

Public Opinion of Forestry 2009, Scotland

Results of the Scotland Survey of
Public Opinion of Forestry

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Executive Summary

2009 survey

In 2009, three separate public opinion of forestry surveys were undertaken - across the UK (2,011 interviews), Wales (1,002 interviews) and Scotland (1,040 interviews).

This report presents results of the survey in Scotland (1,040 interviews) and compares, where appropriate, with previous Scotland surveys and the UK 2009 survey. It highlights any differences in opinion amongst adults in Scotland by geographic variables (e.g. region and degree of rurality) and socio-demographic variables (e.g. gender and age).

Some of the questions asked in the 2009 Scotland survey were the same as those asked in 2007 (and in earlier years); however, a number of new questions were asked on topics such as those relating to health and wellbeing.

Separate reports provide similar results for England, Wales and the UK.

Forests, woodland and trees in the media

44% of respondents had seen or read about forests, woodland and trees in the last 12 months on the television, radio or in the newspapers. Topics most widely recognised include 'tree planting' and 'birds and other animals in woodlands'.

Forest management

79% of adults in Scotland selected at least one public benefit as a good reason to support forestry with public money. The top reasons to support forestry were 'to provide places for wildlife to live', 'to help tackle climate change' and 'to support the economy in rural areas'.

Climate change

There was a high level of agreement with a set of statements regarding how forests and woodlands can impact on climate change, for example 77% of respondents agreed that 'Trees are good because they remove carbon dioxide from the atmosphere and store it in wood'. However 52% of respondents incorrectly agreed that 'Scotland could offset all its greenhouse gas emissions by planting more trees'.

A set of statements was presented to respondents to ascertain their views on the way in which Scottish forests should be managed in response to climate change. The responses received reflect a belief that forestry is a method that can be used to

mitigate the effects of climate change. For example, 77% of respondents agreed that 'A lot more trees should be planted' while only 8% agreed that 'No action is needed: Let nature take its course'.

Wood as a fuel

5% of respondents said that they used wood as a fuel in their home, either on its own, or with other fuels.

Changes to woodland

37% of respondents would like to see more woodland in their part of Scotland, a significantly lower proportion than in 2007 (68%) or 2005 (47%), while 47% of respondents wanted neither more nor less woodland.

The most popular locations for the creation of new woodlands were 'urban and industrial areas' (79%), 'uplands' (37%) and 'intensively farmed areas' (28%).

Woodland recreation

When asked how often they would like to visit woodland in the next 12 months, three quarters (75%) of adults said they would like to visit at least once. Around 39% said they would like to visit at least once a month.

57% of respondents had visited a woodland or forest in the last few years, a significantly lower proportion than in 2007 (75%) but higher than that reported in 2005 (50%). 66% of woodland visitors said that they had been to a woodland or forest at least once a month in the summer of 2008. 40% visited at least once a month in the winter of 2008/09.

Of those adults who had visited woodlands in the last few years, 73% had visited woodlands in the countryside and 55% woodlands in and around towns.

Of those respondents who had not visited, 65% gave their main reason for not visiting as not being interested.

7% of respondents said they or their family had been involved, in the last 12 months, in either a school trip (3%), an event at a woodland visitor centre (3%), a guided walk or talk (2%) or another organised learning event (1%).

Health and Wellbeing

Nearly half of woodland visitors (48%) reported that they felt healthier when spending time outdoors in woodlands. They were also asked if they benefited from the following aspects of health when visiting woodlands:

- Physical health: through increased exercise and physical activity;
- Mental health: through relaxation, stress relief and improved mood;
- Social health and wellbeing: through meeting other people / spending time with people and /or talking with family or friends

Nearly two thirds (64%) said they benefited from all three benefits when visiting woodlands.

1 Introduction

1.1 Background

The Forestry Commission has conducted biennial surveys of public attitudes to forestry and forestry-related issues since 1995. The surveys have evolved since then as follows:

- In the initial surveys, a representative sample of 2,000 adults across Great Britain (GB) was surveyed;
- In 2001, with more interest in country-level results within GB, additional questions were asked of representative samples of 1,000 adults in each of Scotland and Wales;
- Information has also been collected for Northern Ireland in the past through UK wide surveys in 2003 and 2007 and the separate Northern Ireland surveys (1,000 adults) carried out in 2005 and 2007;
- In 2009 three separate surveys were carried out for the UK, Scotland and Wales. Some questions were asked in all three of the surveys conducted in 2009, but an increasing number of questions have become survey-specific.

The table below is a summary of the previous surveys and presents the approximate number of adults interviewed for each country. England results are a subset of the UK or GB survey.

	2003	2005	2007	2009
UK	4,000 adults	No survey	4,000 adults	2,000 adults
GB	No survey	4,000 adults	No survey	No survey
England	3,412 adults	3,367 adults	3,339 adults	1,685 adults
Wales	1,000 adults	1,000 adults	1,000 adults	1,000 adults
Scotland	1,000 adults	1,000 adults	1,000 adults	1,000 adults
Northern Ireland	No survey	1,000 adults	1,000 adults	No survey

1.2 This report

This report presents results from the 2009 survey in Scotland and compares, where appropriate, with previous Scotland surveys and the UK 2009 survey. It also highlights any significant differences in opinion amongst adults in Wales by geographic region, degree of rurality, and socio-demographic variables (e.g. gender and age).

A full set of tables, reporting the results of each question by geographic and socio-demographic variables are available on the Forestry Commission website alongside this report¹.

Separate reports present the results from the surveys undertaken in England and Wales, as well as one for the UK as a whole.

1.3 Survey design

The information presented in this report is taken from the **mrug** Scottish In-Home Omnibus survey carried out from 6th – 12th March 2009 on behalf of the Forestry Commission. The survey was based on a representative sample of 1,040 adults (aged 16 or over) across Scotland. They were selected from 52 sample points across Scotland selected to be representative in terms of geographic location and political constituency. More details of the sample method are given in Appendix 3: MRUK Scottish consumer omnibus survey.

The Scotland 2005 survey data were obtained from the **mrug** Scottish In-Home Omnibus as they were for 2009, while the 2003 and 2007 survey data were obtained from the TNS Scottish Opinion Survey. Comparisons should be taken with care as each of these companies employed a different survey design. In particular it should be noted that for some questions in the Scotland 2009 survey (as in 2005), there is a much higher proportion of adults responding 'don't know' in comparison to the 2007 survey. As this was accompanied by a corresponding decrease in positive responses, this may distort comparisons between the surveys, but 2009 may be comparable with 2005.

The 2009 UK information presented in this report is taken from the GfK NOP Random Location Omnibus survey carried out from the 5th to 10th March 2009. The survey was based on a representative sample of 2,011 adults (aged 16 or over) across the UK. More details of the sample method are given in the UK and England reports published along with this report¹.

All results are subject to the effects of chance in sampling, so a range of uncertainty (confidence interval) should be associated with any result from the survey. The confidence intervals take into account the effect of clustering, weighting and stratification in the survey design (see Appendix 3).

- For questions asked to the whole Scotland sample of around 1,040, the range of uncertainty around any figure should be no more than +/- 4.6%.

¹ <http://www.forestry.gov.uk/forestry/infd-5zyl9w>

- For responses of subgroups the range of uncertainty is higher (e.g. for males (50% of sample) and females (50%) the range of uncertainty is no more than +/- 6.4%.
- For questions asked to the whole UK sample of around 4,000, the range of uncertainty around any figure should be no more than +/- 2.3%.
- Differences of more than 5.7% between the Scotland and UK surveys are statistically significant. Differences of more than 6.6% between the Scotland surveys of 2009 and previous years are statistically significant.

Results are shown as percentages. These have been individually rounded so may not always sum to the totals provided.

1.4 Regression analysis

The 'socio-demographic comparisons' and 'geographic comparisons' sections of this report present the results of multivariate regression analysis. Further details on the variables used are given in Appendix 1: Cross breaks used in analysis and Appendix 2: Correlation matrix of variables used in analysis.

The multivariate regression analysis examines the relationship between responses and socio-demographic and geographical attributes. The model attempts to identify a set of explanatory variables (socio-demographic and geographic variables) that account for a large proportion of the variance of the response variable in question. The model originally includes all variables and sequentially removes the variable that has least effect on the variance, leaving only the most significant variables.

The geographic and socio-demographic sections only report results derived from the regression models. Each region was input into the model as a separate variable, therefore only the results from those regions identified as significant in the model are reported. Similarly age was entered as three separate dummy variables to indicate whether the respondent fell into age group 16-34, 35-54 or 55+.

Unless otherwise specified, those respondents who answered 'Don't know' have not been included in the regression analysis.

Some of the variables found to be significant in the regression results may not have seemed significant in the initial analysis because another correlated variable may have been influencing results in the opposite direction. Also some variables may have seemed significant, but the regression showed some other variable gave a better explanation. For example, there is a strong correlation between age and having any children in the household; the initial differences for those with and without children in the household may have appeared significant, but the regression may have shown this to be better explained by age.

2 Media Profile

2.1 Forests, woodland and trees in the media

Respondents were asked whether they had seen or read about Scottish forests, woods or trees on the television, radio or in the newspapers in the last twelve months. 44% of Scottish adults recalled seeing or reading about at least one topic (table 1). Respondents were most likely to identify 'tree planting' (18%) and 'birds and other animals in woodlands' (16%) as topics they had seen or read about.

Table 1: Respondents who had seen or read about Scottish forests, woods or trees in the last 12 months (%)

	UK	Scotland			
	2009	2003	2005	2007	2009
Tree planting	44	19	9	27	18
Birds and other animals in woodlands	48	19	8	23	16
Public rights of access to woodlands	33	19	15	35	15
Forests and woodlands as places to visit	40	14	6	22	14
Flowers and other plants in woodlands	33	8	4	13	10
Protests about roads or other developments on woodlands	31	13	6	19	9
Forests and woodlands helping to tackle climate change	39	-	-	25	8
Community woodlands	22		4	13	7
Woods in and around towns, new local woods, improved local access	-	-	4	11	7
Loss of ancient or native woodlands	28	9	5	13	6
Restoration of ancient or native woodlands	21	8	4	13	6
Tree pests and diseases	27	5	3	7	5
Wood for fuel, short rotation coppice	22	4	2	8	4
Creation of new native woodlands	19	6	4	11	4
Labelling/ certification of wood products	13	2	1	6	2
At least one topic	76 ¹	49	26	58	44

Base: All respondents –UK 2009 (2,011); Scotland 2003 (1,018), 2005 (1,009), 2007 (1,007), 2009 (1,040).

1- UK figure presented here will not match that presented in the UK report. Additional categories such as 'mountain biking' and 'music events' were included in the UK survey but not the Scotland survey so these have been excluded from this report for comparability.

A lower proportion of respondents to the Scotland survey in 2009 recalled seeing or hearing about all of the topics compared with 2007, although recognition across all topics was higher than in the Scotland 2005 survey results.

Geographic comparisons

Table 2 shows the top 5 most recognised topics by respondents in Scotland, by region.

Respondents from the North of Scotland (60%) were more likely compared with those living in other regions to have seen or read about at least one topic in the last 12 months. They were also more likely to recognise the topic 'Tree planting' (33%). Respondents living in the North were least likely to identify 'forests and woodlands as places to visit' as a topic they had seen or read about.

Respondents from the East of Scotland were more likely to have recognised 'birds and other animals in woodland' (26%) and 'Flowers and other plants in woodlands' (15%) as a topic they had seen or read about in the last 12 months.

Respondents from rural areas were more likely to have seen or heard about 'forests and woodlands as places to visit' (19%) and 'flowers and other plants in woodlands' (16%) compared with those from urban areas. 59% of respondents from rural areas identified at least one topic they recognised compared with 42% of those from urban areas.

Table 2: Respondents who had seen or read about Scottish forests, woods or trees in the last 12 months, by region (%)

	North	East	West	Scotland
Tree planting	33	18	13	18
Birds and other animals in woodlands	16	26	8	16
Public rights of access to woodlands	21	16	12	15
Forests and woodlands as places to visit	8	17	12	14
Flowers and other plants in woodlands	11	15	5	10
At least one topic	60	46	38	44

Base: All respondents in Scotland (1,040)

Socio-demographic comparisons

The following results identify, overall and for the top five most recognised topics, those variables highlighted as significant in the regression analysis.

Respondents recalling at least one topic, Scotland overall 44%:

- **Age group** – aged 16-34 (36%), 35+ (48%);
- **Social grade** – ABC1 53%, C2DE 37%;
- **Tenure** – home owner 53%, renter 35%;
- **Visited woodland** – visited recently 56%, not visited 30%.

Respondents who had seen or heard of 'Tree planting', Scotland overall 18%:

- **Visited woodland** – visited recently 24%, not visited 11%;
- **Tenure** – home owner 22%, renter 14%;
- **Age group** – aged 35-54 (15%), 16-34 or 55+ (20%);

Respondents who had seen or heard about 'Birds and other animals in woodlands', Scotland overall 16%:

- **Age group** – aged 16-34 (10%), 35+ (19%);
- **Social grade** – ABC1 22%, C2DE 11%;
- **Ethnic group** – member of a Black Minority or Ethnic (BME) group 38%, not a member 16%;
- **Visited woodland** – visited recently 24%, not visited 7%;
- **Working status**- working 14%, not working 23%.

Respondents who had seen or heard about 'Public rights of access to woodlands', Scotland overall 15%:

- **Visited woodland** - visited forests or woodlands 20%; not visited 9%;
- **Tenure** – home owner 20%, renter 10%;
- **Ethnic group** – member of a BME group 46%, not a member 15%.

Respondents who had seen or heard about 'Forests and woodlands as places to visit', Scotland overall 14%:

- **Tenure** – home owner 18%, renter 9%;
- **Index of Deprivation** –15% most deprived (6%), other (16%);
- **Visited woodland** – visited recently 21%, not visited 4%;
- **Working status**- working 12%, not working 15%.

