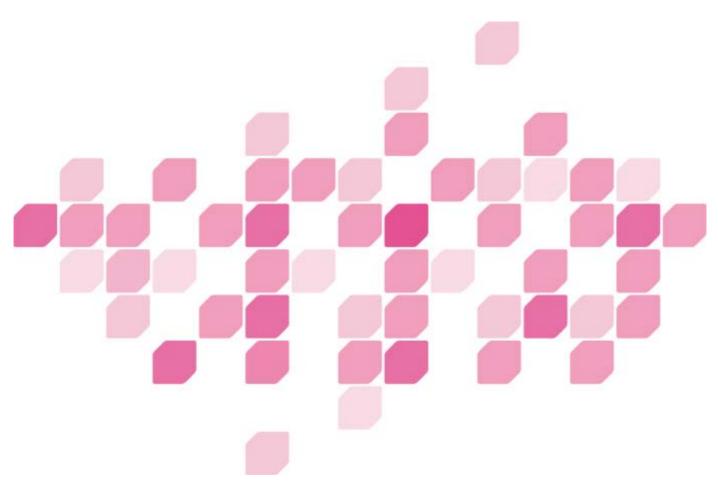
# **All Forests Visitor Monitoring**

Survey of visitors to FCS forests Year 2: June 2005 to May 2006

Forestry Commission Scotland December 2006





# **All Forests Visitor Monitoring** Survey of visitors to FCS forests

Year 2: June 2005 to May 2006

Forestry Commission Scotland December 2006

Prepared by:

**TNS** 

19 Atholl Crescent Edinburgh, EH3 8HQ

Telephone: 0131 656 4000 Facsimile: 0131 656 4001 e-mail: enquiries@tns-global.com

# **Contents**

Exe	ecutive Summary	i
Α.	Background and methodology	1
	Background	1
	Survey approach	2
	Estimating visitors numbers and weighting	10
В.	Volume of visitors to FCS forests	13
	Total visits to FCS forests included in survey	13
	Time of visits	16
	Total visits to all FCS forests	19
C.	Visitor and visit characteristics	20
	Party composition	21
	Visitor origin	24
	Type of trip	25
	Overnight visits	27
	Travel to the forest	31
	Frequency of visits	34
	Duration of visit	39
	Activities undertaken in forest	40
	Improvements to forest	46
	Influence of forest	48
	Expenditure and economic impact	53
	Economic benefits of forests	54
D.	Summary of results by forest district	55
E.	Appendices	56

## **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 districts. Due to the scale of this exercise, fieldwork is to be 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.
- This report is based on the results from the second year of surveying, between June 2005 and May 2006. During the second year of surveying, fieldwork was undertaken in the Scottish Lowlands, Moray, Lorne, Dornoch and Tay forest districts.
- In summary, the objectives of this survey are as follows
  - To measure volume of visitors across FCS forests;
  - o To obtain information on visitor profiles.
- Surveying took place from June 2005 to May 2006 with over 1,700 hours of fieldwork undertaken during 408 days. During this period 1,130 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.
- 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. As such, estimates of total numbers of
  visits to forests in each of the forest districts have been obtained, as detailed overleaf.

Estimates of total visits to FCS forests June 2005 – May 2006						
	Visits					
Scottish Lowlands	938,000					
Moray	360,000					
Lorne	297,000					
Dornoch	119,000					
_ Tay	717,000					
Total	2.4 million					

• Therefore, it may be estimated that around **2.4 million visits** were taken to forests in the five districts included in the survey during the second year of fieldwork.

#### Visitor and visit characteristics

#### Profile of visitors

- Overall, just over half of all visitors to FCS forests in these districts were male (51%).
   In terms of age profile, 48% of visitors were aged 45 years or over while 16% were aged under 16.
- The average party size of visitors to FCS woodland consisted of 1.9 people with nearly half visiting on their own (46%), 36% of visits were taken by couples/ groups of two and just under one-fifth were taken by groups of 3 or more (18%).
- Less than 1% of visitors to forests were members of ethnic minority communities, and, overall, almost three-quarters were Scottish (74%) while one-fifth were English (20%).
   Higher proportions of visitors from England were recorded in Lorne (39%).
- Some 7% of visitors stated that they or a party member had a disability or special need.
- Some 17% of visitors were on an overnight trip away from home when they visited the
  forest while the rest of the visitors were either on a local day trip from within 6 miles of
  the forest, or from a location further away (59% and 23% respectively).
- Of those visitors who were on overnight trips away from home, the main UK areas of origin were Scotland (45%), the Midlands (9%), North East England (8%) and Yorkshire (8%). Furthermore, 8% of those visiting forests were from overseas with places of origin including Germany, Australia, Israel, Sweden, Italy and the USA.

- A quarter of visitors who were on trips away from home stayed in a tent, caravan or cabin (26%). An equal number stayed in a hotel, guest house or bed and breakfast (26%) with a smaller proportion staying in self catering accommodation (22%) or staying at the home of a friend or relative (12%).
- On average, visitors who were on holiday spent 9.9 nights away from home and an average of 8.2 nights in Scotland. Just over a quarter (27%) were away from home on a short break of 1 to 3 nights and almost half were staying away from home between 7 and 14 nights (46%).
- 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 4.6 visits were taken to forests with 56% indicating that they had made 1 to 3 visits. Around a third of visitors had stated that they had made between 4 and 10 visits to forests during their holiday (32%).
- 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. On the whole, the largest proportion of visitors had travelled the shortest distances with 70% travelling under 6 miles and 16% travelling between 6 and 15 miles. Just 7% of visitors travelled more than 25 miles to the forest.
- Overall, 25% of visitors went to the forest they were interviewed in at least once a day, of which 9% stated that they had visited more than once a day. Most commonly, visitors went to the forest 1 to 3 times a week (28%).

## Trip profile

- The majority of visitors to forests travelled by car (72%), 23% walked to the forest while much smaller proportions used other types of transport. Just 2% of visitors used public transport to reach the forest.
- On the whole, visitors spent an average of 1 hour 17 minutes at the forest (this is time spent at the site and does not include travelling time). Half of the visitors spent 30 minutes to 1 hour (50%), 27% spent between 1 and 2 hours, 12% spent less than 30 minutes and 11% spent 2 or more hours.

- The most popular activities at the forests were dog walking (56%) and other walking (28%) whilst a much smaller proportion, cycled or mountain biked on waymarked tracks (5%). Participation levels differed between the forest districts with the highest proportion of dog walkers recorded in Moray (70%), more visitors walking without a dog in Lorne (39%), and one in ten visitors cycling/ mountain biking on waymarked tracks in the Scottish Lowlands (9%).
- When asked what one thing, if anything, could be done to improve the woodland they were visiting, just over two-thirds of visitors suggested any improvements (69%), while the remaining 31% of visitors stated that they could not think of anything or that no improvements were needed. The most frequently provided suggestions referred to included more and/or better signposting, more and/or better paths, reducing dog dirt, improving car park maintenance and providing more litter bins.

#### 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. Combining all the visitors (those on day trips and visitors on trips away from home), almost half spent nothing (48%) and a further 29% spent less than £20. The average amount spent per person across all visitors (i.e. including those who spent nothing) was £18.
- Average spend per visitor varied between forest district. The highest spend per person, including those who spent nothing, was in Lorne (£34) while the lowest spend was recorded in the Scottish Lowlands (£6).
- Visitors were also asked to indicate how important the presence of the forest and its facilities had been in their decision to come to the area for their day out/ holiday. Just 1% of all visitors stated that the forest was 'not important at all' and 10% stated that the forest was 'not relevant' because they lived locally. A larger proportion of visitors stated that the forest was either their 'only reason for coming' (17%) or 'very important' (43%), 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 2 of the survey, visitors who were influenced to take their visit due to the forest and its facilities spent approximately £8.2 million. This expenditure was made during the day of the forest visit and included overnight food and drink, accommodation, transport and non-routine shopping.

## 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 have also been commissioned by Forestry Commission Scotland (FCS) to undertake surveying using the same methods across all 15 of their forest districts. Due to the scale of this exercise, fieldwork is to be 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. During the second year, as described in this report, fieldwork was undertaken in the Scottish Lowlands, Moray, Lorne, Dornoch and Tay forest districts.

The key objectives of this survey are:

- To measure 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 second 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 June 2005 to May 2006 across the following Scottish forest districts:

- Scottish Lowlands 14 forest blocks.
- Moray 6 forest blocks.
- Lorne 11 forest blocks.
- Dornoch 11 forest blocks.
- Tay 10 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 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:

Scottish Lowlands		Mora	у	Lorne		
1	Brakenhirst	3	Monaughty	2	Ardmore	
2	Callendar	5	Roseisle	6	Aros Park	
3	Cardenden	7	Lossie	17	Quinish	
4	Carron Valley	9	Teindland	26	Lochaline	
5	Dean	11	Scootmore	34	Balcardine	
6	Devilla	20	Ordiequish	41	Cologin	
7	Drumbow			42	Duror	
8	Lochwood			47	Glen Creran	
9	Forth			49	Glen Lochy South Inverarden and	
10	Garshellach			55	Benmore	
11	Kirkpatrick			56	Inverawe	
12	Pendriech					
13	Selm Muir					
14	Torr Righ					
Dorno	ch	Tay				
5	Braehour	5	Glen Prosen			
11	Golticarg & Rumster	8	Faskally			
21	Rosal	12	Drummond Hill			
28	Guns Wood	16	South Rannoch			
45	Achany	17	Barracks			
49	Braelangwell	27	Murray's Hill			
52	Rogart	28	Deuchny Wood			
55	Skelbo	40	Blackcraig			
56	Harriets	55	Glen Sherup			
59	Morangie	59	Tentsmuir			
60	Lamington					

Each of the 5 forest districts varies somewhat in terms of the size of forest blocks, proximity to populated areas and facilities provided<sup>1</sup>. 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.

