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**Issued by:** IFOS-Statistics, Forest Research,

231 Corstorphine Road, Edinburgh, EH12 7AT

**Enquiries:** Jackie Watson 0300 067 5238

statistics@forestry.gsi.gov.uk

**Statistician:** Sheila Ward 0300 067 5236 **Website:** www.forestry.gov.uk/statistics

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### Introduction

The Forestry Commission/Forest Research has conducted biennial surveys of public attitudes to forestry and forestry-related issues since 1995. These surveys are used to inform and monitor policy development.

This publication presents results for Scotland from the Scotland Public Opinion of Forestry Survey 2017, commissioned by Forestry Commission Scotland, on:

- Forestry in the media;
- Benefits of forestry;
- Climate change;
- Wood as a fuel;
- Woodland recreation;
- Health and wellbeing;
- Physical activity;
- Changes to woodland;
- Woodland learning activities;
- Tree health; and
- Urban trees.

A copy of the questionnaire used in this survey, giving complete wording of questions and response options, is provided in the Annex at the end of this report.

Surveys have also been run across the UK (to provide results for the UK and for England) and in Wales. Separate reports, providing results from these surveys, are available at <a href="https://www.forestry.gov.uk/forestry/infd-5zyl9w">www.forestry.gov.uk/forestry/infd-5zyl9w</a>.

Results for 2017 are published for the first time in this release. Figures for earlier years have not been revised from those previously released. For further details, see the Revisions section of the Annex.

As the data are obtained from a sample survey, there is a range of uncertainty (confidence interval) associated with any results produced. Any differences referred to in the text are statistically significant at the 95 per cent confidence level unless otherwise stated. For further details, see the Data Sources and Methodology and the Quality sections of the Annex.

# Key findings

#### In 2017:

- More than **one half** of Scottish adults have seen or read about Scottish forests, woods or trees on television, radio or in newspapers in the last 12 months.
- More than **nine in ten** respondents believed that there was at least one benefit of forestry worth supporting with public money.

#### On climate change:

- **84%** agree or strongly agree that 'trees are good because they remove carbon dioxide from the atmosphere and store it in wood'.
- 88% agree or strongly agree that 'a lot more trees should be planted'
- **12%** use wood as fuel in their home. Of those who don't, over **one half** (56%) did not consider wood fuel to be practical for their property.
- Over **four fifths** of respondents have visited forests or woodlands in the last 12 months.
- Over one third of all respondents said they had visited woodlands for the purpose of physical activity at least once a week in the previous 4 weeks.
- Around two thirds of respondents would like to see more woodland in their part of Scotland.
- **One in five** respondents said that they or a family member had attended an organised learning activity or event to do with woodlands in the last 12 months.
- On tree health, around **seven in ten** agree or strongly agree that 'everyone should take action when visiting woodlands to help prevent the spread of damaging tree pests and diseases' and 'would be willing to look out for and report sightings of pests and diseases on trees, if appropriate information and advice was available to [them]'.
- On urban trees, two thirds of respondents would be prepared to monitor the condition
  of public trees, and three fifths to raise concerns with the Local Authority if they noticed
  a problem with urban trees.

# Forestry in the media

Respondents were asked whether they had seen or read about Scottish forests, woods or trees on television, radio or in the newspapers in the last twelve months.

More than one half (54%) of Scottish adults in 2017 recalled seeing or reading about at least one topic (Table 1). The most commonly identified topics were 'birds and other animals in woodlands' (recalled by 26% of respondents), 'tree planting' (26%) and 'forests and woodlands as places to visit' (25%).

There has been a statistically significant increase in recall for a number of topics between 2015 and 2017.

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

Percent of respondents

Fercent of responden					mucnics		
	2005	2007	2009	2011	2013	2015	2017
Birds and other animals in woodlands	8	23	16	17	20	16	26
Tree planting	9	27	18	19	18	17	26
Forests and woodlands as places to visit	6	22	14	18	19	14	25
Public rights of access to woodlands	15	35	15	22	16	13	21
Community woodlands	4	13	7	9	11	10	19
Forests and woodlands helping to tackle climate change		25	8	12	11	9	18
Tree pests and diseases	3	7	5	8	22	13	17
Restoration of ancient or native woodlands	4	13	6	10	11	8	16
Protests about roads or other developments on woodlands	6	19	9	13	10	8	15
Loss of ancient or native woodlands	5	13	6	12	12	10	14
Flowers and other plants in woodlands	4	13	10	7	8	8	14
Creation of new native woodlands	4	11	4	8	8	7	12
Woods in and around towns, new local woods, improved local access	4	11	7	8	9	7	11
Wood for fuel, short rotation coppice	2	8	4	7	7	7	9
Labelling/certification of wood products	1	6	2	3	3	3	6
Other	• •			3	1	1	2
At least one topic	26	58	44	48	50	37	54

Source: Scotland Public Opinion of Forestry Surveys.

- 1. Figures are based on all respondents: 2005 (1,009), 2007 (1,007), 2009 (1,040), 2011 (1,018), 2013 (1,001), 2015 (1,010), 2017 (1,013).
- 2. .. denotes data not available (statement not included in that year's survey).
- 3. Respondents could select more than one topic.