Respondents who had seen or heard about 'Flowers and other plants in woodlands', Scotland overall 10%:

- **Age group** – aged 16-34 (4%), 35+ (12%);
- **Social grade** – ABC1 13%, C2DE 6%;
- **Ethnic group** – member of a BME group 46%, not a member 9%;
- **Visited woodland** – visited recently 14%, not visited 5%.

3 Forest management

3.1 Benefits of forestry

The Scottish Government funds forestry in Scotland in many ways. Respondents were asked to select, from a list of possible public benefits, good reasons to support Scottish forestry with public money.

Table 3: Whether respondent believes public benefits are good reasons to support forestry with public money (%)¹

	UK	Scotland			
	2009	2003	2005	2007	2009
To provide places for wildlife to live	80	50	39	67	43
To help tackle climate change	68	-	-	57	40
To support the economy in rural areas	55	37	37	46	34
To provide places for recreation (such as walking, cycling, horse-riding) ²	64	51	38	63	32
To improve the countryside landscape	62	37	31	56	31
So that Scotland can buy less wood products from abroad	42	27	30	32	23
To provide places for families to play ³	58	-	-	-	23
To provide renewable energy including wood as a fuel	50	26	29	36	21
To provide places for relaxation and stress-relief ⁴	53	44	23	49	21
To improve the appearance of towns and cities ⁵	44	20	22	43	20
To provide places for learning ³	48	-	-	-	19
To provide timber for sawmills and wood processing	28	17	22	28	15
To restore former industrial land	38	20	22	36	14
To help rural tourism	-	32	27	43	-
To make woods more accessible to all in the community	48	23	18	41	-
At least one reason	98	91	79	90	79

Base: All respondents –UK 2009 (2,011); Scotland 2003 (1,018), 2005 (1,009), 2007 (1,007), 2009 (1,040).

NOTE – Respondents could give more than one option.

- 1- Change in question wording, to 'for public benefit' from 'because it is believed it is believed to be of public benefit' in 2009 may prompt a positive response.
- 2- Responses to 'To provide places to walk in' and 'To provide places to cycle or ride horses in' from previous years were amalgamated to match new category in 2009.
- 3- New topic in 2009.
- 4- Wording in previous surveys was 'To provide healthy places for physical activity and stress release'.
- 5- Wording in previous surveys was 'To create pleasant settings for new and existing developments around towns'.

Table 3 shows that in 2009 79% of respondents believed there was at least one benefit of forestry worth supporting with public money. By considering only the categories which were presented to respondents in both 2007 and 2009, on a like-for-like basis, 78% in 2009 believed there was at least one benefit worth supporting forestry with public money compared to 88% in 2007.

As in 2005 and 2007, the top reason to support forestry in Scotland with public money was 'to provide places for wildlife to live' with 43% of respondents selecting this as a benefit. 'To help tackle climate change' (40%) and 'to support the economy in rural areas' (34%) were also seen as important reasons to support forestry with public money.

Geographic comparisons

Table 4 shows the top 5 most important reasons to support forestry with public money selected by respondents in Scotland, by region.

Table 4: Whether respondent believes public benefits are good reasons to support forestry with public money, by region (%)

	North	East	West	Scotland
To provide places for wildlife to live	62	37	41	43
To help tackle climate change	46	51	29	40
To support the economy in rural areas	56	39	22	34
To provide places for recreation (such as walking, cycling, horse-riding)	35	31	31	32
To improve the countryside landscape	60	26	25	31
At least one reason	94	83	71	79

Base: All respondents in Scotland (1,040)

Respondents from the North (94%) and East (83%) of Scotland were more likely than those from the rest of Scotland to select at least one benefit worth supporting forestry with public money.

Respondents living in the North of Scotland were more likely to say 'to provide places for wildlife to live' (62%) was a good reason to support forestry with public money, while respondents from the East of Scotland (37%) were the least likely to say this.

Respondents from the North were more likely to have said 'to improve the countryside landscape' was a good reason to support forestry with public money (60%). Those from rural areas were more likely to say 'to improve the countryside landscape' (50%) and 'to support the economy in rural areas' (52%) were important reasons to support forestry with public money.

Socio-demographic comparisons

The following results identify, for the top five reasons given for supporting forestry with public money, variables highlighted as significant in the regression analysis.

Respondents giving at least one reason to support forestry with public money, Scotland overall 79%:

- **Visited woodland** - visited recently 90%; not visited 64%;
- **Social grade** – ABC1 84%, C2DE 74%;
- **Long term illness/disability** –with long term illness/disability 92%, without 77%;
- **Index of Deprivation** –15% most deprived (67%), other (82%).

Respondents giving 'To provide places for wildlife to live' as a good reason to support forestry with public money, Scotland overall 43%:

- **Social grade** – ABC1 48%, C2DE 38%;
- **Long term illness/disability** –with long term illness/disability 57%, without 41%;
- **Visited woodland** – visited recently 52%, not visited 31%.

Respondents giving 'To help tackle climate change' as a good reason to support forestry with public money, Scotland overall 40%:

- **Age group** – aged 16-54 (36%), 55 + (49%);
- **Social grade** – ABC1 46%, C2DE 35%;
- **Long term illness/disability** –with long term illness/disability 57%, without 38%;
- **Index of Deprivation** – 15% most deprived (24%), other (45%).
- **Visited woodland** – visited recently 50%, not visited 28%;

Respondents giving 'To support the economy in rural areas' as a good reason to support forestry with public money, Scotland overall 34%:

- **Social grade** – ABC1 42%, C2DE 26%;
- **Visited woodland** – visited recently 42%, not visited 23%.

Respondents giving 'To provide places for recreation (such as walking, cycling, horse-riding)' as a good reason to support forestry with public money, Scotland overall 32%:

- **Gender** - male 27%, female 36%;
- **Social grade** - ABC1 36%, C2DE 27%;
- **Visited woodland** - visited recently 40%, not visited 21%.
- **Long term illness/disability** –with long term illness/disability 42%, without 30%;
- **Age group** – aged 16-34 (28%), 35+ (37%).

Respondents giving 'To improve the countryside landscape' as a good reason to support forestry with public money, Scotland overall 31%:

- **Visited woodland** - visited recently 38%; not visited 22%;
- **Work Status** – working 33%, not working 29%;
- **Long term illness/disability** –with long term illness/disability 48%, without 29%;
- **Index of Deprivation** –15% most deprived (18%), other (35%).

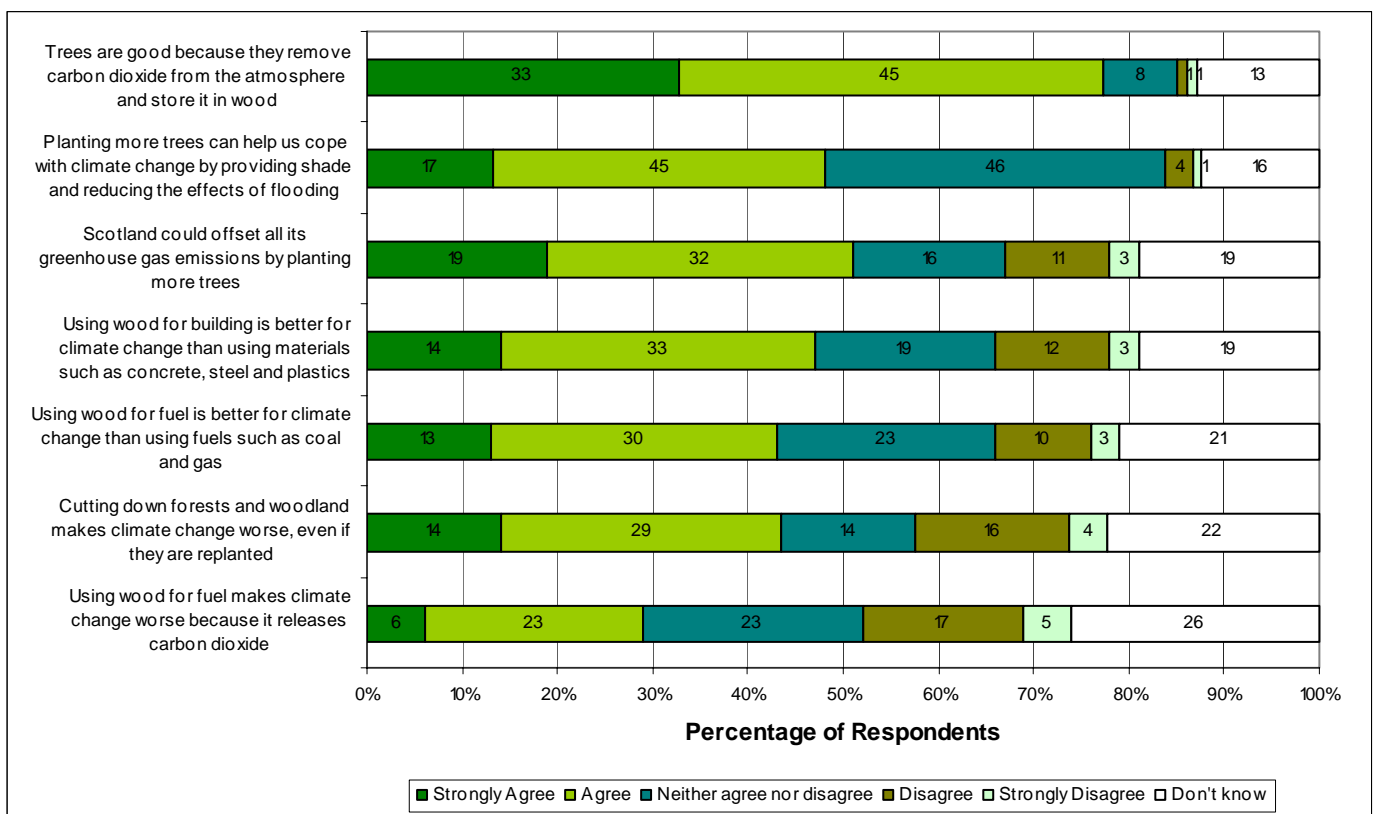
4 Climate change

In an attempt to gauge both the beliefs and knowledge of the public on the relationship between forests and climate change, respondents were asked about their level of agreement with a set of statements regarding the ways in which forests and woodlands in Scotland can impact on climate change.

4.1 Woodlands impact on climate change

Figure 1 shows a high level of agreement with each of the statements, with more respondents agreeing (selecting 'strongly agree' or 'agree') with each statement than disagreeing (selecting 'strongly disagree' or 'disagree').

Figure 1: Ways in which Scottish forests and woodlands can impact on climate change (%)



Base: All respondents in Scotland (1,040)

The highest level of agreement, with almost three-quarters of respondents agreeing (77%), was with the statement that 'Trees are good because they remove carbon dioxide from the atmosphere and store it in wood'. 63% believed 'planting more trees can help us cope with climate change by providing more shade and reducing the effects of climate change' while 52% said they agreed that 'Scotland could offset all its

greenhouse gas emission by planting more trees'. The lowest level of agreement was with the statement 'using wood for fuel makes climate change worse because it releases carbon dioxide' (29%).

It is helpful to consider the numbered statements shown above in figure 1 alongside the following common expert opinion²:

1. In general, it is believed that forests and woodlands have a key role to play in mitigating the effects of climate change. Forests and woodlands do help to stabilise atmospheric carbon dioxide by sequestering and storing carbon in trees, vegetation and soils.
2. In the short term, cutting down forests and woodlands does make climate change worse, as carbon stocks are released, but in the longer term this is countered by replanting. However, this harvesting and replanting should not be confused with deforestation, which implies a change in land cover from forest to non-forest land, whereas sustainable wood production involves cyclical harvesting and growing.
3. Wood and other materials derived from plants have an important contribution to make towards our future energy needs. Wood can be used as a low-carbon renewable energy source to substitute for fossil fuels.
4. Carbon released by burning woodfuel in modern, efficient systems is re-absorbed by growing trees in a cycle that reduces the amount of carbon released into the atmosphere. The long-term effect of tree planting, good forest management practices and burning woodfuel in efficient systems should be almost carbon neutral, however, such forests would of course not offset other emissions.
5. Wood products can be used as low-energy alternatives to materials such as concrete and steel, which involve high-energy use in their production. The biomass in wood products is also a carbon stock in its own right, just as much as biomass in living trees.
6. Afforestation makes an important contribution by sequestering carbon, but it is not feasible for the UK to become 'carbon neutral' through afforestation alone. It is estimated that to do this would require creation of some 50 million hectares of forest – approximately twice the land area of the UK. The same principle is also valid for Scotland, as even although the population density is lower than for the UK overall, a much higher level of woodland cover in Scotland would be theoretically possible but not practical.

² Statements and principles from the Forestry Commission 'Forestry and climate change' website:
<http://www.forestry.gov.uk/forestry/infd-6umkar>

Geographic comparisons

Respondents from the West of Scotland were less likely to agree with the statement 'Trees are good because they remove carbon dioxide from the atmosphere and store it in wood' (68%). They were also less likely to agree with the statement 'Using wood for building is better for climate change than using materials such as concrete, steel and plastic' (36%) than those from other areas.

Table 5: Ways in which Scottish forests and woodlands can impact on climate change, by region (%)

	North	East	West	Scotland
Trees are good because they remove carbon dioxide from the atmosphere and store it in wood	85	85	68	77
Planting more trees can help us cope with climate change by providing shade and reducing the effects of flooding	64	76	51	63
Scotland could offset all its greenhouse gas emissions by planting more trees	76	51	44	52
Using wood for building is better for climate change than using materials such as concrete, steel and plastic	54	57	36	47
Using wood for fuel is better for climate change than using fuels such as coal and gas	60	47	35	44
Cutting down forests and woodland makes climate change worse, even if they are replanted	50	46	39	43
Using wood for fuel makes climate change worse because it releases carbon dioxide	43	26	27	29

Base: All respondents in Scotland (1,040)

Respondents from the East of Scotland (76%) and urban areas (64%) were more likely to agree that 'Planting more trees can help us cope with climate change by providing shade and reducing the effects of flooding' while those in the West of Scotland were less likely to agree (51%).

