



**FOOTPRINT
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Cotswold Beechwoods Visitor Survey 2019



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Summary

This report details the findings from a visitor survey with members of the public who were visiting the Cotswold Beechwoods SAC. Visitor surveys were conducted in June/July 2019 (outside of school holidays) at 12 survey point locations. Surveys consisted of tally counts of visitor numbers and face-to-face interviews with members of the public.

Survey locations ranged from key well-known, visitor destinations along the Cotswold Way with lots of parking (e.g. Barrow Wake and Coopers Hill), to informal laybys (e.g. B4070 layby) and foot-only access points from nearby villages (e.g. Sheepscombe).

Key results from the tally counts included:

- Tally counts were conducted for a total of 192 hours, during this time 770 people (including 201 minors and 43 cyclists) and 213 dogs from 367 groups were counted.
- This equated to approximately 4.0 people per hour (pph) passing survey points. At individual survey points this rate ranged from 0.5 pph (12. Foston's Ash Inn and 4. B4070 layby) to 12.8 pph (2. Coopers Hill).
- Across all survey points roughly 4.3 times as many people were seen on weekends, compared to weekdays.
- Average group size was 2.1 people per group, of which 0.5 were minors, 0.1 on a bicycle and with 0.6 dogs per group.
- Key differences between survey points were the high group sizes at 6. Cranham village, (which included a large proportion of minors) and a high proportion of dogs at 10. Saltridge Layby (1.6 per group).

Key results from the interview data included:

- A total of 139 people, either as lone individuals or members of a group were interviewed (approximately 38% of the groups passing).
- Numbers of interviews per survey point ranged from 3 interviews at 12. Foston's Ash Inn to 28 interviews at 2. Coopers Hill.
- 85% of interviewees were on a short visit directly from home, with 13% on holiday and 2% staying with friends or family locally.
- Walking (without a dog) was the most common activity (45%) followed by dog walking (40%). At five survey points most interviewees were walking, while at a further five most were dog walking.
- Overall, 67% of interviewees arrived by car and 28% on foot. Roughly 83% of all interviewees said they would not have changed their mode of transport had other means been available.
- The largest two classes of visit frequency were "between 30 minutes and 1 hour" and "1-2 hours", each given by roughly a third of interviewees (both 32%), followed by "more than 2 hours" (27%). Using estimates for each frequency category and averaging across these we would suggest a typical visit of around 100 minutes.

- Just under a third of interviewees (29%) were on their visit first to the site.
- Interviewees' full list reasons for visiting the survey location typically related to proximity of the site to their home (30% - multiple choices allowed), followed closely by the scenery/ views (29%).
- When forced to select a single main reason around a fifth stated because it was close to home (20%).
- At least 13 interviewees explicitly stated they were following the Cotswold Way (although a further 21 gave a reason of "following a marked trail").
- Interviewees' most popular alternative sites include; Painswick beacon, Robinswood hill, Crickley hill, Leckhampton hill, Sheepscombe – often sites with views or undulating topography.
- When asked if they would use a new country park, most interviewees responded positively with 53% suggesting they would. Popular features were categorised by surveyors, although the largest category was the pooled "other" class, which included a wide range of features such as; animals, picnic and BBQ areas, flat areas, hilly areas, quiet sites with not many people and outdoor wild swimming. Other suggestions given by more than 10% of interviewees were the views / scenery (13%), café and woodland sites (both 11%).
- Visitor routes showed the overall average route was 5.0 km (mean) and 3.0 km (median), but these routes were far from evenly distributed across the SAC. The long-distance routes (49, 35%, greater than 5 km) were heavily focused to the Cotswold Way.
- A total of 126 postcodes were provided (91% of interviewees). Mapping these postcodes showed 26% of interviewees were from Stroud District, followed by Gloucester District (17%), Tewkesbury District (13%), Cotswold District and Cheltenham District (each 10%). Considering only those who had travelled directly from home the percentages changed subtly to; Stroud District 28%, Gloucester District 19%, Tewkesbury District 15%, Cotswold District 11% and Cheltenham District 9%.
- Linear distances between survey points and home postcodes showed the average (mean) was 27.5 km (± 5.2 SE), but half lived within 7.2 km (median) and three quarters within 20.5 km (of the survey point interviewed at). Considering only those visiting directly from home the values were; average (mean) of 14.9 km, 50% of 6.0 km (median) and 75% of 15.4 km.

A number of limitations are acknowledged within the data as weather conditions were at times variable and survey time was reduced at one location due to surveyor safety concerns. The number of people counted passing (and the number of interviews conducted) is relatively low compared to other European sites surveyed by Footprint Ecology. This is a finding in it's own right. The data collected are robust, but we discuss merits for additional survey work, for example involving targeted work with particular activity groups (such as mountain bikers) who were perhaps under-represented within the interview data.

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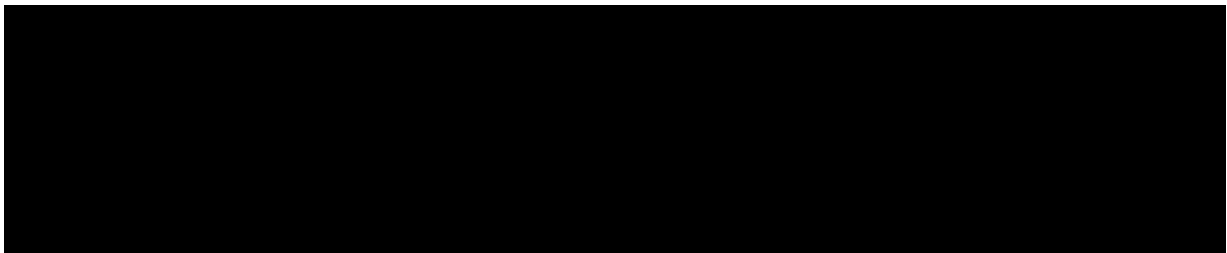
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Acknowledgements

The visitor survey was commissioned by the local planning authorities in the vicinity of the Cotswold Beechwoods; Tewkesbury, Cotswold, Stroud, Cheltenham and Gloucester City Councils (and Highway Authority), as evidence to inform the Habitats Regulations Assessments of the emerging Local Plan



1. Introduction

Cotswold Beechwoods

- 1.1 The Cotswold Beechwoods Special Area of Conservation (SAC) is a 590ha site located between the settlements of Gloucester, Cheltenham, Cirencester and Stroud, Gloucestershire. European wildlife sites are an important feature of the District's natural heritage, with the three main sites being the Severn Estuary, Rodborough Common and the Cotswold Beechwoods. The Cotswold Beechwoods is designated as a SAC under the Conservation of Habitats and Species Regulations 2017, as amended, which transposes the requirements of the EU Habitats Directive and Wild Birds Directive into domestic legislation.
- 1.2 The site is designated for the internationally important beech woodlands, and to a lesser extent for calcareous grassland communities (1.5% of SAC is dry grassland, mostly near Sheepscombe)¹. It is also a National Nature Reserve (NNR) and Site of Special Scientific Interest (SSSI); Cotswold Commons and Beechwoods. The SSSI and NNR both include Cranham Common, which is not covered by the SAC designation. The SSSI also extends to cover Painswick Beacon, and NNR extends to cover two sites; Edge Common and Bull Cross, The Firth and Juniper Hill SSSIs – these are not covered by the SAC and therefore this study. The Cotswold Beechwoods are also recognised for its landscape value, being located within the heart of the Cotswold Area of Outstanding Natural Beauty (AONB).
- 1.3 The Cotswold Beechwoods represent one of the most westerly extensive blocks of *Asperulo-Fagetum* beech forests and are very floristically rich compared to other similar sites². The Beechwoods are mostly high forest, dominated by Beech *Fagus sylvatica*, with Ash *Fraxinus excelsior*, Pedunculate Oak *Quercus robur*, patches of Sycamore *Acer pseudoplatanus* and some areas of remnant beech coppice. Understorey species include Holly *Ilex*

¹ Annex I habitats that are a primary reason for selection of this site: 9130 *Asperulo-Fagetum* beech forests.

Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site: 6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) (* important orchid sites)

² <https://sac.jncc.gov.uk/site/UK0013658>

aquifolium and Yew *Taxus baccata* with a varied and interesting ground flora. Notable plants include Red Helleborine *Cephalanthera rubra*, Stinking Hellebore *Helleborus foetidus*, Narrow-lipped Helleborine *Epipactis leptochila*, Fingered Sedge *Carex digitate* and Bird's-nest Orchid *Neottia nidus-avis*. Other taxa include a wide diversity and variety, with over 780 species of fungi being recorded at Buckholt Wood alone.

- 1.4 Wetter parts of the site are also of interest, with abundant mosses and liverworts which are important conditions for several nationally rare terrestrial snails, including; *Ena montana*, *Phenocolimax major*, *Acicula fusca* and *Macrogastera rolphii* - all species of ancient woodlands. Furthermore, open areas and woodland margins are important areas for butterflies such as the Silver-washed Fritillary *Argynnis paphia*, White Admiral *Ladoga Camilla* and White-letter Hairstreak *Strymonidia w-album*³.
- 1.5 Natural England publishes Site Improvement Plans (SIPs) for designated sites to highlight key issues and identify actions to reduce or remove risks and threats to the site. Concerns over public access are raised in the SIP for the Cotswold Beechwoods⁴. It is suggested both the number and distribution of visitors has increased in recent years, with particular increases from mountain bikes and horse riders. Increased access has the potential to cause trampling and erosion, impact on ground flora and cause damage to archaeological site interest. The SIP suggests dog walking has increased, especially at Coopers Hill, and commercial dog walking has also increased. Poorly controlled dogs can disturb wildlife, as well as dog fouling causing eutrophication of soils.

Planning Context

- 1.6 The visitor survey was commissioned by the local planning authorities in the vicinity of the Cotswold Beechwoods: Tewkesbury, Cotswold, Stroud, Cheltenham and Gloucester City Councils (and the Highway Authority), as evidence to inform the Habitats Regulations Assessments of the emerging respective Local Plan documents. A 'Habitats Regulations Assessment,' normally abbreviated to HRA, is the step by step process of ensuring that a plan or project being undertaken by, or permitted by a public body, will not adversely affect the ecological integrity of a European wildlife site. Where it is

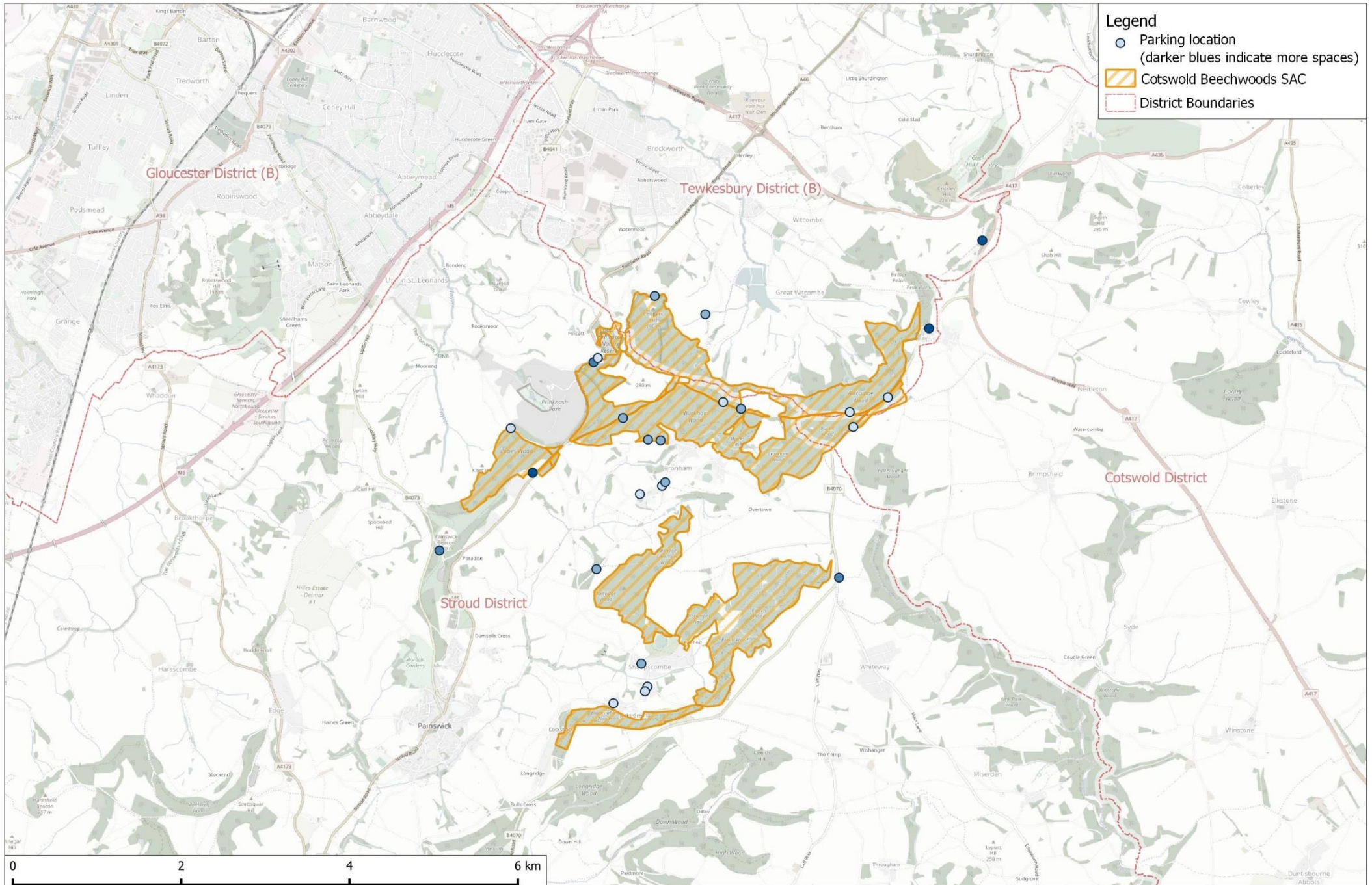
³ <https://designatedsites.naturalengland.org.uk/PDFsForWeb/Citation/1003801.pdf>

⁴ <http://publications.naturalengland.org.uk/publication/6276086220455936>

deemed that adverse effects cannot be ruled out, a plan or project must not proceed, unless exceptional tests are met. The Conservation of Habitats and Species Regulations 2017, as amended, normally referred to as the 'Habitats Regulations', require competent authorities, including local planning authorities, to adhere to the HRA requirements. The duties are also supplemented by national planning policy through the National Planning Policy Framework 2019 (NPPF). The requirements are applicable in situations where the competent authority is undertaking or implementing a plan or project, or authorising others to do so.

