

All Forests Visitor Monitoring
Survey of visitors to FCS forests
Year 3: July 2006 to June 2007

Forestry Commission Scotland
February 2008



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Executive Summary

Background

- TNS Travel and Tourism were commissioned by Forestry Commission Scotland (FCS) in 2004 to undertake surveys and counts across all 15 of their Forest Districts¹. Due to the scale of this exercise, fieldwork was spread across a three year period from June 2004 to June 2007.
- During the first year of surveying, between June 2004 and May 2005, five Forest Districts were surveyed with fieldwork undertaken in Buchan, Galloway, Lochaber, Scottish Borders and West Argyll. The second year of surveying took place between June 2005 and May 2006 and covered the Scottish Lowlands, Moray, Lorne, Dornoch and Tay Forest Districts.
- This report is based on the results from the final year of surveying, between July 2006 and June 2007. During this third year of surveying, fieldwork was undertaken in the Ae, Cowal & Trossachs, Fort Augustus, Inverness and Kincardine Forest Districts.
- In summary, the objectives of this survey are as follows
 - To measure volume of visitors across FCS forests;
 - To obtain information on visitor profiles.
- Surveying took place from July 2006 to June 2007 with over 1,800 hours of fieldwork undertaken during 411 days. During this period 955 face to face interviews were achieved.

Estimated visitor numbers

- In each of the five Forest Districts the forest blocks selected to be included in the survey were chosen as a stratified representation of all FCS forests in the area in terms of estimated levels of usage and the size of the surrounding population.

¹ There were 15 Forest Districts when this survey commenced in June 2004. Since then Kincardine and Buchan have merged to form Aberdeenshire Forest District.

- By applying these categorisations, each forest was placed into one of nine strata. To obtain an estimate of total numbers of visits to all FCS forests in each of the districts, the average number of visits per access point at forests included within the survey was then applied to other forests in the same strata in the district. As such, estimates of total numbers of visits to forests in each of the Forest Districts have been obtained, as detailed below.

Estimates of total visits to FCS forests June 2006 – May 2007	
	Visits
Ae	413,000
Cowal & Trossachs	471,000
Fort Augustus	268,000
Inverness	639,000 ²
Kincardine	789,000
Total	2.6 million

- Therefore, it may be estimated that around **2.6 million visits** were taken to forests in the five districts included in the survey during the third year of fieldwork.

Visitor and visit characteristics

Profile of visitors

- Overall, the male, female split of visitors at the FCS Forest Districts included in the survey was fairly even (53%: 47%). In terms of age profile, while two in ten were between the ages of 35 and 44 (20%), a larger proportion were aged 45 to 59 (27%) and 16% were aged 60 or older.
- The average party size was 2.2 people with two-fifths visiting on their own (40%). A slightly lower proportion of visits involved a party size of 2 people (38%), while 22% of visits were taken by groups of 3 or more people.

² The pilot survey conducted in 2002 estimated 2.2 million annual visits to forests in Inverness Forest District. It is likely that three factors have contributed to the bulk of the difference between that estimate and the 639,000 visits estimated here; the more limited amount of fieldwork conducted during the pilot survey (4 months only); the basic calculations used to gross up the pilot survey results; the selection of different sites for each survey. In particular, Glenmore Forest Park was not included directly in 2006-2007; combining with other sites may have under-estimated the total.

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- The vast majority of visitors to forests in Scotland were white (98%), with slightly less than two-thirds of visitors Scottish (64%) and just over a quarter English (26%).
 - 4% of visitors stated that they or a party member had a disability or special need.
 - 18% of all visitors were on an overnight trip away from home, while the remainder of visitors were either on a day trip from a local base, within 6 miles of the forest, or from a location further away (49% and 33% respectively).
 - Of those visitors who were on overnight trips away from home, the main UK areas of origin were Scotland (45%), England 33% (including South East England (7%), Yorkshire (5%), the Midlands (4%) and the North West of England (4%)). Tourists visiting Scotland from overseas accounted for 10% of visitors with places of origin including Germany, France, Spain, Poland, Australia, Canada and the USA.
 - Approximately a third of visitors who were on trips away from home stayed in a tent, caravan or cabin (34%) while just under a quarter stayed in a hotel, guest house or bed and breakfast (23%). Two in ten stayed in self-catering accommodation (19%), while a similar proportion stayed at the home of a friend or relative (18%).
 - On average, amongst those on an overnight trip, 8.4 nights were spent away from home and 7.6 nights were spent in Scotland. Two-fifths stayed away from home on a short break of 1 to 3 nights (40%) and a third stayed away from home in Scotland between 7 and 14 nights (33%).
 - Visitors on overnight trips were also asked to state the total number of visits they had taken to forests during their holiday (including their current forest visit). Overall, an average of 4.4 visits were taken to forests with 60% indicating that they had made 1 to 3 visits.
 - Visitors were asked to indicate how far they had travelled to reach the forest, either from their home or the holiday accommodation they had used the previous night. Overall, the largest proportions of visitors had travelled the shortest distances with 57% travelling under 6 miles and 22% travelling between 6 and 15 miles. In Kincardine Forest District, 92% of visitors travelled 15 miles or less, while 23% of visitors to Cowal & Trossachs forests travelled for more than 25 miles.
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- Overall, 20% of repeat visitors went to the forest at least once a day, with 6% stating that they visited more than once a day.
- In terms of the timing of visits, across the five districts included in the Year 3 surveying, an estimated two-thirds of visits (65%) were made on weekdays, 14% were on Saturdays and 21% were on Sundays. The majority of visits took place between 10am and 4pm (79%) with 7% earlier in the morning and 14% after 4pm. It should be noted that these estimates are not affected by the timing of fieldwork which has been taken into account in the data analysis.

Trip profile

- Eight in ten visitors travelled to the forest by car (80%). 16% walked to the forest while much smaller proportions used other types of transport. Less than 1% of all visitors used public transport to reach the forest.
 - Overall, the average length of visit to forests was 1 hour and 17 minutes. Just under half of visitors spent between 30 minutes and 1 hour at the forest (48%), 15% stayed less than 30 minutes and 21% spent between 1 and 2 hours. The remaining 16% stayed for a longer duration.
 - The most popular activities overall were dog walking (48%), other walking (29%) and cycling/ mountain biking on waymarked tracks (11%). The highest proportion of dog walkers were recorded in Kincardine (57%), while more visitors were walking without a dog in Cowal & Trossachs (55%) and a quarter of visitors were cycling or mountain biking on waymarked tracks in Inverness (24%).
 - Around two-thirds of visitors suggested any types of improvement (66%) while the remaining 34% of visitors stated that they could not think of anything or stated that no improvements were needed. The most frequently asked for suggestions related to improving the signposting, improvements to paths and reducing the amount of dog dirt in the forest.
-

Value of forests

- All visitors were asked to specify how much money they had personally spent that day, and if they were on an overnight trip, how much they had spent or planned to spend on accommodation. Across all respondents (day trippers and visitors on trips away from home), 47% spent nothing while 31% spent less than £20 in total. The average spend per person across all visitors (i.e. including those who spent nothing) was £18.
 - Average spend per visitor varied between Forest Districts. The highest average spend per person, including those who spent nothing, was in Fort Augustus (£36) while spend was lowest in Kincardine (£7).
 - Just 2% of all visitors stated that the forest was 'not important at all' in their decision to visit the area that day and 15% stated that the forest was 'not relevant' because they lived in the local area. However, a higher proportion indicated that the forest was either 'the only reason' (17%), 'very important' (40%) or 'quite important' (18%) in their decision to visit the local area.
 - By combining information on average levels of spend per person per day to data relating to the influence of forests on decisions to visit, total spend by those visitors whose decisions to visit the area were affected by the presence of a forest to visit has been calculated. This calculation suggests that, across the five Forest Districts included in year 3 of the survey, visitors who were influenced to take their visit due to the forest and its facilities spent approximately £11.3 million. This expenditure was made during the day of the forest visit and included overnight food and drink, accommodation, transport and non-routine shopping.
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A. Background and methodology

Background

The Forestry Commission has collected information on the number and profile of visitors to their forests for a number of years. A variety of methodologies have been used including the installation of permanent mechanical counters, people and vehicle counters and, until 2001, a rolling programme of face to face surveys at a core of 'key' forests.

In late 2001, TNS Travel and Tourism were commissioned to pilot a survey method developed by Cheltenham and Gloucester College of Higher Education which aimed to provide more reliable estimates of visitor numbers and activities and an accurate profile of visitors to a wider range of Forestry Commission sites, including those classified as 'non-key' sites. In particular, it was hoped that this 'All Forests' method would provide more accurate information on local usage of forests.

The pilot fieldwork was undertaken in the New Forest and Inverness Forest Districts in two waves, between February and May 2002 and August and September 2002. A total of 1,437 hours of fieldwork were undertaken at 15 forest blocks.

As a result of this pilot a number of fairly minor changes were suggested and made to the fieldwork materials and approaches to fieldwork scheduling. As a whole, the methodology was found to achieve its objective of producing accurate and robust data regarding visitor numbers and profiles.

Following the success of the pilot, TNS Travel and Tourism were commissioned by Forestry Commission Wales (FCW) to undertake surveying using this methodology across their four Forest Districts, at a total of 38 forest blocks. Fieldwork for this survey took place from January 2004 to January 2005 with results published in September 2005.

TNS Travel and Tourism were also commissioned by Forestry Commission Scotland (FCS) to undertake surveying using the same methods across all 15 of their Forest Districts³. Due to the scale of this exercise, fieldwork was spread across a three year period from June 2004 to June 2007.

³ There were 15 Forest Districts when this survey commenced in June 2004. Since then Kincardine and Buchan have merged to form Aberdeenshire Forest District.

During the first year of surveying, between June 2004 and May 2005, five Forest Districts were surveyed with fieldwork undertaken in Buchan, Galloway, Lochaber, Scottish Borders and West Argyll. During the second year, fieldwork was undertaken in the Scottish Lowlands, Moray, Lorne, Dornoch and Tay Forest Districts. In year 3, as described in this report, fieldwork was undertaken in Ae, Cowal & the Trossachs, Fort Augustus, Inverness and Kincardine.

The key objectives of this survey are:

- To measure the volume of visitors across FCS forests in each of the five districts;
- To obtain information on visitor profiles.

This report provides the results of this third year of surveying. Copies of the questionnaire count sheet and contact sheet are appended.

Survey approach

Geographical coverage

Face to face interviews and counting of visitors was undertaken from July 2006 to June 2007 across the following Scottish Forest Districts:

- Ae – 8 forest blocks.
- Cowal & Trossachs – 6 forest blocks.
- Fort Augustus – 4 forest blocks.
- Inverness – 11 forest blocks.
- Kincardine – 4 forest blocks.

The forest blocks included in the survey were selected by FCS as a stratified representation of all of the blocks in each of the districts, on the basis of population levels within 15km of the site and perceived levels of visitor usage. At a combined level, the blocks selected are representative of the range of facilities and activities available in FCS woodland, but this is not always the case at a district level. Approximately a fifth of each district's forests were included in the survey.

The map overleaf illustrates the location of the forest blocks included in the survey and the Forest District boundaries. The forest blocks included in the survey and their block numbers were as follows:

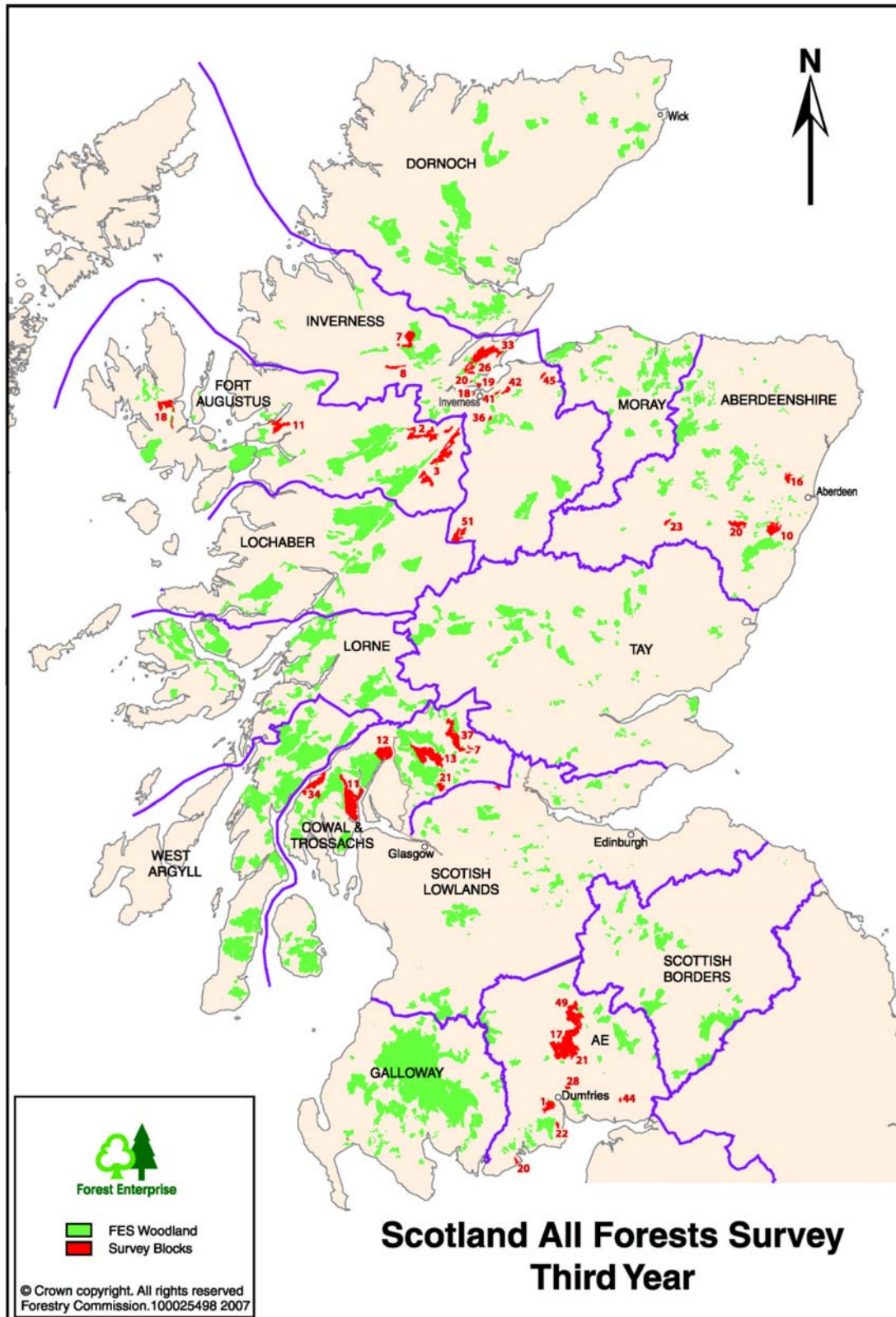
Ae		Cowal & Trossachs	Fort Augustus
1	Mabie	7	Callander Crag
20	Rascarrel	11	Cruach Benmore
17	Queensberry	12	Cruach Tairbeirt
21	Kirkland	13	DML & Forest Drive
22	Criffel	34	Strathlachlan
28	Heathall	37	Strathyre West
44	Brownmoor		
49	Rivox		
Inverness		Kincardine*	
7	Corriemollie/ Strathgarve	10	Durris
8	Strathconon	16	Kirkhill
18	Craig Phadraig	20	Banchory
19/20	Woodend & Ord Hill Littleburn/Cloutie	23	Ballater
26	Well		
33	Learnie		
36	Littlemill		
41	Culloden		
42	Culloden Muir		
45	Laiken		
51	Achduchil		

Each of the 5 Forest Districts varies somewhat in terms of the size of forest blocks, proximity to populated areas and facilities provided⁴. A map illustrating the locations of the survey blocks is provided overleaf while the following pages provide a summary of the main characteristics of each of the districts.