Those from the North of Scotland were more likely to agree with the statement 'Using wood for fuel is better for climate change than using fuels such as coal and gas' (60%), while those from the West were the least likely to agree (35%). Respondents from the West were also the least likely to agree with the statement 'cutting down forests and woodland makes climate change worse, even if they are replanted' (39%).

Respondents from the North of Scotland were more likely to agree with the statements 'Scotland could offset all its greenhouse gas emissions by planting more

trees' (76%) and 'using wood for fuel makes climate change worse because it releases carbon dioxide' (43%) than those from other regions.

Socio-demographic comparisons

Those variables shown to be significant in the analysis are highlighted below; in the statements below, the proportion 'agreeing' refers to those respondents who answered 'strongly agree' or 'agree':

Respondents agreeing that 'Trees are good because they remove carbon dioxide from the atmosphere and store it in wood', Scotland overall 77%:

- **Age group** - aged 16 to 34 (69%), 35+ (81%);
- **Visited Woodland** – visited recently 87%, not visited 64%.

Respondents agreeing that 'planting more trees can help us cope with climate change by providing shade and reducing the effects of flooding', Scotland overall 63%:

- **Age group** - aged 16 to 54 (71%), 55+ (59%);
- **Long term illness/disability** –with long term illness/disability 72%, without 61%;
- **Index of deprivation** –15% most deprived (50%), other (66%);
- **Visited woodland** – visited recently 73%, not visited 49%;

Respondents agreeing that 'Using wood for building is better for climate change than using materials such as concrete and steel and plastics', Scotland overall 47%:

- **Tenure** – home owner 50%, renter 43%;
- **Visited woodland** – visited forests or woodland 50%, not visited 43%;

Respondents agreeing that 'Using wood for fuel is better for climate change than using fuels such as coal and gas', Scotland overall 44%:

- **Index of Deprivation** –15% most deprived (44%), other (43%);

Respondents agreeing that 'Cutting down forests and woodlands makes climate change worse, even if they are replanted', Scotland overall 43%:

- **Ethnic group** – member of a BME group 22%, not a member 44%;
- **Tenure** – home owner 44%, renter 42%;
- **Visited woodland** – visited recently 51%, not visited 34%;

Respondents agreeing that 'Using wood for fuel makes climate change worse because it releases carbon dioxide', Scotland overall 29%:

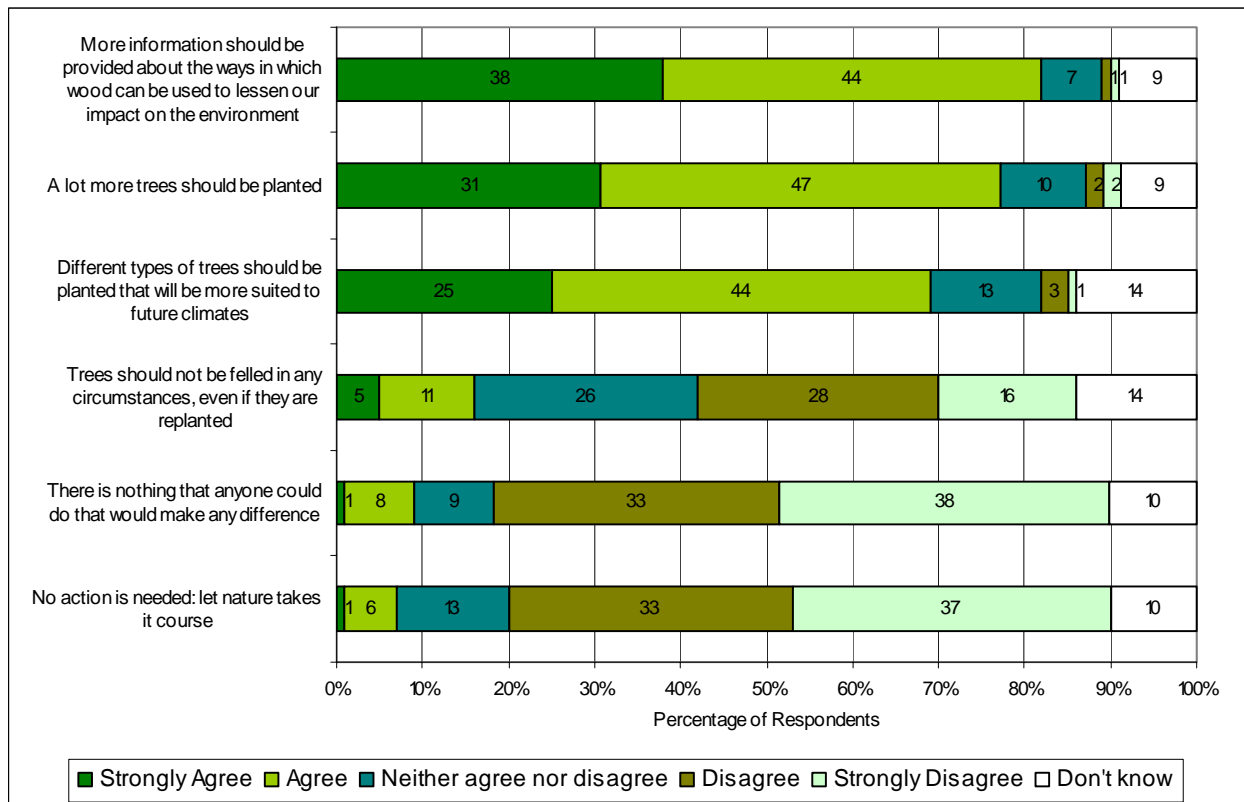
- **Tenure** – home owner 35%, renter 22%;
- **Long term illness/disability** –with long term illness/disability 21%, without 30%;

There were no significant socio-demographic variables to the statement 'Scotland could offset all its greenhouse gas emissions by planting more trees'.

4.2 Forest management in response to climate change

Respondents were then presented with a series of statements regarding the way in which Scottish forests and woodlands should be managed in response to the threat of climate change.

Figure 2: Management of Scottish forests in response to the threat of climate change (%)



Base: All respondents in Scotland (1,040)

The majority of respondents agreed or strongly agreed that:

- 'more information should be provided about the ways in which wood can be used to lessen our impact on the environment' (82%);
- 'a lot more trees should be planted' (77%); and that
- 'different types of trees should be planted that will be more suited to future climates' (69%).

Conversely, there is a low level of agreement (respondents selected 'strongly agree' or 'agree') with the statements: agree

- 'there is nothing that anyone could do that would make any difference' (9%);
- 'no action is needed; let nature take its course' (8%); and that
- 'trees should not be felled in any circumstances, even if they are replaced' (16%).

Geographic comparisons

Respondents from the West of Scotland were less likely to agree that 'more information should be provided about the ways in which wood can be used to lessen our impact on the environment' (71%). A higher proportion of those from urban areas (83%) agreed with this statement in comparison with those from rural areas.

Respondents from the North and East were most likely to agree with the statements 'different types of trees should be planted that will be more suited to future climates' (82% and 72% respectively) and 'a lot more trees should be planted' (94% and 81% respectively). Those from urban areas (78%) were more likely to agree with 'a lot more trees should be planted' than those from rural areas (73%).

Table 6: Management of Scottish forests in response to the threat of climate change, by region (%)

	North	East	West	Scotland
More information should be provided about the ways in which wood can be used to lessen our impact on the environment	88	92	71	82
A lot more trees should be planted	94	81	68	77
Different types of trees should be planted that will be more suited to future climates	82	72	62	69
Trees should not be felled in any circumstances, even if they are replanted	15	12	20	16
There is nothing that anyone could do that would make any difference	25	6	6	9
No action is needed: let nature take its course	24	4	5	8

Base: All respondents in Scotland (1,040)

A fifth of respondents (20%) from the West of Scotland agreed that 'trees should not be felled in any circumstances, even if they are replaced', a higher proportion than those in other regions. Those from urban areas (17%) were more likely to agree with this statement.

Respondents from the North of Scotland were more likely to agree with 'No action is needed: let nature take its course' (24%) and 'there is nothing that anyone could do that would make any difference' (25%).

Socio-demographic comparisons

Those variables shown to be significant in the analysis are highlighted below; in the statements below, the proportion 'agreeing' refers to those respondents who answered 'strongly agree' or 'agree':

Respondents agreeing that 'More information should be provided about the ways in which wood can be used to lessen our impact on the environment', Scotland overall 82%:

- **Visited woodland** - visited recently 92%; not visited 68%.

Respondents agreeing that 'A lot more trees should be planted', Scotland overall 77%:

- **Visited woodland** - visited recently 86%; not visited 65%;
- **Ethnic group** – member of a BME group 63%, not a member 77%;
- **Long term illness/disability** –with long term illness/disability 87%, without 76%.

Respondents agreeing that 'Different types of trees should be planted that will be more suited to future climates', Scotland overall 69%:

- **Tenure** – home owner 75%, renter 63%.

Respondents agreeing that 'Trees should not be felled in any circumstances, even if they are replaced', Scotland overall 16%:

- **Tenure** – home owner 19%, renter 13%;
- **Long term illness/disability** –with long term illness/disability 30%, without 14%.

Respondents agreeing that 'There is nothing that anyone could do that would make any difference', Scotland overall 9%:

- **Tenure** – home owner 11%, renter 7%;
- **Work status** – working 9%, not working 7%;
- **Long term illness/disability** –with long term illness/disability 21%, without 8%.

Respondents agreeing that 'No action is needed; let nature take its course', Scotland overall 8%:

- **Visited woodland** - visited recently 6%; not visited 10%;
- **Age** – aged 16-54 (9%), 55+ (5%).

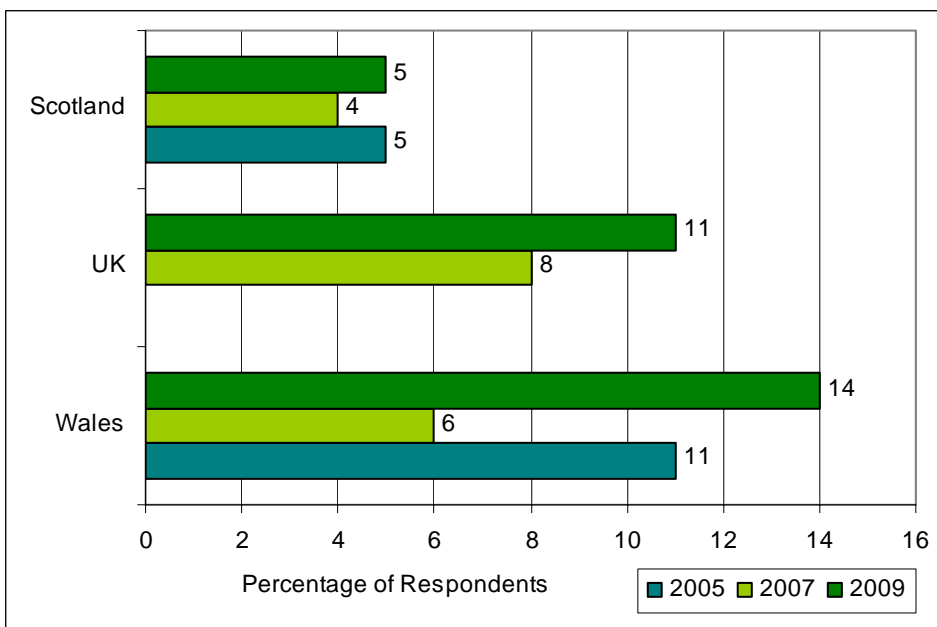
5 Wood as a fuel

5.1 Prevalence of using wood as a fuel

In 2009, respondents to the Scotland survey were asked if they used wood as a fuel in their home, either on its own, or with other fuels. This question was also asked in the UK and Wales 2007 and 2009 opinion surveys as well as in the 2005 Wales public opinion survey and in a woodfuel consumption study in Scotland in 2004/05.

Around 5% of respondents reported using wood as a fuel in their home in 2009.

Figure 3: Proportion who use wood as a fuel in their home (%)



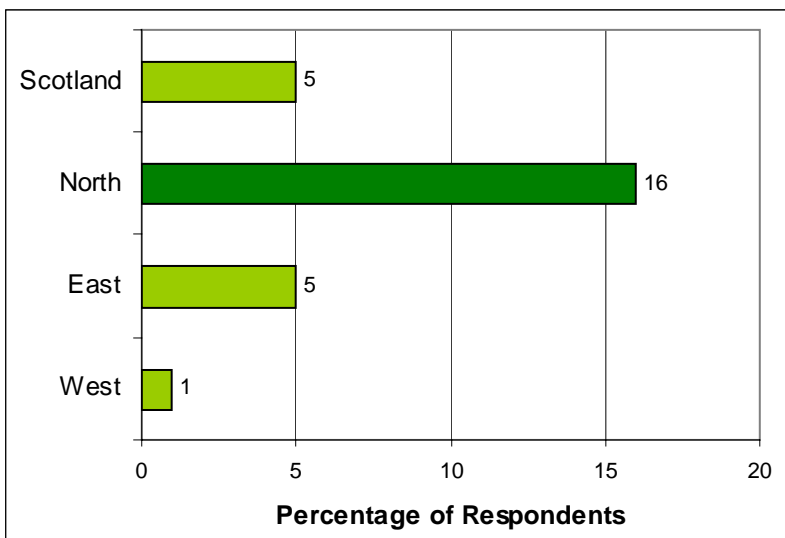
All respondents in – Scotland 2009 (1,040), 2007 (1,007), 2005 (4,006);

Wales 2009 (1,002), 2007 (953), 2005 (1,001); UK 2009 (2,011), 2007 (4,000)

Geographic comparisons

Respondents who lived in the North of Scotland (16%) were more likely than those who lived in other regions to use wood as a fuel in their home. 22% of respondents living in rural areas used wood as a fuel in their home, either on its own or with other fuels, compared with only 2% from urban areas.