- 1.7 The preparation of Local Plan documents by local planning authorities is undertaken with a number of stages of public consultation and refinement before being submitted for Examination in Public, enabling scrutiny by the Planning Inspectorate prior to adoption. Throughout the plan making process, the HRA is also refined and updated, informing the content of the plan by assessing any risks to European sites and recommending measures to alleviate any such risks.
- 1.8 The local planning authorities recognise that there is the potential for increasing recreation, relating to new residential growth across the local planning authority administrative areas, to pose risks to the sensitive ecological features of the Cotswold Beechwoods SAC. The current HRA work for the emerging Local Plan for the Stroud District has highlighted this concern, and the planning officers have formed a partnership with their neighbouring local planning authorities to commission this visitor survey work to better understand the current recreational use of the site. Visitor surveys are often used to inform strategies to manage access at a sensitive designated site, and such strategies are already being implemented at numerous European and SSSI sites around the country.
- 1.9 This visitor survey will help the local planning authorities with HRAs of Local Plans, and inform whether any measures are necessary to manage access at the Cotswolds Beechwoods, particularly in light of new growth coming forward in Local Plans. Visitor surveys can give an indication of the way in which a site may be used in the future, on the assumption that new residents will use the site in a similar way to existing residents in terms of distances travelled to the site, visitor behaviour and the types of activities undertaken.

Map 1: Location of the Costwold Beechwoods SAC with reference to local district boundaries and visitor access.



2. Visitor survey methodology

2.1 This section details the methodology for our visitor surveys conducted at Cotswolds Beechwoods SAC. Surveys were conducted as face-to-face interviews with visitors, along with a simultaneous tally count of visitor numbers during the surveying periods.

Surveying locations

2.2 We identified potential survey locations by mapping parking locations and access from nearby housing within the vicinity of the SPA. These locations were then reviewed and survey points selected based on feedback from some of the stakeholders and a site visit. The following revisions were made based on stakeholder feedback:

Survey points added

- Pub at Foston's Ash Grove further south on the A4070 (just north of Whiteway and northeast of Sheepscombe), which is also linked to wider footpaths. This was initially not included as people would have to walk 100m along the main road to reach the footpath. However, it does provide representation of an area which is otherwise poorly covered.
- Kites Hill / Portway (near Prinknash Abbey) – informal parking at this corner, not very far from location 2, but appeared to be well used. Also covers those using new greenspace of Kite's Hill.
- Saltridge Hill area, to northwest of Sheepscombe – close to survey point 9. We suggested a new survey point at entrance from Cranham.

Locations not included

- Caravan/camp site at Buckshead Farm between Cranham Wood, Buckle Wood and Hazel Hanger Wood off the B4070 south of Birdlip (connected via footpaths) – this seems hard to survey, with no parking and little nearby housing. Maybe some use by caravan park, but this may not capture local residents effectively.
- Along B4070 south of Birdlip – lots of paths, but had limited options for access and intercepting visitors.
- Just north of Painswick Beacon – only 600m from survey point 1.
- The Royal George Hotel, Birdlip – this is located very close to Cotswold Way and SAC, but it seemed to be only for pub patrons, with possibly limited other parking.
- Black Horse Inn – both locations 5 and 6 are relatively close to the pub and therefore access could already be captured here to a degree.

- Butcher’s Arms, Sheepscombe – only 300m from survey point 9.

2.3 The final list of 12 locations for Cotswolds Beechwoods is given in Table 1 below.

Table 1: Details of the 12 survey point locations at Cotswolds Beechwoods.

ID	Name	Description	Surveyor instructions
1	Barrow Wake	On Cotswold Way, from Barrow Wake. Survey point was some distance from the designated habitat, but near a large car park on the Cotswold Way to capture long distance walkers.	Standing near exiting gate and can interview anyone passing. Tally entering/leaving through the gate. Any other people who are walking past, but are not going through the gate (i.e. conducting a walk around the perimeter of the Barrow Wake field) were interviewed, but tallied as moving within.
2	Coopers Hill	On Cotswold Way, and little parking/hard to access, but venue for cheese rolling events therefore potentially novel visitors as well as locals.	Surveyor standing on the path at the bottom on the Hill. Interviewing any people coming to the cheese rolling hill, or any people walking the Cotswold Way. Tally entering/leaving as the gate which leads onto the Way. Any others who only use the Hill can be recorded as moving within.
3	A46 car park.	Large car park/layby along A46. Leads up to Cotswold Way and to pits, which are thought to be popular with mountain bikers.	Interviewing any people seen in the layby (but not people who were only in layby for a driving break). Tally entering/leaving as those going into the site (up the hill).
4	B4070 layby.	Informal layby along B4070, but also at the point of a footpath which crosses the B4070.	Interviewing any people seen in the layby or passing through on footpaths (but not people who were only in layby for a driving break). Tally entering/leaving the beech woods having parked at this layby. Any other passing people on the footpath as moving within site.
5	Cranham Car Park.	Formal Natural England NNR signposted parking near Cranham	Surveyor standing close to gateway into woods from car park (but could roam slightly). Tally count simple entering into site/ leaving from woods back to car park.
6	Cranham Village	Foot access from Cranham down small dirt track	Surveyor standing past last house up dirt track and therefore slightly into site. Simple tally of entering/leaving.
7	Kites Hill	Based in this layby. Covers the corner of the beechwoods, but also adjacent greenspace, Kite’s Hill, for comparison.	Interviewing anyone parking here or passing through. Tally entering/leaving as those entering through gateway/stile (Beechwoods or Kites Hill).

ID	Name	Description	Surveyor instructions
8	The Royal William	Based on a layby around the back of the Royal William. Located on the Cotswold Way.	Surveyor could roam to interview those passing through or parking directly here (including those from the pub who are also using the site). Entering /leaving count to record those people parking here. Tally all other people passing as moving within.
9	Cranham Common	Survey point at edge of common, but on path which leads to Beechwoods	Surveyor standing at this edge of the common but any passing people heading south or east (not those on the common). Tally entering/leaving of people heading down the footpath past the Trout Fishery (most immediate access to the SAC). All others count as moving within.
10	Saltridge Layby	A layby has developed down these little lanes. Provides parking access to the Saltridge Hill	Survey point to capture both people parking here and any others on footpath from/to the woods. Entering /leaving count to record those people parking here and entering into site/leaving woods back to car. Tally all other people passing as moving within.
11	Sheepscombe	Behind Butcher's Arms Pub. Survey largely to look at local use, but may be some greater use by people from the pub etc.	Survey point at gate into the edge of woods as a pinch point. Simple tally of people entering/leaving woods through the gate.
12	Foston's Ash Inn	Start of the public right of way from the pub	Simple tally of entering/leaving as those from road or pub entering onto the footpath / those leaving, going back to the pub or road

Timings

- 2.4 Surveys were conducted in summer 2019, outside of local school holidays (local school term time generally between 8th June and 24th July). Dates of surveys at each point location are given in Table 2 (ranging from 7th to 30th June 2019).
- 2.5 For each survey point, 16 hours of survey work were conducted, evenly split between weekends and weekdays, and covering different times of day. Surveys were conducted as four two-hour blocks per day, with exact timings as follows: 0700-0900; 1030-1230; 1400-1600; 1700-1900. This ensured coverage over the whole day, while allowing the surveyor time for comfort breaks.

Table 2: Surveying dates for the 12 survey point locations at the Cotswolds Beechwoods.

ID	Name	Weekday	Weekend
1	Barrow Wake	24/06/2019	22/06/2019
2	Cooper's Hill	17/06/2019	16/06/2019
3	A46 car park.	17-10/06/2019	09/06/2019
4	B4070 layby.	25/06/2019	23/06/2019
5	Cranham Car Park.	14/06/2019	15/06/2019
6	Cranham Village	21/06/2019	23/06/2019
7	Kites Hill	27/06/2019	29/06/2019
8	The Royal William	17/06/2019	15/06/2019
9	Cranham Common	18/06/2019	16/06/2019
10	Saltridge Layby	17-10/06/2019	08/06/2019
11	Sheepscombe	24/06/2019	22/06/2019
12	Foston's Ash Inn	28/06/2019	30/06/2019

Surveying

- 2.6 Our visitor surveyors were positioned at each survey point to conduct interviews with site users and count people.
- 2.7 Surveyors wore green hi-vis jackets with the Footprint Ecology logo and clearly identified themselves as visitor surveyors. Where parking was available, surveyors also had a poster clearly displayed in their car window to indicate that the visitor surveys were taking place.

Interviews

- 2.8 Potential interviewees were approached at random by selecting the next available interviewee once the preceding interview had been completed. Interviews were conducted with those entering/leaving the access point being surveyed, and anyone else moving through the site. In cases where the survey point was not at an access point, the surveyor interviewed any people moving through the site. No unaccompanied minors were approached or interviewed (but were recorded in tallies).

2.9 The surveyors conducted the interview on tablets using SNAP survey software⁵, an industry standard software for questionnaire design and visitor surveys. A full print out of the questionnaire is included in Appendix 1.

Tallies

2.10 Alongside the interviews, surveyors maintained a tally of all people passing, recording numbers of groups, individuals, minors, dogs and bikes during the 16 hours of surveying at each location. These counts enabled us to compare sites in terms of visitor volume/footfall, and to identify what proportion of visitors were interviewed at each location.

Routes

2.11 Interviewees' routes within the sites were plotted in the field as part of the questionnaire on paper maps, which we subsequently digitised in GIS. We used paper maps which show contour lines, alongside a satellite image reference map, to help people understand the slopes and routes.

Analysis

2.12 All route and postcode analysis were conducted in GIS, QGIS 3.4. Home postcodes were geocoded using Royal Mail Postzon postcode data, from 2019. Only full, valid postcodes were used in analysis of visitor origins, partial postcodes or named towns/villages were not included in any analysis due to the variation in precision.

2.13 Analyses in this report make use of a number of averages where appropriate, means and medians, and often presented together to examine the distribution of values. All data analysed with statistical tests were not normally distributed (usually positively skewed, with a small number of very high outlier values), and therefore we used non-parametric tests and median values.

⁵ www.snapsurveys.com

Weather & other factors

- 2.14 Weather conditions during the surveys were fairly typical for the time of year, although there were extremes of weather in the period⁶. We avoided the most extreme of these conditions (e.g. when weather warnings were issued), but survey days could include in periods of moderate rainfall or at the other end of the scale very hot days. These days had to be surveyed to ensure surveying was completed before the start of the school holidays and therefore reflected typical use. Overall the weather conditions were extremely variable as shown in Table 3. The impact of this was reduced by splitting some sessions, such that sites were surveyed in the morning on one day and the afternoon on a different day.
- 2.15 The weather had some indirect impacts on access – the layby at survey point 4, B4070 layby, is a dirt layby and had become boggy following heavy rain, which may have put some people off using it. The impact of weather is discussed again in refusal counts, as some people did not wish to take part because it was too hot or too wet.
- 2.16 There were some issues at some survey points which affected the ability of surveyors to complete work at the sites. These incidents involve surveyors feeling threatened (survey points 3 and 4; A46 car park and B4070 layby) and at one location having to leave the site (survey point 3 A46 car park), therefore resulting in partially completed survey sessions. It became apparent through the interviewees, and as later informed by local staff, that this survey point was an active PSE (Public Sex Environment). Adjustments were therefore made in the surveying sessions (based on the percentages in Table 3) and tally counts adjusted to reflect the fact that sessions were not always completed.