⁴ A map illustrating a typical forest block and the different types of access point is provided in Appendix 5.

*There were 15 Forest Districts when this survey commenced in June 2004. Since then, Kincardine and Buchan have been combined to form the new Aberdeenshire Forest District as shown in Figure A-1. The former Buchan area was surveyed during the first year of this study and is reported upon in the Year 1 report and the former Kincardine area was surveyed during the third year and is reported upon in this report.

Figure A-1 – Forest blocks included in survey and Forest District boundaries



Ae Forest District

Ae Forest District lies mainly within the Dumfries & Galloway Region in south west Scotland but there are a few forest blocks within the South Lanarkshire Unitary Authority. Broadly speaking the District is bounded by Caulkerbush (on the south west), Sanquhar (on the north west), Abington on the north east and Gretna on the south east.

The district manages an area of 31,500 hectares of land, and manages 26,800 hectares of commercial woodland.

The Forest District covers a geographic area of over 1400 square miles of upland hills, moorland and grassland within a landscape containing extensive conifer forests. The earliest forests, which were established on the lower ground, tend to be a rich patchwork of trees species owing to good soils, early silvicultural practice and the personal individuality of forest staff. The later forests, particularly those established from the 1960s to the early 1990s were generally on poorer soils higher “up the hill” and established primarily as monocultures of Sitka spruce. This reflected the principle objectives of those days, which were to create a national timber reserve and maximise the yield of millable timber, and was pursued with vigour! Today these plantations are being harvested and replaced by a more diverse patchwork which includes substantial areas of open habitats and broadleaved woodland.

Timber production remains a core aim but is now balanced by other objectives including conservation, landscape, recreation, tourism and rural development.

Cowal & Trossachs Forest District

The Cowal and Trossachs Forest District covers Cowal, Loch Lomond, Loch Ard Forest, Achray Forest, Loch Katrine and Strathyre Forest. The district manages over 66,000 hectares, of which over 52,000 hectares are in the National Park and 36,000 are forested.

The forests are currently mainly coniferous, with 14% of the forest being broadleaved woodland. However over the next 50 to 100 years there will be a dramatic increase in the proportion of native woodland.

The area has a long history of recreation with Argyll Forest Park created in 1935 and Queen Elizabeth Forest Park created in 1953. The district is the largest land manager in Loch Lomond and the Trossachs National Park, covering over 28% of the national park

area. The district is accessible to over 2.4 million people within a one-hour drive and over 4 million people within two hours drive. Due to the spectacular landscape and the accessibility of the forests, the district is hugely popular for people looking to relax, walk, cycle, paddle or horse ride.

Over the last five years there has been a £3 million investment in improving the recreational infrastructure in the area. This has included developments to the David Marshall Lodge visitor centre, Cobbler footpath and the fabulous Pucks Glen. The project upgraded over 600 car parking spaces, opened up over 265 kilometres of routes and installed 28 information panels. The district has over 100 marked routes with a wide range of grades from wheel chair users to hill climbers. The district has three visitor centres (David Marshall Lodge, Ardgartan and Glenbranter).

Over ten years ago the district started the conversion of the forests along the east shore of Loch Lomond to native woodland as part of the Ben Lomond National Memorial Park. In 2005 the district took on the management of the 8,500-hectare Loch Katrine area which will be developed into wonderful native woodland. The work at Loch Katrine combined with East Loch Lomond and our neighbours (Woodland Trust and RSPB) will create the largest broad-leaved native woodland in Scotland since the Middle Ages.

The district has 19 Sites of Special Scientific Interest, over 366 archaeological sites and is home to a wide range of species from Red Squirrel, Pine Martin, Ospreys, Golden Eagles, Red Kites and Barn Owls. Many of these species are visible from special video screens at our visitor centres. The district carefully manages its tree harvesting programme to minimise impact on wildlife in the short term and create better habitats for wildlife in the future through the creation of large habitat networks.

The district works closely with the National Park and its associated communities through community woodland projects and larger landscape partnership projects. The district is also working actively to engage with the communities in the towns of Callander and Dunoon. The district aims to deliver the actions of the National Park Plan by working with communities, developing forest habitats and improving the recreation infrastructure for visitors health and to develop the tourism economy.

Fort Augustus Forest District

Fort Augustus Forest District is situated within the Highland Council local authority area, and covers a swathe across the country from the north east end of Loch Ness to the Isle of Skye in the west including Skye and Raasay. The District takes in the northern half of the Great Glen, Glen Urquhart, Glen Affric, Glen Moriston and across into the whole of Skye and Lochalsh. The main office is located in Fort Augustus. The District comprises almost 60,000 hectares of land, with around 35,000 hectares of woodlands.

A quarter of all woodlands are semi-natural, with the other 75% being more conventional plantation forest areas, though many of these are native species. Native pinewoods dominate the Glen Affric National Nature Reserve, Glenmoriston and Achnashellach, with other important native woodlands on Skye and in the Great Glen.

There is a high degree of social engagement in the District, which has 17 community partnerships of one sort or another. Tourism and rural development are also high on the agenda, with Loch Ness in the Great Glen a major tourist destination.

The timber harvesting programme is normally around 120,000 cubic metres per annum. The area is known for its high quality Douglas fir and spruce, which are often used in prestigious construction projects.

The landscape of the District is spectacular and highly sensitive. Consideration is being given to restoration of ancient woodland sites in dramatic landscapes like the Great Glen and Glen Shiel. This will have such a major impact and complete conversion to a more open semi-natural wooded landscape is being contemplated, where appropriate.

Inverness Forest District

Inverness Forest District is located within the Highland Council area. It comprises an area from Laggan in the south to Cromarty in the east, and to Ullapool in the north west. The district comprises an area of some 34,360 hectares of land, hill and loch. It includes a significant proportion of open hill land at Glenmore Forest Park and adjoining Ben Wyvis, with the woodland area totalling 28,600 hectares.

The majority of the national forest estate is afforested with forests (82 woods) ranging from less than 100 hectares (Craig Phadrig) on the outskirts of Inverness, to the largest, 3,689 hectares (Inshriach), in the Cairngorms National Park. It is a very varied district, which

includes native pinewoods in Strathspey, pine forests in the inner Moray Firth, woods on the edge of the city of Inverness and the spruce dominated forests of the west.

The main centres of population are Inverness, Aviemore, Dingwall, Nairn and Ullapool. Around 130,000 people live within the FD boundary, and the combination of important tourist destinations and an active local population means that the forests have to cater for a wide range of users.

Kincardine Forest District (part of the new Aberdeenshire Forest District)

There were 15 Forest Districts when this survey commenced in June 2004. Since then, Kincardine and Buchan have been combined to form the new Aberdeenshire Forest District. Buchan was surveyed during the first year of this study and Kincardine was surveyed during the third year. Although the results for Kincardine are presented in this report, the following description refers to the new Aberdeenshire Forest District.

Aberdeenshire Forest District is made up of around 150 separate woodland blocks, ranging in size from 5ha to 5,800ha. Trees cover 82% of the land managed by the district, and the majority of the rest is open space, including large hilltops as well as planned open ground left within plantations. Of the woodland cover, 96% is conifer and 4% broadleaf. The dominant species planted is Sitka Spruce covering 13,608ha, or 43% of the area. Sitka spruce grows well in the conditions, (soil and climate) prevalent in the district, making it suitable for commercial production of timber.

Throughout history, the people of the north east have interacted with the forest. It has provided them with, shelter, food, fuel and recreation. This is no different today, though the forest has changed from a natural to a largely man made environment. The Forestry Commission has an open access policy for walkers, paddle sports, cyclists and horse riders and is an excellent resource for recreation and education as detailed in the district recreation and education strategies. The team of community and education rangers, who have links with other ranger services both in the local councils and on private estates, implement these strategies. The greatest use of the forests in the small to medium blocks is near towns. The importance of tourism and recreation is growing and is now a major factor in forest management and planning.

The annual timber production is around 260m³ to 290m³ and around 400ha of clear felled land is restocked annually. The Christmas tree sale centre located at Tyrebagger forest

outside Aberdeen sells approximately 6,200 trees a season and is the biggest single recreation event annually with 12,000 people visiting the site each year.

The forests of Deeside are known to be important habitats for plants, invertebrates, birds and mammals associated with pinewoods. Along with Glen Affric/Glen Strathfarrar, Speyside and Deeside form the three most outstanding areas for boreal native woodland. There are 764ha of woodland designated as Plantation on Ancient Woodlands.

The forest landscape of the district is diverse with large productive hill forests linking in with surrounding estates and private woods while small diverse blocks integrate with towns and communities providing recreation, education and employment. Based on figures from the 2001 census, the combined population of Aberdeenshire and Aberdeen City is 439,000, split 60% to 40% in favour of the shire. Agriculture, forestry, and field sports are a significant part of the economy with employment in these sectors twice the national average.

Timing of fieldwork

At each of the blocks included in the survey, interviewing and counting took place at every access point, following the methods outlined in the All Forests Methodology Guidance notes⁵. Essentially, this approach involved a total of 9 one-hour duration fieldwork periods being undertaken at every access point to the sampled forest blocks. Following the guidance, these periods were distributed across different days of the week with a target of 3 during weekdays, 3 on Saturdays and 3 on Sundays. In terms of time of day, around half of the fieldwork periods were undertaken between 10am and 4pm (mid), a quarter were undertaken before 10am (early) and a quarter were after 4pm (late).

Following the first six months of fieldwork, those access points where no visitors or very low numbers of visitors had been encountered during interviewing shifts were removed from the fieldwork schedule. Conversely, representation of the access points where the largest number of visitors had been encountered was increased for the final six months of fieldwork⁶ in an attempt to increase the number of interviews undertaken.

⁵ See Appendix 1

⁶ Variations in the amount of fieldwork time spent at access points have been taken into account in the analysis of results and production of estimates of visitor numbers.

Fieldwork at each forest block was undertaken fairly evenly across the 12 months to make it possible to take account of seasonal variations in visitor numbers, thereby providing more accurate data to use in the subsequent modelling of annual visitor numbers.

Counting

During each one hour period interviewers counted the total numbers of visitors entering and leaving at each access point in total and according to their method of transport (e.g. bicycle, horse). When working at a car park interviewers also recorded the total number of vehicles parked at the start and end of the counting period. A copy of the count sheet used is appended⁷.

Interviews

Interviewing of visitors was undertaken at each access point throughout the fieldwork period. Respondents were selected randomly to guarantee the representativeness of results and the conduct of interviews ‘on-site’ ensured that responses were immediate with no problems of respondent recall.

The survey took the form of an ‘exit survey’ with respondents interviewed at the end of their visit to each site to ensure that their actual behaviour patterns were recorded rather than their intentions. Visitors were targeted on the basis of the next person to leave on completion of the previous interview. This procedure maximised the number of interviews completed per hour whilst maintaining the random selection of respondents.

In circumstances where a group of people or a family left together, the “next birthday” rule was used to select one respondent per group or family for interview. The “next birthday” rule is a standard market research industry method that is widely used in face to face surveys to ensure that the oldest member of the family or the head of the group cannot self-select himself or herself as the respondent. All members of the group or family aged 16 years or over were eligible for selection, thus ensuring that the principles of random sampling were maintained.

The questionnaire used in the survey is provided in Appendix 2.

⁷ See Appendix 4

Fieldwork achieved

Over the 12-month survey period more than 1,800 hours of fieldwork were undertaken during 411 days. During this period 955 interviews were achieved, an average of 0.5 interviews per hour. Of those people approached, 88% agreed to be interviewed. Reasons for not taking part in an interview included having already been interviewed for the survey and cycling so not being able to stop and being in a hurry. Around 2,700 visitors were counted leaving the forests during the fieldwork period.

The table below summarises fieldwork achieved in each Forest District over the 12-month period.

Table A-1 – All Forests Scotland Survey 2006/07 – Hours of fieldwork and interviews achieved by Forest District

	Ae	Cowal & Trossachs	Fort Augustus	Inverness	Kincardine	Total
Days of fieldwork undertaken	63	111	63	116	58	411
Hours of counting and interviewing	295	460	333	506	266	1,860
Interviews achieved	189	285	79	208	194	955
Average interviews per hour	0.6	0.6	0.2	0.4	0.7	0.5

Estimating visitors numbers and weighting

By following the survey approaches described, data on numbers of visits was collected at each forest block over nine available time periods:

Weekdays	Saturdays	Sundays
1) Early (before 10am)	4) Early (before 10am)	7) Early (before 10am)
2) Mid (10am to 4pm)	5) Mid (10am to 4pm)	8) Mid (10am to 4pm)
3) Late (after 4pm)	6) Late (after 4pm)	9) Late (after 4pm)

This data has been used to produce estimates of total numbers of visitors at each forest block by using the approach detailed overleaf.

1) For each of the nine time periods, the total number of hours a forest block was 'available' for a visit was calculated by estimating the number of daylight hours over the whole year (excluding hours before 6.30am when it is assumed that visitor throughput would be negligible):

Weekdays	Saturdays	Sundays
1) Early (before 10am) 752 hours of daylight	4) Early (before 10am) 150 hours of daylight	7) Early (before 10am) 150 hours of daylight
2) Mid (10am to 4pm) 1,561 hours of daylight	5) Mid (10am to 4pm) 310 hours of daylight	8) Mid (10am to 4pm) 310 hours of daylight
3) Late (after 4pm) 644 hours of daylight	6) Late (after 4pm) 129 hours of daylight	9) Late (after 4pm) 129 hours of daylight

2) The actual number of hours of counting undertaken at each access point during each of the nine time periods (typically 3 weekdays/ 3 Saturdays/ 3 Sundays and 4 or 5 mid and 2 or 3 early or late), was then applied to the total 'available' hours to produce a weighting factor.

3) Each of the weighting factors were then applied to the number of counts undertaken during each of the nine time periods to produce an estimate of total visits over the 12 months.

4) By adding together the estimates for each access point an overall estimate of annual visits was obtained for each forest block. These totals have then been applied to other, similar blocks not included in the survey to produce an estimate of visits to all FCS forests throughout each of the five Forest Districts.

As numbers of visitors both entering and leaving forests was recorded during fieldwork, it has been possible to extrapolate data using each of these measures. The final estimate of visitor numbers has been taken as the average of these two estimates. Details of the confidence intervals associated with the estimates included in this report are provided in Appendix 6.

Throughout this report estimates have been rounded to the nearest 1,000.

In addition to providing estimates of the total volume of visits to FCS forests, the data has been used to weight the results of the survey of visitors. All of the results provided in the following sections have been weighted on this basis. Weighted, cross-tabulated data tables have been published alongside this report.