Figure 4: Proportion of respondents who use wood as a fuel in their home, by region (%)



Base: All respondents in Scotland (1,040)

Note: Those in dark green are statistically significant in the multivariate regression

Socio-demographic Comparisons

Respondents using wood as a fuel in their home, Scotland overall 5%:

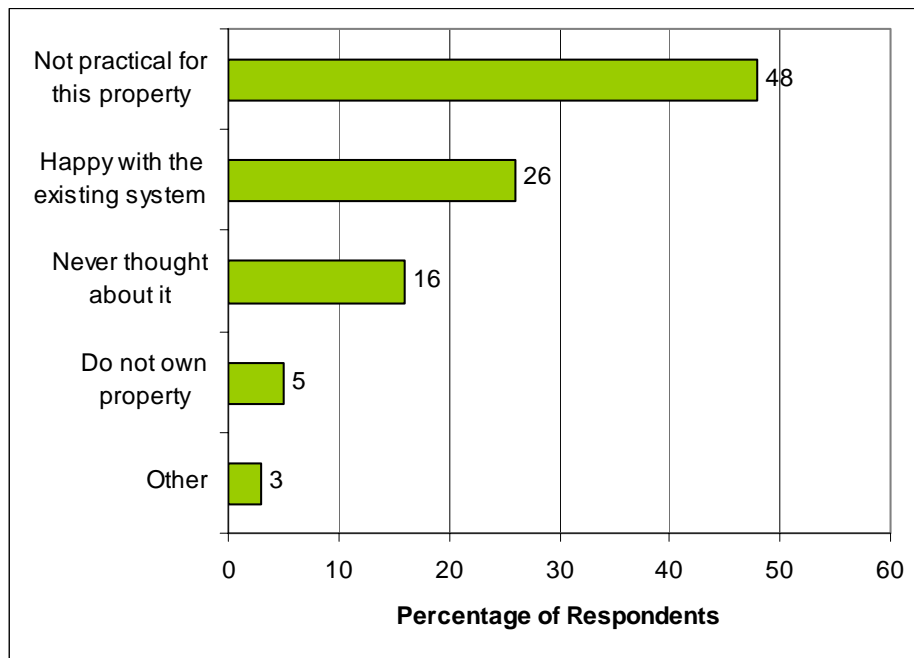
- **Age group** –aged 35-54 (7%), 16-34 or 55+ (5%);
- **Work status** – working 4%, not working 5%;
- **Visited woodland** – visited recently 6%, not visited 2%.

As there were only 48 respondents who used wood as a fuel, no regional or socio-demographic analyses were carried out on subsequent questions.

5.2 Reasons for not using wood as a fuel

In 2009, respondents who said they did not use wood as a fuel were asked to give the main reason why they did not use wood as a fuel (figure 5).

Figure 5: Reason respondents do not use wood as a fuel in their home (%)



Base: All respondents who do not use wood as a fuel (992)

The main reasons given by respondents for not using wood as a fuel in their home were that it was 'not practical for this property' (48% of those who did not use wood as a fuel), they were 'happy with the existing system' (26%) and had never thought about using wood as a fuel (16%).

6 Changes to Woodland

6.1 Desire for change in woodland area

Respondents were asked whether or not they would like to see more woodland in their part of Scotland. Nearly half of all respondents (47%) said they would like to see 'neither more nor less' in their part of Scotland while a third (37%) said they would like to see 'more'. Only 1% said they would like to see 'less' (table 7).

Table 7: Desire for more woodland (%)

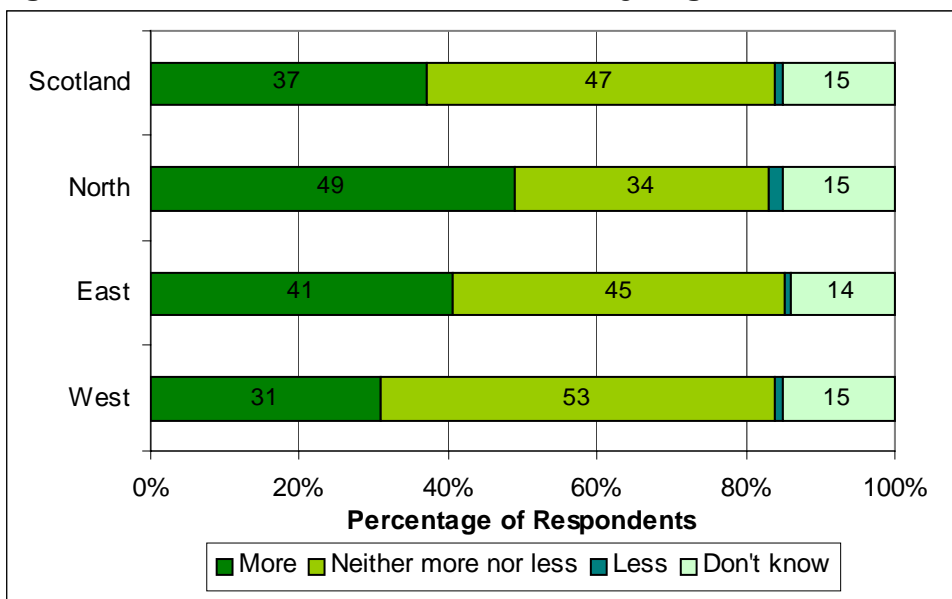
	2003	2005	2007	2009
More	58	47	68	37
Neither more nor less	26	30	28	47
Less	1	0	0	1
Don't know	15	23	4	15

Base: All respondents - Scotland 2003 (1,018), Scotland 2005 (1,009), Scotland 2007 (1,007), Scotland 2009 (1,040).

Geographical Comparisons

Respondents from the North of Scotland were more likely to say they would like to see 'more' woodland in their part of Scotland. They were also less likely to say they would like to see 'neither more nor less' woodland. Those from urban areas were more likely than those from rural areas to say they would like to see 'more' woodland (38%) and less likely to say they would want 'neither more nor less' woodland.

Figure 6: Desire for more woodland, by region (%)



Base: All respondents in Scotland(1,040)

Socio-demographic comparisons

Respondents who said they would like 'neither more nor less' woodland in their part of Scotland, Scotland overall 47%:

- **Visited woodland** – visited recently 42%, not visited 52%;
- **Work status** – working 43%, not working 52%.

Respondents who said they would like 'more' woodland in their part of Scotland, Scotland overall 37%:

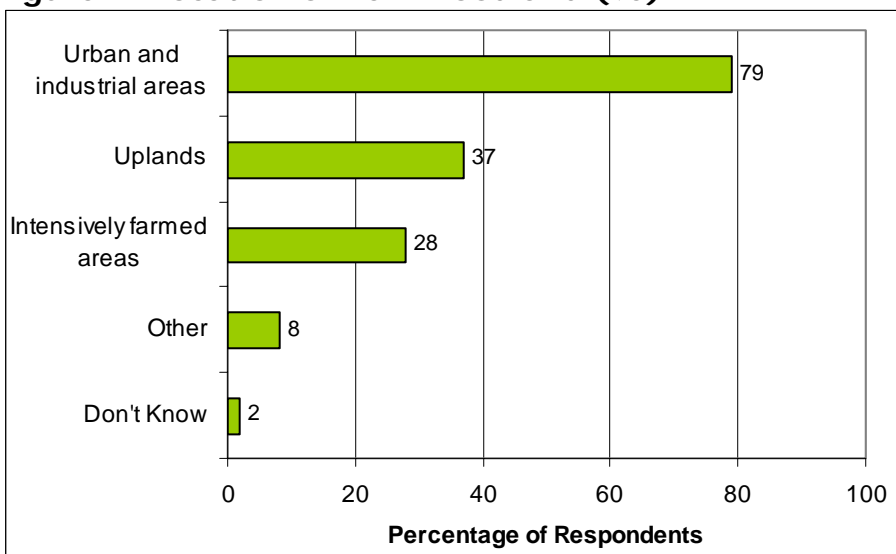
- **Visited woodland** – visited recently 49%, not visited 22%;
- **Age group** – aged 16-34 (33%), 35+ (40%);
- **Ethnicity** – member of a BME group 55%, not a member 37%;
- **Work status** – working 43%, not working 30%.

6.2 Location of new woodland

Respondents who indicated that they would like to see more woodland in their part of Scotland were also asked where they thought this new woodland should be created.

The most popular locations selected by those who thought there should be more woodland in their area were 'urban and industrial areas' (79%), 'uplands' (37%) and 'intensively farmed areas' (28%).

Figure 7: Location of new woodland (%)



Base: All respondents who said they would like more woodland (389)

NOTE: Respondents could choose more than one option.

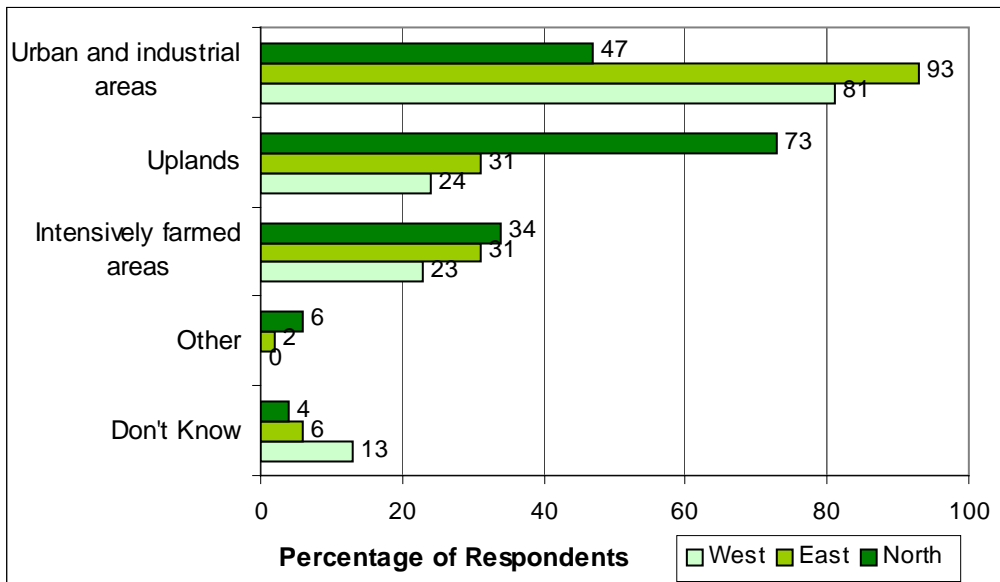
Geographical Comparison

Respondents in the East of Scotland, who said they would like to see more woodland in their part of Scotland, were more likely to say they would like to see it created in 'urban and industrial areas' (93%) while respondents in the North were the least likely to state these areas (36%). Those in urban areas (80%) were more likely than those in rural areas (74%) to state this option.

Of respondents who said they would like more woodland, those in the North were more likely to say they would like to see new woodland created on 'uplands' (73%).

Those in urban areas were less likely to say new woodlands should be created on 'Intensively farmed areas' (26% who said they wanted more woodland) than those in rural areas.

Figure 8: Location of new woodland by region (%)



Base: All respondents who said they would like more woodland (389)

NOTE: Respondents could choose more than one option.

Socio-demographic comparisons

Respondents who said they would like to see woodland created on 'urban and industrial areas', Scotland overall 79%:

- **Visited woodland** – visited recently 83%, not visited 67%.

Respondents who said they would like to see woodland created on 'uplands', Scotland overall 37%:

- **Age group** – aged 35-54 (32%), 16-34 or 55+ (40%);
- **Working status** – working 38%, not working 35%;
- **Ethnic group** – member of a BME group 80%, not a member 36%.

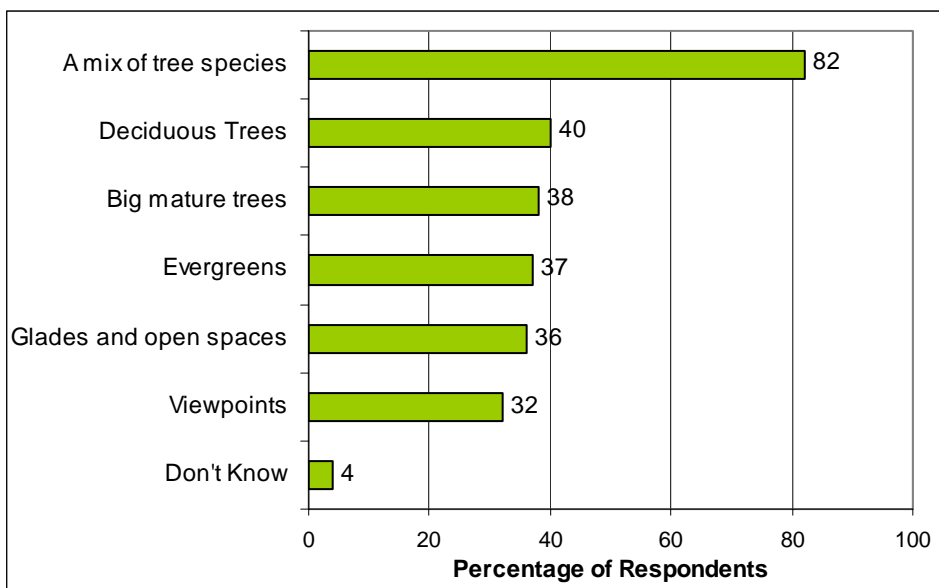
Respondents who said they would like to see woodland created on 'intensively farmed areas', Scotland overall 28%:

- **Age group** – aged 16-54 (25%), 55+ (36%);
- **Working status** – working 30%, not working 25%.

6.3 Characteristics important for new woodland

Respondents who indicated that they would like to see more woodland in their local area were also asked to state what woodland characteristics were important to them. Most commonly respondents cited that 'a mix of tree species' (82%) was important to them, followed by 'deciduous trees' (40%) and 'big mature trees' (38%).

Figure 9: Characteristics important for woodland (%)



Base: All respondents who said they would like more woodland (389)

NOTE: Respondents could choose more than one option.

Geographical comparisons

Of the respondents who said they would like to see more woodlands in their part of Scotland, 48% from the North and 51% from the East said that 'deciduous trees' were the most important woodland characteristic. Respondents from the East were the most likely to say that 'a mix of tree species' was an important woodland characteristic.