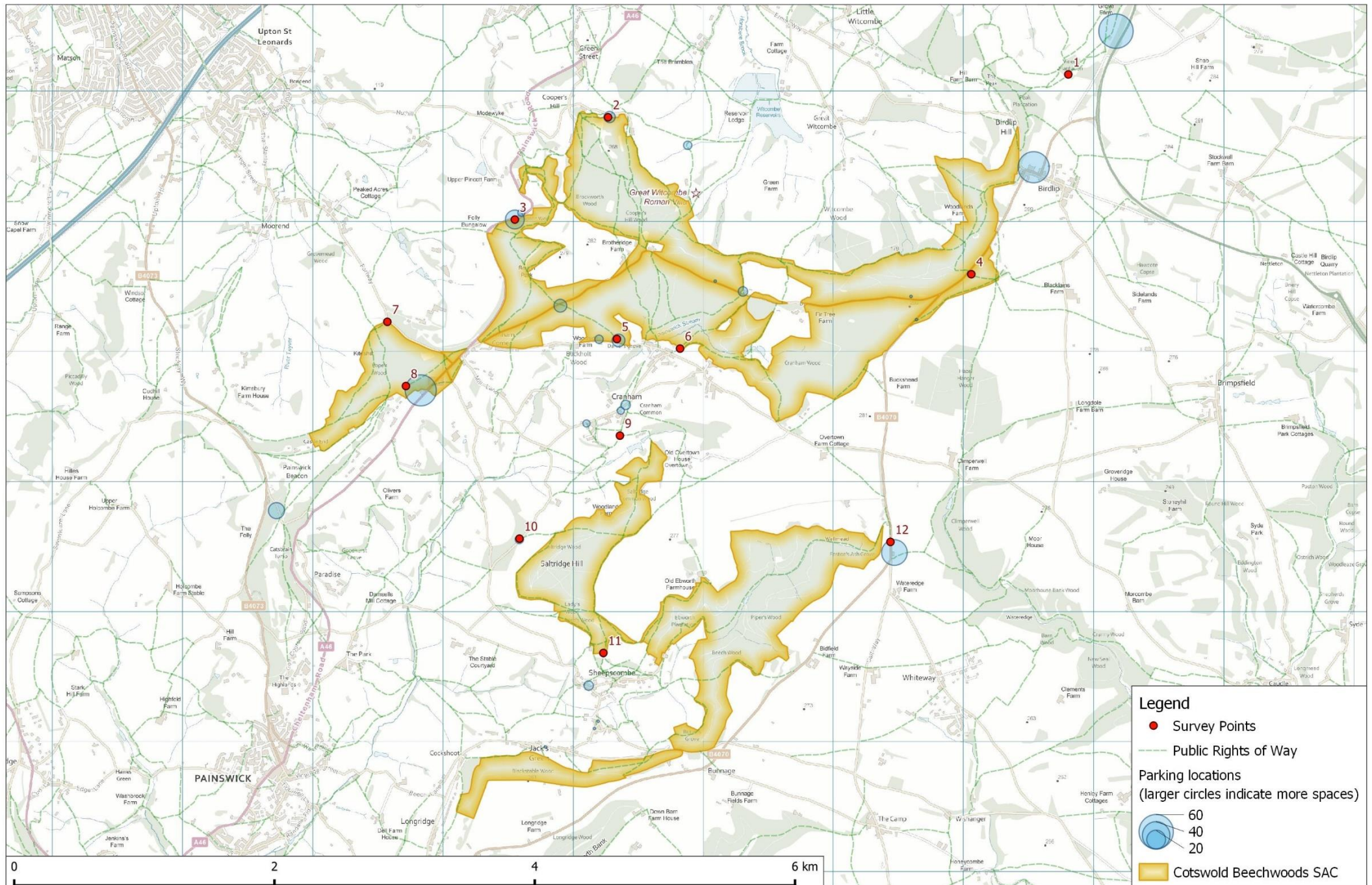
⁶ <https://www.metoffice.gov.uk/research/climate/maps-and-data/summaries/index>

Cotswold Beechwoods Visitor Survey

Table 3: Summary of the weather conditions recorded by surveyors. These are out of a total of 8 sessions for each survey point and 96 sessions in total across all survey points.

ID	Session completeness (%)	Sessions with any rainfall	Average of Cloud cover (8th)	Temperature for session			
				Cool	Mild	Warm	Hot
	98	38	5.7	4	53	33	5
1	100	0	4.9		2	3	3
2	100	3	6.9		4	4	
3	77	4	5.5	2	2	3	
4	100	2	8.0		8		
5	100	8	7.3		8		
6	100	2	5.8			8	
7	100	0	0.9		2	4	2
8	100	6	7.3	1	6	1	
9	100	7	7.4		8		
10	100	6	6.9	1	6	1	
11	100	0	5.0		2	6	
12	100	0	2.5		5	3	

Map 2: Numbered visitor survey points.



3. Visitor Survey Results: Tally Data

Total footfall

3.1 Surveys were conducted for a total of 192 hours on site – although time at one location was reduced and is discussed later. A summary of the count of people is given in Table 4. The overall total was 770 people (including 201 minors and 43 cyclists) and 213 dogs from 367 groups. This equated to approximately 4.0 people per hour passing survey points.

Table 4: Summary of the tally totals recorded at each survey point location, with final columns showing some summary metrics. These summary metrics are coloured red to blue for high to low values. Totals for survey point 3 are repeated (shown in italics and with an *) but using adjusted values scaling up based on the proportion of surveying completed (77%).

ID	Groups	People (inc minors & cyclists)	Dogs	Minors	Cyclists	People per group	% Minors	% Cyclists	Dogs per group
	367	770	213	201	43	2.1	26	6	0.6
1	46	84	26	29	13	1.8	35	15	0.6
2	91	205	35	43	3	2.3	21	1	0.4
3	48	62	21	1	0	1.3	2	0	0.4
3*	59.0	76.2	25.8	1.2	0.0	<i>metrics will be same as above</i>			
4	6	8	3	0	1	1.3	0	13	0.5
5	42	78	37	16	0	1.9	21	0	0.9
6	23	80	15	49	5	3.5	61	6	0.7
7	11	22	11	8	0	2.0	36	0	1.0
8	45	125	3	28	20	2.8	22	16	0.1
9	18	39	18	7	0	2.2	18	0	1.0
10	19	22	30	1	0	1.2	5	0	1.6
11	15	38	13	19	1	2.5	50	3	0.9
12	3	7	1	0	0	2.3	0	0	0.3

Differences between survey points

3.2 There were clear differences between survey points (see Table 4) with number of people per hour ranging from 0.5 (12. Foston's Ash Inn and 4. B4070 layby) to 12.8 (2. Coopers Hill).

- 3.3 Differences between individual survey points were tested based on the total number of people for each two hour session. This showed highly significant differences between survey points (KW; $H=31.81$, $df=11$ $p<0.001$)
- 3.4 Table 4 shows a repeated row for survey point 3, A46 car park, where surveying was curtailed due to PSE activity, which has scaled up the total observed in the reduced surveying window of 740 minutes to show that we would expect in the usual 960 minutes (16 hours). This is based on the 740 minutes as a percentage of the full 960 minute surveying window (77%). These totals differ little and any metrics such as percentages, and group sizes will remain the same. Furthermore, as the surveyor had become uncomfortable and decided to leave, it is likely that many visitors to the SAC would have felt the same. For these reasons we have continued to use the unadjusted values throughout the rest of the analysis.

Differences between weekdays and weekends

- 3.5 There were substantial differences in the count of people observed between weekdays and weekend days, as shown in Figure 1. Across all survey points roughly 4.3 times as many people were seen on weekends, compared to weekdays.
- 3.6 The differences between weekdays and weekends were tested using the total number of people for each two hour session and showed highly significant differences (KW; $H=15.02$, $df=1$, $p<0.001$), suggesting highly varied levels in use.

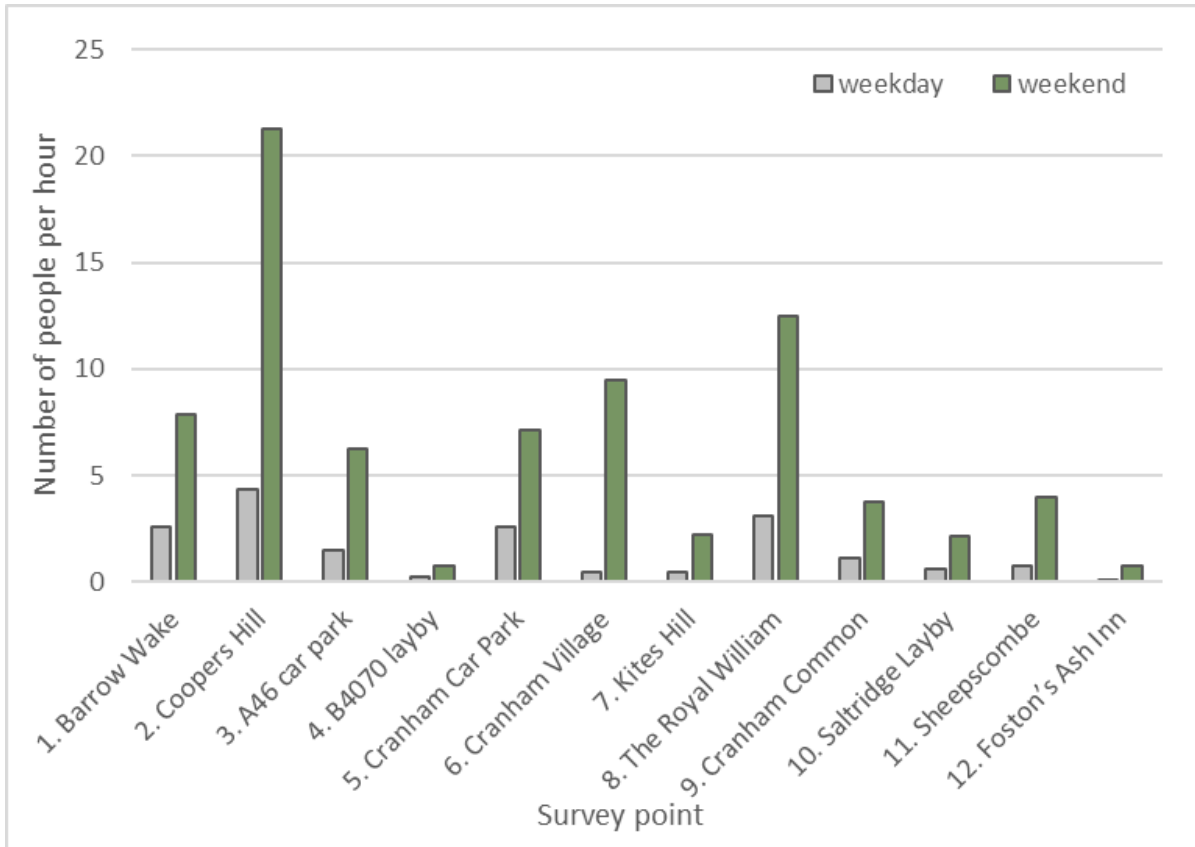


Figure 1: Averaged number of people per hour at each survey point on weekdays and weekends.

People entering

3.7 Tally data are also presented considering just the number of people entering the site, where applicable, at each survey point location, presented in Map 3.

Tally composition

Group sizes

3.8 As part of the tally count, the surveyors recorded the numbers of groups, people, dogs, minors and cyclists. The tally totals of the number of people and groups allowed for simple averaging of group sizes.

3.9 Overall an average group would have consisted of 2.1 people per group, of which 0.5 were minors, 0.1 on a bicycle, and with 0.6 dogs per group. As such we would estimate around half of all groups included a minor and a dog, and just 1 in 10 on a bicycle. At individual survey points group size ranged from 1.2 (10. Saltridge Layby) to 3.5 (6. Cranham Village) people per group – as shown in Figure 2.

Activities

3.10 Inference on activities being conducted can be made from tally count categories – see totals in Map 4 and numbers per group in Figure 2. The highest numbers of minors were recorded at 6. Cranham Village (46 minors), equivalent to 2.1 per group. This location is close to the school, but many of the minors in the counts relate to a few small groups of children who were on Duke of Edinburgh walks with a teacher (6 of the 11 groups). The greatest count of dogs was 37, also at 6. Cranham Village, averaging at 0.9 dogs per group. However, this location did not have the highest number of dogs per group which was at 10. Saltridge Layby, with an average of 1.6 dogs per group (30 dogs for 19 groups) - suggesting the location is the most popular point for dog walking. Number of cyclists was consistently low, but ranged from 0 to 20 per survey point. Survey point 8. The Royal William had the highest count, with 20 people cycling out of the 125 people (16%), equating to an average of 0.4 cyclists per group – on our site visit this area, around Kite’s Hill and Pillow Mound, appeared to be well used by mountain bikers too.