# Benefits of forestry

The Scottish Government provides grants to plant new woodland and to manage existing woodland for public benefit. Respondents were asked to select, from a list of possible public benefits, good reasons to support Scottish forestry with public money.

Table 2 shows that, in 2017, 95% of respondents believed there was at least one benefit of forestry worth supporting with public money. As in previous years, the top reason to support forestry in Scotland with public money was 'to provide places for wildlife to live' with 72% of respondents in 2017 selecting this as a benefit. 'To provide places for recreation' (61%), 'to help tackle climate change' (60%) and 'to improve the countryside landscape' (58%) were also seen as important reasons to support forestry with public money.

Table 2: Reasons to support forestry with public money

Percent of respondents

					i Ci CCi i	. or respo	Jiiuciics
	2005	2007	2009	2011	2013	2015	2017
To provide places for wildlife to live	39	67	43	65	63	67	72
To provide places for recreation i.e.: walking, cycling, horse riding			32	53	50	46	61
To help tackle climate change		57	40	46	42	46	60
To improve the countryside landscape	31	56	31	48	50	48	58
To provide places for relaxation and stress release	23	49	21	43	41	38	54
To support the economy in rural areas	37	46	34	40	42	44	54
To provide places for families to play			23	43	42	43	54
To provide places for learning			19	33	34	34	48
To provide renewable energy including wood as fuel	29	36	21	34	37	40	47
To improve the appearance of towns and cities			20	33	35	35	47
So that Scotland can buy less wood products from abroad	30	32	23	29	34	33	45
To provide timber for sawmills and wood processing	22	28	15	25	31	29	37
To restore former industrial land	22	36	14	26	29	29	37
At least one reason	79	90	79	91	89	89	95

Source: Scotland Public Opinion of Forestry Surveys.

#### Note:

<sup>1.</sup> Figures are based on all respondents: 2005 (1,009), 2007 (1,007), 2009 (1,040), 2011 (1,018), 2013 (1,001), 2015 (1,010), 2017 (1,013).

<sup>2. ..</sup> denotes data not available (statement not included in that year's survey).

<sup>3.</sup> Respondents could select more than one reason.

# Climate change

Respondents were asked to indicate their level of agreement with two sets of statements related to woodlands and climate change.

#### Woodlands' impact on climate change

Firstly, respondents were asked about the ways in which forests and woodlands in Scotland can impact on climate change.

Table 3 shows that the highest levels of agreement, where respondents selected 'Strongly agree' or 'Agree', were with the following statements:

- 'Trees are good because they remove carbon dioxide from the atmosphere and store it in wood' (84% in 2017); and
- 'Planting more trees can help us cope with climate change by providing shade and reducing the effects of flooding' (78%).

The lowest levels of agreement were with the following statements:

- 'Using wood for fuel makes climate change worse because it releases carbon dioxide' (42% in 2017); and
- 'Cutting down forests and woodland always makes climate change worse, even if they are replanted' (44%).

Table 3: Ways in which forests and woodlands can impact on climate change

Percent of respondents who agree or strongly agree

Percent of respon	iuents v	viio agi	ee 01 31	uongiy	ayree
	2009	2011	2013	2015	2017
Trees are good because they remove carbon dioxide from the atmosphere and store it in wood	77	77	72	78	84
Planting more trees can help us cope with climate change by providing shade and reducing the effects of flooding	63	69	66	72	78
Using wood for building is better for climate change than using materials such as concrete, steel and plastics	47	50	50	53	57
Using wood for fuel is better for climate change than using fuels such as coal and gas	44	50	52	54	56
Scotland could offset all its greenhouse gas emissions by planting more trees	52	51	47	46	54
Cutting down forests and woodland always makes climate change worse, even if they are replanted	43	48	40	50	44
Using wood for fuel makes climate change worse because it releases carbon dioxide	29	36	29	35	42

Source: Scotland Public Opinion of Forestry Surveys.

Note:

<sup>1.</sup> Figures are based on all respondents: 2009 (1,040), 2011 (1,018), 2013 (1,001), 2015 (1,010), 2017 (1,013).

#### Forest management in response to climate change

Respondents were 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.

Table 4 shows that the majority of respondents agreed or strongly agreed that:

- 'A lot more trees should be planted' (88% in 2017);
- 'More information should be provided about the ways in which wood can be used to lessen our impact on the environment' (87%); and
- 'Different types of trees should be planted that will be more suited to future climates' (81%).

Conversely, few respondents agreed or strongly agreed that:

- 'There is nothing anyone could do that would make any difference' (10%); and
- 'No action is needed; let nature take its course' (18%).

Table 4: Management of Scottish forests in response to the threat of climate change

Percent of respondents who agree or strongly agree

			J		, , , , , ,
	2009	2011	2013	2015	2017
A lot more trees should be planted	77	80	81	83	88
More information should be provided about the ways in which wood can be used to lessen our impact on the environment	82	80	79	81	87
Different types of trees should be planted that will be more suited to future climates	69	67	70	73	81
No action is needed, Let nature take its course	8	19	20	16	18
There is nothing that anyone could do that would make any difference	9	12	15	13	10

Source: Scotland Public Opinion of Forestry Surveys.