<sup>1</sup> A map illustrating a typical forest block and the different types of access point is provided in Appendix 5.

Fort Augustus FCS Woodland Year 2 Survey Blocks VISITOR MONITORING SURVEY

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

#### Scottish Lowlands Forest District

Scottish Lowlands covers the whole of Central Scotland from the Lothians and Southern Fife in the east to Ayrshire and Arran in the west. The District manages some 39,000 ha of national forest of which 11,000 ha are on Arran. These forests vary in size from 6 ha to 7000 ha across some 80 or so blocks in 15 local authorities. With over 70% of the population of Scotland within the District boundary, helping to deliver the Woods In and Around Towns (WIAT) initiative is an important core objective. Land acquisition in support of the Central Scotland Forest, and latterly the more widespread WIAT programme, has been underway since the District was formed in 1999 from the outlying areas of four neighbours. Within the last two years the District has developed management agreements with councils and public bodies to help manage their woodlands, especially in deprived areas such as parts of Glasgow. The District also oversees various large windfarms and major minerals sites, which is proving useful experience as urban woodland projects are developed.

Scottish Lowlands has a surprising array of biodiversity, including internationally important sites such as the extensive Arran Moors SPA, but also several Sites of Special Scientific Interest (SSSIs) and a range of key species including Black grouse, Red squirrel, Hen harrier, Merlin and a large population of Great crested newt. Although there are only small areas of semi-natural woodland, the District does have a concentration of restorable Lowland Raised Bogs. Heritage interest is equally wide ranging from megalithic (on Arran) through Iron age and Roman (along the Antonine Wall) to 18<sup>th</sup>, 19<sup>th</sup> and early 20th century industrial remains including the historic Wilsontown Ironworks. The central part of the District is criss-crossed with old railway lines, often now developed for public access networks, and a huge number of old mineshafts. As a result there is a wealth of opportunity to help local communities make the most of the woodlands on their doorsteps.

Enthusiastic Community & Environment, Planning & Implementation, Estates and Operations teams all play a vital part in delivering a complex and often complimentary set of objectives.

#### Moray Forest District

Extending from the Moray Firth in the North to the Cairngorms National Park in the South, Moray Forest District manages some 23,000 hectares of land on behalf of the Scottish Executive. The holding is almost exclusively within the Moray Council area, the exception being the western tip of Culbin Forest, which falls into Highland Region. The woodlands are very diverse ranging from the low-lying coastal woodlands of Culbin, Roseisle and Lossie,

Through to the upland forests of Morinsh and Glenfiddich and Blackwater with everything in between.

The district is home to high proportions of the GB populations of red squirrel and Capercaillie, with the woodlands being managed appropriately to benefit these endangered species.

The forest district covers a mosaic of rural and semi-urban settlement encompassing a network of small hamlets, villages and towns including Elgin, Lossiemouth, Buckie and Forres and Nairn on the coastal plain. Inland the settlements become smaller with Keith, Rothes, Aberlour and Dufftown being the predominant ones as you move south.

All the forests in Moray are well used by local residents and visitors but the coastal forests in particular play a significant role in recreational terms, being very busy, particularly in the summer. The public forests provide by far the largest opportunity for outdoor recreation, which ultimately has a very positive effect on the local tourist industry. Moray is a well-wooded county and as such the timber industry is a significant employer, both directly and in the downstream elements.

#### **Lorne Forest District**

Lorne Forest District lies in a scenic coastal area of Argyll. The forests are characterised by fine views in a spectacular mountain setting. The forests are well known for both their productive conifers and significant areas of native woodland.

Lorne Forest District is situated mainly in the North Argyll area of Argyll and Bute, but contains significant land holdings in the south and west of Lochaber and in the west of Perthshire. The Mull and Morvern part of the district has its own particular island type character and presents us with many of the challenges faced by an area with more difficult transport links.

The residential population within the Forest District boundary is estimated at 30,000 people, with some 70% living in Oban and the surrounding lower lying coastal zones. Mull and Morvern have a combined population of approximately 4,000, with this population being dispersed into smaller, more isolated communities, primarily along trunk road corridors.

Landholding of the Forest District totals 48,000 hectare of which 25,000 ha are productive conifer woodland. The balance of land area comprises mainly native woodlands and unplanted high ground with some residual agricultural holdings. Forestry Commission

Scotland ownership represents 15% of the total land area within the District's administrative boundary.

There are 29 varied and interesting recreation facilities within the district that are maintained to a high standard and it is expected that further expansion will be communityled or in partnership. Overall Lorne FD currently has 75 km of walking trails and 178 km of cycle routes.

The only sea eagle viewing hide in the country is situated on Mull and is one of the islands main tourist attractions.

### **Dornoch Forest District**

Dornoch Forest District covers approximately 61,000 hectares of which 40,0000 are currently under woodland cover. The district is the northern-most in Scotland and covers the counties of Sutherland, Caithness and a large part of Easter Ross.

Annual timber production is currently 160,000m3, but will rise rapidly once the younger forests planted in the 1970's and 80's come into full production. Woodland types vary from ancient native Pine woods in the straths and valleys of south to more commercial conifer plantations of Sitka spruce and Lodgepole pine planted on the moors and peatlands in the north and west.

The district is steeped in history with over 90 Scheduled Ancient Monuments (SAMS). These include everything from iron-age hill forts and Neolithic hut circles through to the remains of entire villages, brutally emptied during the notorious Highland Clearances in the early 1800's. The districts biological diversity is equally rich ranging from ancient native pinewoods in the south and east to vast areas of blanket bog in the Flow County of the north and west.

The Forest District aim is to practice sustainable multi-purpose forest management through which we hope to deliver a wide range of public benefits.

#### Tay Forest District

Tay Forest District covers an area of some 38,000 hectares in Perth & Kinross, Angus, Dundee and north-east Fife, from Rannoch Moor in the West to the North Sea and from Blair Atholl in the North to Kinross in the south.

The majority of the forest district is afforested with forest sizes ranging from less than 100 hectares (Paddockmuir) to some 5000 hectares (Barracks). The forests are extremely

diverse and include a wide range of site types – from peat bogs to sand dunes. They also form significant components of some of the area's most attractive landscapes. There is major recreational usage, focussed on areas like Tay Forest Park, Kinnoull Hill Woodland Park, Tentsmuir and Glen Doll. Conservation and biodiversity is integral to all forests, with some exceptional habitats such as the Black Wood of Rannoch and Laggan oakwood and some rare species such as capercaillie.

Main centres of population are Dundee, Perth, Arbroath, Montrose, Brechin, Blairgowrie, Pitlochry, Aberfeldy, Crieff, Cupar and St Andrews. In total a population of some 2-3 million people live within 1 hours drive of the District's forests.

#### 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 notes<sup>2</sup>. Essentially, this approach involves 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 should be 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, 5 or 6 of the fieldwork periods should be undertaken between 10am and 4pm (mid) while the remaining 3 or 4 were either undertaken before 10am (early) or after 4pm (late).

Following the first nine 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, allowing more interviews to be undertaken per hour, was increased for the final three months of fieldwork<sup>3</sup>.

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,

\_

<sup>&</sup>lt;sup>2</sup> See Appendix 1

<sup>&</sup>lt;sup>3</sup> 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.

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 appended<sup>4</sup>.

#### 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.

\_

<sup>&</sup>lt;sup>4</sup> See Appendix 4

#### Fieldwork achieved

Over the 12-month survey period more than 1,700 hours of fieldwork were undertaken during 408 days. During this period 1,130 interviews were achieved, an average of 0.6 interviews per hour. Of those people approached, 85% 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 2,500 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 2005/06 - Hours of fieldwork and interviews achieved by forest district

	Scottish Lowlands	Moray	Lorne	Dornoch	Tay	Total
Days of fieldwork undertaken	137	80	81	57	53	408
Hours of counting and interviewing	592	344	352	226	229	1,743
Interviews achieved	564	156	94	98	218	1,130
Average interviews per hour	0.9	0.4	0.3	0.4	0.9	0.6

### 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)	4) Early (before 10am)	7) Early (before 10am)
752 hours of daylight	150 hours of daylight	150 hours of daylight
2) Mid (10am to 4pm)	5) Mid (10am to 4pm)	8) Mid (10am to 4pm)
1,561 hours of daylight	310 hours of daylight	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 5 or 6 mid and 3 or 4 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, it has been possible to use this data 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 are provided under a separate cover.

## B. Volume of visitors 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 June 2005 to May 2006 period. Tables B-1 to B-5 provide estimates for each of the forest blocks included in the survey, together with details of the classification<sup>5</sup> provided to each forest and numbers of entrances.

Table B-1 - Estimated volume of visits to surveyed forests - Scottish Lowlands, June 2005 to May 2006

Block	Usage Classification (H/M/L)	Population Classification (H/M/L)	Official Car Parks	Unofficial Car Parks	Other Entrance	Permeable Boundaries	Total Entrances	Estimate of visits
1. Brakenhirst	L	Н	0	0	2	1	3	<1,000
2. Callendar	Н	Н	0	0	6	1	7	164,000
3. Cardenden	M	Н	0	0	7	2	9	36,000
4. Carron Valley	Н	Н	1	0	3	0	4	17,000
5. Dean	M	М	0	0	4	0	4	13,000
6. Devilla	Н	М	1	2	6	0	9	38,000
7. Drumbow	L	М	0	0	3	0	3	<1,000
8. Lochwood	M	Н	0	0	6	0	6	10,000
9. Forth	Н	М	0	0	6	2	8	4,000
10. Garshellach	L	L,	0	0	2	1	3	<1,000
11. Kirkpatrick	L	Н	0	0	2	0	2	6,000
12. Pendriech	М	М	1	0	2	0	3	16,000
13. Selm Muir	M	Н	0	0	2	0	2	5,000
14. Torr Righ	Н	Н	1	0	1	0	2	9,000

In the Scottish Lowlands Forest District, the largest number of visits were estimated to have taken place at Callendar (164,000 visits) while fewer than 1,000 visits were estimated to have taken place at both Drumbow and Garshellach. The total number of visits taken to all of the survey sites in this district was around 318,000.