Table 8: Characteristics important for woodland, by region (%)

	North	East	West	Scotland
A mix of tree species	70	89	80	82
Deciduous Trees	48	51	25	40
Big Mature Trees	36	47	28	38
Evergreens	22	47	33	37
Glades and open spaces	28	49	28	36
Viewpoints	19	43	27	32

Base: All respondents who said they would like more woodland (389)

NOTE: Respondents could choose more than one option.

Socio-demographic comparison

Respondents who said 'deciduous trees' were an important woodland characteristic, Scotland overall 40%:

- **Social grade** – ABC1 43%, C2DE 37%;
- **Tenure** – home owner 34%, renter 49%;
- **Ethnic group** – member of a BME group 20%, not a member 41%.

Respondents who said 'big mature trees' were an important woodland characteristic, Scotland overall 38%:

- **Disability** – with disability 22%, without 40%;
- **Index of deprivation** –15% most deprived (29%), other (40%);
- **Age group** – aged 35-54 (32%), 16-34 or 55+ (42%).

Respondents who said 'evergreens' were an important woodland characteristic, Scotland overall 37%:

- **Tenure** – home owner 29%, renter 47%;
- **Long term illness/disability** –with long term illness/disability 19%, without 39%.

Respondents who said 'viewpoints were an important woodland characteristic, Scotland overall 32%:

- **Long term illness/disability** –with long term illness/disability 13%, without 35%.

There were no significant socio-demographic variables in responses to the statements 'Glades and open spaces' and 'a mix of tree species'.

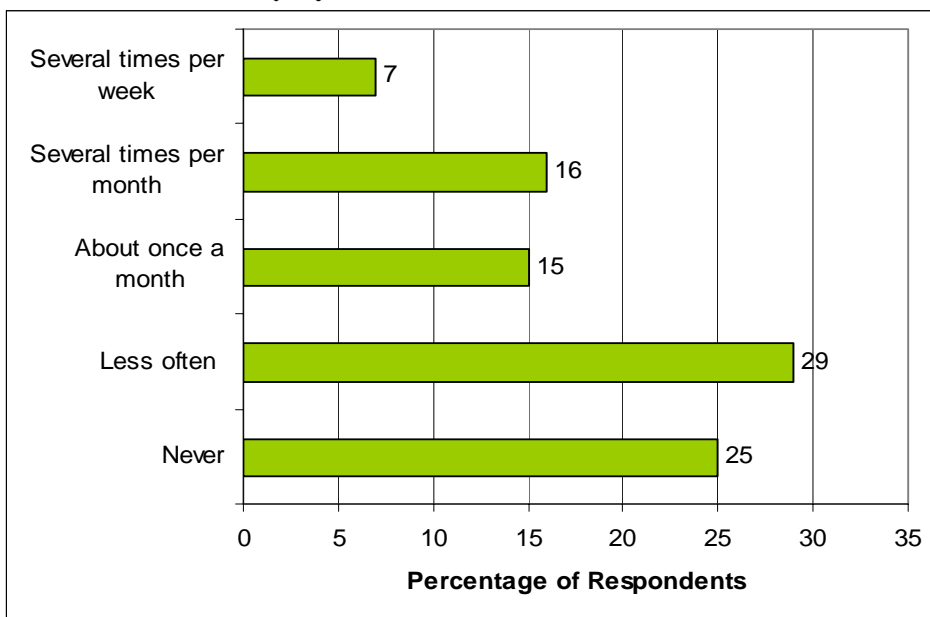
7 Woodland recreation

Two of the key themes of the Scottish Forestry Strategy³ are Access and Health, and Community Development. Some of the primary aims of these themes are to make access to woodlands easier for all sectors of society and to help to improve the quality of life and well-being of people across Scotland. This section reports on questions relating to recreation in forests and woodland.

7.1 Latent demand for woodland visits

Respondents were asked to state how often they would like to visit woodlands and the outdoors in the next 12 months. Three quarters (75%) said that they would like to visit at least once. Around 39% said they would like to visit at least once a month while a quarter (25%) said they would never like to visit the next 12 months.

Figure 10: How frequently respondents would like to visit woodlands in the next 12 months (%)



Base: All respondents in Scotland (1,040)

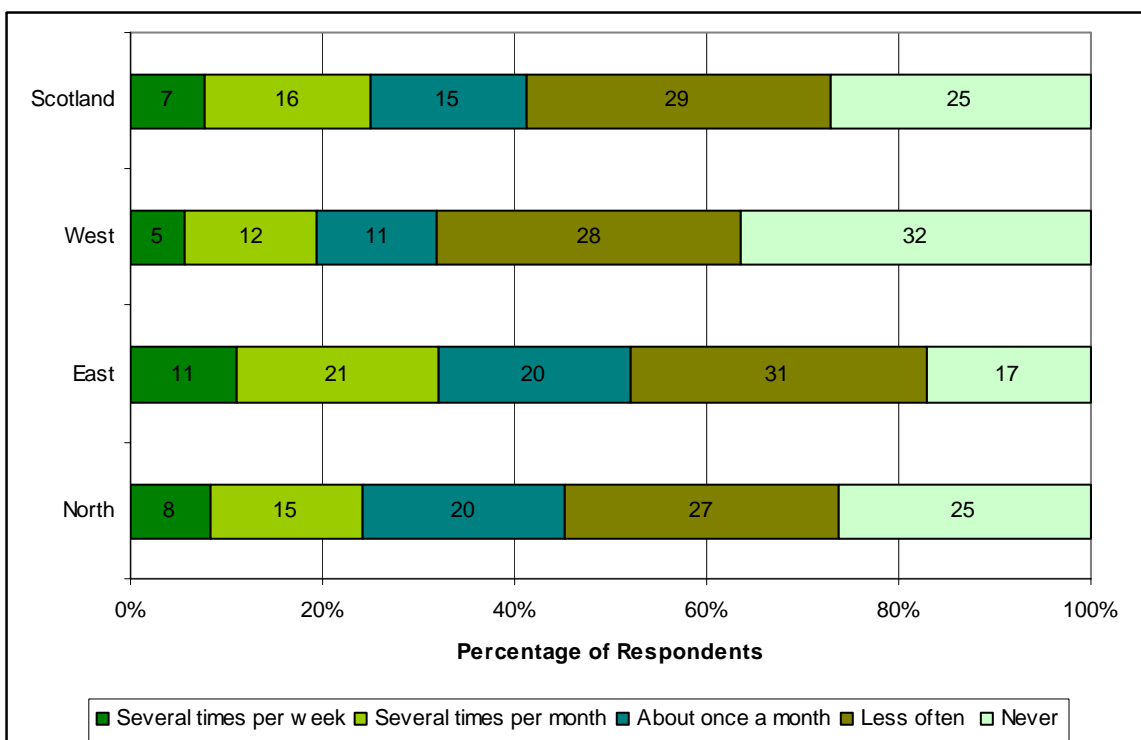
³ The Scottish Forestry Strategy (2006), Forestry Commission, 2006.

Geographic Comparisons

A quarter of respondents from the West of Scotland (27%) said they would like to visit woodlands at least once a month in the next 12 months, which is less than indicated in other regions.

Respondents from rural areas (55%) were more likely than those from urban areas (36%) to say they would like to visit at least once a month.

Figure 11: How frequently respondents would like to visit woodlands in the next 12 months, by region (%)



Base: All respondents in Scotland (1,040)

Socio-demographic comparisons

Respondents who said they would like to visit woodlands and the outdoors at least once a month in the next 12 months, Scotland overall 39%:

- **Visited woodland** – visited recently 62%, not visited 8%;
- **Index of deprivation** – 15% most deprived (36%), other (40%);
- **Tenure** – home owner 44%, renter 33%.

Respondents who said they would like to visit woodlands and the outdoors at least once in the next 12 months, Scotland overall 75%:

- **Visited woodland** – visited recently 98%, not visited 45%;
- **Ethnicity** – member of a BME group 96%, not a member 75%.

7.2 Visits to woodland

Over half of respondents (57%) said that they had visited forests or woodlands for walks, picnics or other recreation in the last few years (table 9). This represents a significant decrease over the Scotland survey results received in 2007 but higher than that reported in 2005 (50%).

Table 9: Visited woodland in last few years (%)

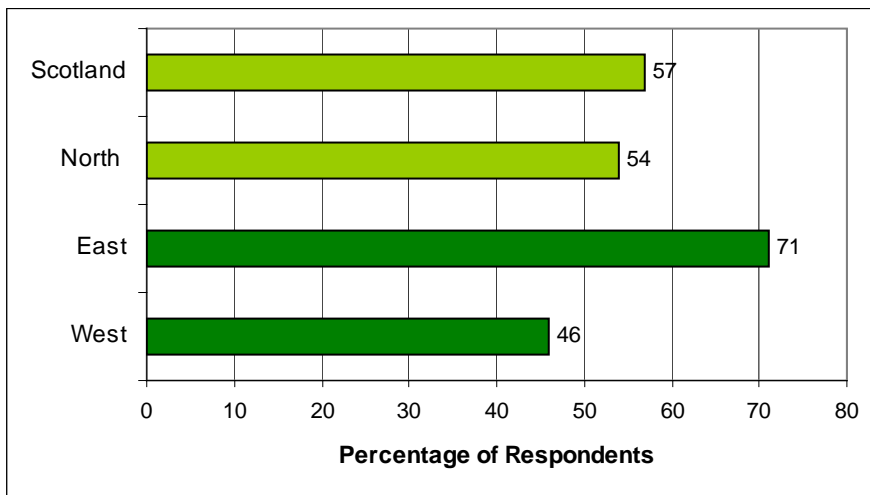
	UK 2009	Scotland 2003	Scotland 2005	Scotland 2007	Scotland 2009
Visited woodland in the last few years	77	64	50	75	57

Base: All respondents –UK 2009 (2,011); Scotland 2003 (1,018), 2005 (1,009), 2007 (1,007), 2009 (1,040).

Geographic Comparisons

Respondents from the East of Scotland were most likely to have reported visiting woodland in the last few years (71%) while those in the West of Scotland were least likely (46%). Those in urban areas (57%) were more likely to have visited woodland in comparison with those from rural areas (54%).

Figure 12: Visited woodland in last few years, by region (%)



Base: All respondents - Scotland 2009 (1,040)

Note: Dark green indicates statistically significant variable in multivariate model

Socio-demographic comparisons

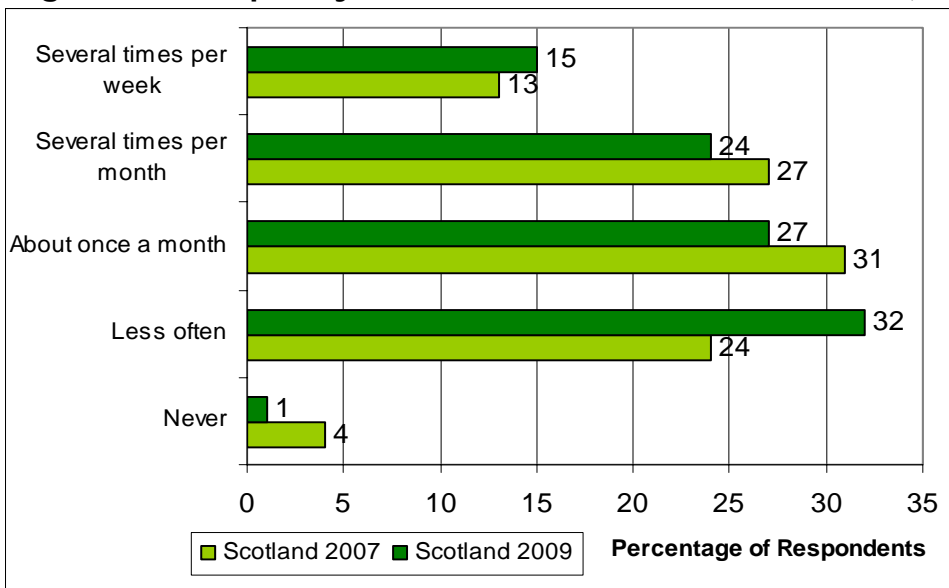
Respondents who had visited forests or woodlands in the last few years, Scotland overall 57%:

- **Social grade** – ABC1 65%, C2DE 49%;
- **Tenure** – home owner 64%, renter 49%;
- **Age group** – aged 35-54 (63%), 16-34 or 55+ (53%).

7.3 Frequency of woodland visits

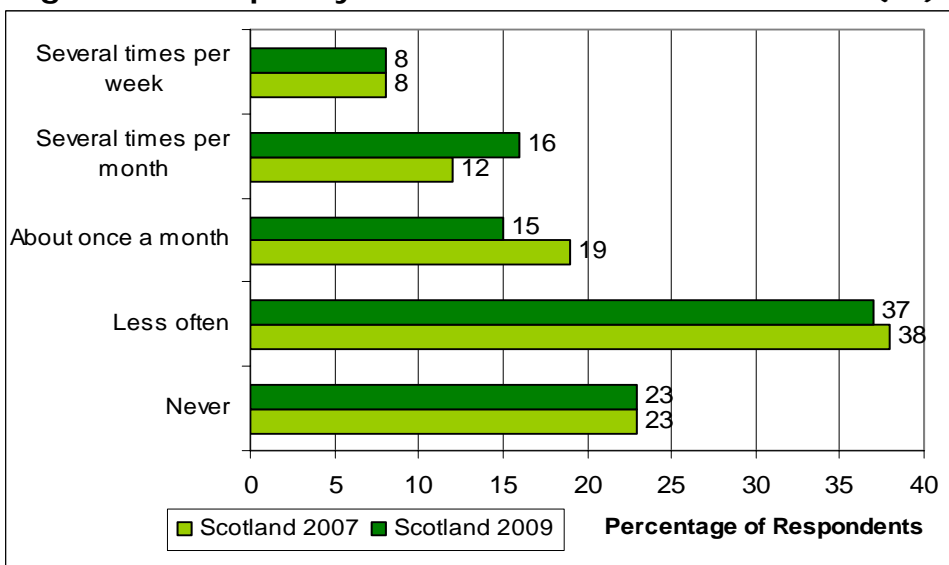
Of those respondents who had visited woodland or forests in the last few years, 66% said that they visited at least once a month in the summer of 2008 (between April and September 2008) (figure 13). 40% said that they visited at least once a month in the winter of 2008/9 (between October 2008 and March 2009) (figure 14).