#### Note:

1. Figures are based on all respondents: 2009 (1,040), 2011 (1,018), 2013 (1,001), 2015 (1,010), 2017 (1,013).

### Wood as a fuel

All respondents were asked to state whether or not they use wood as a fuel in their home, either on its own or with other fuels. The question had been asked in the 2007, 2009, 2011, 2013 and 2015 surveys, and in a woodfuel consumption study in Scotland in 2004/05.

Around one in eight respondents in Scotland (12%) reported that they use wood as a fuel (Figure 1). This represents a statistically significant increase from the results in 2004/05 to 2009, but not in relation to later years.

Percent of Respondents

0 2 4 6 8 10 12 14

2004/05

2007

2009

2011

8

2013

2015

Figure 1: Use of wood as a fuel in the home

Source: Scotland Public Opinion of Forestry Surveys, Woodfuel Consumption Study 2004/05.

#### Note:

2017

1. Figures are based on all respondents: 2004/05 (4,006), 2007 (1,007), 2009 (1,040), 2011 (1,018), 2013 (1,001), 2015 (1,010), 2017 (1,013).

Respondents who said they used wood as a fuel were asked three further questions. The following was reported in 2017:

- 15% of wood fuel users said they use wood as the main fuel for heating their home, while the rest mainly use something else (generally gas or oil);
- Around two fifths of those using wood as a fuel gathered it themselves (38%) and the same proportion bought it 'a few bags at a time' (38%). Around one fifth (21%) bought it 'by the truckload'.

Respondents who said they did not use wood as a fuel were asked to give the main reason why not. Table 5 shows that the most common reasons cited by respondents who do not use wood as a fuel, either on its own or with other fuels, were:

- 'Not practical for this property' (56%);
- 'Happy with the existing system' (22%) and
- 'Do not own the property (10%).

Table 5: Main reason for not using wood as a fuel in the home

Percent of respondents

	2009	2011	2013	2015	2017
Not practical for this property	48	64	59	52	56
Happy with the existing system	26	18	20	17	22
Do not own property	5	6	9	17	10
Never thought about it	16	4	4	6	4
All other responses	5	7	8	9	8

Source: Scotland Public Opinion of Forestry Surveys.

#### Note:

1. Figures are based on respondents who do not use wood as a fuel: weighted totals = 2009 (992), 2011 (940), 2013 (887), 2015 (914), 2017 (889).

### Woodland recreation

The survey asked respondents a number of questions about visits to woodland. This included how often the respondent would like to visit woodlands and the outdoors in the next 12 months, how often the respondent had visited woodland in the last 12 months, and type of woodland visited.

#### Latent demand for woodland visits

Respondents to the 2017 survey were asked to state how often they would like to visit woodlands and the outdoors in the next 12 months.

Three quarters of respondents (76%) said that they would like to visit at least once a month, while 10% said they would not like to visit at all in the next 12 months (Table 6).

Table 6: How often respondents would like to visit woodlands in next 12 months

Percent	٥f	respondents
I CICCIII	OI.	respondents

	2009	2011	2013	2015	2017
Several times per week	7	16	20	19	23
Several times per month	16	25	26	25	28
About once a month	15	26	25	23	24
Less often	29	17	16	19	15
Never	25	16	13	14	10

Source: Scotland Public Opinion of Forestry Surveys.

Note

<sup>1.</sup> Figures are based on all respondents: 2009 (1,040), 2011 (1,018), 2013 (1,001), 2015 (1,010), 2017 (1,013).

#### Frequency of visits and proportion visiting woodland

Respondents to the 2017 survey were asked how often, on average, they had visited forests or woodlands for walks, picnics or other recreation in the previous 12 months. This was slightly different from previous year when respondents had been asked about visits in the previous few years.

Around one third of respondents in 2017 said they visited on average at least once a week (Table 7).

Table 7: Frequency of visits to woodlands in last 12 months

Percent of respondents

	2017
At least once a week	32
Once or twice a month	24
Once every 2-3 months	15
Once or twice	13
Never	16

Source: Scotland Public Opinion of Forestry Survey 2017.

Note:

1. Figures are based on all respondents (1,013).

In 2017, around four fifths of respondents (84%) said they had visited forests or woodlands in the last 12 months for walks, picnics or other recreation (Table 8). This is a statistically significant increase from the level reported in most other years, though not directly comparable owing to the slight difference in the question.

Table 8: Visits to woodland in last few years/12 months

Percent of respondents

Year	%
2007	75
2009	57
2011	75
2013	76
2015	78
2017	84

Source: Scotland Public Opinion of Forestry Surveys.

Note:

- 1. Figures are based on all respondents: 2007 (1,007), 2009 (1,040), 2011 (1,018), 2013 (1,001), 2015 (1,010), 2017 (1,013).
- 2. Question wording changed in 2017, from asking about visits "in the last few years" to asking about visits "in the last 12 months".

### Type of woodland visited

Around one half of respondents (48%) to the 2017 survey who had visited woodland in the last 12 months reported visiting woodlands and forests in both the countryside and in and around towns. More respondents had visited woodlands in the countryside (79%, including those who had visited both locations) than had been to woodlands in and around towns (69%) (Figure 2).