B. Volume of visits to FCS forests

Total visits to FCS forests included in survey

By following the approaches outlined in the previous section it has been possible to obtain estimates of the total number of visits taken to each of the surveyed forest blocks during the July 2006 to June 2007 period. Tables B-1 to B-5 provide estimates for each of the forest blocks included in the survey, together with details of the classification⁸ provided to each forest and numbers of entrances.

Table B-1 – Estimated volume of visits to surveyed forests – Ae, July 2006 to June 2007

Block	Usage Classification (H/M/L)	Population Classification (H/M/L)	Total Entrances	Estimate of visits
1. Mabie	H	H	13	124,000
12.Rascarrel	L	M	6	26,000
28.Heathall	H	H	6	18,000
21.Kirkland	H	H	4	15,000
22.Criffel	M	H	2	4,000
44.Brownmoor	L	M	1	2,000
17.Queensberry	L	H	2	1,000
49.Rivox	H	H	1	1,000

In the Ae Forest District, the largest number of visits were estimated to have taken place at Mabie (124,000 visits) while around a 1,000 visits were estimated to have taken place at both Queensberry and Rivox. The total number of visits taken to all of the survey sites in this district was around 191,000.

⁸ In Tables B-1 to B-5, 'usage classification' shows the perceived level of visitor usage and 'population classification' the population level within 15km of the site. Both are classified on a scale of high (H), medium (M) or low (L), and were assigned prior to the start of fieldwork.

In Cowal and Trossachs Forest District, Cruach Benmore received the highest number of visits (75,000) while Strathlachlan was estimated to receive around 1,000 visits during the 12-month survey period. Some 250,000 visits were estimated to have been taken to all of the Cowal & Trossachs sites included in the survey.

Table B-2 – Estimated volume of visits to surveyed forests – Cowal & Trossachs, July 2006 to June 2007

Block	Usage	Population	Total Entrances	Estimate of visits
	Classification (H/M/L)	Classification (H/M/L)		
11. Cruach Benmore	H	M	14	75,000
13.DML+ Forest Drive	H	M	16	73,000
7. Callander Crag	H	H	8	47,000
12.Cruach Tairbeirt	M	M	6	33,000
37.Strathyre West	M	M	5	20,000
34.Strathlachlan	L	L	4	1,000

In the Fort August Forest District, visits per block ranged from an estimated 44,000 at South Loch Ness to around 2,000 per year at Strome. The estimated total number of visits taken to blocks that were included in the survey was 85,000.⁹

Table B-3 – Estimated volume of visits to surveyed forests – Fort Augustus, July 2006 to June 2007

Block	Usage	Population	Total Entrances	Estimate of visits
	Classification (H/M/L)	Classification (H/M/L)		
3. South Loch Ness	H	L	11	44,000
2. Enrick	H	L	9	25,000
18. Glen Varagill	M	L	6	14,000
11. Strome	L	L	11	2,000

⁹ The pattern of fieldwork undertaken at South Loch Ness may have meant that significant numbers of visits were not counted. A revised estimate has therefore been produced. In addition, a vehicle counter has been used to separately estimate visit numbers for Upper Beaully (Glen Affric), a very high usage site not covered by the survey fieldwork.

In the Inverness Forest District, visits per block ranged from 26,000 at both Craig Phadraig and Woodend & Ord Hill to less than 1,000 at Corriemollie/ Strathgarve. The estimated total number of visits taken to blocks that were included in the survey was around 138,000

Table B-4 – Estimated volume of visits to surveyed forests – Inverness, July 2006 to June 2007

Block	Usage Classification	Population	Total Entrances	Estimate of visits
	(H/M/L)	Classification (H/M/L)		
18. Craig Phadraig	H	H	9	26,000
19. Woodend & Ord Hill	H	H	8	26,000
42. Culloden Muir	H	H	7	24,000
51. Achduchil	M	L	5	23,000
33. Learnie	M	M	7	16,000
26. Littleburn/ Cloutie Well	M	H	9	11,000
36. Littlemill	M	L	3	4,000
41. Culloden Wood	H	H	3	4,000 ¹⁰
8. Strathconon	L	L	2	2,000
45. Laiken	L	M	3	2,000
7. Corriemollie/ Strathgarve	L	L	4	<500

Finally, in the Kincardine Forest District, the estimated number of visits per block during the 12-month survey period ranged from 3,000 at Ballater to around 86,000 at Kirkhill. The total number of visits at blocks in the Kincardine area that were included in the survey was around 165,000.

Table B-5 – Estimated volume of visits to surveyed forests – Kincardine, July 2006 to June 2007

Block	Usage Classification	Population	Total Entrances	Estimate of visits
	(H/M/L)	Classification (H/M/L)		
16. Kirkhill	H	H	11	86,000
20. Banchory	H	M	5	58,000
10. Durris	M	L	13	18,000
23. Ballater	L	M	2	3,000

¹⁰ Likely to be an underestimate caused by a low amount of fieldwork being conducted at this site.

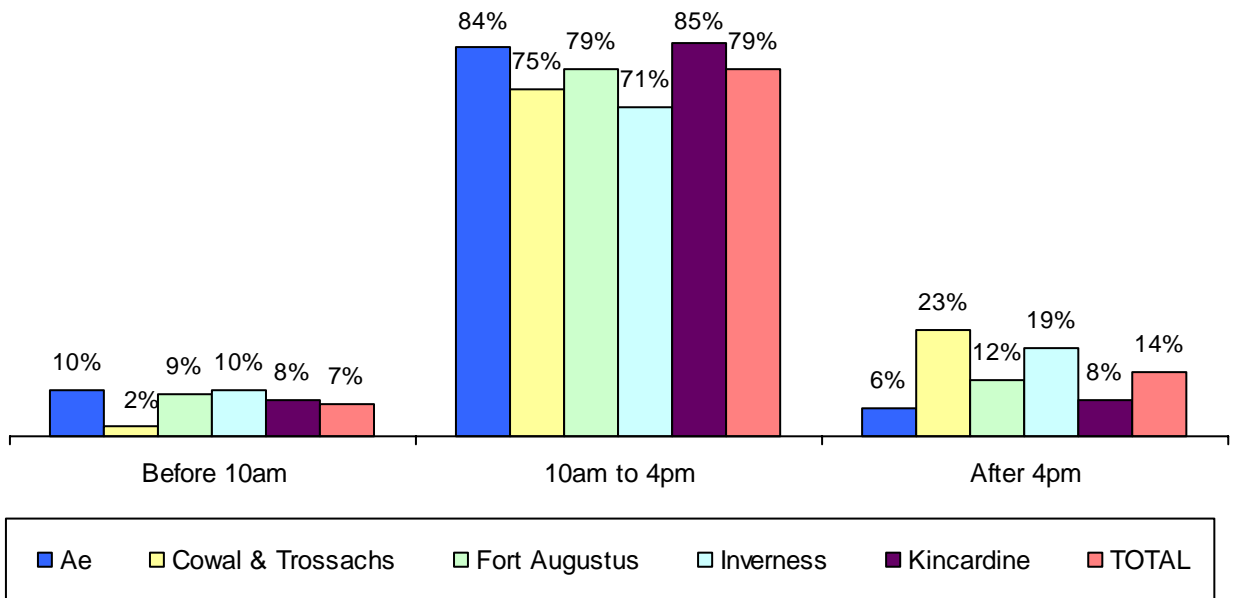
Time of visits

With counts undertaken during different times of day and different days of the week, it is possible to estimate total numbers of visits taken during a variety of time periods. In the following sections the profile of visits are presented for each of the Forest Districts and for the five surveyed districts as a whole.

Time of day of visit

As might be expected, in all of the Forest Districts the majority of visits took place during the six-hour period between 10am and 4pm. However, a higher proportion of visits were estimated to take place in the evenings in both the Cowal and Trossachs area (23%) and Kincardine (19%).

Figure B-1 – Time of visit - FCS forests included in 2006/2007 survey (%)
 Base: Annual hours of daylight from 6.30am to sunset (4,135 hours)

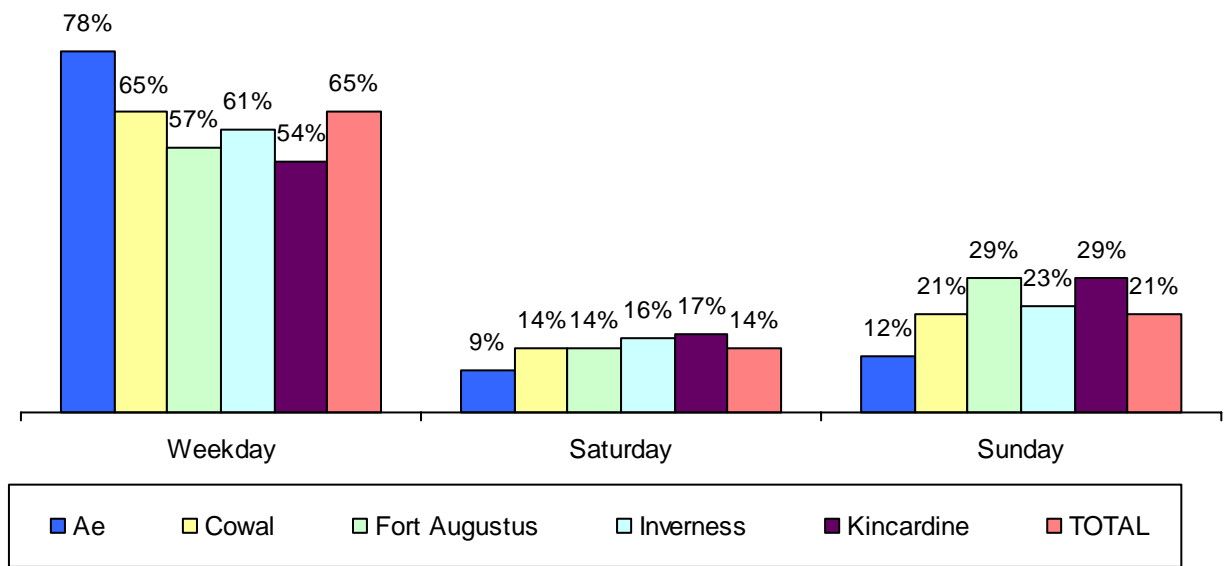


Day of visit

Around two-thirds of visits to forests were estimated to have taken place on weekdays (65%), 14% were taken on Saturdays and 21% on Sundays.

A comparison of the estimates for each district suggests that a higher proportion of visits taken in the Ae district were on weekdays (78%) while more visits taken in Fort Augustus and Kincardine were on Sundays (both 29%). Correspondingly, the proportion of visits taken on Sundays in the Ae district was somewhat lower (12%).

Figure B-2 – Day of visit - FCS forests included in 2006/2007 survey (%)
 Base: Annual hours of daylight from 6.30am to sunset (4,135 hours)



Total visits to all FCS forests

As mentioned previously, in each of the five Forest Districts the forest blocks selected to be included in the survey were chosen as representative of all forests in the area in terms of estimated levels of usage (high, medium or low) and the size of the surrounding population (high, medium or low). By applying these categorisations, each forest was placed into one of the following 9 'strata':

Strata	Population	Usage
1	High	High
2	High	Medium
3	High	Low
4	Medium	High
5	Medium	Medium
6	Medium	Low
7	Low	High
8	Low	Medium
9	Low	Low

To obtain an estimate of total numbers of visits to all FCS forests in each of the five districts, the average number of visits per access point at forests included within the survey were applied to other forests in the same strata.

As such the following estimates of total numbers of visits to forests in each of the Forest Districts as a whole have been obtained:

Table B-6– Estimates of total visits to FCS forests June 2006 – May 2007

	Visits
Ae	413,000
Cowal & Trossachs	471,000
Fort Augustus ¹¹	268,000
Inverness ¹²	639,000
Kincardine	789,000
Total	2.6 million

Therefore, it may be estimated that around **2.6 million visits** were taken to forests in the five districts included in the survey during the third year of fieldwork.

¹¹ The visit number estimate for Fort Augustus was not derived as described here. The pattern of fieldwork undertaken at South Loch Ness may have meant that significant numbers of visits were not counted. A revised estimate has therefore been produced. In addition, a vehicle counter has been used to separately estimate visit numbers for Upper Beaully (Glen Affric), a very high usage site not covered by the survey fieldwork.

¹² The pilot survey conducted in 2002 estimated 2.2 million annual visits to forests in Inverness Forest District. It is likely that three factors have contributed to the bulk of the difference between that estimate and the 639,000 visits estimated here; the more limited amount of fieldwork conducted during the pilot survey (4 months only); the basic calculations used to gross up the pilot survey results; the selection of different sites for each survey.

C. Visitor and visit characteristics

As well as counts being undertaken of visitors entering and leaving forests, some 955 interviews were undertaken with visitors. Each interview lasted approximately 10 minutes and used the questionnaire included in appendix 2.

With a total sample of 955, overall results on an un-weighted random sample would be accurate to +/- 3.2% at the 95% confidence interval. It should be noted that the differential weighting for time of day, blocks and districts means that the overall confidence intervals are much wider. Caution should be used when interpreting the results at an individual level where sample sizes are small, for example, in the Fort Augustus district.

The following sections provide the results of this part of the survey with results weighted to reflect total visitor numbers.

Party composition

As shown in Table C-1 below, the average party size across the 5 districts as a whole was 2.2 people with two-fifths visiting on their own (40%). A slightly lower proportion of visits involved a party size of 2 people (38%), while 22% of visits were taken by groups of 3 or more people.

The average party size was slightly higher in the Cowal and Trossachs Forest District (2.5 people) but lowest in the Fort Augustus and Inverness districts (2.0 people each). Average party size was highest amongst visitors who were on their first visit (2.7), those who visited less often than once a week (2.7), those undertaking walking other than with a dog (2.8), those on an overnight trip (2.7), those travelling between 6 and 25 miles (2.6) and those aged 34 and under (2.6). On the other hand, party sizes were smaller amongst those aged 60 or over (1.9), those who walked to the forest (1.9), those travelling less than 6 miles (1.8), those walking a dog (1.6) and those who visit at least once a week (1.4).

18% of all parties contained children aged under 16. Those more likely than the average to be in a party containing children included those who visit less often than once a week (28%), those walking without a dog (26%), those who travelled between 6 and 25 miles (24%) and those aged 35-59 (23%).

Table C-1 – Average party size by Forest District

Base: All respondents

	Average party size	Base size
Ae	2.1 people	189
Cowal & Trossachs	2.5 people	285
Fort Augustus	2.0 people	79
Inverness	2.0 people	208
Kincardine	2.1 people	194
TOTAL	2.2 people	955

The table below illustrates the sex and age profile of respondents and their party members and, for comparison, the Scottish population profile.