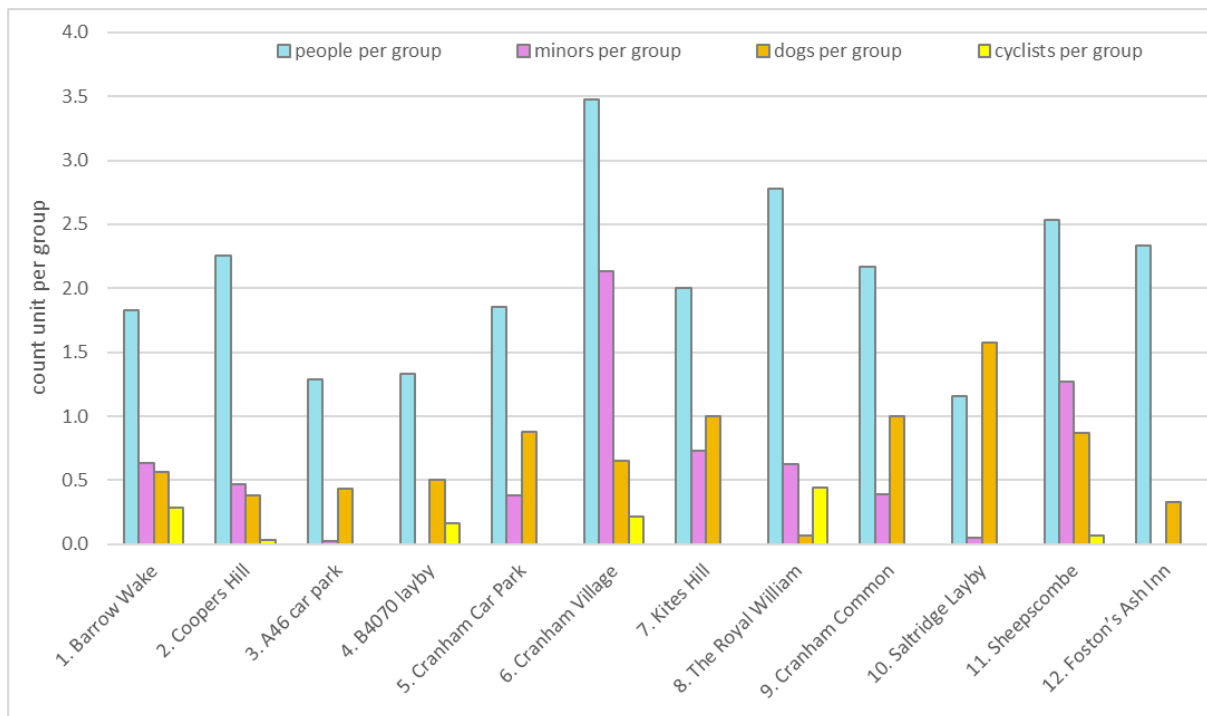
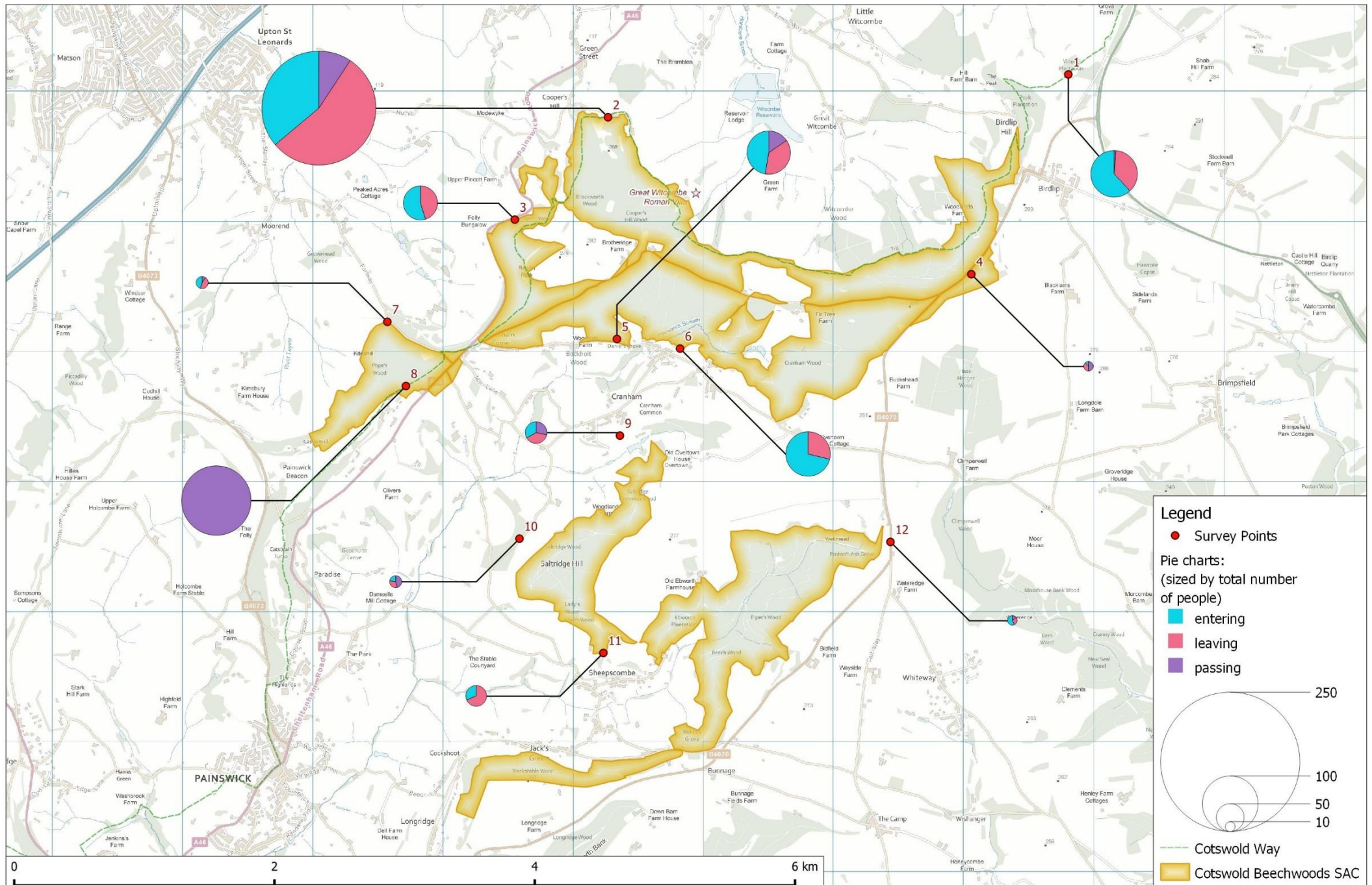
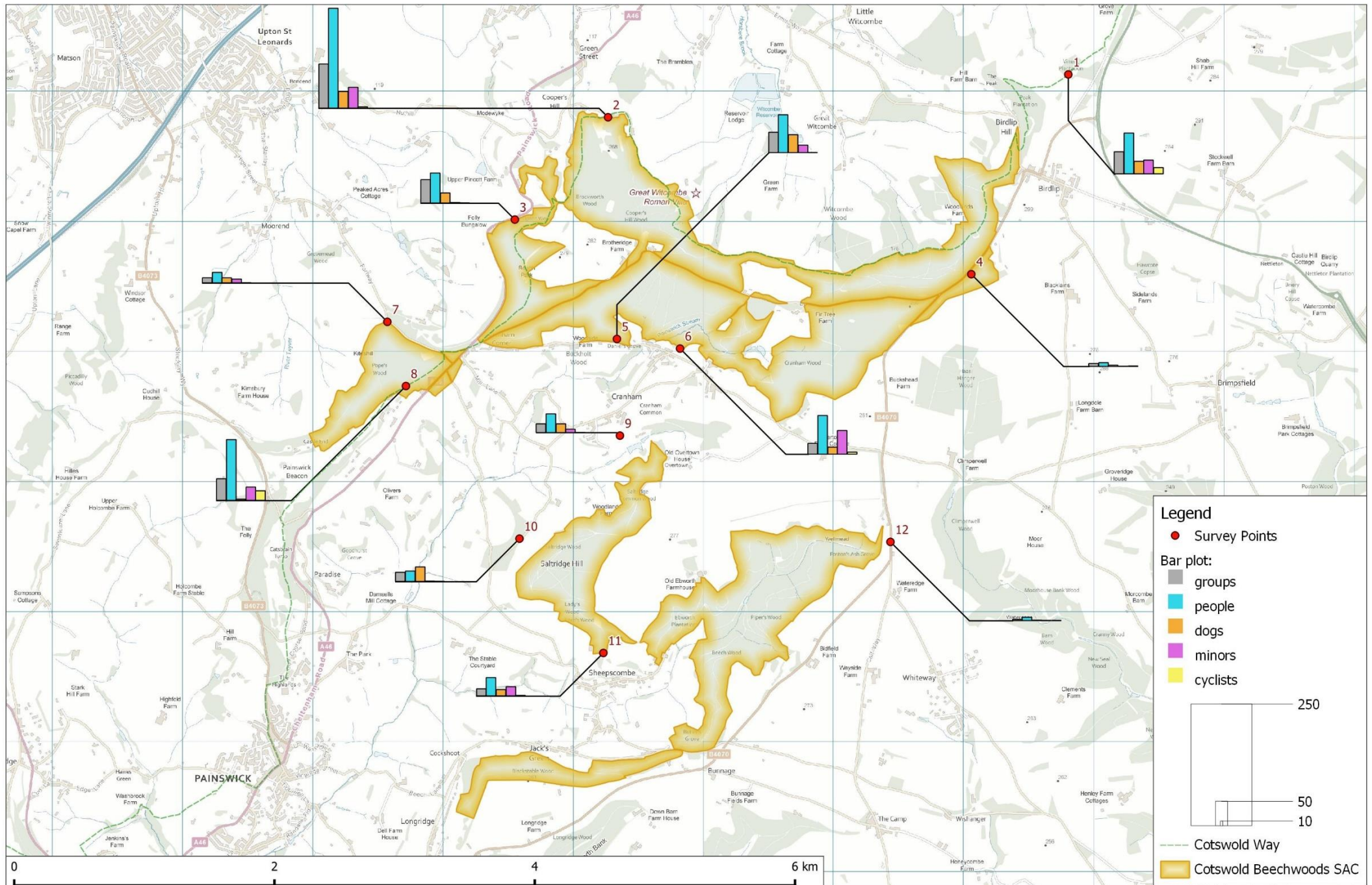


Figure 2: Tally composition shown as the average number of people, minors and dogs per group for each survey point.

Map 3: Pie charts to show the relative number of people entering, leaving and passing. Overall size indicates the relative total number of people.



Map 4: Bar plots to show the numbers of groups, people, dogs, minors and cyclists observed at each survey point.



4. Visitor Survey Results: Questionnaire Data

Number of interviewees

- 4.1 Interviews were undertaken with a total of 139 people, either as lone individuals or members of a group. Around 38% of the groups passing were interviewed and each interview took a median time of 9 minutes to complete.
- 4.2 On average, 11.6 interviews (mean value) were conducted at each survey point over the two days of survey work, ranging from 3 interviews at 12. Foston's Ash Inn to 28 interviews at 2. Cooper's Hill. The number of interviewees at each survey point is shown in Table 5.

Table 5: Summary of visitor interviews, showing the number of refusals, number of people approached who had already been interviewed, and the total number of interviews conducted at each survey point. The latter is also expressed as a percentage of all groups seen in the tally counts.

Survey point	Number of refusals	Number already interviewed	Number of interviews	% of groups seen who were interviewed
1. Barrow Wake	6	2	16	35
2. Coopers Hill	4	3	28	31
3. A46 car park	0	0	10	21
4. B4070 layby	0	1	3	50
5. Cranham Car Park	1	4	16	38
6. Cranham Village	3	1	9	39
7. Kites Hill	0	1	6	55
8. The Royal William	6	5	20	44
9. Cranham Common	3	0	12	67
10. Saltridge Layby	1	2	8	42
11. Sheepscombe	3	0	8	53
12. Foston's Ash Inn	0	0	3	100
Total	27	19	139	38

- 4.3 The number of refusals were relatively high at some places. The following 5 locations had between 10% and 20% of groups seen refusing to take part; 1. Barrow Wake, 6. Cranham Village, 8. The Royal William, 9. Cranham Common, 11. Sheepscombe. Most simply stated that they did not have time to take part. Some activity types are inevitably hard to intercept (e.g. runners,

mountain bikers) or can be less willing to be interviewed (e.g. people in a hurry, horse riders with less steady horses). At survey point 8. The Royal William one cycling group was interviewed and a total of 20 interviews were conducted (cyclists were therefore 5% of the interviewees), but tally data suggests around 16% of people passing were cycling. Were the interview data to reflect the tally data we might have expected 3 cyclists to be interviewed rather than 1.

Visit patterns

Visit type

4.4 Across all interviews, the majority of interviewees 85% (118 out of 139 interviewees) were on a short visit directly from home. Of the remaining interviewees, 12.9% (18) of interviewees were staying away from home on holiday and 2.2% (3) people were staying away from home, but with friends or family. The survey point with the lowest percentage on a short visit from home was recorded at survey point 8. The Royal William, where 8 of the 20 interviewees, (40%), were on holiday in the area.

Activities

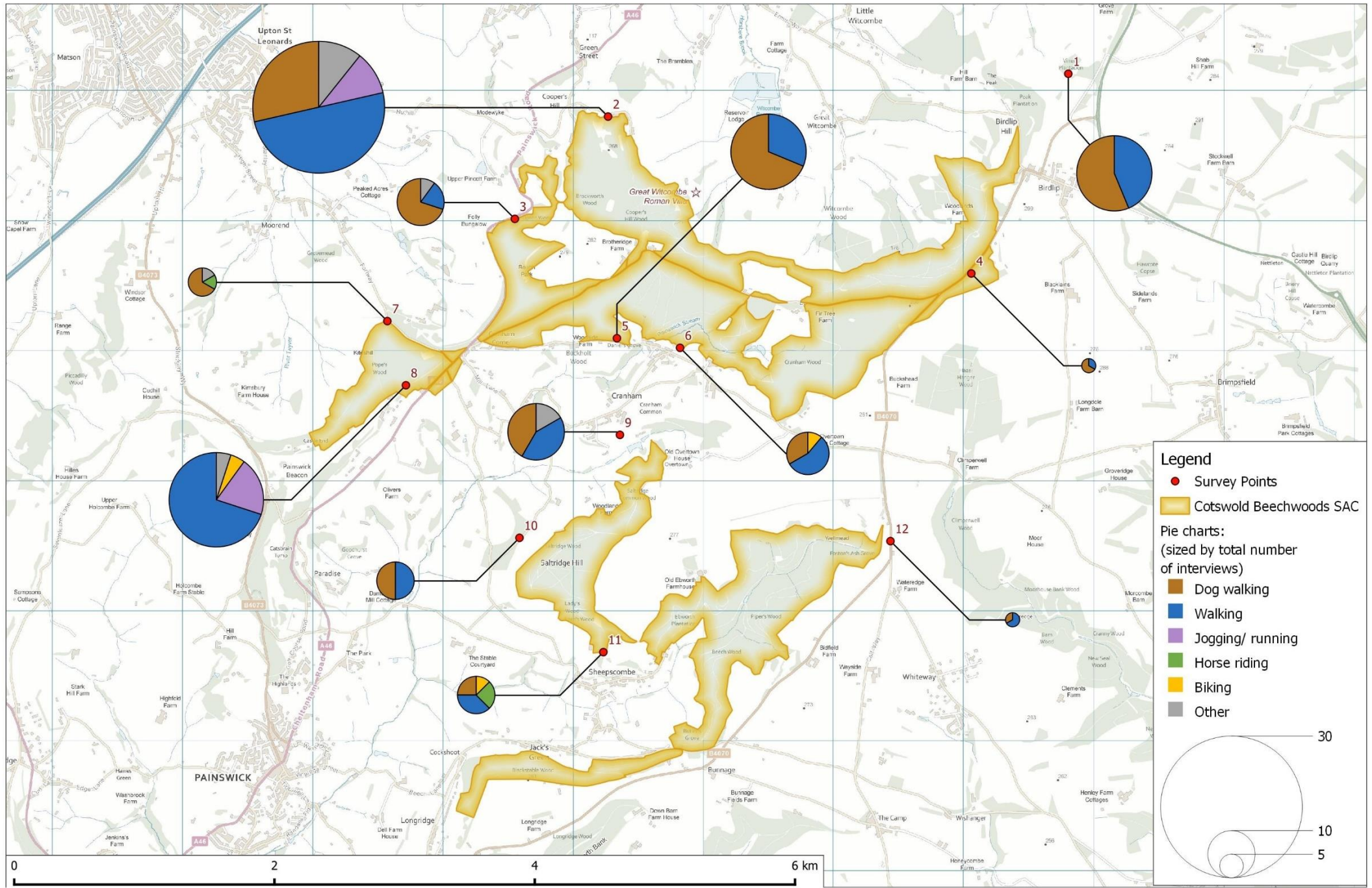
4.5 Walking (without a dog) was the most common main activity, undertaken by 62 interviewees, roughly 45% of interviewees. Dog walkers accounted for 40% of interviewees (56 interviewees), with the remaining 15% (21) split between a wide range of other activities – see Table 6. Walking was the largest activity group at 5 of the 12 survey points, while dog walking was the largest group at another 5 survey points (two survey points were jointly top ranked for dog walkers and walkers).