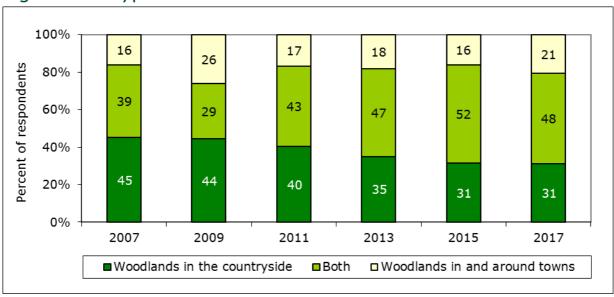


Figure 2: Type of woodland visited

Source: Scotland Public Opinion of Forestry Surveys.

#### Note:

1. Figures are based on all respondents who had visited woodland in the last few years/ 12 months: weighted totals = 2007 (752), 2009 (589), 2011 (761), 2013 (764), 2015 (785), 2017 (851).

# Health and wellbeing

Respondents who had visited woodlands in the last 12 months were asked about their health and wellbeing in relation to woodland visits.

Firstly, respondents were asked to rate the following on a scale of 1 to 10 (where 1 denotes poor health and 10 denotes good health):

- Their general health; and
- Their health when spending time outdoors in woodlands.

Respondents to the 2017 survey who had visited woodland gave an average score of 7.7 out of 10 for their general health and 8.6 out of 10 for their health when spending time outdoors in woodlands (Figure 3). These results are generally similar to previous surveys.

10.0 8.5 8.4 8.6 8.1 8.1 7.9 7.8 7.7 7.5 7.5 8.0 Average score 6.0 4.0 2.0 0.0 How healthy do you generally feel? How healthy do you generally feel when spending time outdoors in woodlands? **■**2009 **■**2011 **■**2013 **■**2015 **■**2017

Figure 3: Health of woodland visitors

Source: Scotland Public Opinion of Forestry Surveys.

#### Note:

1. Figures are based on all respondents who had visited woodland in the last few years/ 12 months: weighted totals = 2009 (589), 2011 (761), 2013 (764), 2015 (785), 2017 (851).

Respondents who had visited woodlands in the last 12 months were then asked about the aspects of their health and wellbeing that benefited from visiting woodlands and the outdoors. This covered:

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

The vast majority of respondents who had visited woodland (95%) said that they benefited from at least one of these aspects, while almost two thirds (62%) said that they benefited from all three (Table 9).

Looking at the individual aspects:

- 87% felt their physical health had benefited by visiting woodlands and the outdoors;
- 88% felt their mental health had benefited; and
- 73% said their social health had benefited.

Table 9: Health benefits from visiting woodlands and the outdoors

Percent of respondents

			. 0. 00	2116 01 165	portacino
	2009	2011	2013	2015	2017
Physical Health	89	85	87	89	87
Mental Health	86	85	83	89	88
Social Health and Wellbeing	69	69	75	73	73
All of these	64	56	60	64	62
None of these	2	4	4	3	5

Source: Scotland Public Opinion of Forestry Surveys.

#### Note:

<sup>1.</sup> Figures are based on all respondents who had visited woodland in the last few years/ 12 months: weighted totals = 2009 (589), 2011 (761), 2013 (764), 2015 (785), 2017 (851).

<sup>2.</sup> Responses for those who said they had benefited from 'all of these' have been included in the totals for 'physical health', 'mental health' and 'social health and wellbeing'.

# Physical activity

In 2017 a new question was introduced to the Scotland Public Opinion of Forestry Survey, asking respondents how many times in the previous four weeks they had visited woodland, forest or tree covered park for the purpose of physical activity. This question had previously been asked in 2013 as part of Scotland's People and Nature Survey (see Further Information section of Annex for more on this survey).

In 2017 over one third (37%) of all respondents said they had visited woodlands for physical activity at least once a week in the previous 4 weeks (Table 10).

Table 10: Frequency of visits to woodlands for physical activity

Percent of respondents

Frequency	2017
At least once a week	37
Every day	9
4-6 days a week	3
2-3 days a week	11
Once a week	13
2-3 times in last 4 weeks	7
Once in the last 4 weeks	13
Can't remember/ don't know	4
Never	39

Source: Scotland Public Opinion of Forestry Survey 2017.

Note:

1. Figures based on all respondents (1,013).

# Changes to woodland

Respondents were asked whether or not they would like to see more woodland in their part of Scotland. Around two thirds (69%) of all respondents in 2017 said they would like to see more woodland in their part of Scotland (Figure 4). This represents a statistically significant increase from the figure of 62% in the 2015 survey.

Around one quarter (26%) of respondents in 2017 reported that they would like to see 'neither more nor less' woodland in their part of Scotland. Only 2% said they would like to see less.