Table C-2 – Sex and age profile of all party members (%)

Base: All party members (2,099)

	Ae	Cowal & Trossachs	Fort Augustus	Inverness	Kincardine	TOTAL	Population of Scotland*
Sex							
Male	56	52	51	57	51	53	48
Female	44	48	49	43	49	47	52
Age							
Under 5	5	5	3	3	7	5	5
5 to 10 years	6	6	7	4	9	7	7
11 to 15 years	4	6	4	5	6	5	6
16 to 24 years	5	7	13	8	4	6	11
25 to 34 years	14	11	12	16	15	14	14
35 to 44 years	23	20	13	17	22	20	15
45 to 59 years	24	26	27	32	24	27	19
60+ years	19	19	21	15	12	16	21

*Source: Census 2001

In general, the male, female split of visitors at the FCS Forest Districts included in the survey was fairly even (53%: 47%). However, the proportion of male visitors was marginally higher in Ae (56%) and Inverness (57%).

In terms of age profile, just over two-fifths of all visitors were aged 45 or over (43%), while two in ten were between the ages of 35 and 44. The Inverness and Fort Augustus Forest Districts recorded the oldest age profiles, with visitors to these districts more likely to be aged 45 or over (47% and 48% respectively).

As illustrated in the table, in comparison to the population of Scotland as a whole, visitors to FCS forests across the 5 districts were more likely to be male (53% of visitors to these five Forest Districts compared to 48% of the Scottish population). Overall, visitors to these five Forest Districts were more likely than the Scottish population as a whole to be between the ages of 35 and 59 (47% and 34% respectively) but less likely to be 60 years or older (16% of visitors to these five Forest Districts compared to 21% of the Scottish population).

As table C-2 (below) highlights, the vast majority of visitors to forests in Scotland were white (98%). Overall, almost two-thirds of visitors were Scottish (64%) while slightly over a quarter were English (26%). Reflecting the high proportion of overseas tourists to the area and perhaps the low sample of visitors interviewed in this district, a higher proportion of visitors to Fort Augustus were categorised as ‘other white’.

By comparison, the 2001 census recorded that 2% of the Scottish population were members of non-white ethnic groups. In terms of Local Authority areas, the proportions of non-white ethnic groups amongst the populations in the areas covering each of the five Forest Districts were as follows: 0.6% in the Highlands (the Inverness and Fort Augustus Forest Districts are within this area), 1% in Aberdeenshire (Kincardine is within this area), 0.5% in Argyll & Bute (Cowal & Trossachs is within this area) and 1% in Dumfries and Galloway (Ae is within this area).

Table C-3 Ethnicity (%)
Base: All respondents (955)

	Ae	Cowal & Trossachs	Fort Augustus	Inverness	Kincardine	TOTAL
Total White	99	98	99	100	96	98
White – Scottish	65	62	39	67	63	64
White – English	32	28	34	26	28	26
White – other	2	7	26	7	5	8
Asian	-	-	-	-	1	*
Black	-	-	-	-	1	*
Other	-	-	2	-	-	*

- nil respondents * fewer than 0.5%

Overall, 4% of visitors (50 respondents) stated that they or a party member had a disability or special need. Amongst these visitors, four-fifths indicated that the disability related to mobility (81%, 40 respondents). By comparison, 34% of households in Scotland have at least one member with a long-standing illness, health problem or disability (Scottish Household Survey).¹³

Table C-4 Disabilities and special needs (%)

Base: All respondents (955)

	TOTAL
Groups containing members with disability or special need	4%
<i>Of which:</i>	
Mobility	81%
Hearing	10%
Learning disability	8%
Sight	6%
Alzheimer's	2%
Asthmatic	1%
Arthritis	1%

¹³ It should be noted that the wording of the question regarding illness and disability in the All Forests survey was not identical to that used in the Scottish Household Survey so results are not directly comparable.

Visitor origin

Visitors were asked to provide details of where they normally lived, allowing analysis of place of origin. Across the five districts as a whole 90% of visitors were from Scotland and 8% were from England. A smaller percentage of visitors came from overseas (2%).

As would be expected, there were some variations in the origins of visitors to each Forest District, as illustrated in tables C-5 to C-9 below (note tables only include places of origin stated by 3% or more of visitors in each district, a full list of all places of origin is provided in the data tables).

While some 63% of visitors to Ae lived in Dumfries and Galloway, a significant percentage lived in England (17%) but none of those interviewed lived outside of the UK.

Table C-5 Origin of visitors to Ae Forest District (%)

Base: All respondents who provided a response (147)

	Ae
Scotland	83
Dumfries & Galloway	63
Scottish Borders	5
Glasgow	3
England	17

Visitors to forests in the Cowal and Trossachs Forest District were most likely to live in the Argyll and Bute, Stirling or Glasgow areas (18%, 14% and 11% respectively) or to live in England (15%). 3% lived outside of the UK.

Table C-6 Origin of visitors to Cowal & Trossachs Forest District (%)

Base: All respondents who provided a response (228)

	Cowal & Trossachs
Scotland	80
Argyll & Bute	18
Stirling	14
Glasgow	11
Edinburgh	4
Falkirk	3
England	15
Overseas	3

As shown below, the largest percentage of visitors to forests in this district lived in the Highland local authority area (57%). In comparison to the other areas, a larger proportion of visitors to forests in the Fort Augustus district lived outside of the UK (12%), however it should be noted that this is based upon a small sample of only 76 visitors.

Table C-7 Origin of visitors to Fort Augustus Forest District (%)

Base: All respondents who provided a response (76)

	Fort Augustus
Scotland	74
Highland	57
Argyll & Bute	5
England	14
Overseas	12

The vast majority of users of forests in the Kincardine area lived in Scotland (98%) with half living in the Aberdeenshire local authority area (50%) and 40% living in Aberdeen.

Table C-8 Origin of visitors to Kincardine Forest District (%)

Base: All respondents who provided a response (183)

	Kincardine
Scotland	98
Aberdeenshire	50
Aberdeen	40
West Lothian	3
England	1
Overseas	1

87% of all visitors to Inverness Forest District lived in Scotland, with the largest proportion resident with the Highland local authority area (74%). 6% of visitors lived in England.

Table C-9 Origin of visitors to Inverness Forest District (%)

Base: All respondents who provided a response (208)

	Inverness
Scotland	87
Highland	74
England	6
Overseas	1

Type of trip

As Figure C-1 below illustrates, some 18% of all visitors were on an overnight trip away from home when they visited the forest while the remainder of visitors were either on a day trip from a local base, within 6 miles of the forest, or from a location further away (49% and 33% respectively).

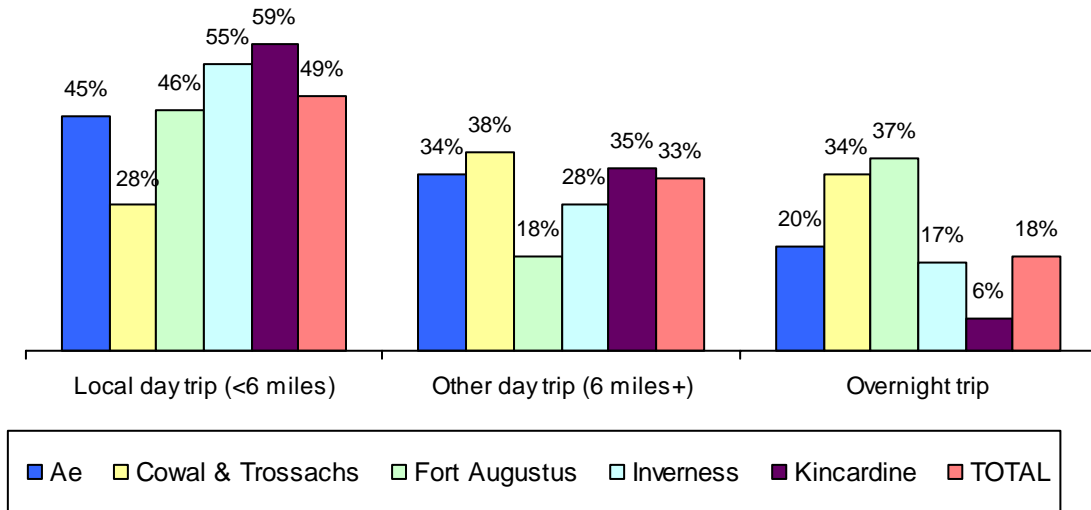
The proportion of visitors on overnight trips away from home was highest in Cowal and Trossachs and Fort Augustus¹⁴ (34% and 37% respectively) and during the April to June 2007 period (28%). Those on their first visit were also more likely than average to be on an overnight trip (55%).

In comparison to the other districts, visitors to forests in Kincardine were more likely to be on a local day trip (59%). Respondents who visited the forest at least once a week and those who took part in dog walking were also more likely to be on a local day trip (84% and 69% respectively).

Respondents taking part in cycling or mountain biking (56%), those visiting less often than once a week (49%) and those aged 34 and under (42%) were most likely to be on a day trip involving a journey of six miles or more.

¹⁴ Treat with caution due to small sample size

Figure C-1 – Whether on a day trip or staying away from home (%)
 Base: All respondents (955)



Overnight visits

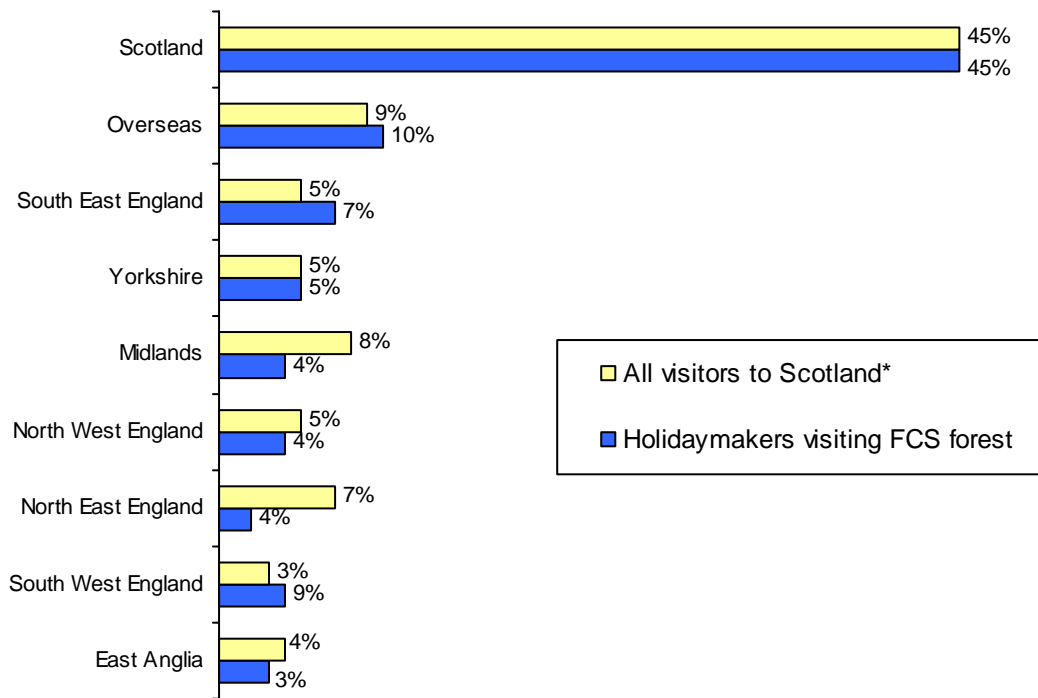
Visitors who were staying away from home were asked further questions relating to their trip.

Place of residence

Figure C-2 compares the place of residence of tourists whom visited FCS forests while on holiday with the profile of tourists to Scotland. The main UK areas of origin of visitors to forests across the 5 Forest Districts included in the survey were Scotland (45%), South East England (5%), Yorkshire (5%), the Midlands (4%) and North West England (4%). Tourists visiting Scotland from overseas accounted for 10% of visitors to the 5 Forest Districts with places of origin including Germany, France, Spain, Poland, Australia, Canada and the USA.

The origin profile of all tourist trips taken in Scotland is similar to that recorded in the 5 Forest Districts.

Figure C-2 –Place of residence of overnight visitors (%)
 Base: All respondents on overnight trips from home (211)



*Source: Tourism in Scotland 2003, VisitScotland

Accommodation used

Visitors who were staying away from home were asked to indicate the type of accommodation they had stayed in. Table C-10 shows a comparison of forest visitors with the overall profile of visitors to Scotland.

A third of visitors to forests stayed in a tent, caravan or cabin (34%) while just under a quarter stayed in a hotel, guest house or bed and breakfast (23%). Two in ten stayed in self-catering accommodation (19%), while a similar proportion stayed at the home of a friend or relative (18%).

By way of comparison, visitors to Scotland generally were more likely than forest visitors to stay in the home of a friend or relative or to use a hotel, guesthouse or bed and breakfast but were less likely to camp, stay in a caravan or use other self catering accommodation.

Table C-10 – Overnight accommodation used (%)

Base: All respondents on overnight trip from home (211)

	Holidaymakers visiting FCS forests	All visitors to Scotland*
Tent/ Caravan/ Cabin	34	7
Hotel, Guest House or B&B	23	41
Self catering accommodation	19	5
Home of friend or relative	18	37
Youth Hostel/ Outdoor Centre	4	2
Time share/ Holiday home	1	n/a

* Source: Tourism in Scotland 2003, VisitScotland

Length of stay

Visitors who were on an overnight trip away from home were asked how many nights in total they were away and how many nights were spent in Scotland. Table C-11 below shows that an average of 8.4 nights were spent away from home and an average of 7.6 nights were spent in Scotland. Of those staying away from home, almost two fifths were away from home on a short break of 1 to 3 nights (38%) and just under a third were staying away from home between 7 and 14 nights (31%). The average number of nights away from home was higher than average amongst those visiting between June and August and those visiting the Inverness Forest District (10.5 and 13.0 nights respectively).

Table C-11 – Duration of overnight trips (%)

Base: All respondents on overnight trip from home (211)

	Nights away from home	Nights in Scotland
1 night	9	10
2 nights	17	19
3 nights	12	11
4 to 6 nights	17	18
7 to 14 nights	31	33
15+ nights	12	9
Average:	8.4	7.6

- nil respondents, * Less than 0.5%

By comparison, the average length of stay amongst all holiday visitors to Scotland was 4.3 nights during 2003 (Source: Tourism in Scotland 2003, VisitScotland).

Visits to forests

Visitors on overnight trips were also asked to state the total number of visits they had taken to forests during their current holiday (including their current forest visit). Overall, an average of 4.4 visits were taken to forests with 60% indicating that they had made 1 to 3 visits.