Figure 13: Frequency of woodland visit in last summer (%)



Base: All respondents who visited woodland in the last few years (589), 2007 (752)

Figure 14: Frequency of woodland visit in last winter (%)



Base: All respondents who visited woodland in the last few years (589), 2007 (752)

Geographic comparisons

Of those who have visited forests and woodlands in the last few years, respondents residing in the East of Scotland were more likely to have visited at least once a month during the most recent summer (71%) and winter (48%), compared to respondents from other regions.

During the most recent summer, 82% from rural areas visited forests and woodlands at least once a month compared to 64% from urban areas. Over half from rural areas (51%) visited at least once a month during the most recent winter compared with 38% from urban areas.

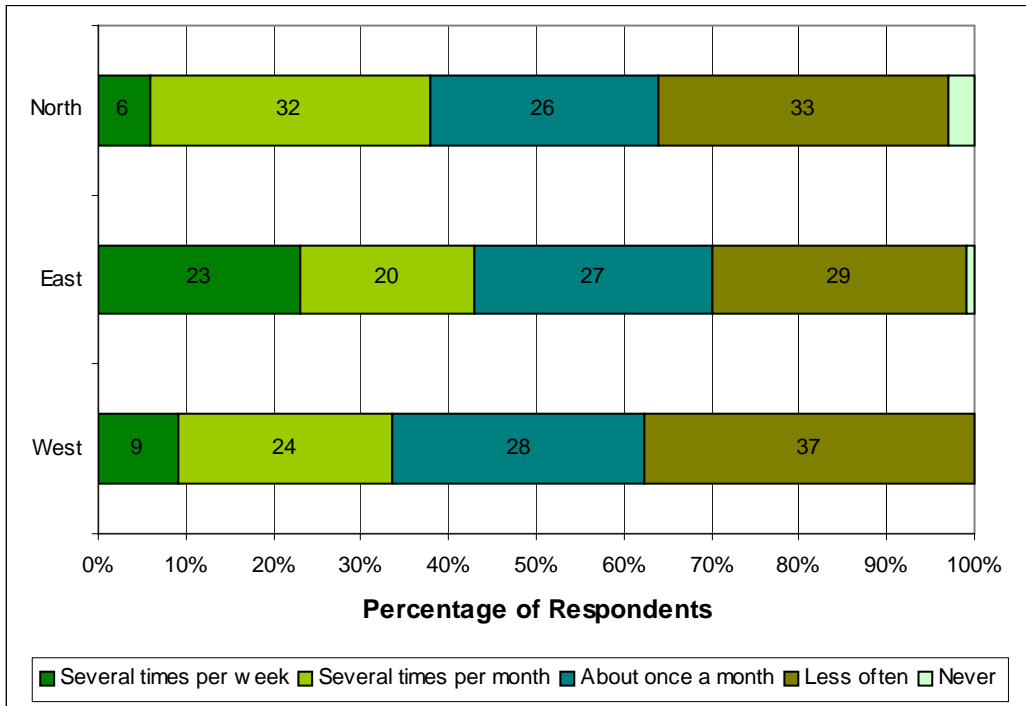
Socio-demographic comparisons

Respondents who had visited forests or woodlands at least once a month in summer 2008, Scotland overall 66%:

- **Gender** – Male 72%, Female 61%;
- **Tenure** – home owner 70%, renter 61%;

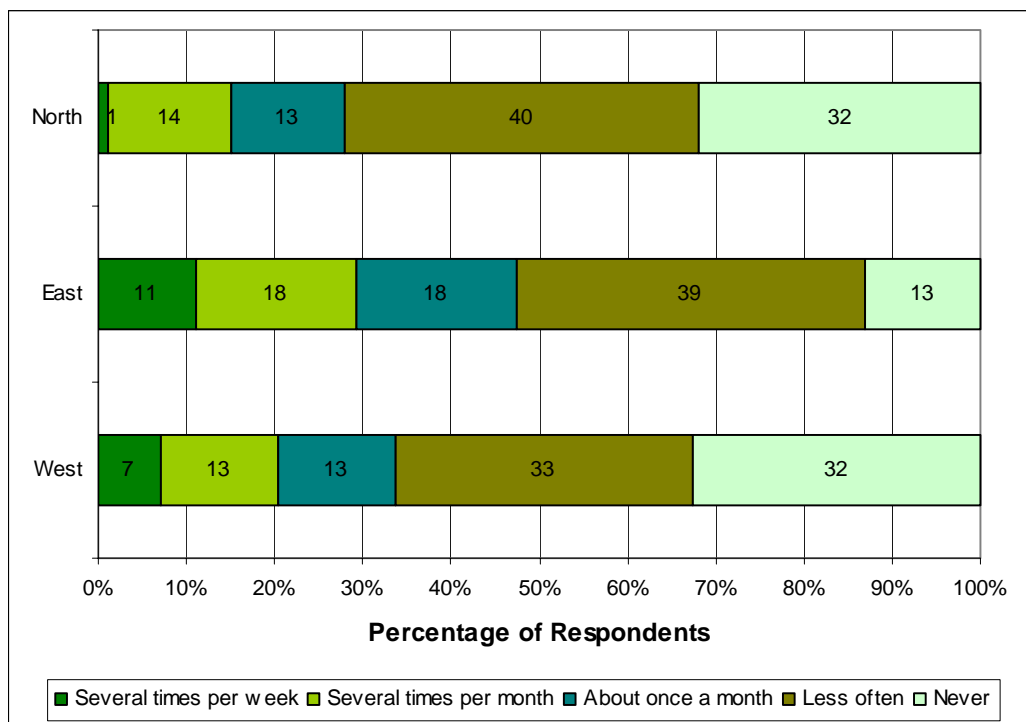
There were no significant socio-demographic variables when analysing those who had visited at least once a month in winter 2008/09.

Figure 15: Frequency of woodland visit in last summer, by region (%)



Base: All respondents who visited woodland in the last few years (589)

Figure 16: Frequency of woodland visit in last winter, by region (%)

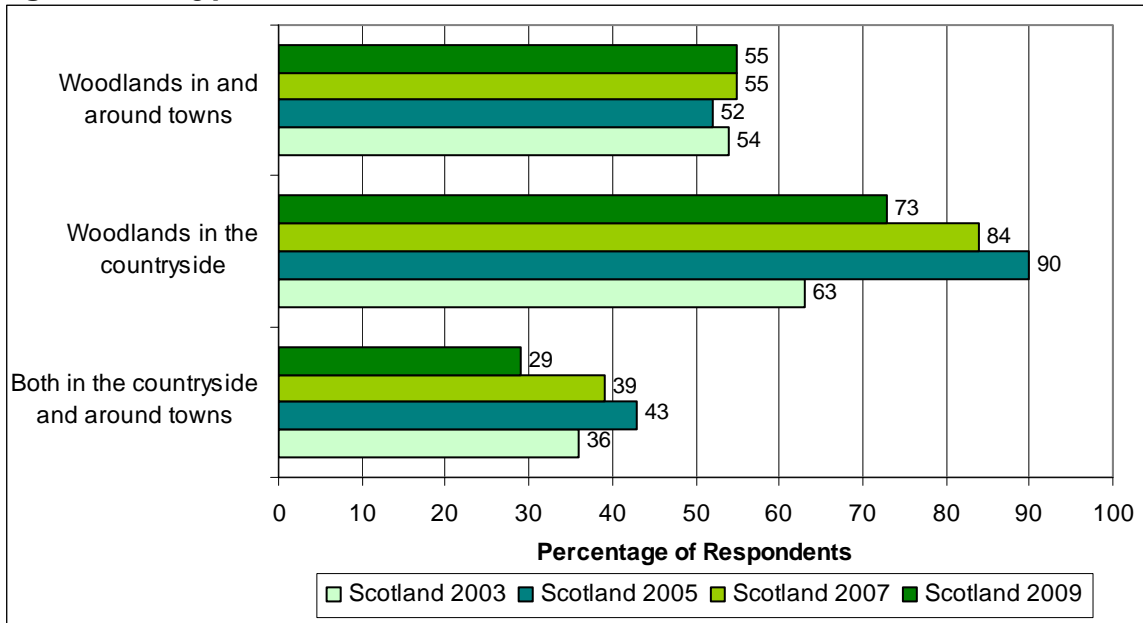


Base: All respondents who visited woodland in the last few years (589)

7.4 Type of woodland visited

Figure 17 shows that respondents who had visited forests or woodland were more likely to have visited 'woodland in the countryside' in 2009 (73%) as opposed to 'woodlands in and around towns' (55%). 29% of respondents said they had visited both woodlands in the countryside and in and around towns.

Figure 17: Type of woodland visited (%)



Base: All respondents in Scotland who had visited woodlands in the last few years – Scotland 2003 (648), 2005 (508), 2007 (752), 2009 (589)

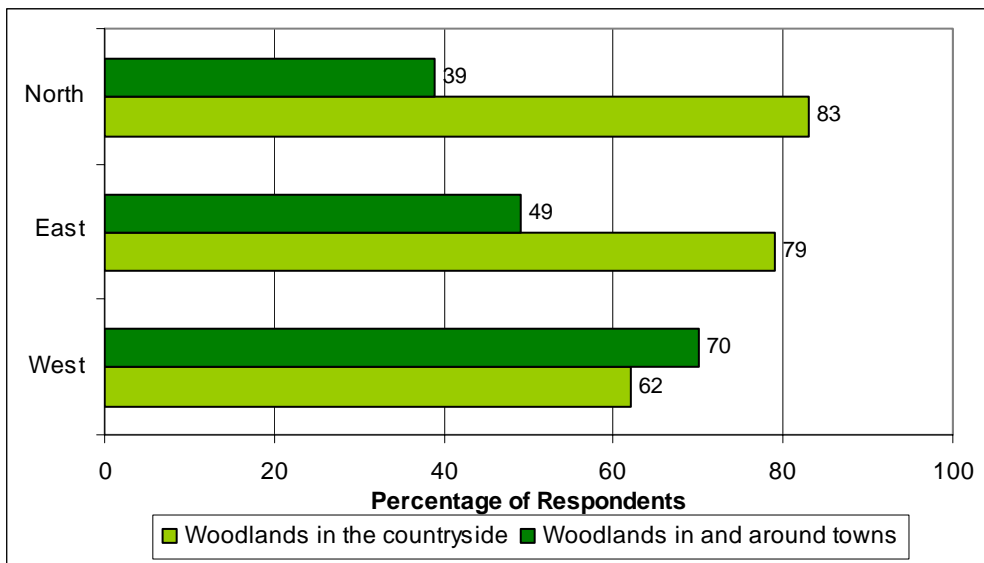
NOTE – Responses for those who said they had been to 'both' types of woodlands have been included in totals for 'Woodlands in and around towns' and 'Woodlands in the Countryside'.

Geographic comparisons

Of those who had visited forests or woodlands in the last few years, respondents from the West of Scotland were most likely to have visited woodlands in and around towns (70%). They were also least likely to have visited woodlands in the countryside (62%).

Of those who had visited forests or woodlands, those from rural areas (93%) were more likely to have visited woodlands in the countryside than those from urban areas (70%). In contrast, those from urban areas were more likely than those from rural areas to visit woodlands in and around towns (60% and 26% respectively).

Figure 18: Type of woodland visited, by region (%)



Base: All respondents who visited woodland in the last few years (589)

NOTE – Responses for those who said they had been to ‘both’ types of woodlands have been included in totals for ‘Woodlands in and around towns’ and ‘Woodlands in the Countryside’.

Socio-demographic comparisons

Respondents who had visited woodlands in the countryside, Scotland overall 73%:

- **Social grade** - ABC1 69%; C2DE 77%;
- **Tenure** – home owner 74%, renter 71%.

Respondents who had visited woodlands in and around towns, Scotland overall 55%:

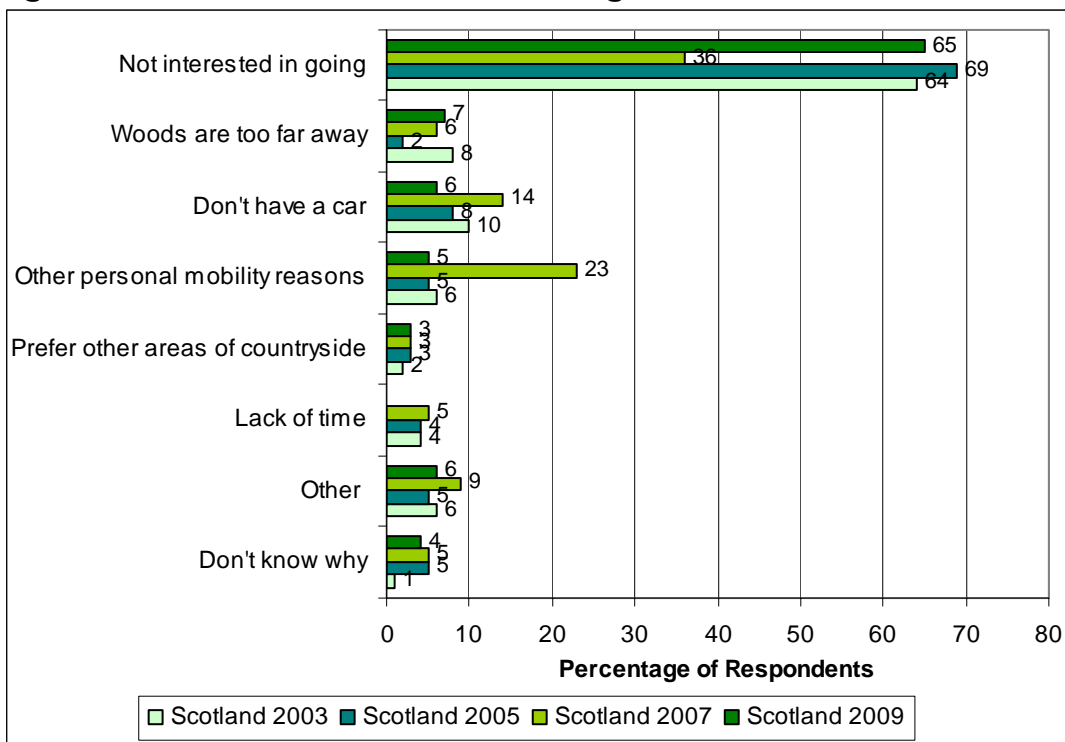
- **Social grade** – ABC1 60%, C2DE 49%.