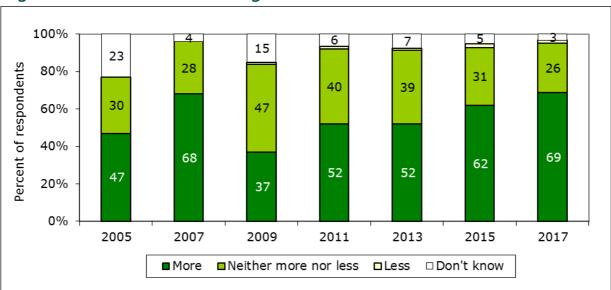


Figure 4: Desire for change in woodland area

Source: Scotland Public Opinion of Forestry Surveys.

#### Note

1. Figures are based on all respondents: 2005 (1,009), 2007 (1,007), 2009 (1,040), 2011 (1,018), 2013 (1,001), 2015 (1,010), 2017 (1,013).

Respondents who had indicated that they would like to see more woodland in their part of Scotland were then asked a follow up question to find out where they thought any new woodlands should be created.

In 2017, two thirds (69%) of respondents who would like to see more woodland in their part of Scotland thought that new woodlands should be created in urban and industrial areas and one half (50%) thought new woodlands should be created in uplands (Table 11).

Table 11: Location of new woodland

Percent of respondents

	2009	2011	2013	2015	2017
Urban and industrial areas	79	61	64	64	69
Uplands	37	38	41	50	50
Intensively farmed areas	28	26	25	35	36
Other	8	2	3	4	3
Don't know	2	10	9	9	6

Source: Scotland Public Opinion of Forestry Surveys.

#### Note:

<sup>1.</sup> Figures are based on all respondents who would like more woodland: weighted totals = 2009 (389), 2011 (528), 2013 (521), 2015 (624), 2017 (695).

<sup>2.</sup> Respondents could select more than one location.

# 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 woodlands in the last 12 months.

Table 12 shows that, in the previous 12 months, around one in five respondents (20%) to the 2017 survey said that they or a family member had attended an organised learning activity or event. In particular:

- 11% had been on a school visit;
- 7% had attended an event at a woodland visitor centre; and
- 7% had attended a guided walk or talk.

Table 12: Woodland learning activities attended in the last 12 months

Percent of respondents

			i cciic oi i c	0 0 0 1 1 0 1 1 0 0
	2011	2013	2015	2017
A school visit	7	7	9	11
An event at a woodland visitor centre	6	8	6	7
A guided walk or talk	4	5	5	7
Another learning event	2	3	2	3
Other	1	1	1	1
None of these	83	81	81	80

Source: Scotland Public Opinion of Forestry Surveys.

- 1. Figures are based on all respondents: 2011 (1,018), 2013 (1,001), 2015 (1,010), 2017 (1,013).
- 2. Respondents could select more than one type of activity.

### Tree health

A question relating to tree health was introduced for the 2013 survey and repeated in 2015 and 2017. Respondents were presented with a series of statements and asked to indicate their level of agreement.

Table 13 and Figure 5 show that the majority of respondents agreed or strongly agreed that:

- 'Everyone should take action when visiting woodlands to help prevent the spread of • damaging tree pests and diseases' (72% in 2017); and that
- 'I would be willing to look out for and report sightings of pests and diseases on trees, if appropriate information and advice was available to me' (69%).

Conversely, few respondents agreed or strongly agreed that:

- 'There is very little that anyone can do to prevent the spread of damaging pests and diseases' (14% in 2017); and that
- 'I understand what is meant by the term 'biosecurity" (36%).

Table 13: Tree health

Percent of respondents who agree or strongly agree

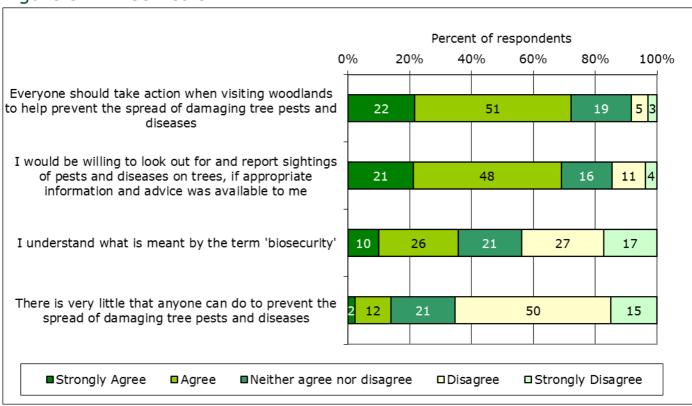
	2013	2015	2017
Everyone should take action when visiting woodlands to help prevent the spread of damaging tree pests and diseases	68	69	72
I would be willing to look out for and report sightings of pests and diseases on trees, if appropriate information and advice was available to me	65	68	69
I understand what is meant by the term 'biosecurity'	30	34	36
There is very little that anyone can do to prevent the spread of damaging tree pests and diseases	21	17	14

Source: Scotland Public Opinion of Forestry Surveys.

Note:

1. Figures are based on all respondents: 2013 (1,001), 2015 (1,010), 2017 (1,013).

Figure 5: Tree health



Source: Scotland Public Opinion of Forestry Survey 2017.

1. Figures are based on all respondents (1,013).

### Urban trees

In 2017 a question was added asking respondents if they would be prepared to support urban trees in various ways.