Table C-12 – Number of visits taken to forests, including current trip (%)

Base: All respondents on overnight trip from home (211)

	Visits
1 visit	26
2 to 3 visits	34
4 to 10 visits	31
11 to 20 visits	4
20 to 50 visits	2
More than 50 visits	-
Average:	4.4

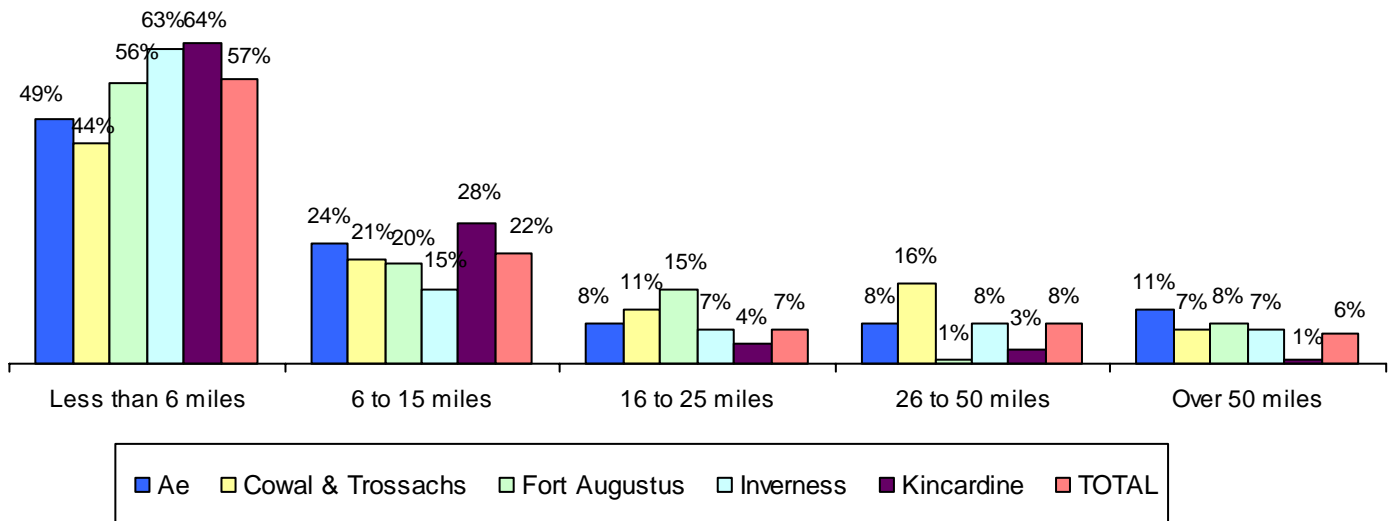
- nil respondents

Travel to the forest

Distance travelled

Visitors were asked to indicate how far they had travelled to the forest, either from their home or the holiday accommodation they had used the previous night.

Figure C-3 – Distance travelled to reach forest (%)
 Base: All respondents (955)



On the whole, the largest proportions of visitors had travelled the shortest distances with 57% travelling under 6 miles and 22% travelling between 6 and 15 miles. Distances travelled to reach forests varied between districts with the largest proportion of very local users (i.e. travelling under 6 miles from home or holiday accommodation) recorded in

Kincardine (64%) and Inverness (63%). In Kincardine Forest District, 92% of visitors travelled 15 miles or less to visit a forest. Conversely, 23% of visitors to Cowal & Trossachs travelled for more than 25 miles to visit a forest in this district.

Other variations in the distances travelled by different groups of visitors included:

- *Travelling less than 6 miles* – those who walked to the forest, those who visited at least once a week, dog walkers, those who described the influence of the forest as ‘not at all important’ and women were more likely to have travelled the shortest distances (98%, 86%, 75%, 71% and 63% respectively).
- *Travelling over 25 miles* – visitors who took part in cycling or mountain biking and those on their first visit were more likely to have travelled over 25 miles to reach the forest (40% and 36% respectively).

Transport used

As Table C-13 illustrates, eight in ten visitors travelled to the forest by car (80%). 16% walked to the forest while much smaller proportions used other types of transport. Less than 1% of all visitors used public transport to reach the forest.

Table C-13 Mode of transport used to reach forest (%)

Base: All respondents (955)

	Ae	Cowal & Trossachs	Fort Augustus	Inverness	Kincardine	TOTAL
Car/ van	88	74	66	70	90	80
Walked all the way	10	20	29	25	6	16
Bicycle	1	2	1	1	1	2
Other	2	4	3	2	1	1

Note: Data in the table above may not add up to 100% due to rounding and/ or ‘Don’t Know / Not Stated’ answer options. Other category includes public transport, coach, minibus, motorhome, horse, running and motorbike.
- nil respondents * fewer than 0.5%

Visitors to forests in the Kincardine and Ae districts were most likely to travel to the forest by car (90% and 88% respectively). A higher proportion of visitors to the Fort Augustus and Inverness districts walked to the forest (29% and 25% respectively).

Other variations in the types of transport used to reach forests included the following:

- *Travel by car/van* – those travelling more than 6 miles and people who visit the forest less than once per week were more likely than the average to travel by car or van (95% and 90% respectively);
- *Walking* – visitors most likely to walk to the forest included those who stated that the forest was not an important influence in their decision to visit the area, people visiting the forest at least once per week and those travelling less than 6 miles to reach the forest (27%, 27% and 27% respectively). It should be noted that there is a large degree of overlap between these groups;
- *Cycling* – as might be expected, visitors who took part in cycling or mountain biking while in the forest were more likely to cycle to the site (14%).

Frequency of visits

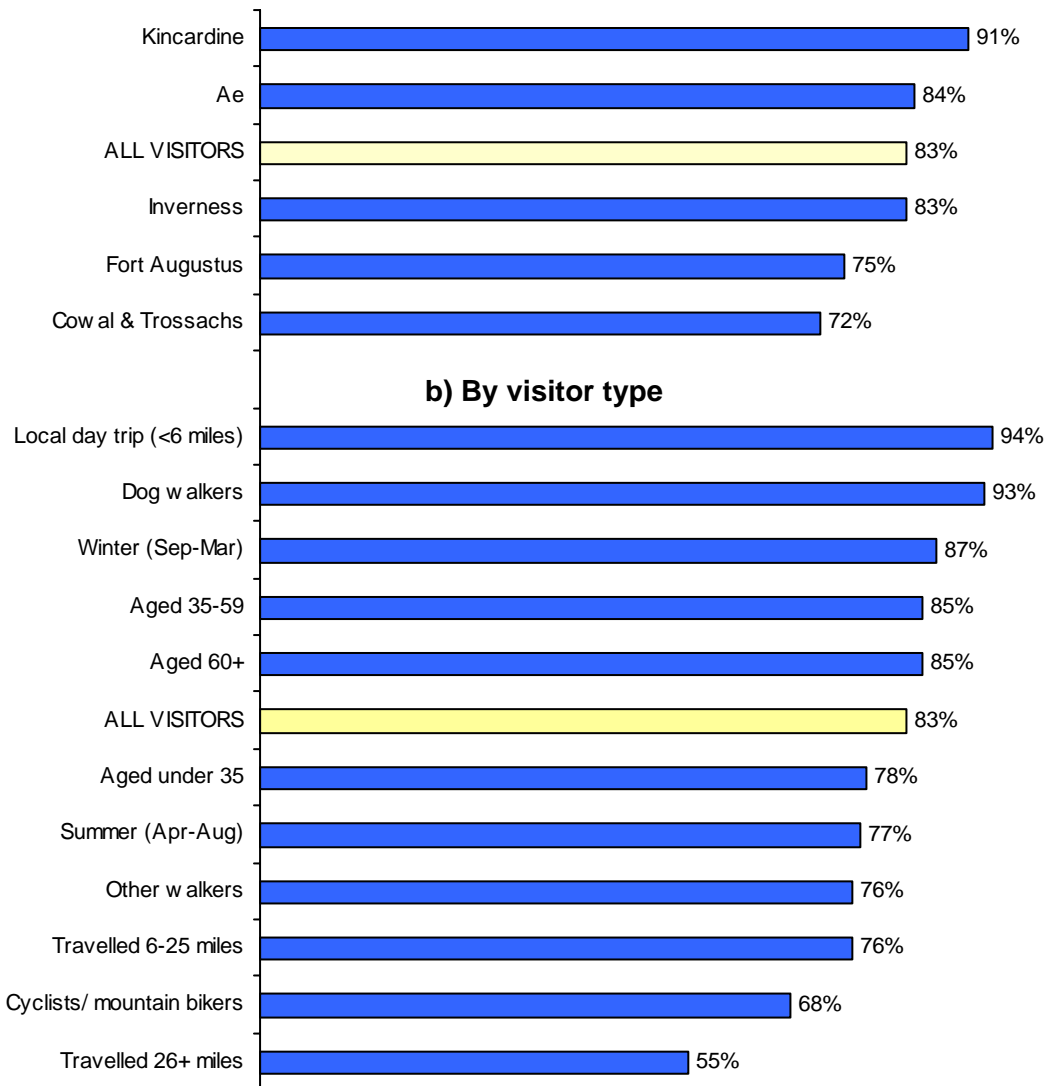
It must be remembered that the sampling frame is **visits** not **visitors**. Those who visit more frequently are more likely to be included in the sample. So the results quoted in this section are not representative of visitors.

Overall, 83% of visitors had visited that particular forest at least once before. However, as the chart overleaf shows, the proportion of repeat visitors varied depending on the Forest District and the type of visitor.

Visitors most likely to be on a repeat visit included those interviewed in Kincardine, those who had travelled less than 6 miles, dog walkers and those visiting between September and March (91%, 93%, 93% and 87% respectively). Conversely the proportion of repeat visitors was lower in Cowal & Trossachs (72%), those who took part in cycling or mountain biking (68%) and those who had travelled over 25 miles to reach the forest (55%).

Figure C-4 –Proportions of repeat visitors (%)
Base: All respondents (955)

a) By location



Repeat visitors were asked to indicate how often they visited the forest. The table overleaf shows the proportion of respondents visiting, the levels of frequency and an estimate of the average number of visits made per year based on these responses.

On the whole, 17% of visitors went to the forest at least once a day. Most commonly visitors went to the forest 1 to 3 times a week (25%).

The following estimated numbers of visits taken per visitor per year have been applied to each of the possible responses:

- Visit more than once a day = 365 visits per year
- Visit once a day = 350 visits per year
- Visit 1 to 3 times a week = 100 visits per year
- Visit 1 to 3 times a month = 25 visits per year
- Visit 1 to 3 times a year = 2 visits per year
- Less often/ first visit = 1 visit per year

It can therefore be estimated that, across all of the Forest Districts, visitors typically took around 89 visits to the forest they were interviewed at each year. The highest average number of visits per year were recorded in the Inverness Forest District (118 visits) and Ae (100 visits) while the average number was lowest in Cowal & Trossachs (59 visits).

Table C-14 Frequency of visits to forest (%)

Base: All respondents (955)

	Ae	Cowal & Trossachs	Fort Augustus	Inverness	Kincardine	TOTAL
More than once a day	4	3	4	10	2	5
Once a day	16	9	9	15	9	12
1 to 3 times a week	25	12	28	24	32	25
1 to 3 times a month	16	14	13	17	22	17
1 to 3 times a year	18	24	13	12	22	19
Less often	5	10	7	5	4	6
On first visit ever	16	28	25	17	9	17
Average visits per year:	100	59	79	118	77	89

Note: Percentages may not equal 100% due to rounding

Table C-15 below compares the key characteristics of visitors with different frequencies of visit with the profile of all adult visitors. This comparison illustrates that the most frequent users (visit at least once a week) were more likely than other users to be older, to live locally, to take part in dog walking and/or to stay in the forest for the shortest duration. Conversely first time visitors were more likely to be younger, male, on an overnight trip and/or taking part in walking without a dog or mountain biking/cycling.

Table C-15 – Profile of users by frequency of visits to forest (%)

Base: All respondents (955)/ Visit at least once a week (372)/ Visit less often (398)/ First visit (183)

	All respondents*	Visit at least once a week	Visit less often	On first visit
Sex				
Male	57	54	58	64
Female	43	46	42	36
Age				
16-34	19	15	22	26
35-59	60	63	60	55
60+	19	22	18	18
Type of trip				
Local day trip (< 6 miles)	49	84	33	2
Other day trip (6 miles+)	33	14	49	42
Overnight trip	18	3	18	55
Activity				
Dog walking	48	73	35	19
Other walking	29	13	40	41
Cycling/ MTB	13	7	13	24
Average duration of visit				
	1hr 17mins	57 mins	1hr 25 mins	1hr 44mins

*Please note that data in table above are based upon respondent profiles and not full party composition data (as shown in Table C-1 and page ii of Executive Summary).

Duration of visit

Overall, the average length of visit to forests was 1 hour and 17 minutes. Just under half of visitors spent between 30 minutes and 1 hour at the forest (48%), 15% stayed less than 30 minutes and 21% spent between 1 and 2 hours. The remaining 16% stayed for a longer duration.

As the table below shows, the average length varied between the five different Forest Districts. Inverness and Kincardine had the shortest average visit times of 59 minutes and 1 hour respectively while Ae and Cowal and Trossachs had the longest averages of 1 hour and 41 minutes and 1 hour and 49 minutes respectively.

Table C-16 Amount of time spent in forest (%)

Base: All respondents (955)

	Ae	Cowal & Trossachs	Fort Augustus	Inverness	Kincardine	TOTAL
Less than 30 minutes	8	8	16	26	14	15
30 minutes to 1 hour	32	41	51	49	60	48
Over 1 hour to 2 hours	29	23	20	17	20	21
Over 2 hours to 3 hours	24	13	8	5	5	10
Over 3 hours to 4 hours	4	6	3	2	-	3
Over 4 hours	4	8	3	1	1	3
Average duration of visit:	1 hr 41m	1 hr 49m	1hr 12m	59m	1hr	1 hr 17m

- = No responses

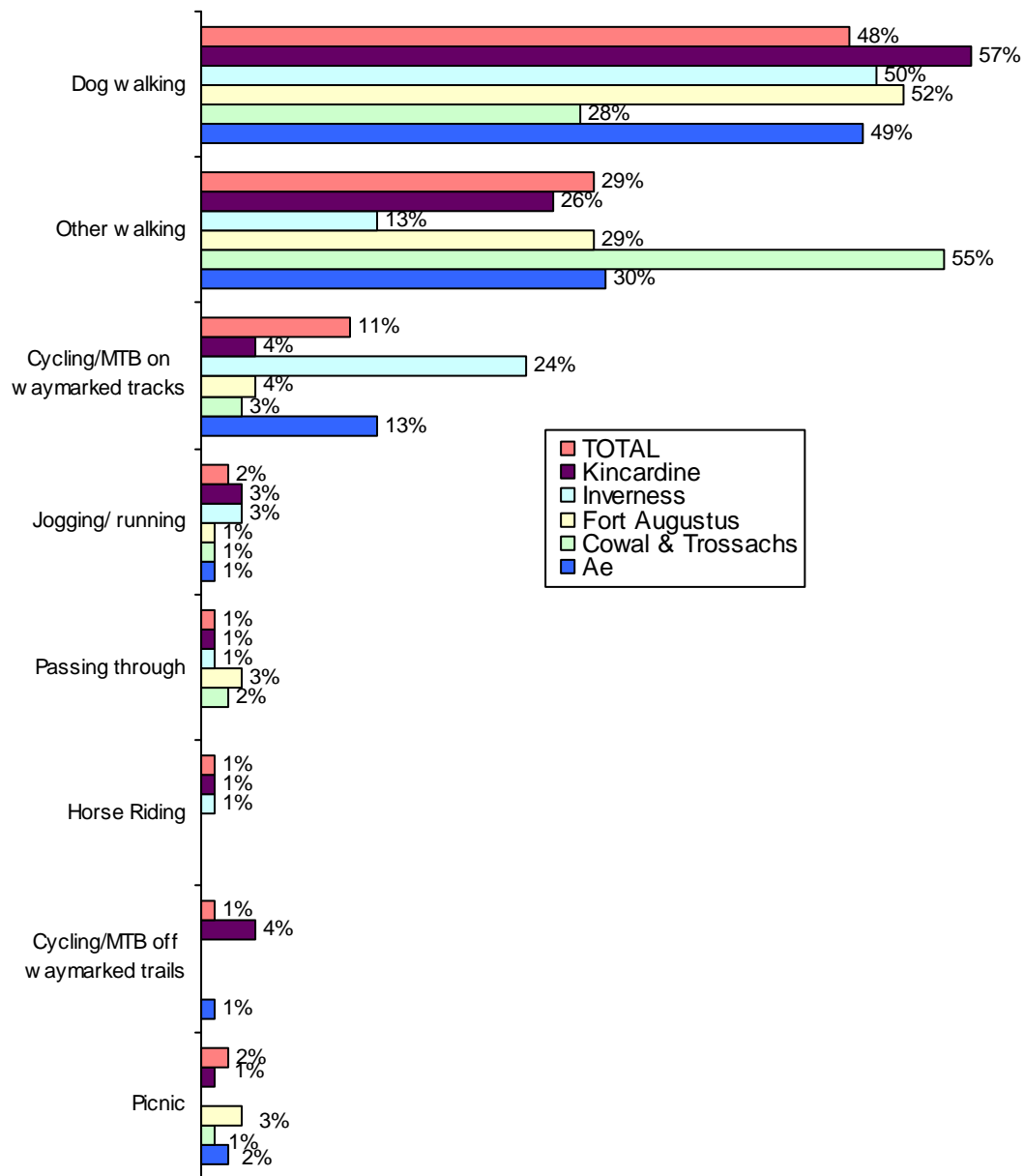
Further variations in the average duration of visits included the following:

- *Longer than average visits* – visitors who travelled more than 25 miles (2 hrs 2 mins), visitors who took part in cycling or mountain biking (2 hrs 1 min), those on an overnight trip (1 hr 48 mins) and those on their first visit (1 hr 44 mins).
- *Shorter than average visits* – those who travelled less than 6 miles (1 hr), those who walked to the forest (59 mins), those who rated the forest's influence as not important in their decision to visit the area (58 mins) and dog walkers (52 mins).

