range of different sample sizes. For example, where the sample size is in excess of 10,000 respondents, the data are accurate to around +/-2% at the 95% confidence interval. In other words, a hypothetical result of 50% would have a range from 48% to 52%.

Table 5.3 Margins of error associated with an individual result

Sample size	Demographic weighting only	Demographic and visit weighting
10,000 or more	+/-1%	+/-2%
6,000	+/-2%	+/-3%
3,000	+/-3%	+/-4%
2,000	+/-3%	+/-5%
1,000	+/-5%	+/-8%
500	+/-7%	+/11%

Table 5.4 (overleaf) provides an indication of when the differences between two results may be considered to be statistically significant (for example, when comparing two results obtained in different years of the survey). For example, when comparing two percentages where both sample sizes are around 6,000, a difference of +/-2% or more can be considered to be statistically significant when results have been weighted using demographic weighting only.

Table 5.4 Margins of error when comparing two percentages

Sample size	Demographic weighting only	Demographic and visit weighting
10,000 or more	+/-2%	+/-4%
6,000	+/-2%	+/-4%
3,000	+/-4%	+/-6%
2,000	+/-5%	+/-8%
1,000	+/-7%	+/-11%
500	+/-9%	+/-16%

Again, it should be noted that these margins of error are intended to be indicative only. The margins of error shown are all for a hypothetical result of 50% at the 95% confidence levels (e.g. a margin of error of +/-4% represents a range from 46% to 54%). For results of below or above 50% the margin of error is smaller in terms of percentage points.

ANNEX 1: QUESTIONNAIRE

			SET	FREQUENCY/ MONTH
1	REC1	**ASK ALL** **REC1 How often on average have you taken visits to the outdoors for leisure and recreation in Scotland in the last 12 months?** **These leisure trips could either have been from home or while you were away from home on holiday, provided the holiday was in Scotland. By outdoors, we mean open spaces in the countryside as well as in towns and cities such as woodland, parks, farmland, paths, beaches etc.** 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	A	MONTHLY JANUARY FEBRUARY MARCH APRIL MAY JUNE JULY AUGUST SEPTEMBER OCTOBER NOT ASKED IN NOVEMBER DUE TO CODE MONITORING DECEMBER
2	REC3	**ASK IF ANY VISITS IN LAST 12 MONTHS AT REC1** **REC3 How many visits to the outdoors for leisure and recreation in Scotland have you made in the last 4 weeks?** **PROBE: You may have made more than one visit to the outdoors for leisure and recreation each day.** **IF NO VISITS TAKEN IN LAST 4 WEEKS AT REC3, SKIP TO FIRST QUESTION AFTER BEN 2** **IF MORE THAN 56 VISITS TAKEN AT REC3, SHOW THE FOLLOWING:** **REC3b You stated that you have taken [number of visits at REC3] visits during the last 4 weeks. As this is more than an average of two visits per day, can I check that this is correct?** Yes No **(RETURN TO REC3)**	A	MONTHLY JANUARY FEBRUARY MARCH APRIL MAY JUNE JULY AUGUST SEPTEMBER OCTOBER NOVEMBER DECEMBER
3	REC4	**ASK IF ANY VISITS IN LAST 4 WEEKS AT REC3** **REC4 Thinking about your last visit to the outdoors for leisure and recreation, which of the activities listed on the screen did your visit include?** **MULTI-CODE** Walking - less than 2 miles Walking 2-8 miles Walking - more than 8 miles Hillwalking\mountaineering Cycling - on public roads Cycling - on paths and tracks Cycling - not on paths and tracks or roads Mountainbiking Horse riding Fishing Watersports, including canoeing, windsurfing, rowing & sailing Ski-ing - on piste Ski-ing - off piste Swimming in the sea, rivers, lochs Birdwatching Other wildlife\nature watching Running\jogging Wildcamping Sightseeing\ visiting attractions	B	BI-MONTHLY JANUARY MARCH MAY JULY SEPTEMBER NOVEMBER