4.6 Numbers of interviewees at each survey point are given in Table 6 and Map 7. No location was dominated by a single activity to the point where more than three-quarters were conducting just one activity. Key locations for dog walkers with more than half of interviewees conducting this activity were; 1. Barrow Wake, 3. A46 car park, 4. B4070 layby, 5. Cranham Car Park, and 7. Kites Hill. Those with more than half of interviewees walking were 6. Cranham Village, 8. The Royal William and 12. Foston's Ash Inn.

Table 6: Summary of interviewee activities at each survey point.

Survey Point	Walking	Dog walking	Jogging/ running	Horse riding	Cycling/Mountain Biking	Outing with family	Work	Bird/Wildlife watching	Enjoying scenery / fresh air	Other	Total
1. Barrow Wake	7	9									16
2. Coopers Hill	14	8	3				1		1	1	28
3. A46 car park	2	7								1	10
4. B4070 layby	1	2									3
5. Cranham Car Park	5	11									16
6. Cranham Village	5	3			1						9
7. Kites Hill		4		1		1					6
8. The Royal William	14		4		1		1				20
9. Cranham Common	5	5				1		1			12
10. Saltridge Layby	4	4									8
11. Sheepscombe	3	2		2	1						8
12. Foston's Ash Inn	2	1									3
Total	62	56	7	3	3	2	2	1	1	2	139

Map 5 : Pie charts to show interviewee activities from surveys. Overall size indicates the relative total number of people.



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Transport

4.7 Overall, across all survey points, 67% of interviewees (93 interviewees) arrived by car and 28% (39) on foot (57) – see Table 7. Clearly surveying locations based in car parks recorded high proportions of access by car – with all interviewees arriving by car at the two locations along busy roads (3. A46 car park and 4. B4070 layby). Highest levels of foot access (e.g. over 50% of interviewees) were at the two locations with many long-distance walkers (8. The Royal William and 12. Foston’s Ash Inn). Other modes of transport included 3 interviewees arriving by bicycle, 3 by horse and 1 by public transport. Survey point 11. Sheepscombe recorded highest numbers of other means of transport, with one interviewee arriving by bicycle and two by horse. However, sample sizes for individual survey points are relatively small (see n values in Table 7).

Table 7: Summary of modes of transport interviewees used for each survey point.

Survey point	n	Car / van	On foot	Other
1. Barrow Wake	16	13 (81)	3 (19)	0 (0)
2. Coopers Hill	28	18 (64)	10 (36)	0 (0)
3. A46 car park	10	10 (100)	(0)	0 (0)
4. B4070 layby	3	3 (100)	(0)	0 (0)
5. Cranham Car Park	16	15 (94)	1 (6)	0 (0)
6. Cranham Village	9	5 (56)	3 (33)	1 (11)
7. Kites Hill	6	5 (83)	(0)	1 (17)
8. The Royal William	20	7 (35)	11 (55)	2 (10)
9. Cranham Common	12	8 (67)	4 (33)	0 (0)
10. Saltridge Layby	8	5 (63)	3 (38)	0 (0)
11. Sheepscombe	8	3 (38)	2 (25)	3 (38)
12. Foston’s Ash Inn	3	1 (33)	2 (67)	0 (0)
Total	139	93 (67)	39 (28)	7 (5)

4.8 When asked if they would have used any other means of transport, such as better bus or cycle routes, overall 83% of all interviewees (117) said they would not have changed their mode of transport. Of those arriving by car, roughly 11% (10 out of 93 interviewees) suggested they would have used public transport, had better links been available.

Visit duration

- 4.9 Interviewees were asked to consider their visit patterns, with regards to the duration of their current visit and frequency of visit to the site. Responses given in these two questions were categorised into classes by the surveyor (classes given in the questionnaire in the appendices and shown in Figure 3 and Figure 4).
- 4.10 Interviewees were first asked to state how long they had spent/were going to spend on site. Categories of visit duration, with reference to the approximate time in minutes on site, were used to group the interviewees' responses. In addition, from the frequencies reported by each respondent we calculated an approximate average visit duration. This was estimated using the number of interviewees in each category, multiplied by an approximate duration in terms of minutes⁷, summed for each category, and then divided by the overall number of interviewees. While this is highly simplistic, and values are considered very approximate, it serves well to allow comparison and provide a ranking to the sites.
- 4.11 Across all interviewees, the largest two classes of visit frequency were "between 30 minutes and 1 hour" and "1-2 hours", each given by roughly a third of interviewees (45 interviewees, 32%, and 44 interviewees, 32% respectively). The remaining third were mostly visiting for longer; 27% of interviewees for more than 2 hours (38 interviewees) and 10% more than 4 hours (14 interviewees). Just 11 interviewees (8%) were using the Beechwoods for less than 30 minutes.
- 4.12 There were some very slight differences between sites, as shown in Figure 3, but these differences were influenced by very small sample sizes at some locations. At survey point 5. Cranham Car Park, 62% of interviewees were on site for less than 1 hour. The averaged visit duration for each site ranged from between 60 to around 160 minutes for a typical visitor, but overall average was 100 minutes (see Figure 3).

⁷ Estimated average time used values: Less than 30 minutes = 20 minutes; Between 30 minutes and 1 hour = 45 minutes; 1 to 2 hours = 90 minutes, 2 to 3 hours = 150 minutes.

Cotswold Beechwoods Visitor Survey

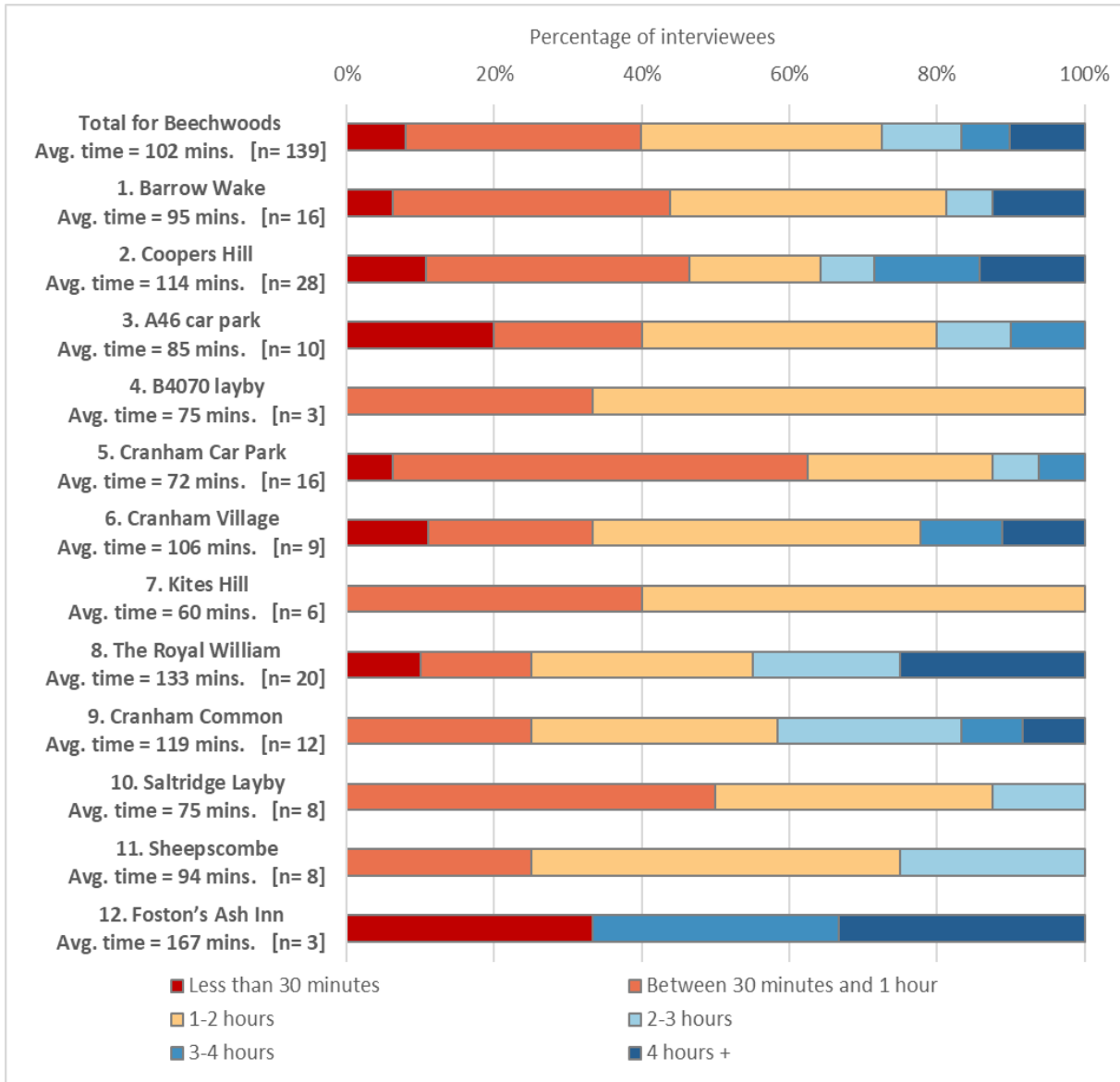


Figure 3: Summary of visit duration at survey points.

Visit frequency

- 4.13 Interviewees' responses for visit frequency were categorised with reference to how many visits they made in a year (e.g. "10 visits a year") or how frequently they visited (e.g. "once a week"). As for the visit duration, we used simple averaging to indicate how often people visited, based on an annual number of visits⁸.
- 4.14 The single largest group of interviewees were those who said they were on their first visit to the site in the 12 months – 44 interviewees, roughly 32% (see Figure 4). The next largest category was also an infrequent class, with 29 interviewees, 21%, suggesting they visit less than once a month. When this category was pooled with other relatively infrequent visits, and first time visitors, it showed 84% of interviewees visited no more than once a week. Using values of an estimated number of annual visits, we would estimate a "typical" visitor makes around 57 visits a year to the sites.
- 4.15 There were again some differences between sites, as shown in Figure 4, but these differences are influenced by very small sample sizes at some locations. However, it was notable that the two locations close to the small village of Cranham had many interviewees who visited more than once a day. Survey point 2. Coopers Hill and 8. The Royal William were most popular with infrequent and first time visitors, with 75% and 85% respectively visiting less than once a month or on their first visit. These two locations are the main survey points on the Cotswold Way within the Beechwoods SAC.

⁸ "More than once a day" = 700 visits per year, "Daily" = 350 visits per year, "Most days (180+ visits)" =200 visits, "1 to 3 times a week (40-180 visits)" = 110 visits, "2 to 3 times per month (15-40 visits)" =27.5 visits, "Once a month (6-15 visits)" =10.5 visits, "Less than once a month (2-5 visits)" = 3 visits.

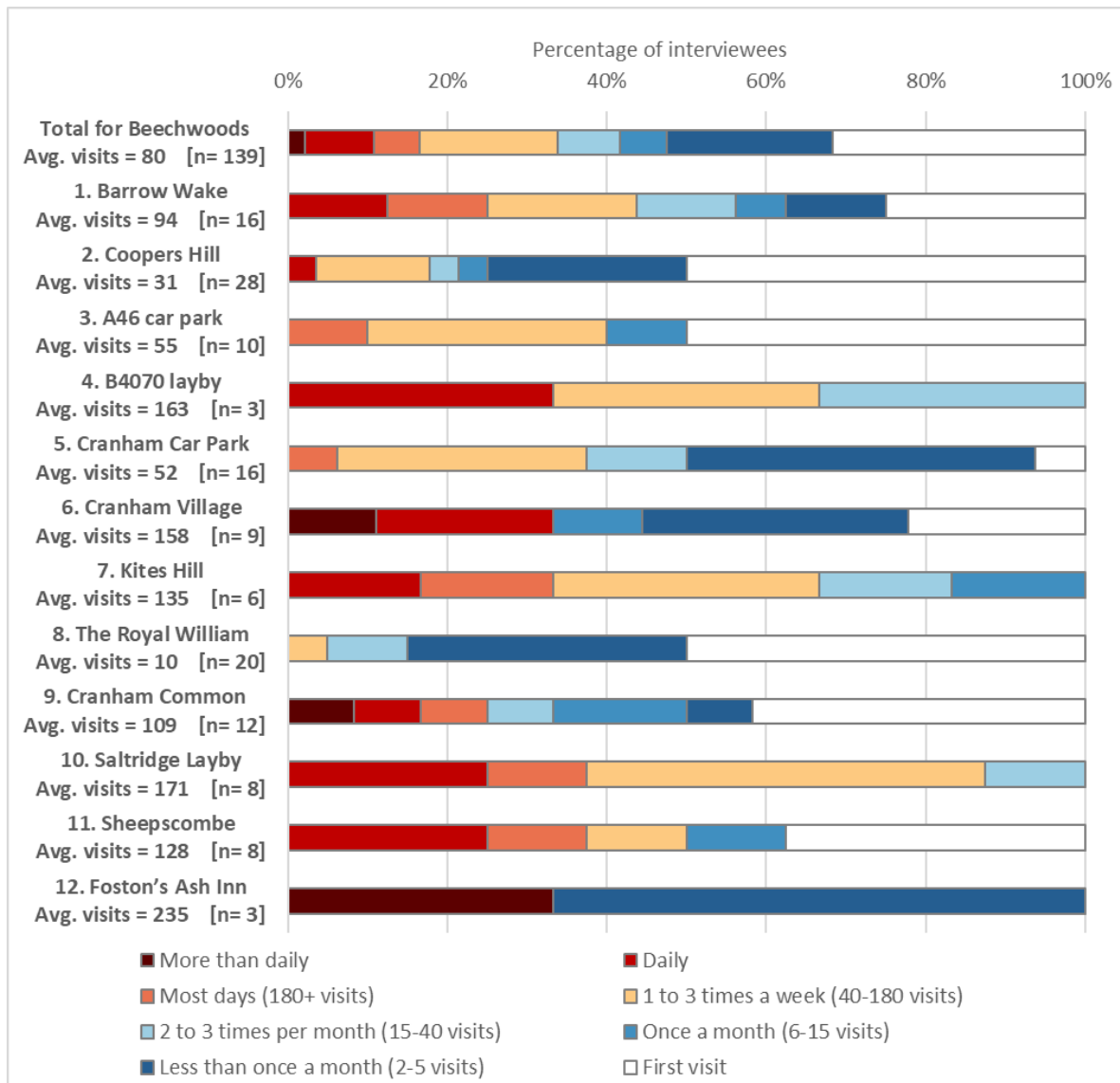


Figure 4: Summary of visit frequency at survey points.