7.5 Reasons for not visiting woodland

Respondents who had not visited woodland in the last few years were asked about their main reason for not visiting (figure 19).

As in previous surveys the most common reason for not having visited woodlands in the last few years was 'not interested in going' (65% in 2009). Other reasons cited included 'woods are too far away' (7%) and respondents 'don't have a car' (6%).

Figure 19: Main reason for not visiting forest/woodland in last few years



Base: Respondents who had not visited woodland in the last few years – Scotland 2003 (333), 2005 (473), 2007 (255), 2009 (451)

Geographic comparisons

Respondents from the West (68%) were more likely to say they were 'not interested in going' compared to respondents from other regions. 13% from the East said the main reason they did not visit is that 'woods are too far away' while 11% from the North said it was because they 'don't have a car'.

Respondents who live in urban areas (7%) were more likely than those from rural areas (1%) to say the main reason they didn't visit is because they 'don't have a car'.

Table 10: Main reasons for not visiting woodland, by region

	North	East	West	Scotland
Not interested in going	59	61	68	65
Woods are too far away	0	13	7	7
Don't have a car	11	3	5	6

Base: Respondents who had not visited woodland in the last few years - Scotland 2009 (433)

Socio-demographic comparisons

The following results identify, for the top three reasons for not having visited forests or woodlands in the last few years, those variables highlighted as significant in the regression analysis.

Respondents giving 'Not interested in going' as their main reason for not visiting forests and woodlands, Scotland overall 65%:

- **Index of Deprivation** –15% most deprived (56%), other (68%);
- **Ethnicity** – member of a BME group 9%, not a member 66%;
- **Long term illness/disability** –with long term illness/disability 37%, without 68%.

Respondents giving 'woods are too far away' as their main reason for not visiting forests and woodlands, Scotland overall 7%:

- **Index of Deprivation** –15% most deprived (15%), other (5%).

Respondents giving 'don't have a car' as their main reason for not visiting forests and woodlands, Scotland overall 6%:

- **Long term illness/disability** –with long term illness/disability 19%, without 4%.

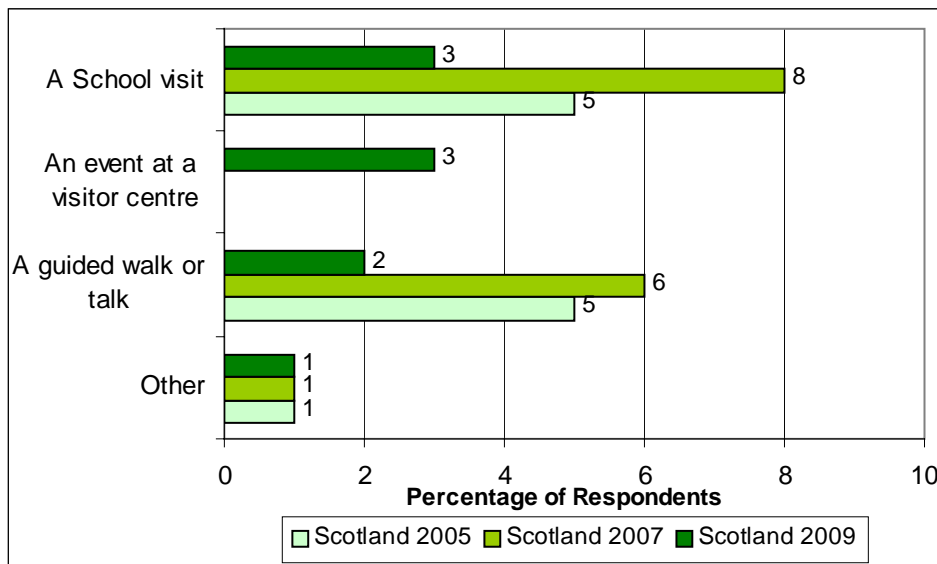
7.6 Woodland learning activities

Respondents were asked whether they, or any member of their family, had attended any organised learning activities or events to do with woodland or forests within the last 12 months.

In 2009, a total of 7% said that they or a member of their family had attended at least one such event or activity. These break down as follows:

- 3% had attended a 'school trip';
- 3% 'an event at a woodland visitor centre';
- 2% a 'guided walk or talk', and
- 1% had attended some other type of organised learning activity or event

Figure 20: Woodland learning activities attended (%)



Base: All respondents (1,040)

NOTE- 'An event at a visitor centre' was a new category for 2009

Geographic comparisons

Respondents from the West (9%) were more likely than those from other regions to have taken part in at least one of the activities.

Socio-demographic comparisons

Respondents who had taken part in at least one of the activities, Scotland overall 7%:

- **Age group** – 16-54 8%, 55+ 4%;
- **Index of Deprivation** –15% most deprived (4%), other (8%);
- **Visited woodland** - visited recently 9%; not visited 4%.

8 Health and Wellbeing

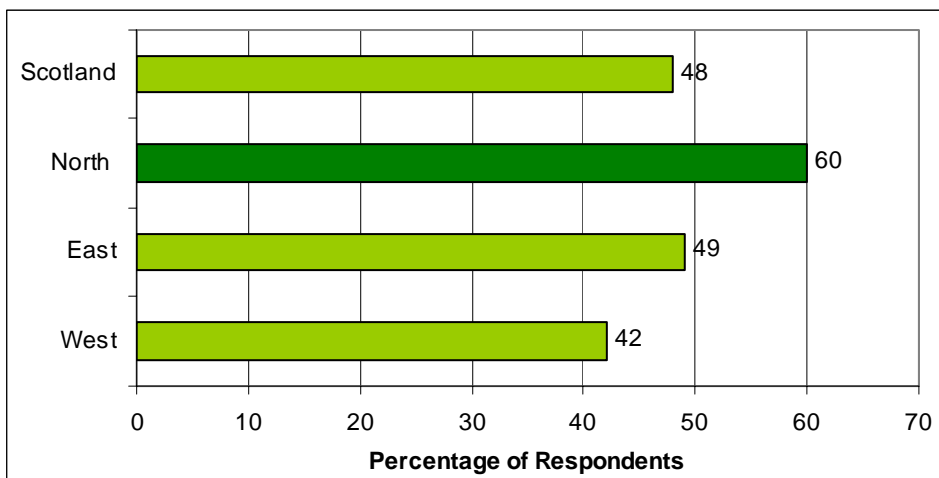
Two new questions were added to the Scotland 2009 survey to ascertain the health and wellbeing benefits experienced when visiting woodland.

8.1 Health in woodlands

Those who had visited forests or woodlands in the last few years, were asked to state on a scale of 1 to 10 how healthy they generally feel (where 1 denotes poor health and 10 denotes good health). They were then asked to rate, on the same scale, how healthy they generally feel when spending time outdoors in woodlands.

Nearly half of the respondents who had visited woodland in the last few years (48%) said that they felt healthier when spending time outdoors in woodlands compared to how healthy they generally feel.

Figure 21: Respondents who felt healthier when spending time outdoors in woodlands, by region (%)



Base: All respondents who had visited forest or woodlands in the last few years (589)

Note: Dark green indicates statistically significant variable in multivariate model

Geographic comparisons

Respondents living in the North of Scotland were more likely than respondents from other regions to say they felt healthier when spending time outdoors in woodlands.

Socio-demographic comparisons

Respondents who said they felt healthier when spending time outdoors in woodlands, Scotland overall 48%:

- **Age group** – aged 16-34 (30%), 35+ (55%);
- **Tenure** – home owner 43%, renter 54%.

8.2 Aspects of health in woodland

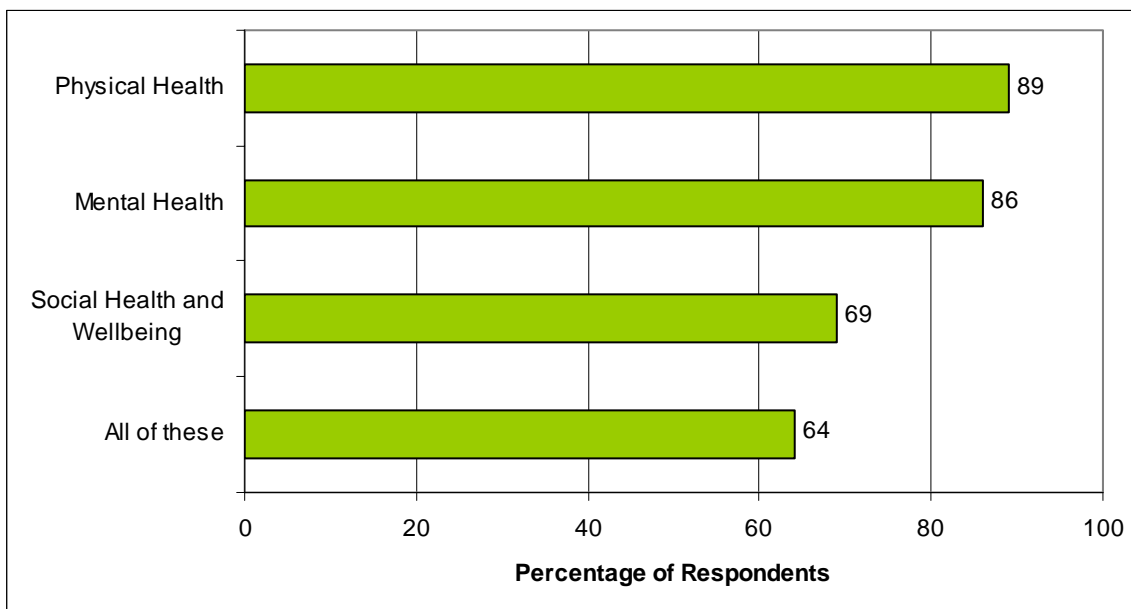
Respondents who had visited forests or woodland in the last few years were also asked what aspects of health and wellbeing they felt they benefited from when visiting woodlands and the outdoors as follows:

- Physical Health: through increased exercise and physical activity;
- Mental Health: through relaxation, stress-relief and improved mood;
- Social Health and Wellbeing: through meeting other people/ spending time with people and/ or talking with family and friends.

The vast majority of respondents who had visited woodland (97%) said that they benefited from at least one of these aspects, while nearly two thirds (64%) said that they benefited from all three.

Looking at the individual aspects, those asked were most likely to say they felt their physical health had benefited by visiting woodlands and the outdoors (89%). This compares with 86% of those who had visited saying they felt their mental health had benefited while 69% said their social health had benefited.

Figure 22: Benefits from visiting woodlands and the outdoors (%)



Base: All respondents who visited forest or woodlands in the last few years (589)

Note: Responses that indicated that respondents had felt all health benefits have been included in totals for 'physical health', 'mental health' and 'social health and wellbeing'.

Geographic comparisons

Of those respondents who had visited woodland, those from the North of Scotland were least likely to say they had experienced physical health benefits from visiting woodlands and the outdoors (71%) (table 11). Respondents from the West of Scotland were the least likely to say their mental health had improved through visiting woodlands and the outdoors (77%).

Respondents from the North were the least likely to say that they felt any social health and wellbeing benefits (43%) while those from urban areas (72%) were more likely to say this than those in rural areas (50%).

Those from the North of Scotland were least likely to state that they felt they had experienced all three health benefits (physical, mental and social) through visiting woodlands and the outdoors (39%). Those in East were most likely to say that had seen an improvement in at least one aspect of their health (99%).

Table 11: Benefits felt by respondents from visited woodlands and the outdoors, by region (%)

	North	East	West	Scotland
Physical Health: through increases exercise and physical activity	71	96	88	89
Mental Health: through relaxation, stress-relief and improved mood	91	91	77	86
Social Health and Wellbeing: through meeting other people/ spending time with people and/ or talking with family and friends	43	72	75	69
All of these	39	70	66	64
At least one benefit	95	99	95	97

Base: All respondents who visited forest or woodlands in the last few years (589)

Note: Responses that indicated that respondents had felt all health benefits have been included in totals for 'physical health', 'mental health' and 'social health and wellbeing'.

Socio-demographic comparisons

Those variables shown to be significant in the analysis are highlighted below.

Respondents who said they felt their physical health benefited from visiting woodlands and the outdoors, Scotland overall 89%:

- **Social grade** – ABC1 92%, C2DE 86%;
- **Working status** – working 92%, not working 85%.

Respondents who said they felt their mental health benefited from visiting woodlands and the outdoors, Scotland overall 86%:

- **Social grade** – ABC1 90%, C2DE 80%;
- **Index of Deprivation** –15% most deprived (74%), other (88%);

Respondents who said they felt their social health and wellbeing benefited from visiting woodlands and the outdoors, Scotland overall 69%:

- **Ethnic** – member of a BME group 14%, not a member 70%;
- **Tenure** – home owner 75%, renter 60%;

Respondents who said they felt their physical health, mental health and social health & wellbeing benefited from visiting woodlands and the outdoors, Scotland overall 64%:

- **Ethnic** – member of a BME group 14%, not a member 65%;
- **Tenure** – home owner 70%, renter 55%;
- **Working status** – working 69%, not working 57%.

Respondents who said they felt at least one aspect of their health benefited from visiting woodlands and the outdoors, Scotland overall 97%:

- **Index of Deprivation** –15% most deprived (92%), other (98%).