Two thirds (68%) of respondents would be prepared to monitor the condition of public trees, and three fifths (60%) to raise concerns with the Local Authority if they noticed a problem with trees (Table 14). One third (34%) would accept increased council tax to support community tree programmes.

Table 14: Activities to support urban trees

Percent of respondents

Tercent of respondents		
Activity	2017	
Monitoring the health and condition of public trees	68	
Raising concerns with the Local Authority if you notice a problem with trees	60	
Planting and tending trees in your garden or your community residential area	56	
Watering newly planted trees in public areas during periods of dry weather	55	
Participating in community planting programmes	51	
Accepting higher council taxes which will be used for community tree programmes	34	

Source: Scotland Public Opinion of Forestry Survey 2017.

Note:

<sup>1.</sup> Figures are based on all respondents (1,013).

### Annex

#### Introduction

This annex provides background information on the statistics presented in this release. It covers the data sources and methodology used to produce the statistics, information on quality measures and on any revisions to historic data and links to further information.

# Glossary

Biosecurity A set of precautions that aim to prevent the introduction and spread of harmful organisms. These may be pests, pathogens or invasive species.

Clustering A sampling technique where the entire population is divided into groups, or clusters, and a random sample of these clusters are selected. All (or a selection of) observations in the selected clusters are included in the sample. Cluster sampling is often used when a random sample would produce a list of subjects so widely scattered that surveying them would prove to be far too expensive.

Confidence interval An estimated range of values that is likely to include an unknown population parameter (i.e. a fixed value for the population as a whole). The confidence interval around an estimate is derived from the sample data, and is used to indicate the reliability of the estimate.

Design factor A factor applied in the calculation of confidence intervals to take account of the survey design (clustering, weighting, stratification) used in selecting the sample. A design factor of 1.5 is commonly assumed by Market Research companies for omnibus surveys of the population.

Forest In the United Kingdom, there is no formal definition of "forest"; the term is often used for large woodland areas (especially conifers) or for old Royal hunting preserves such as the New Forest or the Forest of Dean.

Forestry Commission (FC) The government department responsible for forestry matters in England, Scotland and (until March 2013) Wales. The Forestry Commission's functions in Wales transferred to a new organisation, Natural Resources Wales, on 1 April 2013. The responsibility for forestry is devolved.

Great Britain (GB) England, Wales and Scotland.

Quota sampling A method of sampling where interviewers are each given a fixed number of subjects of specified type to interview.

Scottish Government (SG) The executive branch of the devolved government of Scotland.

Statistical significance A statistical assessment of whether observations reflect an actual pattern rather than just chance.

Stratification A sampling technique where the entire population is divided into groups, or strata, and a random sample is selected within each group. Stratified sampling is often used to ensure that sufficient numbers from each group are included in the overall sample, particularly where results are required for each group.

United Kingdom (UK) Great Britain and Northern Ireland.

Urban trees Trees and woodland located in towns or cities. Includes trees in urban woods, parks, gardens, streets and other urban areas.

Weighting A set of factors assigned to survey responses to ensure that the resulting weighted results are representative of the population as a whole.

Woodland Land under stands of trees with a canopy cover of at least 20% (25% in Northern Ireland), or having the potential to achieve this, including integral open space, and including felled areas that are awaiting restocking. Can exist in rural or urban settings.

# Data Sources and Methodology

### Background

The Forestry Commission/ Forest Research 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 the separate Northern Ireland surveys (1,000 adults) carried out in 2005, 2007, 2010 and 2014;
- In 2017 three separate surveys were carried out for the UK, for Scotland and for Wales. Some guestions were asked in all three of the surveys conducted in 2017, but a 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 survey.

Table A1: Sample sizes for Public Opinion of Forestry surveys since 2001

Approximate number of adults interviewed

Year	UK¹	England <sup>2</sup>	Wales	Scotland	Northern Ireland
2001	2,000		1,000	1,000	
2003	4,000	3,400	1,000	1,000	
2005	4,000	3,400	1,000	1,000	1,000
2007	4,000	3,300	1,000	1,000	1,000
2009	2,000	1,700	1,000	1,000	
2010					1,000
2011	2,000	1,700	1,000	1,000	
2013	2,000	1,600	1,000	1,000	
2014					1,000
2015	2,000	1,500	1,000	1,000	
2017	2,000	1,800	1,000	1,000	

#### Note:

- 1. 2001 and 2005 surveys covered Great Britain only (i.e. excluding Northern Ireland).
- 2. Results for England are derived from UK surveys.

### Survey Design

The 2017 survey results presented in this report are taken from the TNS Scottish Opinion Survey carried out from the 1st to 28<sup>th</sup> February 2017. The survey was based on a representative sample of 1,013 adults (aged 16 or over) across Scotland. More details of the sample method are given below.

The 2003, 2007, 2011, 2013 and 2015 surveys were also obtained from the TNS Scottish Opinion Survey. This survey was also the source for Scotland's People and Nature Survey, that ran from March 2013 to February 2014.

The 2005 and 2009 survey data were obtained from the mruk Scottish In-Home Omnibus Survey. This survey employed a different survey design so comparisons should be taken with care.

#### Methodology

#### 2017 survey

The TNS Scottish Opinion Survey covers between 68 and 108 locations per month throughout Scotland, with sampling points selected to be geographically representative of the population.