Timing

4.16 Interviewees were asked if they visited more at a particular time of day. 27% of interviewees (37 out of 139) suggested it varied, or they did not know and 35% (49) could not comment as they were on a first visit to the Beechwoods. Remaining interviewees (53) selected one or more than one times of day in which they visited. Most popular choices were late morning, 43% of interviewees, followed by midday, 38% of interviewees.

4.17 Interviewees were also asked if they visited more at a particular time of year. Those who were on a first visit were again unable to comment. But for remaining interviewees who felt they could comment, they selected one or more than one season or stated equally all year. Just over half, 53% of

interviewees (73 out of 139), suggested they visited equally all year around, with no seasonal preference. Of the remaining 13 interviewees, who selected one or more seasons, the most common response was for summer with 100% of the 13 interviewees, followed by spring, 69% of interviewees.

Length of time visiting

4.18 Surveyors asked interviewees to state how long they had been visiting the site, with responses categorised by the surveyors. Overall, 29% of interviewees (40) were on their visit first to the site. Of those who could give a duration, 34% (47) had been visiting for more than 10 years and just 19% (27) less than three years.

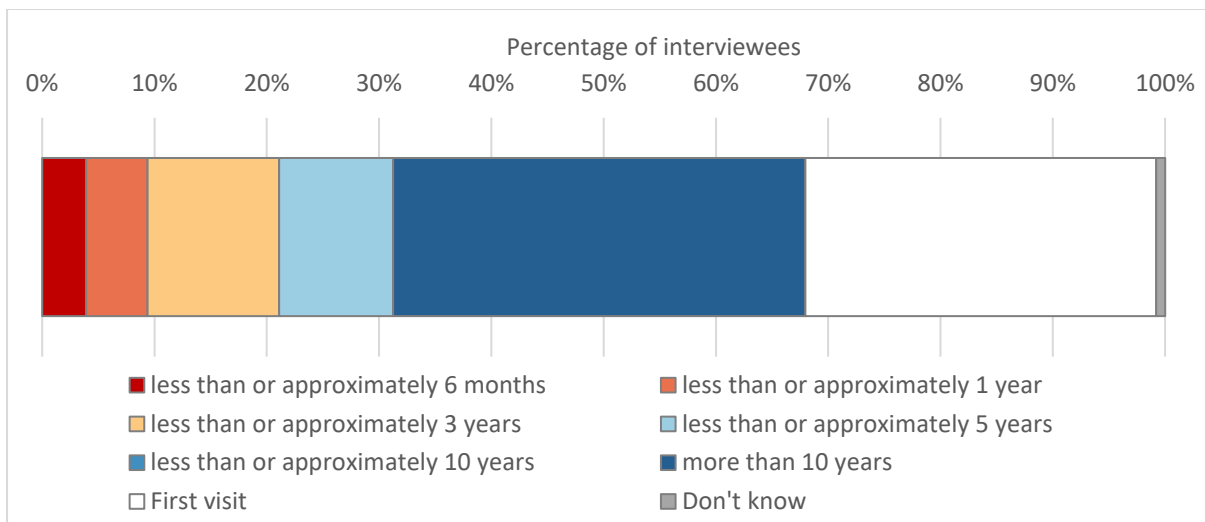


Figure 5: interviewees length of time visiting the site.

Site choice, alternative sites and reasons

Current site choice

- 4.19 Interviewees were asked to provide reasons why they chose to visit the Beechwoods. Responses were categorised (where possible) by the surveyor, with multiple choices allowed. Surveyors recorded all the interviewees' responses, but then asked interviewees to select just one single main reason which was recorded separately.
- 4.20 The most commonly stated reason for visiting was that the Beechwoods were close to home, (42 interviewees, 30%), closely followed by the scenery/ views (40, 29%) – see Table 8. This was followed by 22% of interviewees (30) whose reasons were diverse and grouped as “other”, including those who like the topography, for a shady walk or a walk without livestock. At least 10 of these interviewees stated that they were visiting specifically the Cotswold Way, although some interviewees walking the Cotswold Way may also be included in the next category, “appropriate place for activity” (24, 17%).

Table 8: Summary of interviewees' reasons for visiting the current site, provided as: all reasons, a single choice main reason, and all other multiple secondary reasons. Reasons are sorted by the all reasons combined and any reasons given by less than 5% of interviewees are not shown.

Reason	Number and % of interviewees		
	All reasons	Single main reason	Other reasons
Close to home	42 (30)	28 (20)	14 (10)
Scenery / variety of views	40 (29)	7 (5)	33 (24)
Other, please detail	30 (22)	15 (11)	15 (11)
Appropriate place for activity	24 (17)	17 (12)	7 (5)
Habit / familiarity	21 (15)	9 (6)	12 (9)
Good for dog / dog enjoys it	17 (12)	1 (1)	16 (12)
For a change / variety	16 (12)	9 (6)	7 (5)
Variety of habitats	16 (12)	4 (3)	12 (9)
Not many people	16 (12)	3 (2)	13 (9)
Rural feel / wild landscape	14 (10)	4 (3)	10 (7)
Quick & easy travel route	12 (9)	5 (4)	7 (5)
Particular wildlife interest (including trees)	11 (8)	2 (1)	9 (6)
Suitability of area in given weather conditions	10 (7)	2 (1)	8 (6)
Ability to let dog off lead	8 (6)	1 (1)	7 (5)

4.21 The single choice main reasons showed some notable differences in ranking – see Figure 6. One in five interviewees stated their main reason for choosing this site was because it was close to home (20%, 28 interviewees). Within the other factors that were not the single main choice, the dominant reason, given by roughly a quarter of interviewees was for the scenery/ views (24%, 33).

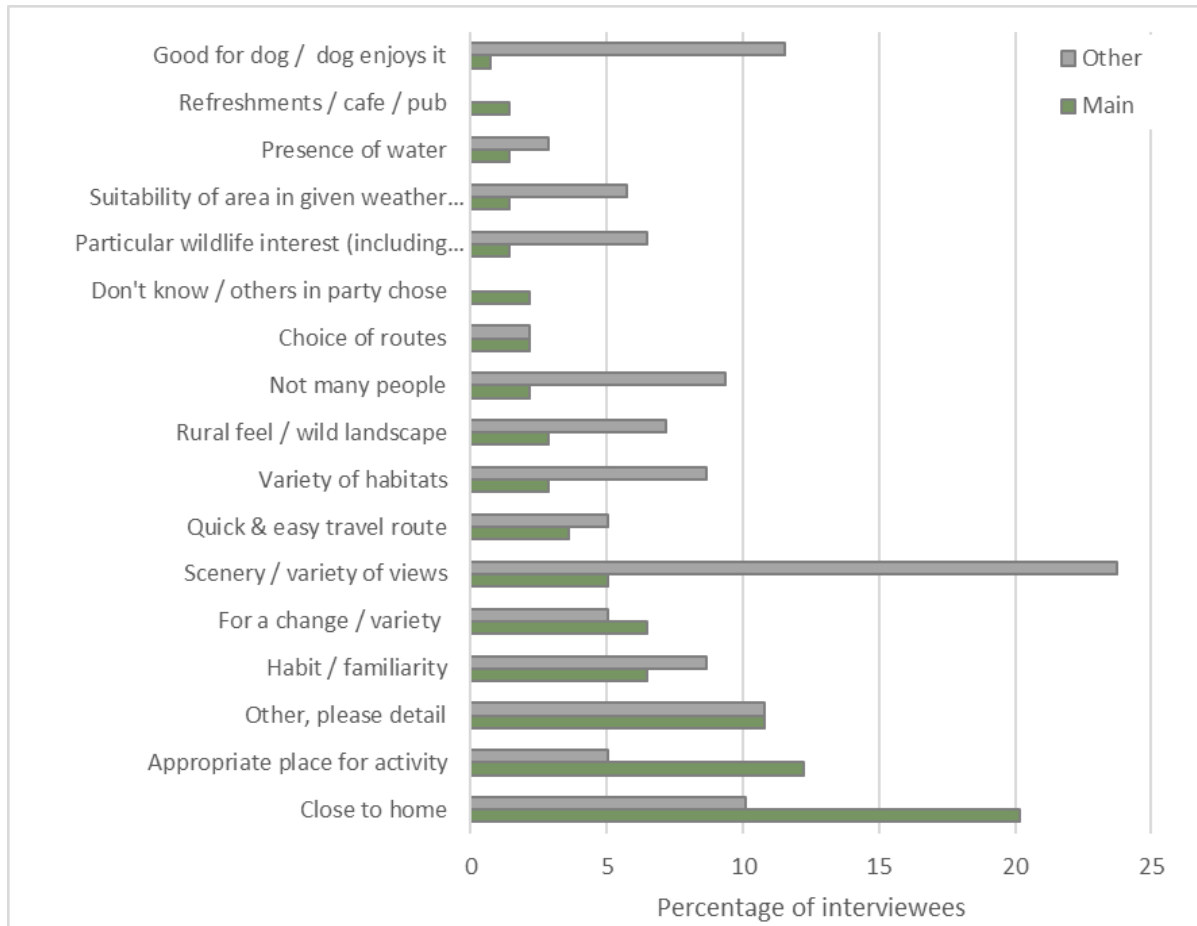


Figure 6: Summary of interviewees single choice main reason and any other reasons for choosing this site. Categories are sorted by main choice.

Alternative sites

4.22 The interviewee’s location often represents one of many locations used for the activity they were undertaking. Interviewees were asked to suggest how frequently they used the site where interviewed for their current activity, compared to alternative locations.

4.23 Overall, just 4% of interviewees (6) stated that they only visited the site where interviewed for their current activity. However, 27% (37 interviewees),

were mostly using the site where interviewed, in that they made 50% or more of their visits there,.

4.24 A full list of all alternative site names is given in Table 18. It should be noted that, interviewees may not have understood the full extent of the “site”, as referred to in the question, as some of the sites listed are still within the Beechwoods SAC.

Table 9: Alternative named sites ranked by the number of times mentioned by any interviewees, and then considering only the first named sites. Sites with less than 2% not shown.

	All named sites (number times mentioned, site as a percentage of all named locations n=195)	First named site only (number of interviewees naming site, percentage of interviewer choices n=281)
1	Painswick Beacon (20, 7%)	Painswick Beacon (8, 4%)
2	Robinswood Hill (11, 4%)	Robinswood Hill (7, 4%)
3	Crickley Hill (10, 4%)	Crickley Hill (6, 3%)
4	Leckhampton Hill (9, 3%)	Cleeve Hill (5, 3%)
5	Sheepscombe (8, 3%)	Coopers Hill (4, 2%)
6	Cirencester (7, 2%)	Painswick (3, 2%)
7	Cleeve Hill (7, 2%)	Sheepscombe (3, 2%)
8	Painswick (6, 2%)	Bristol (3, 2%)
9	Miserden (6, 2%)	Chosen Hill (3, 2%)
10	Winchcombe (6, 2%)	Cotswold Way (3, 2%)
11	Haresfield Beacon (5, 2%)	Leckhampton Hill (3, 2%)
12	Cranham Woods (5, 2%)	Forest of Dean (3, 2%)
13	Chosen Hill (5, 2%)	
14	Coopers Hill (5, 2%)	

4.25 Most popular answers in this full list of all locations were; Painswick Beacon, Robinswood Hill, Crickley Hill, Leckhampton Hill, Sheepscombe – see Table 9. If we consider only the first named site then lists generally consist of the same locations, but in a slightly different order.

New or improved greenspaces

4.26 Interviewees were asked what changes these greenspaces would need to encourage them to visit more. Roughly a third of interviewees (32%) suggested that no improvements were needed or that they wouldn't visit these more regardless of any changes, and a further 29% suggested they did not know. Of those interviewees providing a suggestion, the most common

was for more/better parking (9.4%), followed by improved footpaths and better signposting / interpretation / maps (both 5%).

- 4.27 When asked if they would use a new country park (for their current activity) was one to be created near here, overall 53% responded positively suggesting they would, compared to 30% who suggested they would not. Table 9 shows that the idea of a new country park was more popular with those who use the Beechwoods for dog walking, with 63% of interviewees suggesting they would use a new country park.

Table 10: Interviewees responses as to whether they would use a new country park.

Activity	n	Yes	Maybe	No	Not sure/ Dont know / Cant tell
Dog walking	56	35 (63)	7 (13)	14 (25)	(0)
Walking	62	27 (44)	9 (15)	24 (39)	2 (3)
Other	77	47 (61)	11 (14)	18 (23)	1 (1)
Total	139	74 (53)	20 (14)	42 (30)	3 (2)

- 4.28 Interviewees were then asked to state what features they would like to see at a new country park. The most common suggestion was the pooled category of "other" (17%). This category included a wide range of comments such as; animals, picnic and BBQ areas, flat areas, hilly areas, quiet with not many people and outdoor wild swimming. Other suggestions given by more than 10% of interviewees were good views / scenery (13%), café and woodland (both 11%).