Activities undertaken in forest

The chart below illustrates the main activities undertaken by visitors to the five Forest Districts. The most popular activities overall were dog walking (48%), other walking (29%) and cycling/ mountain biking on waymarked tracks (11%).

Figure C-5 – Activities undertaken in the forest (%)
Base: All respondents (955)



Levels of participation in each of the activities varied between the districts. The highest proportion of dog walkers were recorded in Kincardine (57%), while more visitors were walking without a dog in Cowal & Trossachs (55%). Almost a quarter of visitors were cycling or mountain biking on waymarked tracks in Inverness (24%), although, due to the inclusion of the popular Learnie Red Rocks site, it should be noted that this result may not be representative of Inverness Forest District overall.

Other variations in levels of participation in the main activities included the following:

- *Dog walking (48% overall)* – visitors more likely than the average to take part in dog walking during their visit included those who visit at least once a week (73%), women (60%), those aged 60 or over (57%) and those on a day trip (53%);
 - *Other walking (29% overall)* – visitors more likely to walk without a dog during their visit included those who were on their first visit to the forest (41%), those who travelled between 6 and 25 miles (39%) and those on an overnight trip (38%);
 - *Cycling/ mountain biking on tracks (11% overall)* – people more likely to visit the forest to cycle/ mountain bike on waymarked tracks included those who travelled more than 25 miles (35%), those on their first visit to the forest (23%) and those between the ages of 16 and 34 (22%). Over half of visitors to the Achduchil and Learnie forest blocks took part in cycling or mountain biking (64% and 59% respectively).
-

Table C-17 below compares the key characteristics of forest users who took part in different activities with the profile of all adult visitors. Compared to the profile of all visitors, dog walkers were more likely to be female (53%) and on a local day trip of less than 6 miles (69%) while those who walked without a dog were more likely to be male (61%) and on a day trip of more than six miles (43%) or on an overnight trip (24%). The majority of cyclists/mountain bikers were male (86%) and a larger than average proportion were on a day trip of more than 6 miles (56%). Furthermore, two-fifths of cyclists were between the ages of 16 and 34 (39%). Dog walkers spent the least time in the forest while those who took part in cycling or mountain biking spent a little over 2 hours on site on average.

Table C-17 – Profile of users by activity (%)

Base: All respondents (955)/ Dog walkers (427)/ Other walkers (314)/ Cyclists (104)

	All visitors*	Dog walking	Other walking	Cycling/ mountain biking
Sex				
Male	57	47	61	86
Female	43	53	39	14
Age				
16-34	19	16	17	39
35-59	60	61	62	58
60+	19	23	20	3
Type of trip				
Local day trip (< 6 miles)	49	69	33	17
Other day trip (6 miles+)	33	21	43	56
Overnight trip	18	10	24	26
Average duration of visit				
	1hr 17mins	52 mins	1hr 41mins	2hrs 4mins

*Please note that data in table above are based upon respondent profiles and not full party composition data (as shown in Table C-1 and page ii of Executive Summary).

Improvements to forest

When visitors were asked what one thing, if anything, could be done to improve the forest they were visiting, around two-thirds of visitors suggested an improvement (66%) while the remaining 34% of visitors stated that they could not think of anything or stated that no improvements were needed.

As the table below shows, the most common suggestions related to improving the signposting, improvements to paths and reducing the amount of dog dirt in the forest.

Table C-18 One thing would like to improve about this woodland (%)

Base: All respondents (955)

	Ae	Cowal & Trossachs	Fort Augustus	Inverness	Kincardine	TOTAL
More/ better signposting	6	14	5	10	14	11
More/ better paths	7	7	9	9	7	8
Less dog dirt	7	2	-	1	6	4
More/better litter bins	2	5	5	2	3	3
More/ better seating	1	4	8	3	4	3
More/ better toilets	3	2	3	4	2	3
Clean up litter	4	1	1	3	2	2
Provide more facilities	5	1	1	3	1	2
Improve/ more difficult trails	-	*	1	6	1	2
Remove cut down trees from paths	1	1	3	2	3	2
Make paths wider/cut back foliage/grass	2	*	-	4	2	2
Segregate cyclists/horse riders from walkers	4	*	-	*	3	2
Better maintenance of the car park/ entrance	1	2	-	3	1	1
Stop/ reduce motorcycle use	1	*	-	3	-	1
Tidy up walking paths	1	1	4	3	-	1
More/ better parking	1	2	-	2	1	1
Cut down some trees	2	*	5	1	-	1
More variety of trees	1	2	-	*	1	1
Provide maps/ place to buy maps	-	1	3	1	2	1
Play area for children	1	1	-	*	1	1
Stop fly tipping	1	1	-	*	1	1
More cycle tracks	1	*	1	1	3	1
Enforce dogs on leads	1	1	5	-	-	1
Nothing/ fine as it is/ don't know	37	34	29	26	39	34

- nil respondents * fewer than 0.5%

A full list of the suggestions provided at each of the sites included in the survey is available separately. However, the following ‘verbatim’ comments illustrate some of the types of suggestions provided.

More or better signposting (11% overall)

“Better signage to show directions of where you are going.” (Rascarrel, Ae)

“Maps at beginning of routes to guide you and telling you how long walks will take. Also information on what wildlife you can expect to see.” (Cruach Tairbeirt, Cowal & Trossachs)

“The signposts could be a bit better, we got mixed up about what walk we were on.” (Enrick, Fort Augustus)

More or better paths (8% overall)

“Smooth the paths to make walking easier - got churned up in the floods a while back and its now a bit rough in places. Tripped up on the path once.” (Woodend & Ord Hill, Inverness)

“Road surfaces could do with improvement where broken up by forestry operations south side.” (Durriss, Kincardine)

Less dog dirt (4% overall)

“More dog waste bins, not just at car parks.” (Mabie, Ae)

“Encourage dog walkers to clean up after dogs and put dirt in undergrowth, not plastic bags.” (Kirkhill, Kincardine)

More/ better litter bins (3% overall)

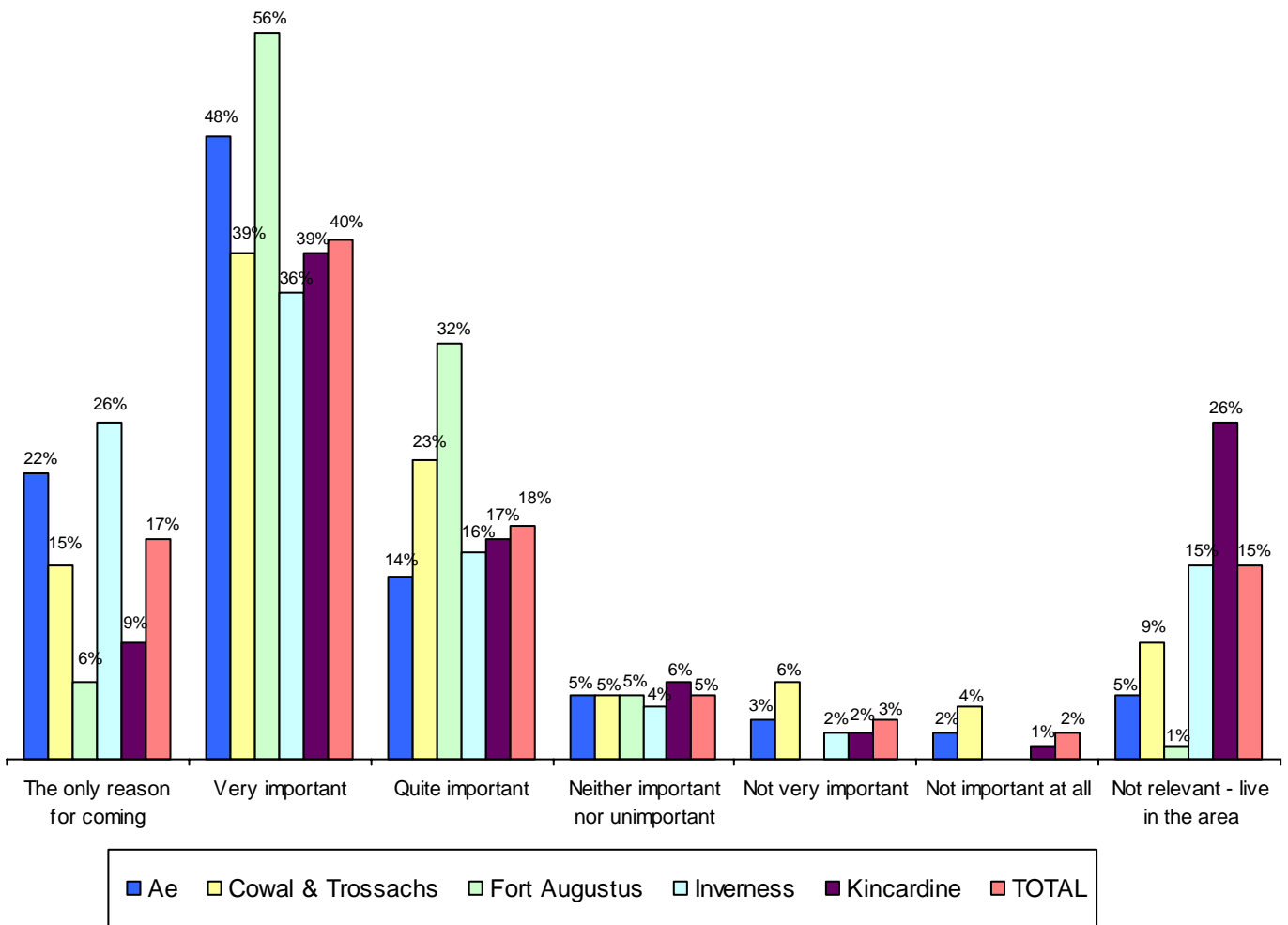
“Tidy up recycling area.” (Strathyre West, Cowal & Trossachs)

Influence of forest

Visitors were asked to indicate how important the presence of the forest they were visiting and its facilities had been in their decision to visit the area for their day out/ while on holiday.

As the chart below illustrates, just 2% of all visitors stated that the forest was 'not important at all' and 15% stated that the forest was 'not relevant' because they lived in the local area. However, a higher proportion indicated that the forest was either 'the only reason' (17%), 'very important' (40%) or 'quite important' (18%) in their decision to visit the local area.

Figure C-6 – Importance of forest and facilities in decision to visit area
Base: All respondents (955)



Visitors to the Inverness Forest District were more likely than the average to state that the forest visited was their ‘only reason for coming’ (26%). This response was also given by a higher than average proportion of those who took part in cycling or mountain biking, those who travelled more than 25 miles and those aged 34 and under (41%, 27% and 24% respectively).

However, higher proportions of visitors to forests in Cowal & Trossachs indicated that the forest was not very important or not at all important (10%), as did 10% of those on an overnight trip.

Slightly over a quarter of visitors to forests in Kincardine indicated that they lived in the area so the forest was not relevant in their decision to visit (26%).

By applying the proportion who stated that the forest was the 'only reason' for their visit (17%), to the estimated total number of visits taken to all five of the Forest Districts surveyed between July 2006 and June 2007 (2.4 million), it may be estimated that the choice of destination for at least 409,000 visits was directly related to the presence of a forest.

Expenditure and economic impact

Average spend per person per day

All visitors were asked to specify how much money they had or would personally spend on a number of categories that day and, if they were on an overnight trip, how much they had spent on their accommodation the previous night.

Across all respondents (day trippers and visitors on trips away from home), 47% spent nothing while 31% spent less than £20 in total. The average spend per person across all visitors (i.e. including those who spent nothing) was £18.

As the table below illustrates, 12% of all forest visitors had paid for overnight accommodation during the previous 24 hours (or would do so on the day of the interview), with an average spend amongst those who spent anything (i.e. excluding zeros) of £51.

Table C-19 Expenditure per person per day (row %)

Base: All respondents (955)

	Nothing	Up to £20	£21 to £50	Over £50	Average (including zeros)	Average (excluding zeros)
Overnight accommodation	88	4	4	4	£6	£51
Food and drink	66	27	5	2	£6	£17
Admission fees	95	5	*	*	<£1	£7
Shopping (non-routine)	93	5	2	*	£2	£24
Transport	69	27	4	*	£4	£11
Equipment	98	1	*	*	£1	£25
TOTAL	47	31	11	11	£18	£35

- nil respondents * fewer than 0.5%

The total average spend per visitor varied between Forest Districts and the different groups of visitors. The highest average spend per person, including those who spent nothing, was in Fort Augustus (£35, small sample size) while spend was lowest in Kincardine (£7).

In general, expenditure was highest amongst those on overnight trips (£66), those on their first visit (£50), those who travelled more than 25 miles (£44), those who took part in cycling or mountain biking (£34) and those visiting between the months of April and June (£25).

Conversely, expenditure was lowest amongst those who visit at least once a week (£5), dog walkers (£8), those on a day trip (£8) and those visiting during the January to March quarter (£12).

Economic benefits of forests

By applying information on average levels of expenditure per person per day, to data relating to the influence of forests on decisions to visit, it is possible to estimate total spend by visitors whose decisions to go to the area were affected by the presence of a forest to visit.