		Picnicking Family outing Other		
4	REC5	**ASK IF ANY VISITS IN LAST 4 WEEKS AT REC3** **REC5 Thinking about your last visit to the outdoors for leisure and recreation, which of the places on the screen best describes where you went?** **SINGLE CODE** A town or city The countryside (including inland villages) The seaside (a resort or the coast)	B	BI-MONTHLY JANUARY MARCH MAY JULY SEPTEMBER NOVEMBER
5	REC6	**ASK IF ANY VISITS IN LAST 4 WEEKS AT REC3** **REC6 On this last visit to the outdoors for leisure and recreation, what types of location or destination did you go to?** CODE UP TO 3 MENTIONS. **ALLOW MULTI-CODE** Woodland\forest - managed by Forestry Commission\Forest Enterprise Woodland\forest - other type of owner Woodland\forest - don't know owner Farmland - fields with crops Farmland - fields with livestock Farmland - mixed crops and livestock Mountain\hill Moorland Village Loch Sea\Sea loch River Canal Beach Cliff Local Park or open space Wildlife area/nature reserve Other	B	BI-MONTHLY JANUARY MARCH MAY JULY SEPTEMBER NOVEMBER
6	REC9	**ASK IF ANY VISITS IN LAST 4 WEEKS AT REC3** **REC9 Thinking of your most recent visit to the outdoors, what was the main means of transport used in this last visit? That is, the one used to get to the main destination of the visit?** On foot Car\van\minibus Motorcycle\scooter Public bus Private coach Train Horseback Bicycle Boat Other	D	QUARTERLY FEBRUARY MAY AUGUST NOVEMBER
7	REC10	**ASK IF ANY VISITS IN LAST 4 WEEKS AT REC3** **REC10 In total, how far did you travel to get to and from the main destination of this visit?** **SINGLE CODE** INTERVIEWER - MAKE SURE THAT THE DISTANCE RECORDED IS FOR THE ROUND TRIP TO AND FROM THE DESTINATION. Less than 2 miles 2-5 miles 6-10 miles 11-20 miles 21-30 miles	D	QUARTERLY FEBRUARY MAY AUGUST NOVEMBER

		31-40 miles 41-50 miles 51-60 miles 61-80 miles 81-100 miles More than 100 miles		
8	REC11	**ASK IF ANY VISITS IN LAST 4 WEEKS AT REC3** **REC11 In total, how long was the visit, in terms of time – that is the total time spent, including travelling time to and from the destination?** Less than 1 hour 1 up to 2 hours 2 up to 3 hours 3 up to 4 hours 4 up to 5 hours 5 up to 8 hours 8 hours or more	D	QUARTERLY FEBRUARY MAY AUGUST NOVEMBER
9	REC18	**ASK IF ANY VISITS IN LAST 4 WEEKS AT REC3** **REC18 Thinking about your last visit to the outdoors, which of the following, if any, did you encounter?** SHOW SCREEN ALLOW MULTI-CODE A sign that made me feel unwelcome/ unsure about what route to take (e.g. 'Private', 'No Entry', 'Keep Out') A man-made obstruction intended to prevent me from taking my planned route (e.g. a locked gate on a well-used path or track, barbed wire across a stile) A gate or a stile which I had difficulty opening or crossing A dog annoying me or my party The well-used or promoted path I was on was difficult to use (e.g. due to uneven surface or gradient that caused me problems). The well-used or promoted path I was on was in a poorer condition than expected (e.g. wet, muddy, overgrown) The well-used or promoted path I was on had insufficient resting places or places to sit for my needs Other people behaving inconsiderately or irresponsibly (e.g. cyclists failing to consider the needs of walkers) Litter, vandalism or graffiti I experienced another type of problem (**SPECIFY**) None - I didn't experience any of the above	E	6 MONTHLY MAY NOVEMBER
10	REC 19	**ASK ALL** **REC19 Have you heard of the Scottish Outdoor Access Code?** Yes, definitely Yes, think so Definitely not Don't know	E	6 MONTHLY MAY NOVEMBER
11	BEN1	**ASK IF ANY VISITS IN LAST 4 WEEKS AT REC3** **BEN1 What reasons, if any, best describe why you made your last visit to the outdoors?** **MULTICODE** To spend time with family/friends To entertain a child	F	6 MONTHLY JUNE DECEMBER