\_

<sup>&</sup>lt;sup>5</sup> 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).

In Moray Forest District, East Monaughty and Roseisle received the highest number of visits (36,000 and 35,000 respectively) while Scootmore was estimated to have received fewer than 1,000 visits during the 12-month survey period. Some 92,000 visits were estimated to have been taken to all of the Moray sites included in the survey.

Table B-2 - Estimated volume of visits to surveyed forests - Moray, June 2005 to May 2006

	Usage	Population	Official					
	Classification	Classification	Car	<b>Unofficial Car</b>	Other	Permeable	Total	Estimate of
Block	(H/M/L)	(H/M/L)	Parks	Parks	Entrance	Boundaries	Entrances	visits
3 East Monaughty	М	Н	1	0	5	1	7	36,000
5 Roseisle	Н	Н	1	0	2	1	4	35,000
7 West Lossie	M	M	0	1	5	4	10	10,000
9 Teindland	M	L	0	1	4	1	6	3,000
11 Scootmore	L	L	0	0	6	1	7	<1,000
20 Ordiequish	M	M	2	0	7	1	10	8,000

In the Lorne Forest District, visits per block ranged from an estimated 20,000 at both East Aros Park and Glen Lochy South to around 1,000 per year at West Quinish, Glen Creran and Inverawe. The estimated total number of visits taken to blocks that were included in the survey was 104,000.

Table B-3 - Estimated volume of visits to surveyed forests - Lorne, June 2005 to May 2006

	Usage	Population						
	Classification	Classification	Official	Unofficial	Other	Permeable	Total	Estimate
Block	(H/M/L)	(H/M/L)	Car Parks	Car Parks	Entrance	Boundaries	Entrances	of visits
2 Mid Ardmore	L	Н	1	0	1	0	2	19,000
6 East Aros Park	Н	Н	4	0	3	0	7	20,000
17 West Quinish	L	Н	0	2	3	0	5	1,000
26 East Lochaline	L	M	5	0	3	0	8	9,000
34 Balcardine East	Н	Н	1	0	3	0	4	18,000
41 Cologin	М	Н	0	0	1	0	1	2,000
42 Duror	М	M	1	0	2	0	3	9,000
47 Glen Creran 49 Glen Lochy	L	M	1	0	2	0	3	1,000
South	М	M	0	0	3	0	3	20,000
55 Inverarden	М	M	1	0	2	0	3	4,000
56 Inverawe	L	Н	0	0	4	0	4	1,000

In the Dornoch Forest District, visits per block ranged from less than 1,000 at Braehour, Rosal, Braelangwell, Rogart and Harriets to 19,000 at Morangie. The estimated total number of visits taken to blocks that were included in the survey was around 53,000

Table B-4 - Estimated volume of visits to surveyed forests - Dornoch, June 2005 to May 2006

	Usage	Population						
	Classification	Classification	Official	Unofficial	Other	Permeable	Total	Estimate
Block	(H/M/L)	(H/M/L)	Car Parks	Car Parks	Entrance	Boundaries	Entrances	of visits
5 Braehour	L	L	0	3	1	0	4	<1,000
11 Golitcarg & Rumster	М	М	2	1	2	0	5	3,000
21 Rosal	L	L	1	1	0	0	2	<1,000
28 Guns Wood	М	M	0	1	2	0	3	2,000
45 Achany	М	M	1	0	3	1	4	4,000
49 Braelangwell	L	L	0	0	2	0	2	<1,000
52 Rogart	М	M	0	0	3	0	3	<1,000
55 Skelbo	М	M	1	0	3	2	5	11,000
56 Harriets	L	M	0	1	1	0	2	<1,000
59 Morangie	Н	Н	1	2	2	1	5	19,000
60 Lamington	М	M	1	0	3	2	4	12,000

Finally, in the Tay Forest District, the estimated number of visits per block during the 12-month survey period ranged from less than 1,000 at Glen Prosen and Murray's Hill to around 165,000 at Tentsmuir. The total number of visits at blocks in the Tay area that were included in the survey was around 273,000.

Table B-5 – Estimated volume of visits to surveyed forests – Tay, June 2005 to May 2006

	Usage	Population						
	Classification	Classification	Official	Unofficial		Permeable	Total	Estimate
Block	(H/M/L)	(H/M/L)	Car Parks	Car Parks	Other Entrance	Boundaries	Entrances	of visits
5. Glen Prosen	L	L	0	1	0	0	1	<1,000
8. Faskally	M	М	1	0	4	0	6	36,000
12. Drummond Hill	Н	М	3	0	2	0	5	22,000
16. South Rannoch	М	L	3	0	8	0	11	26,000
17. Barracks	L	L	0	0	2	0	2	1,000
27. Murray's Hill	L	М	0	2	2	0	4	<1,000
28. Deuchny Wood	Н	Н	1	1	4	0	6	16,000
40. Blackcraig	М	L	0	1	1	0	2	5,000
55. Glen Sherup	М	М	0	1	0	0	1	2,000
59. Tentsmuir	Н	Н	1	3	11	0	15	165,000

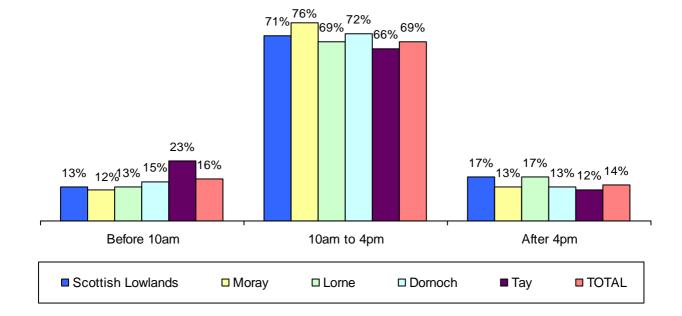
#### Time of visits

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 morning in Tay (23%) while more evening visits took place in the Scottish Lowlands (17%) and Lorne (17%).

Figure B-1 – Time of visit - FCS forests included in 2005/2006 survey (%) Base: Annual hours of daylight from 6.30am to sunset (4,135 hours)

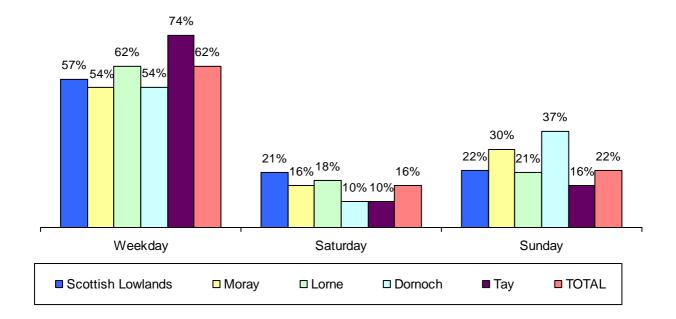


## Day of visit

Around three-fifths of visits to forests were estimated to have taken place on weekdays (62%), 16% were taken on Saturdays and 22% on Sundays.

A comparison of the estimates for each district suggests that a higher proportion of visits taken in the Tay district were on weekdays (74%) while over a third of visits taken in Dornoch were on Sundays (37%).

Figure B-2 – Day of visit - FCS forests included in 2005/2006 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 2005 - May 2006

Visits
938,000
360,000
297,000
119,000
717,000
2.4 m

Therefore, it may be estimated that around **2.4 million visits** were taken to forests in the five districts included in the survey during the second year of fieldwork.

## C. Visitor and visit characteristics

As well as counts being undertaken of visitors entering and leaving forests, some 1,130 interviews were undertaken with visitors. Each interview lasted approximately 10 minutes and used the questionnaire included in appendix 2.

With a total sample of 1,130, overall results on an unweighted random sample would be accurate to +/- 2.9% 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 much smaller, especially in the Lorne and Dornoch districts.

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

## **Party composition**

The average party size was 1.9 people with nearly half (46%) visiting on their own, 36% of visits taken by couples/ groups of two and 18% of visits taken by groups of 3 or more people (18%). 16% of all parties contained children aged under 16.

The average party size was slightly higher in the Dornoch and Tay forest districts (2.3 people) but lowest in the Scottish Lowlands (1.6). Average party size was highest amongst visitors who were on holiday (2.5), those on their first visit to the forest they were interviewed at (2.7), and those walking without a dog (2.4). On the other hand, party sizes were smaller amongst those aged 60 or over (1.7), people who lived locally to the forest they were interviewed at (1.7), those walking with a dog (1.6) and those who visited the forest they were interviewed at at least once a week (1.5). The proportion of parties containing children under 16 was highest in Dornoch (28%) but lowest in Lorne (10%).

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

Table C-1 – Sex and age profile of all party members (%)

Base: All party members (2,141)

	Scottish Lowlands	Moray	Lorne	Dornoch	Tay	TOTAL	Population of Scotland*
Sex							
Male	56	46	42	51	50	51	48
Female	44	54	58	49	50	49	52
Age							
Under 5	6	7	3	6	4	4	5
5 to 10 years	7	6	5	15	6	7	7
11 to 15 years	4	5	4	4	5	5	6
16 to 24 years	6	3	3	5	4	4	11
25 to 34 years	15	13	9	9	13	13	14
35 to 44 years	19	22	21	20	15	19	15
45 to 59 years	25	28	29	21	27	26	19
60+ years	18	16	26	20	26	22	21

\*Source: Census 2001

In general, the male, female split of visitors at the FCS forest districts included in the survey was fairly even (51%: 49%). However, there was a notably higher proportion of male visitors in the Scottish Lowlands (56%) and a higher proportion of female visitors in Lorne (58%).