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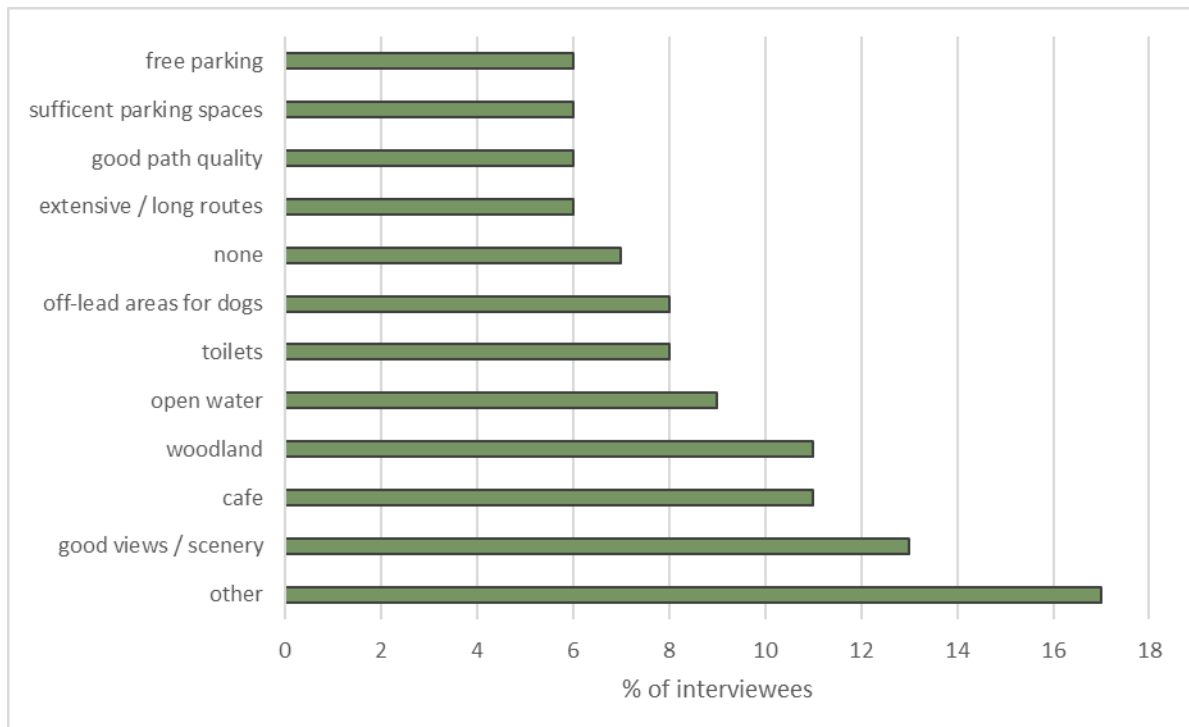


Figure 7: Interviewees' suggested traits for a new country park. Sorted by the percentage of interviewees with those less than % not shown.

Routes

4.29 During the interview, surveyors asked the interviewee to indicate on a map the route they had taken (or were going to take if just arrived on site). The route was marked on a paper map at an appropriate scale for the activity (the largest scale was the entire SAC). The routes were then digitised within GIS allowing us to extract data on route lengths and present pooled data on maps.

Route length

4.30 All interviewees were able to give a route, and route lengths ranged from 116 m to 22.4 km; these could include routes which extended beyond the SAC. The overall average route was 5.0 km (mean) and 3.0 km (median).

4.31 Table 11 shows the route lengths recorded at survey points were significantly different from each other (using a Kruskal-Wallis test). Median values for survey points ranged from 11.3 km (8. The Royal William) to 1.6 km (5. Cranham Car Park). Route lengths at two survey points were much longer, compared to the other survey points; these were mostly long-distance walkers using the Cotswold Way at 8. The Royal William, or other public rights of way at 12. Foston's Ash Inn. Although it should be noted that sample sizes for individual survey points are often small; for example, just three interviewees at Foston's Ash Inn.

Table 11: Summary statistics and test results for interviewees' route length in km for survey points, sorted by median values.

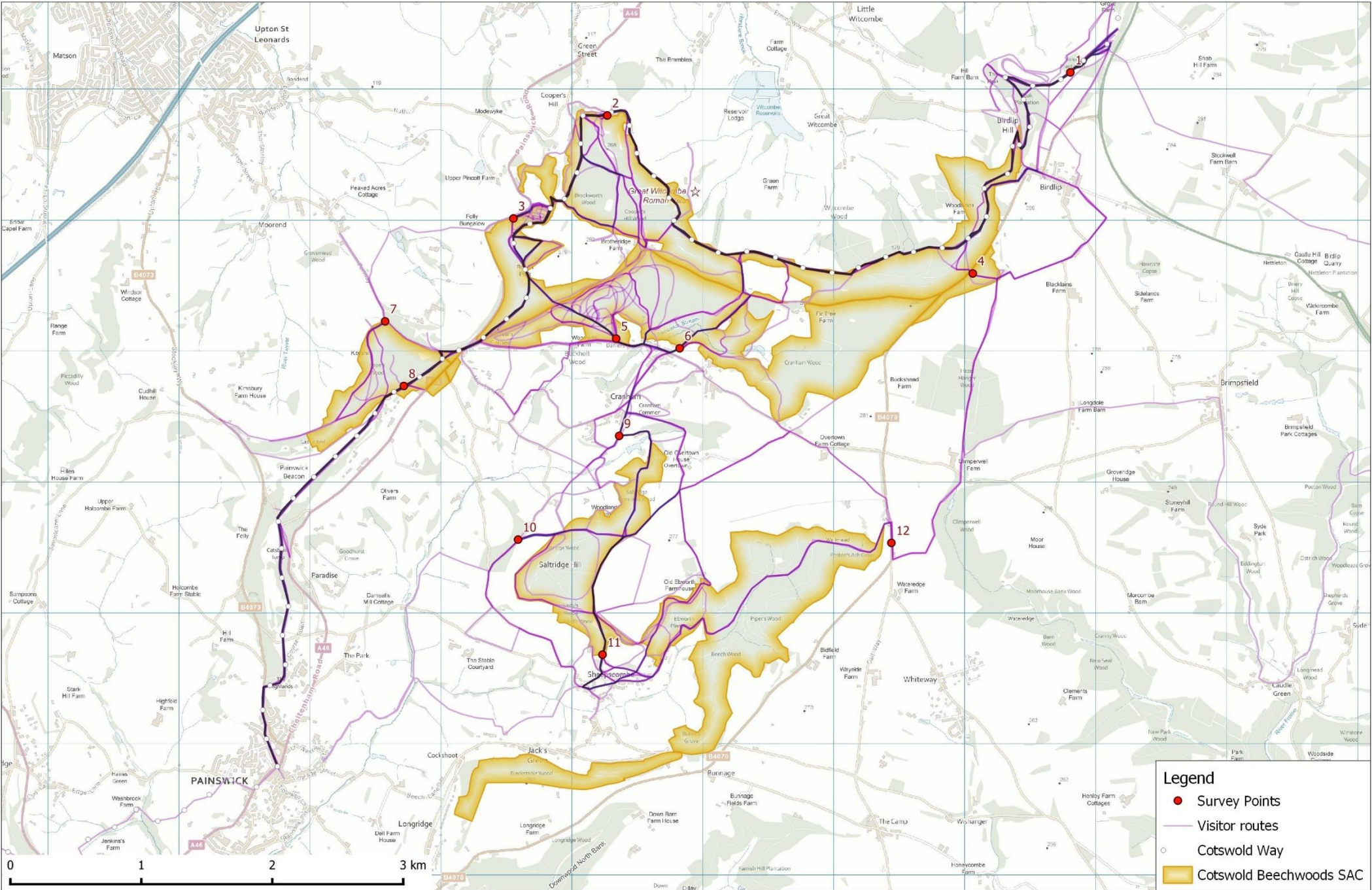
Survey Point	Number of interviewees (n)	Mean \pm SE	Median	Min – Max	Q3 (75% percentile)
8. The Royal William	20	10.0 \pm 1.1	11.3	0.9 - 22.4	12.6
12. Foston's Ash Inn	3	7.7 \pm 4.2	7.8	0.4 - 14.9	14.9
6. Cranham Village	9	4.6 \pm 1.0	3.8	1.0 - 8.1	7.4
9. Cranham Common	12	4.8 \pm 1.1	3.5	1.8 - 14.5	5.8
10. Saltridge Layby	8	4.3 \pm 0.9	3.3	2.3 - 9.7	5.4
11. Sheepscombe	8	3.3 \pm 0.4	3.2	1.7 - 4.6	4.4
2. Coopers Hill	28	4.8 \pm 0.7	3.0	0.1 - 12.6	7.3
1. Barrow Wake	16	4.8 \pm 1.5	2.8	1.6 - 21.1	3.1
3. A46 car park	10	2.9 \pm 0.6	2.8	0.4 - 6.9	4.2
7. Kites Hill	6	2.8 \pm 0.7	2.5	0.7 - 6.0	3.8
4. B4070 layby	3	2.2 \pm 1.0	1.7	0.7 - 4.2	4.2
5. Cranham Car Park	16	2.8 \pm 0.9	1.6	0.7 - 15.4	2.1
<i>KW: H=32.0, df=11, p=0.001.</i>					
Total	139	5.0 \pm 0.4	3.0	0.1 - 22.4	7.0

- 4.32 As a check on route lengths, interviewees were asked if their route was typical of their usual visit. Excluding those interviewees who were on a first visit, and therefore unable to comment, 66% of the interviewees suggested their route was typical. Roughly 17% suggested it was shorter than usual and 5% longer than usual. Key factors affecting this were often weather (too hot or too wet) and time.
- 4.33 A total of 34 interviewees stated they were following a marked trail and at least 13 interviewees explicitly stated the Cotswold Way (but only one said this had affected the typical total route length).

Distribution

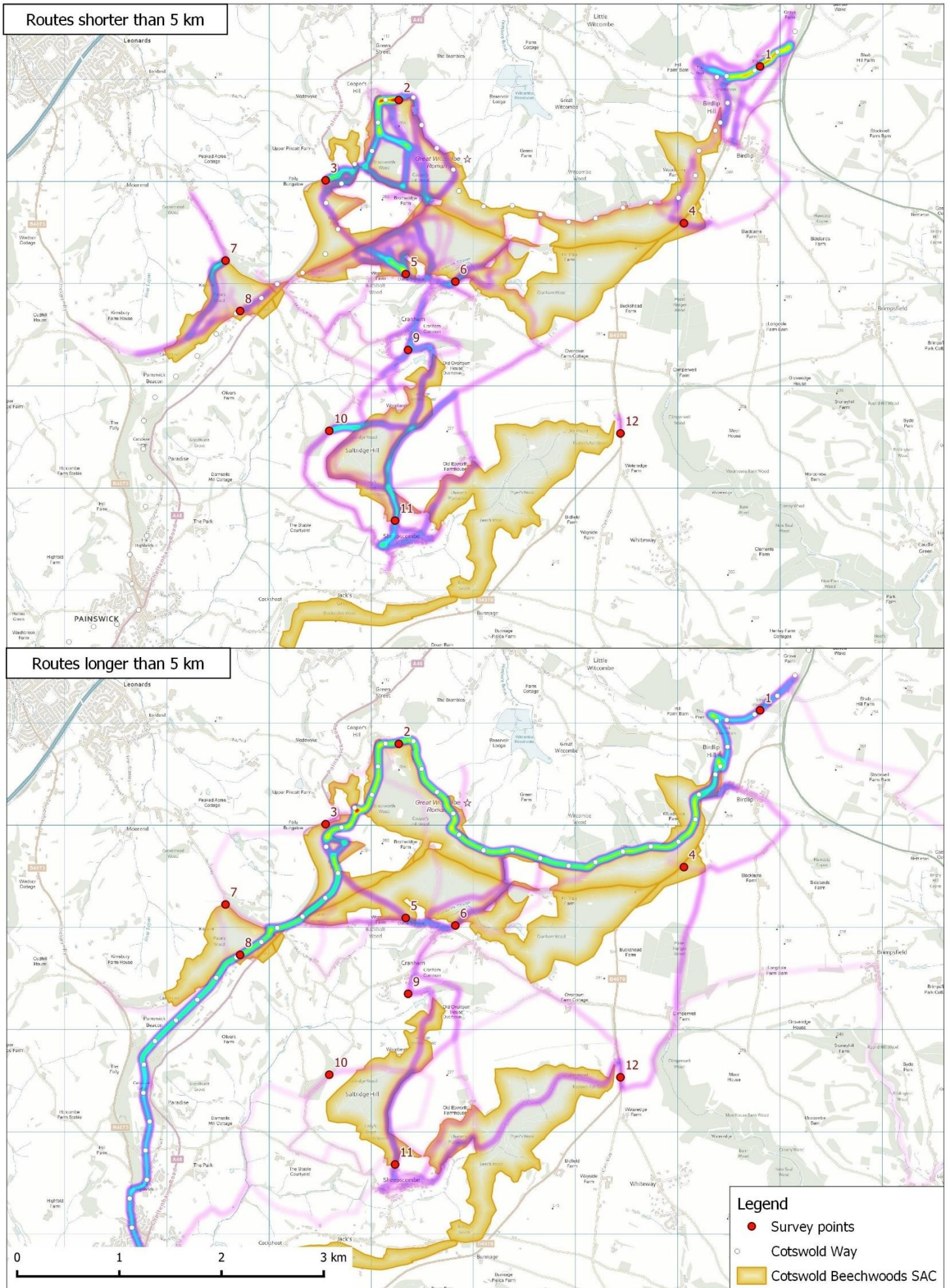
- 4.34 The raw route lines are shown in Map 5, with overlapping routes darkened to become black where many routes cross. The density of routes is better expressed as a heatmap as shown in Map 6. Map 6 displays separately those routes were which smaller or larger than the 5km mean (49 routes greater than 5 km, 35%). Greatest densities of long routes were along the Cotswold Way, and fairly evenly along this through the SAC area. Other long routes include the longer footpaths between small settlements e.g. Cranham, Sheepscombe, Birdlip or to visitor facilities (e.g. Foston's Ash Inn). Greatest densities of short routes were found around each survey point, but particularly between Cooper's Hill, Brockworth and Upton Wood, on Barrow Hill, around Cranham and within Saltridge Hill.