		For health and exercise To challenge myself/achieve something To exercise a dog For fresh air or to enjoy pleasant weather To be somewhere I like For peace and quiet To relax and unwind To learn something about the outdoors To enjoy scenery or wildlife To help out/volunteer To take part in a sport or hobby		
12	BEN2	**ASK IF ANY VISITS IN LAST 4 WEEKS AT REC3** **BEN2 Thinking about your last visit, how much do you agree or disagree with each of the following statements?** **COLUMNS** Agree strongly Agree slightly Neither Nor Disagree slightly Disagree strongly **ROWS** It improved my physical health (through exercise and physical activity) It helped me de-stress, relax and unwind It made me feel energised and revitalised It was a good social experience (through spending time with other people) I felt closer to nature	F	6 MONTHLY JUNE DECEMBER
13	BEN3	**ASK ALL** **BEN3** In the past week, how many minutes of physical exercise have you done in an outdoor environment, that is, activity which was enough to make you feel warmer, breath harder and make your heart beat faster? PROMPT, IF NECESSARY**: This could include an activity like a walk or a cycle. Remember to add up activities you may have done on different days of the week.** **SINGLE CODE** Less than an hour (less than 60 minutes) Less than 2 hours (less than 120 minutes) Less than 2 and a half hours (less than 150 minutes) 2 and a half hours or more (150 minutes or more) None	F	6 MONTHLY JUNE DECEMBER
14	CLASS IF1	**ASK ALL** **CLASSIF1 How is your health in general? Would you say it was:** READ OUT. SINGLE CODE ONLY. Very good Good Fair Bad Very bad Don't know	C	QUARTERLY MARCH JUNE SEPTEMBER DECEMBER
15	CLASS IF2	**ASK ALL** **CLASSIF2 Is your ability to participate in outdoor recreational activities limited because of a long-term illness, health problem or disability which has lasted, or is expected to last, at least 12 months?** **SINGLE CODE** SHOW SCREEN. SINGLE CODE	C	QUARTERLY MARCH JUNE SEPTEMBER DECEMBER

		Yes, limited a lot Yes, limited a little No, not limited at all		
16	CLASS IF3	**ASK ALL** **SHOW SCREEN** **CLASSIF3 What is your ethnic group?** WHITE Scottish Other British Irish Gypsy/traveller Polish Any other white ethnic group (PLEASE SPECIFY) MIXED OR MULTIPLE ETHNIC GROUPS Any mixed or multiple ethnic groups (PLEASE SPECIFY) ASIAN, ASIAN SCOTTISH, ASIAN BRITISH Pakistani, Pakistani Scottish or Pakistani British Indian, Indian Scottish or Indian British Bangladeshi, Bangladeshi Scottish or Bangladeshi British Chinese, Chinese Scottish or Chinese British Other (PLEASE SPECIFY) AFRICAN African, African Scottish or African British Other (PLEASE SPECIFY) CARIBBEAN OR BLACK Caribbean, Caribbean Scottish or Caribbean British Black, Black Scottish or Black British Other (PLEASE SPECIFY) OTHER ETHNIC GROUP Arab, Arab Scottish or Arab British Other (PLEASE SPECIFY) I would prefer not to disclose my ethnic group	A	MONTHLY JANUARY FEBRUARY MARCH APRIL MAY JUNE JULY AUGUST SEPTEMBER OCTOBER NOVEMBER DECEMBER

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