In terms of age profile, just under half of all visitors were aged 45 or over (48%) while 16% were under 16. The age profile of visitors in each forest district varied with Dornoch having more visitors aged under 16 (25%), while more visitors visiting the Scottish Lowlands were aged between 16 and 34 (21%). By comparison the oldest age profile was recorded in Lorne where 55% of visitors were aged 45 or over.

As illustrated in the table, in comparison to the population of Scotland as a whole, visitors to FCS forests across the 5 districts had a similar sex profile but were more likely to be aged 35 or over (67% compared to 55%).

As table C-2 overleaf highlights, the vast majority of visitors to forests in Scotland were white (99%). Overall, around three-quarters of visitors were Scottish (74%) while one-fifth were English (20%). Lorne saw a higher proportion of English visitors than the other forest districts (39%) while the highest proportion of Scottish visitors were recorded in the Scottish Lowlands (89%).

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 (Dornoch forest district is within this area), 0.8% in Moray and 0.5% in Argyll & Bute (Lorne forest district is within this area). Approximating the Local Authority areas covering the Tay forest district as Fife, Angus and Perth & Kinross, 1.1% of the population across these three areas are members of a non-white ethnic group.

In terms of the Scottish Lowland forest district, this area includes parts of the following Local Authority areas: Clackmannanshire, East Ayrshire, East Dunbartonshire, East Lothian, East Renfrewshire, City of Edinburgh, Falkirk, Glasgow City, Inverclyde, Midlothian, North Ayrshire, North Lanarkshire, Renfrewshire, South Ayrshire, South Lanarkshire, West Dunbartonshire and West Lothian. Combined, 2.4% of the population from these areas are members of a non-white ethnic group.

**Table C-2 Ethnicity (%)**Base: All respondents (1,130)

	Scottish Lowlands	Moray	Lorne	Dornoch	Tay	TOTAL
Total White	100	99	96	100	100	99
White - Scottish	89	68	44	76	69	74
White – English	8	25	39	20	23	20
White – other	3	7	12	4	7	6
Asian	-	-	-	-	-	-
Black	-	-	-	-	*	*
Other	-	-	-	-	-	-

<sup>--</sup> nil respondents \* fewer than 0.5%

Overall, 7% of visitors stated that they or a party member had a disability or special need. Amongst these visitors, just under two-thirds indicated that the disability related to mobility (64%). By comparison, 34% of households in Scotland have at least one member with a long-standing illness, heath problem or disability (Scottish Household Survey).

Table C-3 Disabilities and special needs (%)

Base: All respondents (1,130)

	TOTAL
Groups containing members with disability or special need	7
Mobility	(64)
Hearing	(9)
Heart problems	(8)
Asthmatic	(5)
Sight	(4)

## Visitor origin

Visitors were asked to provide details of where they normally lived, allowing analysis of place of origin. The table below shows that 89% of visitors were from Scotland and 9% were from England. A small number of visitors came from Wales (1%), Northern Ireland (<1%) and overseas (1%).

Table C-4 Origin of visitors (%) Base: All respondents (1,130)

sase. All respondents (1,1	Scottish Lowlands	Moray	Lorne	Dornoch	Tay	TOTAL
Scotland	97	94	66	94	83	89
Aberdeen	*	1	-	-	-	*
Aberdeenshire	1	1	1	5	1	1
Angus	*	1	-	1	3	1 1
Argyll & Bute	_	-	42	-	1	6
Clackmannanshire	7	_	-	-	1	3
Dumfries & Galloway	*	1	_	-	-	*
Dundee	_	1	1	_	9	3
East Ayrshire	_	-	· -	_	-	_
East Dunbartonshire	1		_			*
East Lothian	*	_	1	_	_	*
East Renfrewshire	*	-	1	-	-	*
	1	-	2	-	3	2
Edinburgh	1	-	2	-	-	
Falkirk	34	-	-	1	1	13
Fife	30	1	-	-	23	18
Glasgow	4	1	3	2	1	2
Highland		1	3	74	1	5
Inverclyde	*	-	-	-	-	
Midlothian	1	-	-	-	*	*
Moray	-	86	1	7	*	13
North Ayrshire	1	-	-	-	-	*
North Lanarkshire	2	-	-	-	*	1
Orkney	-	-	-	1	-	*
Perth & Kinross	1	-	2	1	33	11
Renfrewshire	*	-	-	1	-	*
Scottish Borders	1	-	-	-	1	1
South Ayrshire	1	-	-	-	-	*
South Lanarkshire	2	-	2	-	1	2
Stirling	7	-	4	-	2	4
W. Dunbartonshire	*	-	2	-	*	*
West Lothian	2	1	-	-	-	1 1
Western Isles	*	1	=	=	-	*
England	1	3	28	2	14	9
North East	-	1	3	=	3	2
North West	1	-	5	_	1	1 1
Yorks & Humber		1	-	1	5	l i
East Midlands	*	-	4	-	1	1 1
West Midlands	_	1	1	_	1	1 1
East of England	1 -	1	3	_	1	1 1
Last of England London	_		2	-	*	*
South East	*	-	4	1	1	1
	*	-	4	I	! *	1
South West				-		
Wales	-	3	1	11	*	1 *
N. Ireland	-	-	3	-		
Overseas	1	-	2	2	2	1 *
Not Known	-	1	-	1	-	*

Base: Scottish Lowlands (564), Moray (158), Lorne (94), Dornoch (98), Tay (218) Total (1,130) - nil respondents \* fewer than 0.5%

The table highlights that while the majority of visitors to the Scottish Lowlands, Moray and Dornoch lived within the same area, larger proportions of visitors to Tay and, more notably, Lorne lived elsewhere in Scotland, England or further afield.

#### Type of trip

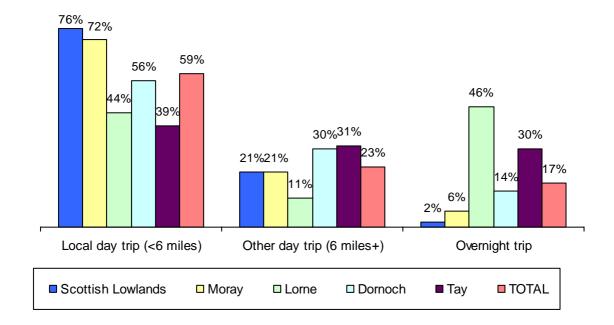
As Figure C-1 below illustrates, some 17% of all visitors were on an overnight trip away from home when they visited the forest while the remainder of visitors were either on a day trip from a local base, within 6 miles of the forest, or from a location further away (59% and 23% respectively).

The proportion of visitors on overnight trips away from home was highest in the Lorne and Tay districts (46% and 30% respectively) but lowest in the Scottish Lowlands (2%).

Other groups more likely to be on an overnight visit included first time visitors to the forest (66%) and those walking without a dog (34%).

The largest proportions of local day trippers were recorded in the Scottish Lowlands (76%) and Moray (72%) while almost one-third of visitors to both Tay and Dornoch were on day trips involving more than 6 miles travel (31% and 30% respectively).

Figure C-1 – Whether on a day trip or staying away from home (%) Base: All respondents (1,130)



## **Overnight visits**

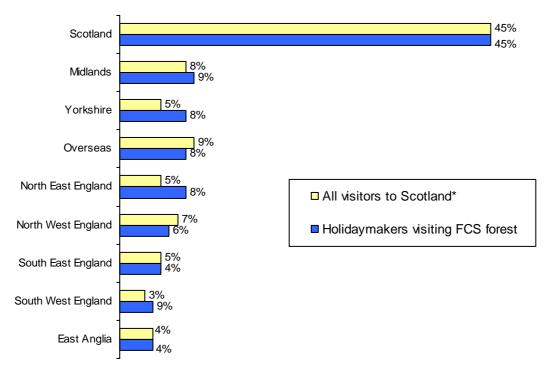
Visitors who were staying away from home were asked further questions relating to their trip.

#### 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%), the Midlands (9%), North East England (8%) and Yorkshire (8%). Tourists visiting Scotland from overseas accounted for 8% of visitors to the 5 forest districts with places of origin including Germany, Australia, Israel, Sweden, Italy and the USA.

The origin profile of all tourist trips taken in Scotland was very 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 (147)



\*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-5 shows a comparison of forest visitors with the overall profile of visitors to Scotland.

Around a quarter of visitors to forests stayed in a tent, caravan or cabin (26%) while an equal proportion stayed in a hotel, guest house or bed and breakfast (26%). Just over one-fifth stayed in self-catering accommodation (22%) and 12% stayed at the home of a friend or relative.

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-5 – Overnight accommodation used (%)**Base: All respondents on overnight trip from home (147)

	Holidaymakers visiting FCS forests	All visitors to Scotland*
Tent/ Caravan/ Cabin	26	7
Hotel, Guest House or B&B	26	41
Self catering accommodation	22	5
Home of friend or relative	12	37
Time share/ Holiday home	5	n/a
Motor home	4	n/a
Youth Hostel/ Outdoor Centre	3	2
Other	2	6

<sup>\*</sup> 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-6 below shows that an average of 9.9 nights were spent away from home and an average of 8.2 nights were spent in Scotland. Just over a quarter (27%) were away from home on a short break of 1 to 3 nights and just under half were staying away from home between 7 and 14 nights (46%).

Table C-6 – Duration of overnight trips (%)

	Nights away from home	Nights in Scotland
1 night	7	7
2 nights	12	13
3 nights	8	7
4 to 6 nights	15	17
7 to 14 nights	46	47
15+ nights	11	8
Average:	9.9	8.2

<sup>-</sup> 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 4.6 visits were taken to forests with just under three-fifths indicating that they had made 1 to 3 visits (56%). One-third of visitors on an overnight trip had made 4 to 10 visits to forests (32%).