#### **Survey sampling**

The sample used to conduct the TNS Scottish Opinion Survey is designed to be representative of the adult population of Scotland (aged 16+). To make the sample as representative as possible, it is stratified using the 8 Scottish Parliament electoral regions. Population data is then used to determine the correct number of sample points required in each region. As mentioned above, the number of sampling points per month is between 68 and 108, with 9-14 interviews per sampling point. In each sample point, quota targets are set to ensure representative coverage of the population on the basis of gender, age group, social grade and working status.

#### **Interviewing**

Fieldwork is conducted over a four week period, including weekends, with most interviewing taking place in the afternoon or evening. Interviewers are issued with blocks of addresses in which to conduct their interviews. Blocks of addresses are used to ensure that all interviews are conducted within the correct sample point. Only one interview is permitted per household.

#### **Ouestionnaire**

A copy of the 2017 questionnaire is provided at the end of this release. This covers the questions requested by Forestry Commission Scotland. In addition, a small number of questions are included as standard in the omnibus surveys run by Market Research companies (e.g. gender, age, country/ region) and some of these are also used in analysing the results from the survey.

Most questions are retained from one survey to the next, to enable comparisons over time. However, changes are sometimes made to reflect changing circumstances or priorities, or to improve the wording of questions. The following changes were made for the 2017 questionnaire:

- The question on regular/ occasional woodfuel use has been dropped;
- The question on whether respondents have visited woodland in the last couple of years has been replaced with one asking about frequency of visits in the last 12 months, for consistency with the question asked in Scotland's People and Nature Survey 2013-14;
- A new question on physical activity in the last 4 weeks (Q15), previously asked in Scotland's People and Nature Survey 2013-14, has been added; and
- A new question on urban trees (Q22) has been introduced.

# Quality

Results from the TNS Scottish Opinion Survey are weighted to population profiles at each wave (i.e. each time the survey is run) to ensure an accurate representation of Scotland's population and consistency between waves. Currently, weighting is applied on the basis of gender, age, social class and region, using population estimates from the Mid Year Populations Estimates 2014, 2011 Census and TGI July 2014-July 2015. The results quoted in this report are based on weighted data.

#### **Design effect**

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 methodology, above, for more details).

The TNS Scottish Opinion Survey uses a quota sampling approach, which means that the likelihood of individuals within the population being interviewed cannot be measured. Any confidence intervals calculated are also indicative. Due to the survey design, a 'design effect' of 1.5 should be applied to confidence intervals calculated for data from this survey.

Confidence intervals are most commonly reported at the 95% level. This means that there is a 95% chance that the true population value lies within the confidence interval. The following provides a guide to interpreting the results in this report on the basis of a 95% confidence interval and assuming a design factor of 1.5:

For questions asked to the whole Scotland sample of around 1,013, the margin of error should be no more than  $\pm$  4.6%.

For questions not asked of the whole sample and sub-groups within the sample, margin of error will increase. For example:

- By gender (male n=509; female n=514), the confidence intervals should be no more than ±6.5%;
- For those who visited woodland in the last few years (n=851), the confidence interval should be no more than  $\pm 5.1\%$ .

For questions asked to whole samples, differences are statistically significant if more than:

- ±6.5% between the 2017 and 2015 surveys;
- ±6.6% between the 2015 and 2013 surveys;
- ±7.0% between the 2013 and 2011 surveys;
- ±7.0% between the 2011 and 2009 surveys.

Further quality information on FC Official Statistics is available at: www.forestry.gov.uk/forestry/infd-7zhk85

#### Revisions

Figures for 2017 are published for the first time in this release.

All figures are final. Figures for earlier years have not been revised.

The Forestry Commission's revisions policy sets out how revisions and errors to these statistics are dealt with, and can be found at:

www.forestry.gov.uk/pdf/FCrevisions.pdf/\$FILE/FCrevisions.pdf.

#### Further information

Accompanying tables to this release, available at www.forestry.gov.uk/forestry/infd-<u>5zyl9w</u>, provide more detailed figures, showing standard breakdowns.

Figures in tables have been independently rounded, so may not add to the totals shown.

Scotland's People and Nature Survey, carried out by TNS for Scottish Natural Heritage, Forestry Commission Scotland, National Park authorities and Greenspace Scotland, ran in 2013/14 and included 4 questions specifically related to forestry. Results for these forestry questions were included in *Public Opinion of Forestry 2015, Scotland* and are available at www.forestry.gov.uk/forestry/infd-5zyl9w. Full results from Scotland's People and Nature Survey are available at www.snh.gov.uk/land-and-sea/managing-recreation-andaccess/increasing-participation/measuring-participation/

#### Release schedule

The Scotland Public Opinion of Forestry is a biennial survey, next due to run in early 2019 with results likely to be available in summer 2019.

#### Official Statistics

This is an Official Statistics publication. For more information about Official Statistics and the UK Statistics Authority visit www.statisticsauthority.gov.uk.

# Scotland Public Opinion of Forestry Survey 2017: Questionnaire

#### Q1 [AII]

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?

- 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

#### Q2 [AII]

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?