The following calculations apply these results to obtain an overall estimate:

- A: Total visits to forests = **2.6 million**
- B: Proportion of visits taken by people who stated that the forest and its facilities were their *only reason* or *very important* in their decision to visit the area. Excluding people who live locally (i.e. within 6 miles of forest) whose expenditure in the area is likely to have occurred regardless of the presence of the forest = **26%**
- C: Total visits taken due to forests and facilities (A x B) = **671,000**
- D: Average spend per person per day amongst those who visited due to forests and facilities = **£18**
- E: Estimated total spend per year by people who visited due to forests and facilities (C x D) = **£12.1 million**

This calculation suggests that visitors who were influenced to take their visit to an area due to the forest and its facilities spent approximately £12.1 million. This expenditure was made during the day of the forest visit and included overnight accommodation, food and drink, transport and non-routine shopping.

D. Summary of results by Forest District

The following table provides a summary of the key characteristics and variations in results obtained for each of the five Forest Districts.

	Ae	Cowal & Trossachs	Fort Augustus	Inverness	Kincardine
<i>Estimated total visits</i>	413,000	471,000	268,000	639,000	789,000
<i>Sex</i>	Over half of visitors were male (56%).	Fairly even male/female split.	Fairly even male/female split.	Over half of visitors were male (57%).	Fairly even male/female split.
<i>Age/ lifestage</i>	43% aged 45 or over.	Highest proportion of parties with children (17%).	An older age profile – 48% aged 45 or over.	An older age profile – 47% aged 45 or over.	Younger age profile – 36% aged 45 or over.
<i>Type of trip</i>	Slightly over three-quarters on a day trip (79%) – 45% on local day trip (<6 miles).	High proportion on overnight visit (34%). Slightly higher proportion on day trip of more than 6 miles (38%).	Highest proportion on overnight trip (37%). 46% on local day trip.	Over half on a local day trip (55%). Smaller proportion on overnight visit (17%).	Highest proportion on local day trip (59%) and 35% on a day trip of over 6 miles.
<i>Travel to forest</i>	Almost three-quarters travelled up to 15 miles to reach the site visited (73%).	Highest proportion of visitors who travelled more than 25 miles (23%). However, 44% travelled less than 6 miles.	Over half travelled less than 6 miles to reach the forest visited (56%).	Almost two-thirds travelled 6 miles or less (63%).	Vast majority (92%) travelled 15 miles or less to reach the site visited.
<i>Transport used</i>	The vast majority travelled by car / van (88%).	Slightly under three-quarters travelled by car / van (74%), while two in ten came on foot (20%).	More likely than most of other districts to walk to the site visited (29%).	More likely than most of the other districts to walk to the site visited (25%).	The vast majority travelled by car / van (90%).
<i>Frequency of visits</i>	Slightly over four-fifths were on a repeat visit (84%).	Most likely to be on first visit (28%).	Three-quarters were on a repeat visit (75%).	Slightly over four-fifths were on a repeat visit (83%).	Most likely to be on a repeat visit (91%).
<i>Duration of visits</i>	Longer than average visit of 1hr and 41 mins.	Longest average visit of 1hr and 49 mins.	Average visit of 1hr and 12 mins.	Shortest average duration of 59 mins.	One of shortest average visits of 1hr.
<i>Activities undertaken</i>	48% took part in dog walking, 13% cycled or took part in mountain biking.	55% took part in walking without a dog.	52% walked with a dog, 29% took part in other walking.	24% took part in cycling/mountain biking and 13% walked without a dog.	Highest proportion of dog walkers (57%).
<i>Expenditure per day</i>	£19	£28	£35	£21	£7

E. Appendices

- 1. All Forests Methodology Guidance**
 - 2. Questionnaire**
 - 3. Contact Sheet**
 - 4. Count Sheet**
 - 5. Example of a forest block**
 - 6. Confidence intervals for volume of visitors**
-

Appendix 1 - All Forests Methodology Guidance

1. Introduction

These guidance notes outline the visitor monitoring methodology which aims to predict visitor numbers in Scotland.

2. Purpose of survey

The purpose of the method outlined here is to provide reliable estimates of visitor numbers, visitor activities and profiles of different types of visitors.

The sampling strategy employed the same amount of effort to each selected forest block within the Forest District. Blocks were categorised by their local population density and their level of use, allowing for comparisons to be made between blocks with similar characteristics.

3.0 All Sites

The aim of this survey is to provide more reliable estimates of visitor numbers, visitor activities and profiles of different types of visitors than previously. It has been applied across the whole FC estate in Scotland over a three-year period, starting in June 2004 and took into account the whole range of forest types. Five Forest Districts in Scotland were covered each year.

The basis of this programme has been forest blocks and access points within forest blocks. Blocks were categorised by their level and type of use on the basis of local judgement. Local categorisation should allow for greater stratification of forest blocks within districts and across the country than if countrywide measures were applied.

Surveying took place at all access points within a sample of blocks from each Forest District (typically 20% of a district's blocks) and a statistical model was developed to apply the information gathered across similar access points and similar blocks within the districts.

3.1 Blocks

Forest Districts stratified their forests into blocks. A block is an area (of whole compartments) in which most visitors would be expected to stay in one visit. The block was categorised by level of population (within 15km) and level of use. Level of use and population density were categorised as high, medium or low based on local perception. A

range of data was gathered for each block by completing the Block Spreadsheet, including information such as the types of facilities available and types and numbers of access points. In addition some of the block characteristics were also collected, including whether the block is freehold or leasehold, and local staff's perception of whether it is used predominantly by locals or holidaymakers.

On the basis of the above information FC Economics & Statistics, FC Scotland and the districts chose which blocks would be surveyed. Choices were aimed at providing a range of use and population levels and a range of locations across the district. Approximately 20% of a district's blocks were selected for sampling.

When a leasehold block was selected for survey the district notified the landowner in advance, to inform that the work was due to go ahead.

3.2 Access Points

For each of the blocks selected for survey, information about the block's access points was gathered by Forest Districts and entered into the Access Point Spreadsheet, which included information such as access point type (official car park, unofficial car park, other entrance, or 'permeable boundary') and a grid reference for each access point. Completing this spreadsheet generated a unique reference number for each access point in the forest estate which was used during information gathering and analysis.

In addition, maps were produced to show the blocks to be surveyed with the access points, the access point code and each access point's unique number marked.

3.3 Selecting blocks

As noted in section 3.1, about 20% of each Forest District's blocks were sampled, giving around five to ten blocks per district to be monitored.

In each district roughly half of high usage blocks, a quarter of medium usage blocks and an eighth of low usage blocks were sampled, distributed across the different levels of population density categories.

Unusually busy blocks were treated separately and required a slightly different sampling system. Other 'atypical' blocks also required consideration, for example, blocks where there is only limited access, or blocks where more than half, say, of the boundary is permeable.

3.4 Sampling procedure

Section 4.3 below sets out the system that was used in the programme of counting and interviewing. Monitoring followed a predetermined programme and took place whatever the weather conditions.

4.0 Sampling

4.1 Contract for All Forests Monitoring Methodology

The fieldwork ran for a full 3 year period, from June 2004 to June 2007.

While Forestry Commission Scotland set out the sampling systems and locations and provided all relevant background information, the contractors were expected to adopt a flexible approach. In particular, FC Scotland, FC Economics & Statistics and the contractors met regularly to discuss progress and any issues which arose during the fieldwork. As a result, some modifications to the fieldwork schedules were required.

4.2 Sites for Monitoring

For each Forest District to be monitored, FC Scotland and Economics & Statistics selected 20% of each district's forest blocks for sampling. Each block was categorised based on level of use (high, medium or low) and population level within 15km (high, medium or low). Paragraph 3.1 describes the methodology for selecting blocks.

Within each block access points were split into the following codes:

- A = official car park
- B = unofficial car park
- C = other entrance
- D = permeable boundary

Every access point in the selected forest blocks was monitored. Monitoring consisted of counting visitor numbers into and out of access points and also conducting visitor surveys at access points.

Contractors were supplied with maps showing the location of blocks and access points.

4.3 Monitoring System

Observations (counts and interviews) were recorded at a variety of dates and times. The observation periods that were covered are:

- weekdays
- Saturdays
- Sundays
- early (sunrise-1000)
- middle (1000-1600)
- late (1600-sunset).

Monitoring was set out in a predetermined programme. Counting was carried out at all the access points for the selected blocks. Each access point had around 9 count observations (each lasting one hour) spread throughout the 12-month period (including public holidays) and across the three time periods and in each of the three 'day of week' periods. Around 50% of the counting observation period took place during the "middle" time period, with the remaining 50% split fairly evenly between the "early" and "late" time periods.

The matrix overleaf gives an example of how the times and days were distributed throughout the 12-month period. Access point 1 from block 1 (*), and access point 2 from block 1(♣) are indicated. They cover all time periods and all 'day of week' options and are spread over the 12-month fieldwork period.

Over the 12-month period;

* = Block 1, Access Point 1

♣ = Block 1, Access Point 2

Month	Weekday (rotate Mon-Fri)			Saturday			Sunday		
	Early	Mid	Late	Early	Mid	Late	Early	Mid	Late
January				*	♣				
February								*	♣
March	♣	*							
April					*	♣			
May							♣	*	
June	*	♣							
July					♣	*			
August								♣	
September		*							
October		♣							
November									*
December									

Each time an access point has an 'early' slot it should try to be at a different hour during the early period, for example the first one could be 0800-0900 and the second 0900-1000. Similarly for 'mid' and 'late' slots.

Each access point was added in a similar manner to (an extended version of) the grid above. It was possible, depending on geographic locations, for one 'counter' to complete 6 counting periods in one day, at different access points. At any time we only want to be counting at one access point in each block.

Counts and observations were made of people entering **and** leaving the access point.

b. Interviewing

Interviewing took place at each access point at the same time as counting was undertaken. Interviews were conducted as people **exited** the forest. The questionnaire used is provided in Appendix 2.

4.4 Recording and Return of Data

Count and interview observations were recorded as described above (4.3). The data was input, analysed and supplied electronically to FC Economics & Statistics.

Appendix 2 – Questionnaire

FORESTRY COMMISSION VISITOR MONITORING SCOTLAND (015794) - YEAR 1						OFFICE USE ONLY (1 - 6) 015794 (7-10) - - - - (11) 1	
Name.....						(12)	
Address.....						Sex: Male 1 Female 2	
Postcode						Location code: (see instructions)	
(27)	(28)	(29)	(30)	(31)	(32)	(33)	(13)
Telephone number.....						(14)	(15)
Date of interview		Day		Month		Age:	
		(34)	(35)	(36)		(22)	
Time of interview		(24 hours clock)				16-24 1	
		(37)	(38)	(39)	(40)	25-34 2	
						35-44 3	
						45-59 4	
						60+ 5	
Place of residence: (from address)							
(41)							
.....							
(42)							
SHOW CARD H							
Please indicate which of the following ethnic groups you consider that you belong to.							
White (23)		Black, Black Scottish, Black Welsh, Black English or other Black British (24)					
Scottish 1		Caribbean 1					
Welsh 2		African 2					
English 3		Any other Black background (WRITE IN) 3					
Other British 4						
Irish 5		Mixed					
Any other White background (WRITE IN) 6		Any Mixed background (WRITE IN) 4					
.....						
Asian, Asian Scottish, Asian Welsh, Asian English or other Asian British		Other ethnic background (WRITE IN) (25) (26)					
Indian 7						
Pakistani 8							
Bangladeshi 9							
Chinese 0							
Any other Asian background (WRITE IN) X							
.....							

DECLARATION: Interview conducted by me with respondent named above in accordance with instructions and MRS Code of Conduct

Interviewer.....Interviewer ID..... Date.....

Good Morning/Afternoon/Evening. I am conducting a survey on behalf of TNS Travel and Tourism on behalf of the Forestry Commission. The survey is to find out about who visits Forestry Commission woodland in Scotland and their reasons and frequency of their visits, and I would like to ask you a few questions.

The interview length depends on the answers you provide, but will last on average 8 to 10 minutes.

Here is a leaflet that explains your rights under our industry code and the data protection act.

First of all, can I check that you have not been interviewed already at this woodland site?

Yes – been interviewed already	1	Close
-----	----	-----
No – not been interviewed	2	Continue

Q.1a)	Have you travelled from home today?		
		(43)	
	Yes	1	
	-----	-----	
	No	2	
Q.1b)	And will you be returning home later today?		
		(44)	
	Yes	1	
	-----	-----	
	No	2	

<p align="center">IF RESPONDENT HAS TRAVELLED FROM HOME AND IS RETURNING HOME TODAY (CODE 1 AT Q.1a AND Q.1b) GO TO Q3. IF RESPONDENT HAS NOT TRAVELLED FROM HOME AND/OR IS NOT RETURNING HOME TONIGHT (CODE 2 AT Q1a AND/OR Q1b) ASK Q2</p>

Q.2a)	SHOW CARD A	
	IF RESPONDENT DID NOT TRAVEL FROM HOME TODAY ASK:	
	What type of accommodation did you stay in last night?	
	ALTERNATIVELY, IF RESPONDENT TRAVELLED FROM HOME BUT IS NOT RETURNING TONIGHT ASK:	
	What type of accommodation will you stay in tonight?	
	SINGLE CODE	(45)
	Tent/Caravan/Cabin	1
	Guest House/Bed and Breakfast	2
	Hotel	3
	Staying with friends/relatives	4
	Youth Hostel/Outdoor Centre	5
	Self-catering	6
	Other (SPECIFY)	
	

Q.2b) How many nights in total will you be spending **away from home** during your current trip?

(46) (47)

WRITE IN

--	--

Q.2c) And how many nights of these nights, if any, will you be spending **in Scotland**?

(48) (49)

WRITE IN

--	--

Q.2d) During your trip away from home, how many times will you set out specifically to visit a forest or wood? Please include your current trip.

REMEMBER TO INCLUDE CURRENT FOREST VISIT.

(50) (51)

WRITE IN

--	--

**ASK ALL
SHOW CARD B**

How far did you travel to get here today, from your home or accommodation?

SINGLE CODE. NOTE - THIS IS ONE DIRECTION ONLY. (52)

- Less than 6 miles/ 10 km 1
- 6 to 15 miles/ 11 to 25 km 2
- 16 to 25 miles/ 26 to 40 km 3
- 26 to 50 miles/ 41 to 80 km 4
- Over 50 miles/ Over 80 km 5
- Don't Know Y

SHOW CARD C

Q.4) What was the **main** type of transport you used to get here today?

SINGLE CODE TRANSPORT USED TO TRAVEL THE LONGEST PART OF THEIR JOURNEY (53)

- Car/ Van 1
- Minibus/Coach 2
- Public transport (scheduled bus, train, taxi, etc.) 3
- Bicycle 4
- Walked 5

Other (SPECIFY) (54) (55)

.....

Q.5a) Have you been to *this woodland site/ here** before?