Table C-7 – Number of visits taken to forests, including current trip (%)

Base: All respondents on overnight trip from home (147)

	Visits
1 visit	24
2 to 3 visits	32
4 to 10 visits	32
11 to 20 visits	8
20 to 50 visits	2
More than 50 visits	-
Average:	4.6

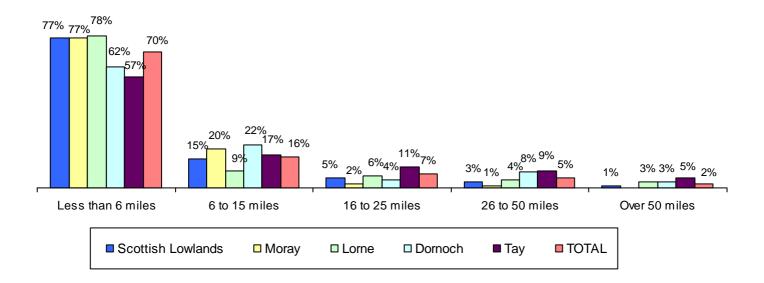
#### Travel to the forest

#### 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 (1,130)



On the whole, the largest proportions of visitors had travelled the shortest distances with 70% travelling under 6 miles and 16% 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 Lorne (78%), Moray and the Scottish Lowlands (both 77%). Conversely, visitors to Tay and Dornoch were more likely to have travelled further to reach the forests with 14% and 11% respectively travelling over 25 miles.

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

- Travelling less than 6 miles those who walked to the forest, visitors aged over 60, dog walkers and people who visited the forest at least once a week were more likely to have travelled the shortest distances (99%, 74%, 78% and 87% respectively).
- Travelling over 25 miles visitors staying away from home, those on their first visit and those who took part in cycling or mountain biking were more likely to have travelled over 25 miles to reach the forest (11%, 21% and 9% respectively).

# Transport used

As Table C-8 illustrates, the majority of visitors to forests travelled to the forest by car (72%). 23% walked to the forest while much smaller proportions used other types of transport. Just 2% of all visitors used public transport to reach the forest.

Table C-8 Mode of transport used to reach forest (%)
Base: All respondents (1.130)

	Scottish Lowlands	Moray	Lorne	Dornoch	Tay	TOTAL
Car/ van	57	87	62	82	86	72
Walked all the way	37	8	37	13	9	23
Bicycle	3	3	1	3	1	2
Public transport	1	-	-	-	-	*
Horse	1	1	-	-	*	1
Motorhome	-	-	-	-	2	1
Minibus/ coach	*	1	-	-	*	*

<sup>-</sup> nil respondents \* fewer than 0.5%

Running

Note: Data in the table above may not add up to 100% due to rounding and/ or 'Don't Know / Not Stated' answer options.

Visitors to forests in the Moray and Tay districts were most likely to travel to the forest by car (87% and 86% respectively). A higher proportion of visitors to the Scottish Lowlands and Lorne districts walked to the forest (both 37%).

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

- Travel by car – those travelling between 6 and 25 miles, people who visit the forest less than once per week and dog walkers (96%, 84% and 76% respectively).

- Walking visitors most likely to walk to the forest included people under 34 years of age, those travelling less than 6 miles to reach the forest and people visiting the forest at least once per week (25%, 33% and 32% respectively).
- 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 (4%).

# Frequency of visits

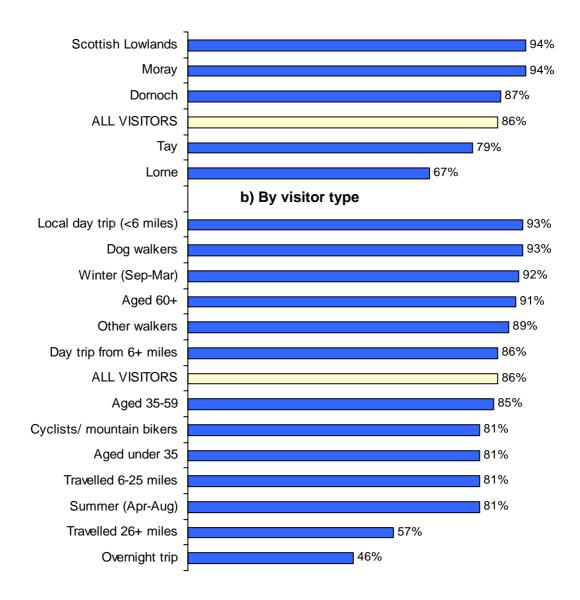
It must be remembered that the sampling frame is **visits** not **visitors**. Those who visit more frequently are more likely to be included in the sample. So the results quoted in this section are not representative of visitors.

Overall, 86% 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 include those interviewed in the Scottish Lowlands and Moray, local day trippers who had travelled less than 6 miles and dog walkers (94%, 94%, 93% and 93% respectively). Conversely the proportion of repeat visitors was lower in Lorne (67%), amongst those who visited while on holiday (46%) and those who had travelled over 25 miles to reach the forest (57%).

Figure C-4 –Proportions of repeat visitors (%) Base: All respondents (1,130)

a) By location



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

On the whole, some 25% of visitors went to the forest at least once a day, of which 9% stated that they visited more than once a day. Most commonly visitors went to the forest 1 to 3 times a week (28%).

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 122 visits to the forest they were interviewed at each year. The highest average number of visits per year were recorded in the Scottish Lowlands (165 visits) and Moray (139 visits) while the average number was lowest in Tay (79 visits).

Table C-9 Frequency of visits to forest (%)

Base: All respondents (997)

	Scottish Lowlands	Moray	Lorne	Dornoch	Тау	TOTAL
More than once a day	16	11	5	6	3	9
Once a day	20	17	15	11	13	16
1 to 3 times a week	34	35	23	31	19	28
1 to 3 times a month	15	17	4	19	17	15
1 to 3 times a year	7	10	11	13	22	12
Less often	3	4	7	5	6	5
On first visit ever	6	6	33	13	21	14
Average visits per year:	165	139	97	98	79	122

#### **Duration of visit**

Overall, the average length of visit to forests was 1 hour and 17 minutes. Half of visitors (50%) spent between 30 minutes and 1 hour at the forest, 12% stayed less than 30 minutes and 27% spent between 1 and 2 hours. The remaining 12% stayed for a longer duration.

As the table below shows, the average length varied between the five different forest districts. Dornoch had the shortest average visit at 59 minutes while Tay had the longest at an average of 1 hour and 35 minutes.

Table C-10 Amount of time spent in forest (%)

Base: All respondents (1,130)

	Scottish Lowlands	Moray	Lorne	Dornoch	Tay	TOTAL
Less than 30 minutes	18	8	9	8	9	12
30 minutes to 1 hour	48	65	54	69	41	50
Over 1 hour to 2 hours	28	20	24	17	31	27
Over 2 hours to 3 hours	4	6	7	3	10	6
Over 3 hours to 4 hours	2	1	1	1	3	2
Over 4 hours	1	-	4	1	6	3
Average duration of visit:	1 hr 8m	1 hr 3m	1hr 26m	59m	1hr 35m	1 hr 17m

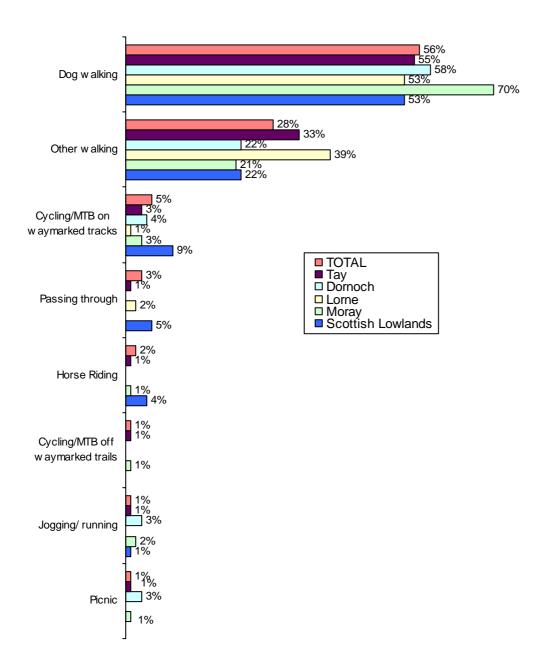
Further variations in the average duration of visits included the following:

- Longer than average visits visitors in June, July and August (1 hr 30 mins), visitors staying away from home (1 hr 44 mins), visitors who had travelled over 25 miles to the forest (2 hrs), first time visitors to the forest (1 hr 53 mins) and visitors walking without a dog (1 hr 44 mins).
- Shorter than average visits visitors in January, February and March (1 hr 8 mins), visitors on day trips (1 hr 11 mins), visitors who have travelled less than 6 miles to the forest (1 hr 4 mins), those who have walked to the forest (1 hr), those who visit the forest at least once a week (1 hr) and dog walkers (1 hr 1 min).

# **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 (56%), other walking (28%) and cycling/ mountain biking on waymarked tracks (5%).

Figure C-5 -Activities undertaken in the forest (%	%)
Base: All respondents (1,130)	



Levels of participation in each of the activities varied between the districts with dog walking accounting for the highest proportion of visitors to the forests (56%). The highest proportion of dog walkers were recorded in Moray (70%), while more visitors were walking without a dog in Lorne (39%) and one in ten visitors were cycling or mountain biking on waymarked tracks in the Scottish Lowlands (9%).