(Multi answer)

- 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

#### Q3 [AII]

#### Would you agree or disagree with the following statements about the ways in which forests and woodlands in Scotland can impact on climate change?

(1 strongly agree, 2 agree, 3 neither agree or disagree, 4 disagree, 5 strongly disagree)

- Trees are good because they remove carbon dioxide from the atmosphere and store it in wood
- Cutting down forests and woodland for timber always 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

#### **Q4** [AII]

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)

- 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
- 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

#### Q5 [AII]

Do you ever use wood as a fuel in your home, either on its own or with other fuels?

(Single answer)

- (Go to Q6) Yes
- No (Go to Q8)

#### [Ask if answered yes to Q5]

Is the wood the main fuel for heating your home, or do you mainly use something else?

(Single answer)

- main fuel
- something else (specify)

#### **Q7** [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?** (then go to Q9)

(Single answer)

- by the truck load
- a few bags at a time
- gather it yourself
- Other (specify)

#### **Q8** [Ask if answered no to Q5]

What is the main reason that you do not use wood as a fuel in your home?

(Single answer)

- 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]

#### Q9 [AII]

How often would you like to visit woodlands and the outdoors in the next 12 months?

(Single answer)

- Several times per week
- Several times per month
- About once a month
- Less often
- Never

#### **Q10** [ΑΙΙ]

In the last 12 months, how often on average have you visited forests or woodlands for walks, picnics or other recreation?

(Single answer)

•	More than once per day	(Go to Q11)
•	Every day	(Go to Q11)
•	Several times a week	(Go to Q11)
•	Once a week	(Go to Q11)
•	Once or twice a month	(Go to Q11)
•	Once every 2-3 months	(Go to Q11)
•	Once or twice	(Go to Q11)
•	Never	(Go to Q16)

#### Q11 [Ask if answer to Q10 is not 'never']

Did you visit woodlands in the countryside or woodlands in and around towns?

(Single answer)

- Woodlands in the countryside
- Woodlands in and around towns
- Both in the countryside and around towns

#### Q12 [Ask if answer to Q10 is not 'never']

Please answer the following question on the basis of your general feelings (not your present state).

How would you rate the level that best describes your general health on a scale of 1 to 10? 1 denotes poor health and 10 denotes good health.

#### How healthy do you generally feel?

(Single answer)

#### Q13 [Ask if answer to Q10 is not 'never']

How healthy do you generally feel when spending time outdoors in woodlands? 1 denotes poor heath and 10 denotes good health.

(Single answer)

1 2 3 4 5 6 7 8 9 10 Denotes poor Health Denotes good Health

#### Q14 [Ask if answer to Q10 is not 'never']

What aspects of health and wellbeing do you feel benefit from visiting woodlands and the outdoors?

- 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
- All of these
- None of these

#### 015 [Ask if answer to Q10 is not 'never']

In the past 4 weeks, how often have you made use of a woodland, forest or tree covered park for physical activity (e.g. walking, cycling or doing any sports)?

(Single answer)

- Every day
- 4-6 days a week
- 2-3 days a week
- Once a week
- 2-3 times in the last 4 weeks
- Once in the last 4 weeks
- Can't remember/ don't know
- Never

#### Q16 [AII]

Would you like to have more or less woodland in your part of Scotland?

(Single answer)

More (Go to Q17) Neither more nor less (Go to Q18) Less (Go to Q18) Don't know (Go to Q18)

#### **Q17** [Ask if answered 'more' to Q16]

Where do you think new woodlands should be created?

(Multi answer)

- Urban and industrial areas
- Intensively farmed areas
- Uplands
- Other (specify)
- Don't know

#### Q18 [AII]

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?

- A school visit
- A guided walk or talk
- An event at a woodland visitor centre
- Another learning event
- Other (specify)
- None of these

#### Q19 ΓΑΙΙ

# Would you agree or disagree with the following statements relating to tree

(1 strongly agree, 2 agree, 3 neither agree or disagree, 4 disagree, 5 strongly disagree)

- Everyone should take action when visiting woodlands to help prevent the spread of damaging tree pests and diseases (e.g. by removing soil & plant material from footwear, clothing, bikes, buggies and dogs before their visit).
- There is very little that anyone can do to prevent the spread of damaging tree pests and diseases.
- I would be willing to look out for and report sightings of pests and diseases on trees, if appropriate information and advice was available to me.
- I understand what is meant by the term 'biosecurity'.

#### [AII] **Q20**

Do you have any long-term illness, health problems or disability which limits your daily activities or the work you can do?

(Multi answer)

- 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
- None of the above

#### Q21 [AII]

Do you regard yourself as belonging to a Black or Ethnic Minority (BME) group?

(Single answer)

- Yes
- No

#### **Q22** ΓΑΙΙΊ

Thinking about your nearest urban area (town or city) where you live or visit regularly, would you be prepared to support trees by...?

- Participating in community planting programmes ullet
- Watering newly planted trees in public areas during periods of dry weather
- Accepting higher council taxes which will be used for community tree programmes
- Planting and tending trees in your garden or your communal residential area
- Monitoring the health and condition of public trees
- Raising concerns with the Local Authority if you notice a problem with trees