Appendix 1: Cross-breaks used in analysis

Table A: Variables used in regression analysis

Variable	Divisions	Proportion of sample	Distribution of 16+ Scottish population in 2001 census ⁴	Details (where necessary)
Geographic Region	West	46%	46%	Argyll & Bute, East Ayrshire, East Dunbartonshire, East Renfrewshire, Glasgow City, Inverclyde, North Ayrshire, North Lanarkshire, Renfrewshire, South Ayrshire, South Lanarkshire, West Dunbartonshire, Dumfries & Galloway
	North	15%	16%	Aberdeen City, Aberdeenshire, Eilean Siar, Highland, Moray, Orkney, Shetland
	East	38%	38%	Angus, Clackmannanshire, Dundee City, East Lothian, Edinburgh City, Falkirk, Fife, Midlothian, Perth & Kinross, Stirling, West Lothian, Scottish Borders
Rural/urban	Urban (1) Rural (2)	86% 14%		Based on respondent's postcode (see below)
Deprivation	15% most deprived (1) Other (0)	22% 78%	15% 85%	Based on respondent's postcode (see below)
Age	16-34 (1) not 16-34 (0)	31% 69%	31% 69%	Adults over 16 were divided into 3 age variables
	35-54 (1) not 25-54 (0)	36% 64%	36% 64%	
	55+ (1) not 55+ (0)	33% 67%	33% 67%	

⁴ Scottish adult population (16 + years) 4,090,000

Variable	Divisions	Proportion of sample	Distribution of 16+ Scottish population in 2001 census ⁵	Details (where necessary)
Gender	Male (1) Female (2)	50% 50%	47% 53%	
MRS social grades	ABC1 (1) C2DE (2)	47% 53%	46% 54%	See below
Long-term illness or disability	Yes (1) No (0)	9% 91%		From question in survey
Work Status	Working (1) Not working (0)	56% 40%	58% 42%	Not working includes students, retired adults and unemployed
Visited Woodlands	Yes (1) No (0)	57% 42%		From question in survey
Tenure	Home Owners (1) Renters (0)	52% 48%		
BME	Yes No	1% 99%	2% 98%	

Note: To aid in interpreting Table A, the values used for each of the variables are detailed in brackets.

Table A details the cross-breaks used in the analysis of this data. It also shows the proportion of the sample that falls into each category. For example, with the age-group category, 31% of respondents were aged 16 to 34, 36% were aged 35 to 54 and 33% were aged over 55.

⁵ Scottish adult population (16 + years) 4,090,000

Description of variables

Market Research Society (MRS) social grades:

Covers ABC1, where the chief income earner in the household is a non-manual worker and C2DE, where the chief income earner in the household is a manual worker or is unemployed.

Geographic region:

Scotland has been divided into three regions: 'West', 'North' and 'East'. Details of the boundaries for these regions are shown above.

Deprivation:

The deprivation ranking is taken from the Scottish Index of Multiple Deprivation, which is based on a range of indicators in areas such as Health, Education and Employment. Deprivation is measured across data zones, groups of postcodes that have a population of between 500 and 1,000. The data zones are ranked from 1 (most deprived), to 6,505 (least deprived). This survey contrasts the responses from those resident in the most deprived 15% of datazones with those resident in the least deprived 85% of datazones.

Rural/urban:

The 'rural/urban' variable is based upon the official Scottish Government classification, which places postcodes into six strata based upon population size and density. This report combines these strata into two categories, as shown below:

- Urban: 'large urban area', 'other urban area', 'accessible small town', and 'remote small town'.
- Rural: 'accessible rural' and 'remote rural'.

Appendix 2: Correlation matrix of variables used in analysis

Table B shows the correlation between the socio-demographic variables used in the regression modelling. The greater the magnitude of the correlation coefficient, the more highly correlated the variables are.

More highly correlated variables include: age with work status with long-term illness or disability and degree of rurality (urban or rural) with region.

For this reason, when simply analysing percentages, consideration should be taken regarding the correlation between each of these variables and the effect they may have on the interpretation of the results.

Table B: Correlation coefficients of variables used in regression analysis

	Age	Gender	Social class	Region	Tenure	Working status	Long term illness or disability	Ethnicity	Urban/ Rural	Deprivation	Visited Woodland
Age ¹	1.00	-0.04	0.01	-0.03	0.15	-0.33	-0.25	0.04	0.01	-0.05	0.01
Gender		1.00	-0.02	-0.08	0.00	-0.01	0.01	0.01	0.04	0.00	0.04
Social class			1.00	0.05	-0.40	-0.17	-0.10	-0.01	-0.09	0.20	-0.17
Region				1.00	-0.01	-0.02	0.10	0.01	-0.30	0.24	-0.17
Tenure					1.00	0.11	0.07	0.02	0.09	-0.22	0.16
Working status						1.00	0.29	0.07	0.07	0.00	0.06
Long term illness or disability							1.00	0.01	-0.01	0.06	0.02
Ethnicity								1.00	0.01	-0.02	-0.02
Urban/ Rural									1.00	-0.17	0.04
Deprivation										1.00	-0.11
Visited Woodland											1.00

1- For simplicity, the age characteristics have been entered into the correlation matrix as a single variable, whereas in the regression analysis it is entered as three dummy variables as specified in table A.

Appendix 3: MRUK Scottish consumer omnibus survey

The **mrुक** omnibus is a monthly Scottish consumer omnibus survey, for which 1,040 interviews are conducted in-home each month. There are 52 constituency-based sample points. The distribution of sample points is in line with the geographic spread of the population.

Interviews are conducted using a random route approach to select the address within each of the sampling points. One interview is conducted per household and quotas are imposed on age, gender and socio-economic group to reflect the population.

The sample is structured to match population profile estimates, allowing analysis and comparison between each wave of fieldwork to monitor changes in awareness, attitudes or behaviour over time.

1,040 adults (aged 16 or over) were interviewed during the March 2009 wave of the omnibus survey. Interviews for the March survey were conducted between 6th and 12th March 2009.

Appendix 4: Scotland questionnaire 2009

<p>Q1</p>	<p>[All] You may have seen or read about Scottish forests, woods or trees on the television, radio or in the newspapers. From this list, can you please tell me which of these topics you have seen or read anything about in the last 12 months?</p> <p style="text-align: right;">(Multi answer)</p> <ul style="list-style-type: none"> • Birds and other animals in woodlands • Flowers and other plants in woodlands • Forests and woodlands as places to visit • Community woodlands • Woods in and around towns, new local woods, improved local access • Tree planting • Tree pests and diseases • Wood for fuel, short rotation coppice • Loss of ancient or native woodlands • Restoration of ancient or native woodlands • Creation of new native woodlands • Public rights of access to woodlands • Protests about roads or other developments on woodlands • Labelling/certification of wood products • Forests and woodlands helping to tackle climate change • Other (specify) • None of these
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<p>Q2</p>	<p>[All] In Scotland, public money is given to plant new woodland and to manage existing woodland for public benefit. From this list, please tell me which of the following reasons are good reasons to support forestry in this way?</p> <p style="text-align: right;">(Multi answer)</p> <ul style="list-style-type: none"> • To support the economy in rural areas • To provide timber for sawmills and wood processing • To provide renewable energy including wood as fuel • So that Scotland can buy less wood products from abroad • To help tackle climate change • To provide places for wildlife to live • To provide places for recreation (such as walking, cycling, horse-riding) • To provide places for relaxation and stress release • To provide places for families to play • To provide places for learning • To improve the countryside landscape • To improve the appearance of towns and cities • To restore former industrial land • None of these
<p>Q3</p>	<p>[All] Would you agree or disagree with the following statements about the ways in which forests and woodlands in Scotland can impact on climate change?</p> <p>(1 strongly agree, 2 agree, 3 neither agree or disagree, 4 disagree, 5 strongly disagree)</p> <ul style="list-style-type: none"> • Trees are good because they remove carbon dioxide from the atmosphere and store it in wood • Cutting down forests and woodland makes climate change worse, even if they are replanted • Using wood for fuel is better for climate change than using fuels such as coal and gas • Using wood for fuel makes climate change worse because it releases carbon dioxide • Using wood for building is better for climate change than using materials such as concrete, steel and plastics. • Scotland could offset all its greenhouse gas emissions by planting more trees • Planting more trees can help us cope with climate change by providing shade and reducing the effects of flooding

<p>Q4</p>	<p>[All] Do you agree or disagree with the following statements regarding how Scottish forests and woodlands should be managed in response to the threat of climate change? (1 strongly agree, 2 agree, 3 neither agree or disagree, 4 disagree, 5 strongly disagree)</p> <ul style="list-style-type: none"> • There is nothing that anyone could do that would make any difference • No action is needed; let nature take its course • A lot more trees should be planted • Trees should not be felled in any circumstances, even if they are replaced • Different types of trees should be planted that will be more suited to future climates • More information should be provided about the ways in which wood can be used to lessen our impact on the environment
<p>Q5</p>	<p>[All] Do you ever use wood as a fuel in your home, either on its own or with other fuels?</p> <ul style="list-style-type: none"> • Yes <i>(Go to Q6)</i> • No <i>(Go to Q9)</i>
<p>Q6</p>	<p>[Ask if answered yes to Q5] Do you get the wood by the truck load, or a few bags at a time, or gather it yourself?</p> <p style="text-align: right;">(single answer)</p> <ul style="list-style-type: none"> • by the truck load • a few bags at a time • gather it yourself • Other (specify)
<p>Q7</p>	<p>[Ask if answered yes to Q5] Do you use wood as a fuel regularly or only occasionally?</p> <p style="text-align: right;">(single answer)</p> <ul style="list-style-type: none"> • regularly • occasionally

<p>Q8</p>	<p>[Ask if answered yes to Q5] Is the wood the main fuel for heating your home, or do you mainly use something else? (then Go to Q10)</p> <ul style="list-style-type: none"> • main fuel • something else (specify)
<p>Q9</p>	<p>[Ask if answered no to Q5a] What is the main reason that you do not use wood as a fuel in your home?</p> <p style="text-align: right;">(single answer)</p> <ul style="list-style-type: none"> • Never thought about it • Happy with the existing system • Not practical for this property • Concerned about cost • Concerned about efficiency • Concerned about ease of use • Concerned about environmental issues • Do not own property • Lack of local help/suppliers • Other [specify]
<p>Q10</p>	<p>[All] How often would you like to visit woodlands and the outdoors in the next 12 months?</p> <p style="text-align: right;">(single answer)</p> <ul style="list-style-type: none"> • Several times per week • Several times per month • About once a month • Less often • Never
<p>Q11</p>	<p>[All] In the last few years, have you visited forests or woodlands for walks, picnics or other recreation?</p> <p style="text-align: right;">(single answer)</p> <ul style="list-style-type: none"> • Yes (Go to Q12) • No (Go to Q13)

<p>Q12</p>	<p>[Ask if answered yes to Q11] Did you visit woodlands in the countryside or woodlands in and around towns? <i>(then Go to Q14)</i></p> <p style="text-align: right;">(single answer)</p> <ul style="list-style-type: none"> • Woodlands in the countryside • Woodlands in and around towns • Both in the countryside and around towns
<p>Q13</p>	<p>[Ask if answered no to Q11] What was the main reason that you did not visit? <i>(then Go to Q19)</i></p> <p style="text-align: right;">(single answer)</p> <ul style="list-style-type: none"> • Not interested in going • Don't have a car • Lack of suitable public transport • Other personal mobility reasons (difficulty in walking, unwell, etc.) • Woods are too far away • Lack of facilities (play areas, picnic areas, etc.) • Lack of information about woods to visit • Prefer other areas of countryside • Concerns that woods are not safe • Afraid of not being welcome • Other (specify)
<p>Q14</p>	<p>[Ask if answered yes to Q11] How frequently did you visit forests and woodlands last summer, i.e. between April and September 2008?</p> <p style="text-align: right;">(single answer)</p> <ul style="list-style-type: none"> • Several times per week • Several times per month • About once a month • Less often • Never

<p>Q19</p>	<p>[All] Would you like to have more or less woodland in your part of Scotland?</p> <p style="text-align: right;">(Single answer)</p> <ul style="list-style-type: none"> • More <i>(Go to Q20)</i> • Neither more nor less <i>(Go to Q22)</i> • Less <i>(Go to Q22)</i> • Don't know <i>(Go to Q22)</i>
<p>Q20</p>	<p>[Ask if answered 'more' to Q19] Where do you think new woodlands should be created?</p> <p style="text-align: right;">(Multi answer)</p> <ul style="list-style-type: none"> • Urban and industrial areas • Intensively farmed areas • Uplands • Other (specify) • Don't know
<p>Q21</p>	<p>[Ask if answered 'more' to Q19] What woodland characteristics are important to you?</p> <p style="text-align: right;">(Multi answer)</p> <ul style="list-style-type: none"> • Deciduous trees • Evergreens • A mix of tree species • Big mature trees • Glades and open spaces • Viewpoints • Other (specify) • Don't know
<p>Q22</p>	<p>[All] Have you and/or your family attended any of the following organised learning activities or events to do with woodlands in the last 12 months?</p> <p>(Multi choice)</p> <ul style="list-style-type: none"> • A school visit • A guided walk or talk • An event at a woodland visitor centre • Another learning event • Other (specify) • None of these

<p>Q23</p>	<p>[All] Do you have any long-term illness, health problems or disability which limits your daily activities or the work you can do? Yes (Go to Q24) No (Go to Q25)</p>
<p>Q24</p>	<p>[Ask if answered yes to Q23] If yes, how would you describe your condition? (Multi answer)</p> <ul style="list-style-type: none"> • A long-term illness lasting for more than 12 months • A physical disability, an infirmity or a mobility problem • You regard yourself to have a mental health problem such as anxiety or depression
<p>Q25</p>	<p>[All] Do you regard yourself as belonging to a Black or Ethnic Minority (BME) group?</p> <ul style="list-style-type: none"> • Yes • No