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

- Dog walking (56% overall) visitors more likely to take part in dog walking during their visit included those who visited in January, February or March (65%), women (64%), people aged 60 or over (62%), local day trippers who lived within 6 miles of the forest (63%) and people who visited the forest at least once a week (74%).
- Other walking (28% overall) visitors more likely to walk without a dog during their visit included those who visited in June, July or August (31%), those on overnight trips away from home (54%), visitors who had travelled more than 25 miles to the forest (42%), first time visitors (57%) and those who visit the forest less than once a week (40%).
- Cycling/ mountain biking on tracks (5% overall) people more likely to visit the forest to cycle/ mountain bike on waymarked tracks included those visiting between April and August (13%), those under 34 years of age (10%), and those who travelled more than 6 miles to the forest (19%).

Table C-11 below compares the key characteristics of the main users of the forests with the profile of all adult visitors. Compared to the profile of all visitors, dog walkers were more likely to be female (49%) and on a local day trip of less than 6 miles (72%) while those who walked without a dog were more likely to be male (64%) and on an overnight trip (34%). The majority of cyclists/ mountain bikers were male (81%) and a larger proportion were aged under 35 (38%). Furthermore, most cyclists were on a day trip from more than 6 miles away (60%). Dog walkers spent the least time in the forest while those who walked without a dog stayed the longest.

Table C-11 - Profile of users by activity (%)

Base: All respondents (1,130)/ Dog walkers (635)/ Other walkers (290)/ Cyclists (71)

base. All respondents (1,150)/ b	All visitors*	Dog walking	Other walking	Cycling/ mountain biking
Sex				
Male	57	51	64	81
Female	43	49	36	19
Age				
16-34	18	15	19	38
35-59	55	56	54	56
60+	26	29	27	6
Type of trip				
Local day trip (< 6 miles)	59	72	38	29
Other day trip (6 miles+)	23	18	27	60
Overnight trip	17	10	34	12
Average duration of visit	1hr 17mins	1hr 01min	1hr 44mins	1hr 26mins

<sup>\*</sup>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, just over two-thirds of visitors suggested any types of improvement (69%) while the remaining 31% of visitors stated that they could not think of anything or stated that no improvements were needed.

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

Table C-12 One thing would like to improve to woodland (%)

Base: All respondents (	(1,130)
-------------------------	---------

Base: All respondents (1,130)	Scottish Lowlands	Moray	Lorne	Dornoch	Tay	TOTAL
More/ better signposting	6	6	15	11	9	8
More/ better paths	13	4	5	11	4	8
Less dog dirt	2	16	2	6	7	6
Better maintenance of the car park/ entrance	4	3	9	2	2	4
More/better litter bins	3	2	3	4	6	4
More/ better seating	3	5	5	3	6	4
More/ better toilets	2	1	2	3	7	3
Clean up litter	5	3	1	-	4	3
Stop/ reduce motorcycle use	4	8	2	1	*	3
Tidy up walking paths	5	3	-	3	-	2
Provide more facilities	2	1	-	1	5	2
More/ better parking	2	1	1	2	2	2
Cut down some trees	1	2	3	3	1	2
More variety of trees	1	-	1	3	1	1
Tidy up car parks	1	1	1	3	1	1
Provide maps/ place to buy maps	1	1	1	-	1	1
Picnic/ BBQ area	*	1	-	1	1	1
Improve/ more difficult trails	2	1	-	3	*	1
Nothing/ fine as it is/ don't know	26	34	36	26	35	31

<sup>-</sup> nil respondents \* fewer than 0.5%

Variations between districts included more suggestions for better paths in the Scottish Lowlands (13%), more mentions of reducing dog dirt in Moray (16%) and more suggestions regarding signposting improvements in Lorne (15%).

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

# More or better signposting (8% overall)

- "signage from main A82 would help in locating access (easy to miss at present)" (Mid Ardmore, Lorne)
- "clearer route markings as some of the pathway junctions can be confusing" (Skelbo and Harriets, Dornoch)
- "information boards showing walks including their length; signage of paths could be better, at the moment paths well marked by colour but no idea how long the path is" (Garshellach & Pendriech, Scottish Lowlands)
- "a sign would be useful, approximately 200 yards after gate, where the forest track splits into two (mainly for benefit of first time visitors)" (West Quinish, Lorne)

#### More or better paths (8% overall)

- "put a path alongside the burn reinstate the path that used to be there, the new paths are very good, but the old ones are getting overgrown" (Roseisle, Moray)
- "more even paths as we have a pushchair" (Scottish Lowlands)
- "more tracks, better maintained tracks signposting with mileage distances signs" (North Devilla, Moray)

#### Less dog dirt (6% overall)

"more dog refuse bins, not enough of them in the woodland area" (Callendar, Scottish Lowlands)

#### Better maintenance of car park/ entrance (4% overall)

- "pot holes in car park" (South Devilla, Scottish Lowlands)
- "organisation of car park very poor" (Glen Prosen, Dornoch)

# More/ better litter bins (4% overall)

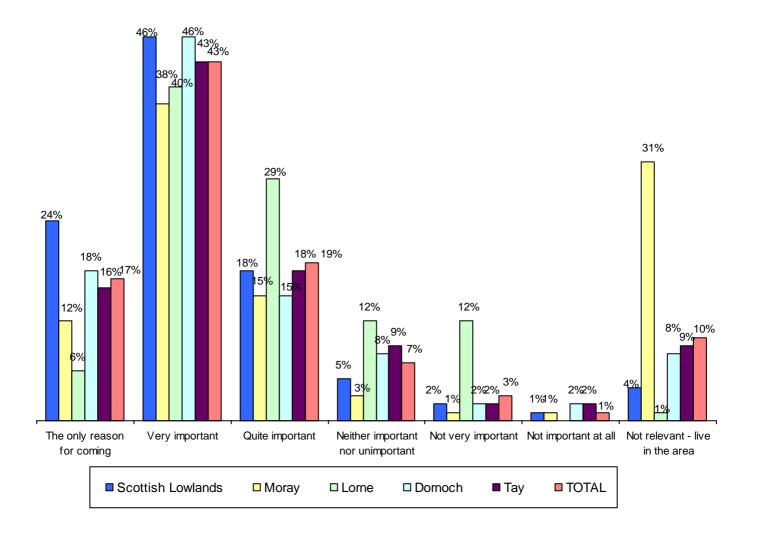
- "more litter bins and encourage people to use them" (Cardenden, Scottish Lowlands)
- "litter bins in parking area and (on) walks are required" (East Monaughty, Moray)

#### 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 1% of all visitors stated that the forest was 'not important at all' and 10% 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' (43%) or quite important (19%) in their decision to visit the local area.

Figure C-6 – Importance of forest and facilities in decision to visit area Base: All respondents (1,130)					



Visitors to the Scottish Lowland forest and those visiting as cyclists/ mountain bikers were more likely to state that the forest was their 'only reason for coming' (24% and 35% respectively).

However, higher proportions of visitors to forests in Lorne indicated that the forest was not very important or not at all important (12%) while some 31% of visitors to forests in Moray indicated that they lived in the area so the forest was not relevant in their decision to visit.

Some 17% of visitors who lived at least 6 miles from the forest stated that the forest and its facilities was either their 'only reason for visiting the area' or 'very important' in their decision.

By applying this proportion to the estimated total number of visits taken to all five of the forest districts surveyed between June 2005 and May 2006 (2.4 million), it may be

estimated that destination choices for at least 406,000 visits were influenced by 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 personally spent on the following 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), 48% spent nothing while 29% 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, 13% of all forest visitors had paid for overnight accommodation during the previous 24 hours, with an average spend amongst those who had spent anything (i.e. excluding zeros) of £46.

Table C-13 Expenditure per person per day (row %)

Base: A	I respondents	(1.130)

	Nothing	Less than £20	£21 to £50	Over £50	Average (including zeros)	Average (excluding zeros)	
Overnight accommodation	87	4	3	5	£6	£46	
Food and drink	77	18	3	1	£5	£24	
Admission fees	92	6	*	*	<£1	£6	
Shopping (non-routine)	92	5	1	1	£2	£23	
Transport	67	28	4	1	£5	£14	
Equipment	98	1	*	-	<£1	£20	
TOTAL	49	29	10	10	£18	£36	

<sup>-</sup> 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 Lorne (£34) while spend was lowest in the Scottish Lowlands (£6).

In general, expenditure was highest amongst those aged between 35 and 59 years of age (£21), those on overnight trips (£63), those who travelled between 6 and 25 miles to the forest (£31), first time visitors (£56) and those walking in the forest without a dog (£30).

Conversely, expenditure was lowest amongst those aged 60 and over (£11), day trippers (£9), those who visit the forest at least once a week (£7), dog walkers (£10), cyclists and mountain bikers (£14).

Further to this, expenditure was highest among people visiting the forest during June, July and August (£30) and lowest among those visiting between January, February and March (£9).

#### **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 visit 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 = 2.4 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 = 17%
- C: Total visits taken due to forests and facilities  $(A \times B) = 406,000$
- D: Average spend per person per day amongst those who visited due to forests and facilities = £20
- E: Estimated total spend per year by people who visited due to forests and facilities (C  $\times$  D) = £8.2 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 £8.2 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.