*IF YOU ARE INTERVIEWING IN NON-WOODED AREA USE 'HERE'

(56)

Yes	1	Ask Q5b
-----	---	---------

No	2	Skip to Q6
----	---	------------

IF NO, SKIP TO Q.6

SHOW CARD D

- Q.5b) How often, on average, do you come here?
SINGLE CODE (57)
- | | |
|----------------------|---|
| More than once a day | 1 |
| Once a day | 2 |
| 1 to 3 times a week | 3 |
| 1 to 3 times a month | 4 |
| 1 to 3 times a year | 5 |
| Less often | 6 |
| Don't Know | Y |

**ASK ALL
SHOW CARD E**

- Q.6 What was your **main** activity during your visit today?
SINGLE CODE (58)
- | | |
|---|---|
| Dog walking | 1 |
| Other walking | 2 |
| Cycling/ Mountainbiking <u>on</u> waymarked tracks | 3 |
| Cycling/ Mountainbiking <u>off</u> waymarked tracks | 4 |
| Horse riding | 5 |
| Picnic | 6 |
| Seeing something in the woodland (e.g sculptures, ancient tree, waterfalls) | 7 |
| Just passing through | 8 |
- An organised event (PLEASE SPECIFY) (59)
-
- Other activity (SPECIFY)
-

- Q.7 How long have you been in *this woodland/ here** today?
*IF YOU ARE INTERVIEWING IN NON-WOODED AREA USE 'HERE'

RECORD TO THE NEAREST 15 MINUTES	Hours	Minutes
	(60)	(61) (62)

- Q.8a) Do you (or anyone else in your group) have a disability or special needs?
- | | | | |
|--|-----|-----------|------------|
| | Yes | (63)
1 | Ask Q8b |
| | No | 2 | Skip to Q9 |

IF NO, GO TO Q9

Q.8b) What type of disability or special need, do you (or anyone in your group) have?
CODE ALL MENTIONED (64)

Sight	1
Hearing	2
Mobility	3
Other (SPECIFY)	4

ASK ALL
 Q.9 If we could improve just **one** thing about *this woodland/ here**, what should it be?
SINGLE THING ONLY

..... (66)

..... (67)

..... (68)

SHOW CARD F
 Q.10 How important was the presence of this forest and its facilities in your decision..
DAY TRIPPERS: to come to this area for a day out?
THOSE STAYING AWAY FROM HOME: to visit this area while on holiday?
SINGLE CODE (69)

The only reason for coming	1
Very important	2
Quite important	3
Neither important nor unimportant	4
Not very important	5
Not important at all	6
Not relevant – I live in this area	7
Don't know	Y

.11 Next I would like to ask you about your spending **TODAY**.

OFFICE USE ONLY (1 - 10) REPEAT (11) 2
--

IF NOT STAYING AWAY FROM HOME (CODE 1 AT Q1A and Q1B) SKIP TO Q11B)
--

.11a) How much did you **personally** spend on accommodation (including food and drink at the accommodation) **LAST NIGHT**?

OR

IF RESPONDENT HAS NOT YET SPENT A NIGHT AWAY FROM HOME

How much do you personally expect to spend on accommodation (including food and drink at the accommodation) **TONIGHT**? Please **include** the amount spent/you will spend on any others (adults and children) for whom you have paid/will pay. If you are on a business trip please include any expenditure paid for by your company.

WRITE IN BELOW UNDER APPROPRIATE AREA. IF RESPONDENT DOES NOT KNOW EXACT AMOUNT AN ESTIMATE WILL DO. DO **NOT** LEAVE BLANK. IF NOTHING WRITE IN 0 0 0. IF DON'T KNOW WRITE IN YYY

11(b-h) **ASK ALL, SHOW CARD G**

Can you tell me how much you **PERSONALLY** have spent/will spend **TODAY** on each of the following categories. That is the amount you have spent today already plus that which you will spend later today. Please **include** the amount spent/you will spend on any others (adults and children) for whom you have paid/will pay. If you are on a business trip please include any expenditure paid for by your company.

IF RESPONDENT IS UNABLE TO GIVE SPENDING ON EACH CATEGORY ASK FOR THEIR TOTAL SPENDING TODAY

WRITE IN BELOW UNDER APPROPRIATE AREA. IF RESPONDENT DOES NOT KNOW EXACT AMOUNT AN ESTIMATE WILL DO. DO **NOT** LEAVE BLANK. IF NOTHING WRITE IN 0 0 0. IF DON'T KNOW WRITE IN D/K

	£		
	12	13	14
a) Accommodation (incl. food & drink)			
b) Food and drink (excluding at accommodation)	15	16	17
c) Admission fees (to attractions)	18	19	20
d) Shopping (non-routine, e.g. souvenirs)	21	22	23
e) Transport (including, petrol, taxis, public transport etc)	24	25	26
f) Equipment (e.g. hire of boat, horse-riding)	27	28	29
g) Other miscellaneous items	30	31	32
h) TOTAL	33	34	35

- Q.12a) Can you tell me the age group and sex of all the people with you on this visit. Please remember to **include** yourself. CODE BELOW
IF IN A LARGE GROUP/IN A COACH PARTY ONLY RECORD DETAILS OF THE IMMEDIATE PARTY

	Male	Female
Under 5 years	(36)	(44)
5 – 10 years	(37)	(45)
11 – 15 years	(38)	(46)
16 – 24 years	(39)	(47)
25 – 34 years	(40)	(48)
35 – 44 years	(41)	(49)
45 – 59 years	(42)	(50)
60+ years	(43)	(51)

- Q.12b) ALSO PLEASE RECORD THE NUMBER OF DOGS, BICYCLES AND /OR HORSES WITH RESPONDENT
WRITE IN BELOW IF NONE WRITE IN 0

Dogs	(52)
Bicycles	(53)
Horses	(54)

COLLECT CLASSIFICATION DETAILS AND THANK RESPONDENT

Appendix 3 – Contact sheet

<p>FORESTRY COMMISSION VISITOR MONITORING – SCOTLAND YEAR 1 (015794) CONTACT SHEET</p>	<p><u>OFFICE USE ONLY</u> (1-7) 015794A (8-11) _ _ _ _</p>																
<p>Location Code</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; width: 25px; height: 20px;"></td> <td style="border: 1px solid black; width: 25px; height: 20px;"></td> <td style="border: 1px solid black; width: 25px; height: 20px;"></td> <td style="border: 1px solid black; width: 25px; height: 20px;"></td> <td style="border: 1px solid black; width: 25px; height: 20px;"></td> <td style="border: 1px solid black; width: 25px; height: 20px;"></td> <td style="border: 1px solid black; width: 25px; height: 20px;"></td> <td style="border: 1px solid black; width: 25px; height: 20px;"></td> </tr> <tr> <td style="text-align: center; font-size: small;">(13)</td> <td style="text-align: center; font-size: small;">(14)</td> <td style="text-align: center; font-size: small;">(15)</td> <td style="text-align: center; font-size: small;">(16)</td> <td style="text-align: center; font-size: small;">(17)</td> <td style="text-align: center; font-size: small;">(18)</td> <td style="text-align: center; font-size: small;">(19)</td> <td style="text-align: center; font-size: small;">(20)</td> </tr> </table>									(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	<p>Interviewer (initials)</p> <p>_____</p>
(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)										
<p>Date of interview shift</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; width: 40px; height: 20px;"></td> <td style="border: 1px solid black; width: 40px; height: 20px;"></td> <td style="border: 1px solid black; width: 40px; height: 20px;"></td> </tr> <tr> <td style="text-align: center; font-size: small;">(21)</td> <td style="text-align: center; font-size: small;">(22)</td> <td style="text-align: center; font-size: small;">(23)</td> </tr> </table>				(21)	(22)	(23)	<p>Day</p>	<p>Month</p>									
(21)	(22)	(23)															
<p>Interview shift <u>start</u> time</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; width: 25px; height: 20px;"></td> <td style="border: 1px solid black; width: 25px; height: 20px;"></td> <td style="border: 1px solid black; width: 25px; height: 20px;"></td> <td style="border: 1px solid black; width: 25px; height: 20px;"></td> </tr> <tr> <td style="text-align: center; font-size: small;">(24)</td> <td style="text-align: center; font-size: small;">(25)</td> <td style="text-align: center; font-size: small;">(26)</td> <td style="text-align: center; font-size: small;">(27)</td> </tr> </table>					(24)	(25)	(26)	(27)	<p>(24 hour clock)</p>								
(24)	(25)	(26)	(27)														
<p>Interview shift <u>end</u> time</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; width: 25px; height: 20px;"></td> <td style="border: 1px solid black; width: 25px; height: 20px;"></td> <td style="border: 1px solid black; width: 25px; height: 20px;"></td> <td style="border: 1px solid black; width: 25px; height: 20px;"></td> </tr> <tr> <td style="text-align: center; font-size: small;">(28)</td> <td style="text-align: center; font-size: small;">(29)</td> <td style="text-align: center; font-size: small;">(30)</td> <td style="text-align: center; font-size: small;">(31)</td> </tr> </table>					(28)	(29)	(30)	(31)	<p>(24 hour clock)</p>								
(28)	(29)	(30)	(31)														
<p>Weather CIRCLE ONE NUMBER ON EACH ROW. USE 2 FOR MIDLING/ MIXED WEATHER</p>																	
Dry	1	2	3	Wet	(32)												
Hot	1	2	3	Cold	(33)												
Sunny	1	2	3	Overcast	(34)												
Calm	1	2	3	Windy	(35)												
<p>Number of completed interviews</p>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; width: 40px; height: 20px;"></td> </tr> </table>		(36)	<p><i>Reasons for refusals:</i></p> <div style="border: 1px solid black; height: 60px; width: 100%;"></div>													
<p>Total number of refusals</p>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; width: 40px; height: 20px;"></td> </tr> </table>		(37)														
<p>Special events IF THERE IS A SPECIAL EVENT ON DURING YOUR SHIFT PLEASE RECORD DETAILS OF NAME OF EVENT, TYPE OF EVENT AND ESTIMATED NUMBERS ATTENDING.</p>																	
<div style="border: 1px solid black; height: 30px; width: 100%;"></div>																	
<p>Comments on shift PLEASE PROVIDE DETAILS OF ANY PROBLEMS ENCOUNTERED DURING YOUR SHIFT SUCH AS LACK OF VISITORS TO INTERVIEW, PROBLEMS WITH INTERVIEW LOCATION ETC.</p>																	
<div style="border: 1px solid black; height: 60px; width: 100%;"></div>																	

Interviewer..... ID Date.....

Appendix 4 – Count sheet

FORESTRY COMMISSION VISITOR MONITORING – SCOTLAND YEAR 1 (015794) COUNT SHEET										OFFICE USE ONLY (1-7) 015794B (8-11) _ _ _ _																
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(13) (14) (15) (16) (17) (18) (19) (20)																										
Date of counts		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="3" style="text-align: center;">Day</td> <td colspan="3" style="text-align: center;">Month</td> </tr> <tr> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> </tr> <tr> <td style="text-align: center;">(21)</td> <td style="text-align: center;">(22)</td> <td colspan="2"></td> <td style="text-align: center;">(23)</td> <td></td> </tr> </table>			Day			Month									(21)	(22)			(23)					
Day			Month																							
(21)	(22)			(23)																						
Count <u>start</u> time		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> </tr> <tr> <td style="text-align: center;">(24)</td> <td style="text-align: center;">(25)</td> <td style="text-align: center;">(26)</td> <td style="text-align: center;">(27)</td> <td colspan="2"></td> </tr> </table> (24 hour clock)										(24)	(25)	(26)	(27)											
(24)	(25)	(26)	(27)																							
Count <u>end</u> time		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> </tr> <tr> <td style="text-align: center;">(28)</td> <td style="text-align: center;">(29)</td> <td style="text-align: center;">(30)</td> <td style="text-align: center;">(31)</td> <td colspan="2"></td> </tr> </table> (24 hour clock)										(28)	(29)	(30)	(31)											
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		Sunny	1	2	3	Overcast	(34)																			
		Calm	1	2	3	Windy	(35)																			
Parked cars IF YOU ARE AT A CAR PARK ENTRANCE (OFFICIAL OR UNOFFICIAL) PLEASE RECORD THE NUMBER OF CARS PRESENT AT THE START AND END TIMES.																										
Number of cars at start				<table border="1" style="width: 100%; height: 20px; border-collapse: collapse;"> <tr> <td style="width: 20px;"></td> <td style="width: 20px;"></td> </tr> </table>				Number of cars at end				<table border="1" style="width: 100%; height: 20px; border-collapse: collapse;"> <tr> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> </tr> </table>														
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WRITE IN TOTALS FROM COUNT SHEETS AT THE <u>END</u> OF 1 HOUR PERIOD (REMEMBER TO INCLUDE ANY CONTINUATION SHEETS USED) :																										
ENTERING							LEAVING																			
Visitors							Visitors																			
On foot	On bike	On horse	Staff	Dogs	Prams	Wheel-chairs	On foot	On bike	On horse	Staff	Dogs	Prams	Wheel-chairs													
(42)	(43)	(44)	(45)	(46)	(47)	(48)	(49)	(50)	(51)	(52)	(53)	(54)	(55)													
(56)	(57)	(58)	(59)	(60)	(61)	(62)	(63)	(64)	(65)	(66)	(67)	(68)	(69)													

Appendix 5 – Example of forest block – Block 28, Heathall, Ae



Appendix 6 - Confidence intervals for volume of visitors

This survey builds on a methodology developed for the Forestry Commission by Cheltenham and Gloucester College of Higher Education which suggested the most efficient way of balancing the cost of data collection at a large number of forest entrances spread over a wide geographical area with data precision and accuracy. Forest blocks were stratified by level of usage and population density within 15km of the site, but there is still a large degree of variability within a given forest block, from highly developed facilities with car parking and visitor centres to remote access points. Using this methodology, factors affecting the precision of the estimates are:

- The sampling of a proportion of forest blocks within each Forest District. Typically around 20% of forests are included within each district.
- While all surveying is undertaken at all access points to sampled forest blocks, there is a high variability of visitor numbers to different access points.
- A relatively small number of hours of surveying are undertaken at each access point and results are then weighted to cover all daylight hours.

The precision of the estimates of the volume of visitors to FCS woodland given in Section B of the report can be calculated using information about the number of forest blocks included in the survey, the number of access points at each of these blocks and the weights applied in the grossing up of results.

In calculating these estimates the usage and population categorisation used to stratify forest blocks and the proportion of sampled access points within each of the strata in each Forest District has also been taken into account (see pages 14 to 16 for details of the categorisation of each forest block).

On this basis the confidence intervals of total visits to each of the Forest Districts included in the Year 3 surveying are as follows.

Confidence intervals for estimates of total visits to surveyed FCS Woodland 2005/6
Estimate of visits \pm 95% CI

Kincardine	789,000 +/-316,000
Ae	413,000 +/-173,000
Cowal & Trossachs	471,000 +/-109,000
Fort Augustus	268,000 \pm 91,000
Inverness	639,000 +/-211,000
Total	2.6m +/-464,000

* Data from other sources including vehicle counters has been used to obtain estimate for Fort Augustus. Margin of error for this district is based upon standard errors associated with the data collected in manual counts.

The table shows the range of uncertainty related to sampling a proportion of entrances during restricted time periods at the woodlands in each of the five Forest Districts. The total estimated volume for the five Forest Districts will be in the range **2.1 to 3.1 million visits** each year, at the 95% confidence interval. The large confidence intervals are indicative of the fact that the entrances do not contribute equally to the total number of people visiting FCS woodland - entrances range from highly developed facilities, with car parking and visitor centres, to remote rural access points.

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