	Scottish	Moray	Lorne	Dornoch	Тау	
	Lowlands					
Estimated total visits	938,000	360,000	297,000	119,000	717,000	
Sex	Over half of visitors are male (56%).	Fairly even male/female split.	Over half of visitors are female (58%).	Even male/female split.	Fairly even male/female split.	
Age	Highest proportion of those aged 16 to 34 years (21%)	Half aged 35 to 59 (50%)	Half aged 35 to 59 (50%) and a quarter 60 or over (26%). Lowest proportion with children (10%).	Largest proportion of parties containing children (28%).	Over half aged 45 or over (53%).	
Type of trip	Three quarters on a local day trip (76%). Very few on overnight trips (2%).	Just under three- quarters on a local day trip (72%).	Highest proportion on overnight trips (46%). Next highest proportion on local day trip (44%).	Just under three- fifths on local day trip (56%).	Fairly even split between local day trips (39%), non-local day trippers (31%) and those on overnight trips (30%).	
Travel to forest	Just over three quarters travelling less than 6 miles (77%).	Just over three quarters travelling less than 6 miles (77%).	Just over three quarters travelling less than 6 miles (78%).	Most travelling less than 6 miles (62%) but 11% travelling over 25 miles.	Over half travelling less than 6 miles (57%) but 14% travelling over 25 miles.	
Transport used	Just under three fifths travel by car/van (57%) while over a third walk (37%).	The vast majority travel by car/van (87%).	Just over three fifths travel by car/van (62%). Just over a third walk (37%).	The vast majority travel by car/van (82%).	The vast majority travel by car/van (86%).	
Frequency of visits	High proportion of repeat visitors (94%). 36% visit at least once a day.	High proportion of repeat visitors (94%). 28% visit at least once a day.	High proportion of first time visitors (33%).	Mix of first time visitors (13%) and frequent visitors (17% daily).	Highest proportion of first time and infrequent visitors. Lowest average visits per year.	
Duration of visits	Average 1 hr 8 mins	Average 1 hr 3 mins	Average 1 hr 26 mins	Shortest duration of visit – 59mins	Longest duration of visit – 1 hr 35mins	
Activities undertaken	Majority walking with or without a dog (53% and 22% respectively). Highest proportion of mountain bikers (9%).	Majority walking with a dog (70%).	Highest proportion of walkers without a dog (39%).	Majority walking with or without a dog (58% and 22% respectively). Small proportion cycling/mountain biking (4%).	Majority walking with or without a dog (55% and 33% respectively).	
Expenditure per day	£6	£25	£34	£19	£23	

# 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.

Significant changes to the previous monitoring system have been made. These include changing to a national survey and placing greater emphasis on the accuracy of the visitor number data. The survey will run over a 3 year period.

Forest Enterprise (FE) has been collecting visitor monitoring information throughout Great Britain since 1996. There were 2 main elements to the programme:

## interviewer based surveys

This programme operated annually with around 12 Forest Districts (Forest Districts are management areas – 30 across GB) taking part each year, so that all Forest Districts were covered within three years. Generally, however, only one or two sites per Forest District were monitored each time. The aim was to find out about the types of visitors using FE woodlands.

#### counting numbers of visitors at a range of sites

This programme operated in all Forest Districts with around 140 mechanical counters installed on a permanent basis. The national aim was to measure changes in visitor numbers between years at the selected sites where counters were installed. The counter data also met some local needs.

# 2. Purpose of survey

The previous visitor monitoring approach focused on a core number of high-developed sites. Generally we know little about visitor use elsewhere and in particular about local use of woodlands.

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

The sampling will apply the same amount of effort to each selected forest block within the Forest District. Blocks will be categorised by their local population density and their level of use. This will allow 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 will be applied across the whole FC estate in Scotland over a three year period, starting in spring 2004 and will take into account the whole range of forest types. Five Forest Districts in Scotland will be covered each year.

The basis of this programme will be forest blocks and access points within forest blocks. Blocks will be 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 will take 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 will be developed to apply the information gathered across similar access points and similar blocks within the district.

# 3.1 Blocks

Forest Districts will stratify 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 will be categorised by level of population (within 15km) and level of use. Level of use and population density will be categorised as high, medium or low and will be based on local perception. A range of data will be gathered for each block by completing the Block Spreadsheet. This will include information such as the types of facilities available and types and numbers of access points. In addition some of the block characteristics are also required. These include 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 district will choose blocks to be surveyed. Choices will be 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 will be selected for sampling.

When a leasehold block is selected for survey the district should notify the landowner, in advance, that the work is due to go ahead.

#### 3.2 Access Points

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

In addition Forest Districts will produce maps to show the blocks to be surveyed with the access points, the access point code and each access point's unique number marked.

Permeable boundaries will be treated separately. For mapping they will be shown as a line and given one access code. Where entry points can be identified they will be assigned as an access point and each access point will be treated as described above. If the permeable boundary cannot be treated by this method a separate methodology will be prepared.

#### 3.3 Selecting blocks

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

The matrix below will be used as an idealised template for selecting the proportion of blocks in each category to be sampled. We wish to choose blocks to sample in the same proportions as indicated here. As it is likely that a Forest District's blocks won't be spread evenly across the matrix we will take account of the actual number of blocks in each cell and some adjustment will be required when selecting blocks.

BLOCK SELECTION		USAGE				
MATRIX		HIGH	MEDIUM	LOW		
POPULATION	HIGH	2		1		
	MEDIUM					
	LOW	2		1		

Unusually busy blocks may have to be treated separately and may require a slightly different sampling system. In most cases we will wish to sample these blocks. Other 'atypical' blocks also require 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

Sections 4.3a and 4.3b below set out the system that will be used in the 2005 programme contract for counting and interviewing. Monitoring will follow a predetermined programme and will take place whatever the weather conditions.

# 4.0 Sampling

## 4.1 Contract for All Forests Monitoring Methodology

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

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

# 4.2 Sites for Monitoring

For each Forest District to be monitored, FC Scotland and Economics & Statistics have selected 20% of each district's forest blocks for sampling. Each block has been 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 have been 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 must be monitored. Monitoring will consist of counting visitor numbers into and out of access points and also conducting visitor surveys at access points.

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

#### 4.3 Monitoring System

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

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

Monitoring will be set out in a predetermined programme. An example template is shown below.

Counting will be carried out at all the access points for the selected blocks. Each access point will have a total of 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 60% of the counting observation periods will take place during the "middle" time period, with the remaining 40% split between the "early" and "late" time periods.

The matrix below gives an example of how the times and days might be 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			Saturday			Sunday		
	(rotate Mon-Fri)								
	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 should be added in a similar manner to (an extended version of) the grid above. It should be possible for one counter to complete 6 counting periods in one day, at different access points. Obviously the geographic location of access points to be surveyed in any one day will need to be considered. At any time we only want to be counting at one access point in each block. E.G. On a specific day at 10am counting can be going on at Block 1, Access point 1 and Block 2 access point 1, but not at Block 1 access point 1 and Block1 access point 2.

Counts and observations will be made of people entering and leaving the access point.

# b. Interviewing

Interviewing will take place at each access point at the same time as counting is undertaken. Interviews will be conducted as people **exit** the forest. The questionnaire used is provided in Appendix 2.

# 4.4 Recording and Return of Data

Count and interview observations will be recorded as described above (4.3a and 4.3b). The data should be input and supplied electronically to FC Economics & Statistics in a format which can be imported into SAS analysis system.

#### 4.5 Contact with Forest Districts

Contractors will liase on a weekly basis with the relevant Forest Districts. They should contact the Forest District on Friday morning each week to let the district know their timetable for the following week. The district will provide information on any forest activity that may affect the contractor and the observations.

In addition, when the contractor contacts the district each Friday, the district will let them know of any permitted events/activity that are due to take place in the survey blocks. The information will include the type of event/activity, the date, the block and the expected numbers. The contractor will note this on the relevant batch sheet(s)

The Forest District will supply the contractor with copies of local leaflets for issue to the public if information is requested.

Contractors should carry photo identification at all times.

# Appendix 2 - Questionnaire

	LOFFIOE LIGE	ONII V				
FORESTRY COMMIS	OFFICE USE					
<b>SCOTLAND (015794)</b>	- VEAR 1				(1 - 6) 01579	4
3001 LAND (013794)	- I LAN I				(7-10)	
					(11) 1	
Nama					(11)	(40)
Name				_		(12)
				Sex:	Male	1
Address					Female	2
Destands					antion and a loss inst	mustions)
Postcode				LO	cation code: (see inst	ructions)
(27) (28)	(29) (30) (	31) (32)	(33)			
(=: / (==)	() () (	, (,	()			
				(4.2) (4	4) (45) (46) (47) (40)	(40) (20) (24)
				(13) (14	4) (15) (16) (17) (18)	(19) (20) (21)
Telephone number						
	Day		Month			
Date of interview				Age:		(22)
					16-24	1
L	(0.4) (0.5)	`	(0.0)	J		
	(34) (35)		(36)		25-34	2
_	(24	hours clock)		-	35-44	3
Time of interview					45-59	4
					60+	5
<u> </u>	(27) (20	2) (20)	(40)	J		ŭ
	(37) (38	3) (39)	(40)			
Place of residence: (from addr	ess)					
	(41)					
(42)						
SHOW CARD H						
Please indicate which	of the following	etnnic group	os you consi	ider that yo	u belong to.	
	White	(23)	Black	Black Sco	ottish, Black Welsh,	(24)
		` '			other Black British	(24)
	Scottish	1	DIACK	English of		
	Welsh	2			Caribbean	1
	English	3			African	2
	Other British	4	Any other	r Black bac	kground (WRITE IN)	3
	Irish	5	,		,	ū
Any other White						
Any other White		6			Minad	
	(WRITE IN)		_		Mixed	
			Any	Mixed bac	kground (WRITE IN)	4
Asian, Asian Sc	ottish. Asian					
Welsh, Asian Eng			Other e		ground (WRITE IN)	(25) (26)
			Other c	tillio baci	(WICHE IIV)	(25) (26)
·	Asian British					
	Indian	7				
	Pakistani	8				
	Bangladeshi	9				
	Chinese	0				
Any other Asia						
Any other Asiar		X				
	(WRITE IN)					
			_			
DECLARATION: Interview of			pondent na	amed abov	ve in accordance	
with instructions and MRS Co						

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 a	Yes – been interviewed already		
	No – not been interv	riewed	2	Continue
Q.1a)	Have you travelled from home today?	Yes	(43) 1	
Q.1b)	And will you be returning home later today?	No	2	
Q.10)	And will you be returning nome later today?	Yes	(44) 1	
		No	2	

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

#### **SHOW CARD A**

IF RESPONDENT DID NOT TRAVEL FROM HOME TODAY ASK:

Q.2a) 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

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

(45)

Other	(SPECIFY)

Q.2b)	How many nights in total will you be spending <b>away from home</b> during you trip?	our currei	nt
	(46) (47)		
	WRITE IN (46) (47)		
Q.2c)	And how many nights of these nights, if any, will you be spending in Scot	tland?	
	(48) (49)		
	WRITE IN		
Q.2d)	During your trip away from home, how many times will you set out specifi a forest or wood? Please include your current trip.  REMEMBER TO INCLUDE CURRENT FOREST VISIT.	cally to vi	sit
	(50) (51)		
	WRITE IN		
Q.3	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	(52) 1	
	6 to 15 miles/ 11 to 25 km	2	
	16 to 25 miles/ 26 to 40 km 26 to 50 miles/ 41 to 80 km	3 4	
	Over 50 miles/ Over 80 km	5	
	Don't Know	Y	
Q.4	SHOW CARD C 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  Car/ Van	(53) 1	
	Minibus/Coach	2	
	Public transport (scheduled bus, train, taxi, etc.)	3	
	Bicycle Walked	4 5	
	Other (SPECIFY) (5	54) (55)	
Q.5a)	Have you been to this woodland site/ here* before? *IF YOU ARE INTERVIEWING IN NON-WOODED AREA USE 'HERE'  Yes	(56) 1	Ask Q5b 
ı	No	2	Skip to Q6
	IF NO, SKIP TO Q.6		

	SHOW CARD D				
Q.5b)	How often, on average, do you come h	ere?			
•	SINGLE CODE			(57)	
		More than o		1	
			nce a day	2	
			es a week	3	
		1 to 3 time		4	
			nes a year Less often	5	
			on't Know	6 Y	
		D	OITTRIOW	ı	
	ASK ALL				
Q.6	SHOW CARD E				
	What was your main activity during your visit	today?			
	SINGLE CODE			(58)	
			Dog walking	1	
	0 11 /44		Other walking	2	
	Cycling/ Mour	ntainbiking <u>on</u> wayı	marked tracks	3	
	Cycling/ Mour	ntainbiking <u>off</u> wayı	Horse riding	4 5	
			Picnic	6	
	Seeing something in the woodland (e.g scu	ulptures, ancient tr		7	
			ssing through	8	
		·			
	An organ	nised event (PLEA	SE SPECIFY)	(59)	
		Other activi	ity (SPECIFY)		
Q.7	How long have you been in this woodla	and/ here* today?			
	*IF YOU ARE INTERVIEWING IN NON	I-WOODED AREA	USE 'HERE'		
			B. 4:		
	DECORD TO THE MEADECT	Hours	Minutes	·	
	RECORD TO THE NEAREST 15 MINUTES				
	13 1/11/10 123	(60)	(61) (62	)	
		()	(5-7) (8-	,	
Q.8a)	Do you (or anyone else in your group)	have a disability or	special		
	needs?			(00)	
			Vaa	(63)	Adv Oob
			Yes	1	Ask Q8b
			No	2	Skip to Q9
					,
	·= · · ·	00 TO 00			
	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  Sight Hearing Mobility Other (SPECIFY)	(64) 1 2 3 4
Q.9	ASK ALL If we could improve just <b>one</b> thing about <i>this woodland/ here*</i> , what should it be? SINGLE THING ONLY	
		(66)
		(67)
		(68)
Q.10	SHOW CARD F 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 Very important Quite important Neither important nor unimportant Not very important Not important at all Not relevant – I live in this area Don't know	1 2 3 4 5 6 7 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 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 RESPONDENTOOES NOT KNOW EXACT AMOUNT AN ESTIMATE WILL DO. DONOT LEAVE BLANK. IF NOTHING WRITE IN 0 0 0. IF DON'T KNOW WRTE IN YYY

#### 11(b-h) ASK ALL, SHOW CARDG

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. Pleaseinclude the amount spent/you will spend on any others (adults and children) for whom you have paid/will pay. If youræ 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. DONOT LEAVE BLANK.

IF NOTHING WRITE IN 000. IF DON'T KNOW WRITE IN D/K

			£	
a)	Accommodation (incl. food & drink)	12	13	14
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
<u>f)</u>	Equipment (e.g. hire of boat, horseriding)	27	28	29
<u>g</u> )	Other misællaneous 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

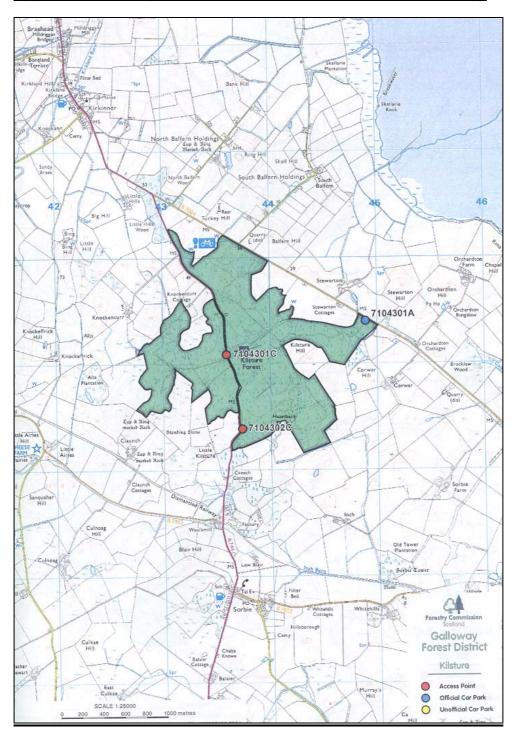
# Appendix 3 - Contact sheet

FORESTRY COMM	IISSIO	N VISIT	OR MO	NITORI	NG – SC	OTLAND	OFFICE USE ONLY
YEAR 1 (015794)							(1-7) 015794A
CONTACT SHEET							(8-11)
Location Code				Inte	erviewer (ii	nitials)	
				] .			
(13) (14) (15) (16	6) (17)	(18) (	19) (20)				
Date of interview shift		Da	ay	1	Month	ſ	
Date of interview shift	_	(21)	(22)	J	(23)		
Interview shift start tir	ne	(0.4)	(05)	(20)	(07)	(24 hour clo	ock)
		(24)	(25)	(26)	(27)		
Interview shift end tim	ie	(28)	(29)	(30)	(31)	(24 hour clo	ock)
Weather CIRCLE ONE NUMBER	R ON EA	CH ROV	V. USE 2 2	FOR MID	DLING/ MIX	XED WEATH	IER
	•					, ,	
	Hot	1	2	3	Cold	(33)	
	Sunny	1	2	3	Overcast	(34)	
	Calm	1	2	3	Windy	(35)	
				Reasons	for refusals	3:	
Number of completed interviews			(36)				
Total number of refus	als		(37)				
Total namber of feras			(01)				
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.  Comments on shift							
PLEASE PROVIDE DE SHIFT SUCH AS LACK LOCATION ETC.							
Interviewer			ID		Date		

## Appendix 4 - Count sheet

FORESTRY COMMIS YEAR 1 (015794) COUNT SHEET	SION VI	SITOR	MONIT	ORIN	G – S(	COTLA		OFFIC ONLY (1-7) 0 (8-11)	15794E	3
Location Code				Cou	nter (init	ials)				
(13) (14) (15) (16)	(17) (18	) (19)	(20)							
Date of counts	(21)	(22	2)		Month (23)					
Count start time	(24)	(2	5)	(26)	(27)	(24 h	nour cloc	k)		
Count <u>end</u> time	(28)			(30)	(31)	(24 h	nour cloc	k)		
Weather CIRCLE ONE NUMBER ON EACH ROW. USE 2 FOR MIDDLING/ MIXED WEATHER										
	Dry 1	2	2	3	Wet	(32)				
	Hot 1	2	2	3	Cold	(33)				
Su	nny 1	2	2	3	Overcast	(34)				
C	alm 1	2	2	3	Windy	(35)	)			
Parked cars IF YOU ARE AT A CAR PARK CARS PRESENT AT THE ST				UNOFF	ICIAL) PI	LEASE F	RECORD	THE NU	JMBER (	OF
Number of cars at start				Number	of cars	at end				
Special events	(36) (37	7) (38)					(3	9)(40)(41	1)	
IF THERE IS A SPECIAL EVENAME OF EVENT, TYPE OF							TAILS O	F		
WRITE IN TOTALS FROM I INCLUDE ANY CONTINUA	TION SHE			END O	F 1 HOU	JR PER	IOD (RI	ЕМЕМВ	ER TO	
ENTE	RING				\ <i>t</i> = 14		EAVI	NG		
Visitors On foot On On Staf bike horse	Dogs	Prams	Wheel- chairs	On foot			Staff	Dogs	Prams	Wheel- chairs
(42) (43) (44) (45) (46) (47) (48) (	49) (50) (51	)(5) (53)	(54) (55)	(56)(57)	(58) (59)	(60) (61)	(62) (63)	(64) (65)	(66) (67)	(68) (69)

Appendix 5 – Example of forest block – Block 43, Kilsture, Galloway



### 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 13 to 15 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 2 surveying are as follows.

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

	Estillate of visits ± 93 /6 Ci
Scottish Lowlands	938,000 +/-150,000
Moray	360,000 +/-133,000
Lorne	297,000 +/-62,000
Dornoch	119,000 +/-44,000
Tay	717,000 +/-244,000
Total	2,431,000 +/-413,000

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 **2.0 to 2.8 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.

Document	
Last edited by	
Version	
Checked and approved	
Printed on	