Map 6: Routes taken by interviewees at Cotswold Beechwoods. Darker colours indicate more footfall.



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Map 7: Routes taken by interviewees at Costwold Beechwoods shown as a rainbow heatmap.



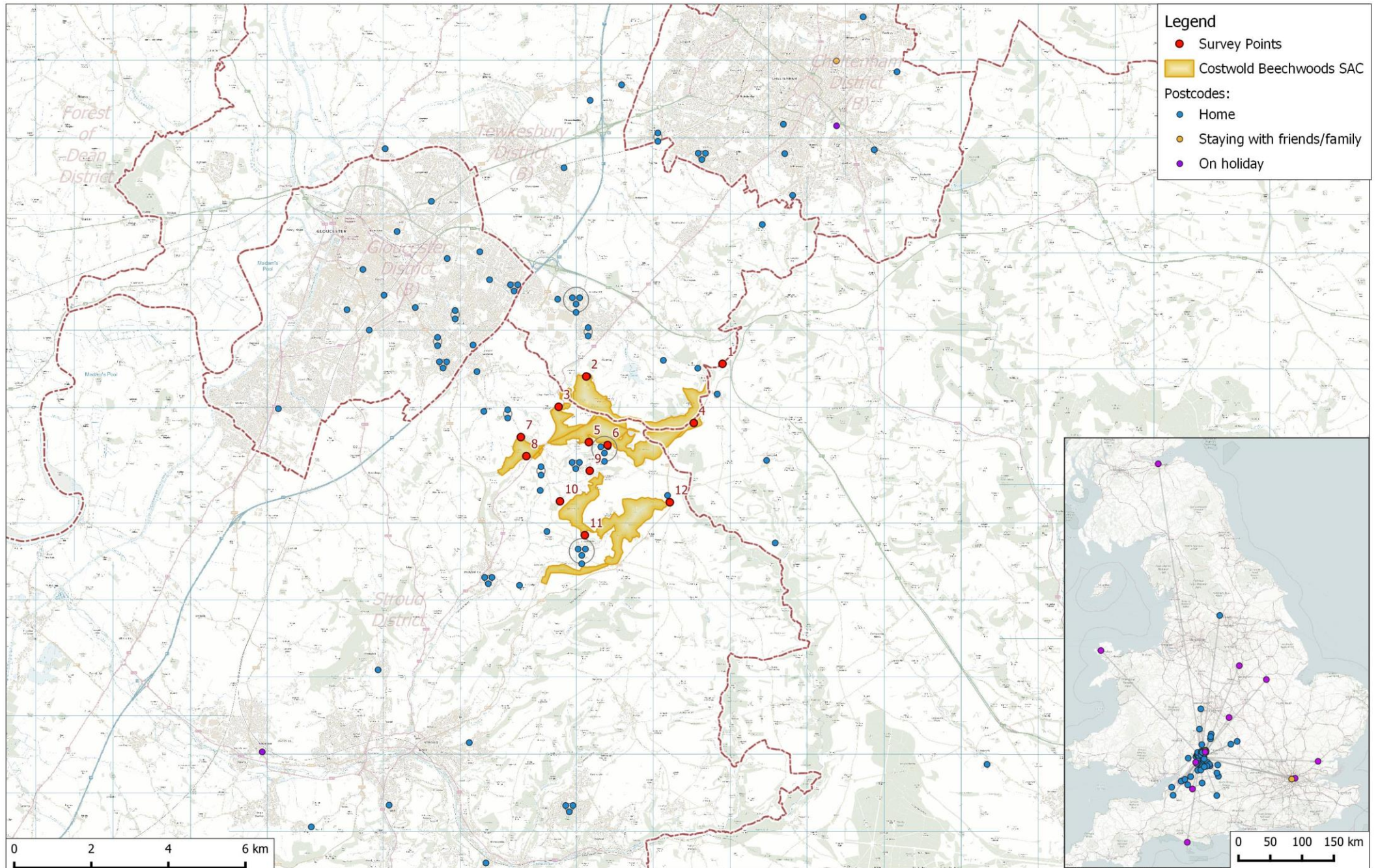
Postcodes

- 4.35 Interviewees were asked to provide their full home postcode. A total of 126 interviewees (91%) provided a full postcode which was georeferenced. Four interviewees were from overseas and eight interviewees refused to give a full postcode. All postcodes were matched within our georeferenced database and could therefore be mapped.
- 4.36 The interviewee home postcodes were widely spread across the local districts – see Table 12 and Map 8. The ranked number of interviewees showing the highest numbers were from Stroud District, roughly a quarter (26%), followed by Gloucester District 17% of interviewees, Tewkesbury 13%, Cheltenham and Cotswold, both 10%. Roughly the remaining quarter of interviewees (30, 24%) came from 22 other local authorities.
- 4.37 Considering only visitors who had travelled directly from home (rather than those staying with friends/family or on holiday), the proportions were largely similar although the relative importance of local districts increased. The top five districts (Stroud, Gloucester, Tewkesbury, Cotswold, Cheltenham) accounted for 76% of all interviewees, increasing to 82% of interviewees when considering those from home.

Table 12: Ranked local authority districts for number (and percentage) of interviewees postcodes.

Local authority	All interviewees	Home only
Stroud District	33 (26)	32 (28)
Gloucester District	22 (17)	22 (19)
Tewkesbury District	17 (13)	17 (15)
Cheltenham District	12 (10)	12 (11)
Cotswold District	12 (10)	10 (9)
South Gloucestershire	3 (2)	3 (3)
Wychavon District	3 (2)	3 (3)
Cherwell District	2 (2)	2 (2)
Swindon	2 (2)	2 (2)
Wiltshire	2 (2)	2 (2)
City of Bristol	2 (2)	2 (2)
Other LAs with only one interviewee	16 (13)	6 (5)
Total	126 (100)	113 (100)

Map 8: Distribution of interviewee postcodes shown across the UK (inset) and locally around the survey points (main map). Main map using a concentric ring offset to show overlapping postcodes (within 500m).



Linear distances

4.38 Linear distances between each interviewee’s home postcode and the survey point were calculated as Euclidean distances. The distance values ranged from 46 m to 465 km. The cumulative distribution of postcodes is shown in Figure 8 and overall the average was 27.5 km (mean \pm 5.2 SE) and 7.2 km (median).

4.39 One of the key factors in this distance range is the influence of large distances by interviewees on holiday, who lived an average of 148 km away (mean) and half of which lived within 153 km (median). In comparison, for those travelling directly from home we observed a mean linear distance of 14.9 km and median of 6.0 km, with three-quarters living within a 15.4 km radius – see Table 13 and Figure 8.

Table 13: Comparison of interviewee postcode linear distances, separated by visit type.

Visit type	N	Mean \pm SE	Median	Range	Q3
Home	113	14.9 \pm 2.5	6.0	0.05 - 223.5	15.4
Friends/family	2	79.4 \pm 67.8	79.4	11.61 - 147.2	n/a!
Holiday	11	147.9 \pm 38.3	153	10.20 - 465.1	185.9
Total	126	27.5 \pm 5.2	7.2	0.05 - 465.1	20.5

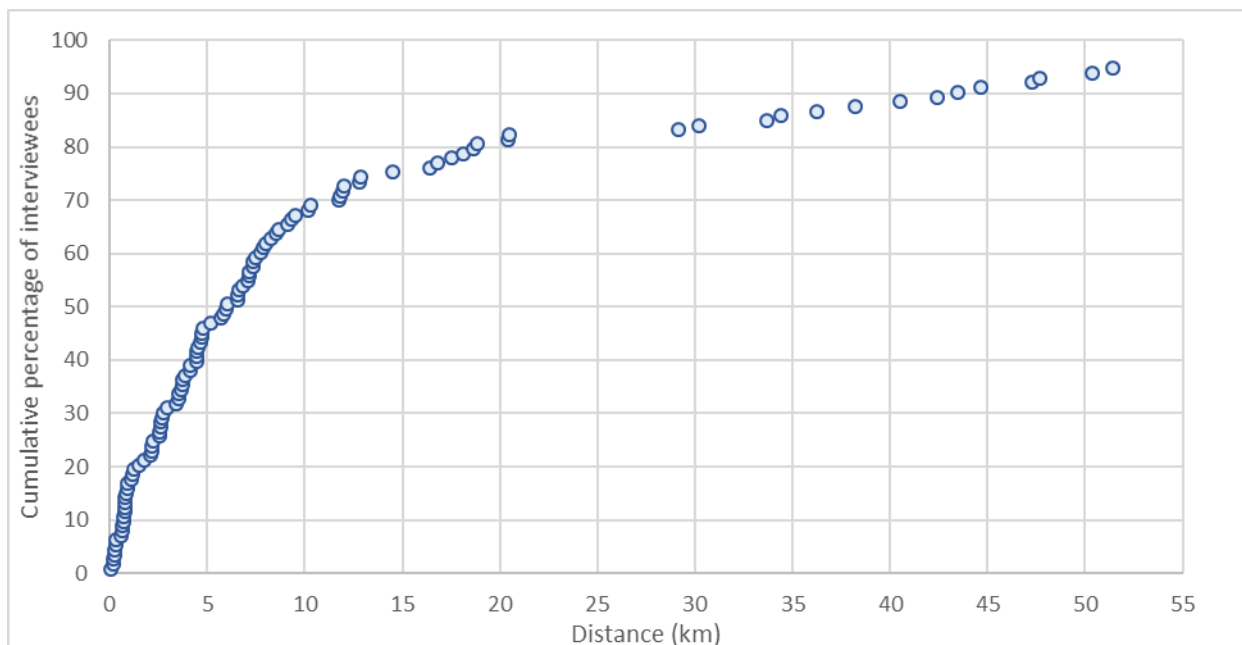


Figure 8: Cumulative distance of interviewee’s home postcode from the survey point interviewed at, shown only for those interviewees from home. Six interviewee distances beyond 55 km not shown.

- 4.40 Another key factor was mode of transport. Those visiting on foot obviously lived close to sites – typically within a 2.5 km radius (median value), although the long distance walkers are noted to have had an influence on this with a mean value of 23.7 km. In comparison, those who arrived by car typically lived further away, with half within an 8.1 km radius (median) and a mean value of 30.8 km.
- 4.41 As already noted, there were clear differences in visitor patterns for each survey point and therefore linear distances were explored for each survey point – as shown in Table 14. The 75th percentile ranged from 2.3 km at 10. Saltridge Layby to 67 km at 8. The Royal William. This was based on all interviewees rather than just those travelling directly from home, although it is very important to note the small sample sizes.

Table 14: Summary of interviewee postcode linear distances for each survey point, based on all interviewees. Based on all interviewees.

Survey point	N	Mean ± SE	Median	Range	Q3
1	15	29.2 ± 10.8	11.9	0.65 - 153.0	34.4
2	25	49.6 ± 20.7	9.3	0.05 - 465.1	31.4
3	9	34.7 ± 24.7	7.1	2.16 - 229.2	26.0
4	3	17.4 ± 10.6	10.1	3.76 - 38.2	38.2
5	16	8.1 ± 2.4	5.2	0.33 - 40.5	8.0
6	7	14.0 ± 8.7	8.0	0.19 - 65.0	11.6
7	6	2.7 ± 0.8	2.7	0.69 - 6.0	3.7
8	16	49.4 ± 14.7	31.9	2.54 - 185.9	67.6
9	11	20.1 ± 6.9	11.7	0.22 - 62.2	47.7
10	8	1.9 ± 0.7	1.1	0.59 - 6.7	2.3
11	7	14.0 ± 8.6	7.3	0.27 - 64.4	14.5
12	3	18.4 ± 10.4	18.6	0.19 - 36.3	36.3

- 4.42 Visitors generally came from further on weekends (median 7.3 km), than on weekdays (median 4.73 km), however this difference was not statistically significant (KW: H = 0.01, df= 1, p = 0.910). It might be assumed that visitors on holiday in the area were influencing this pattern, however the difference was still present and still not statistically significant (KW: H = 0.77, df= 1, p = 0.380). Summary statistics are given in Table 15 and show that the differences were not clear. Mean values showed higher values for weekdays than weekends, contrary to the median values (but with large standard error on the weekday mean). Accounting for this relatively large difference in the 75th percentiles between weekday and weekend a “typical” value can be

hypothesised of 16.4 km ((17.8 *5 + 12.9*2)/7) – which is just slightly larger than the overall 75th percentile value.

Table 15: Comparison of interviewee postcode linear distances on weekdays and weekends, using interviewees from home only

Day	N	Mean ± SE	Median	Range	Q3
Weekday	33	18.9 ± 7.2	4.5	0.2 - 223.5	17.8
Weekend	80	13.2 ± 1.9	7.0	0 - 73.1	12.9
Total	113	14.9 ± 2.5	6.0	0 - 223.5	15.4

4.43 For the two main activity groups, dog walkers typically lived within a 4.4 km radius (median), compared to 12.8 km for walkers. For the 11 daily visitors who gave a postcode, half lived within 692m of the survey point interviewed at and three-quarters within 2.6km. Of those interviewees who said all their visits for the current activity took place on the Beechwoods (n=6) all lived within 1.5 km and half of them lived within 564 m. Those interviewees who said they would be on site for more than 4 hours (n=9), lived on average 63.8 km away (mean), compared to those who would be on site for less than 30 minutes, 7.9 km.

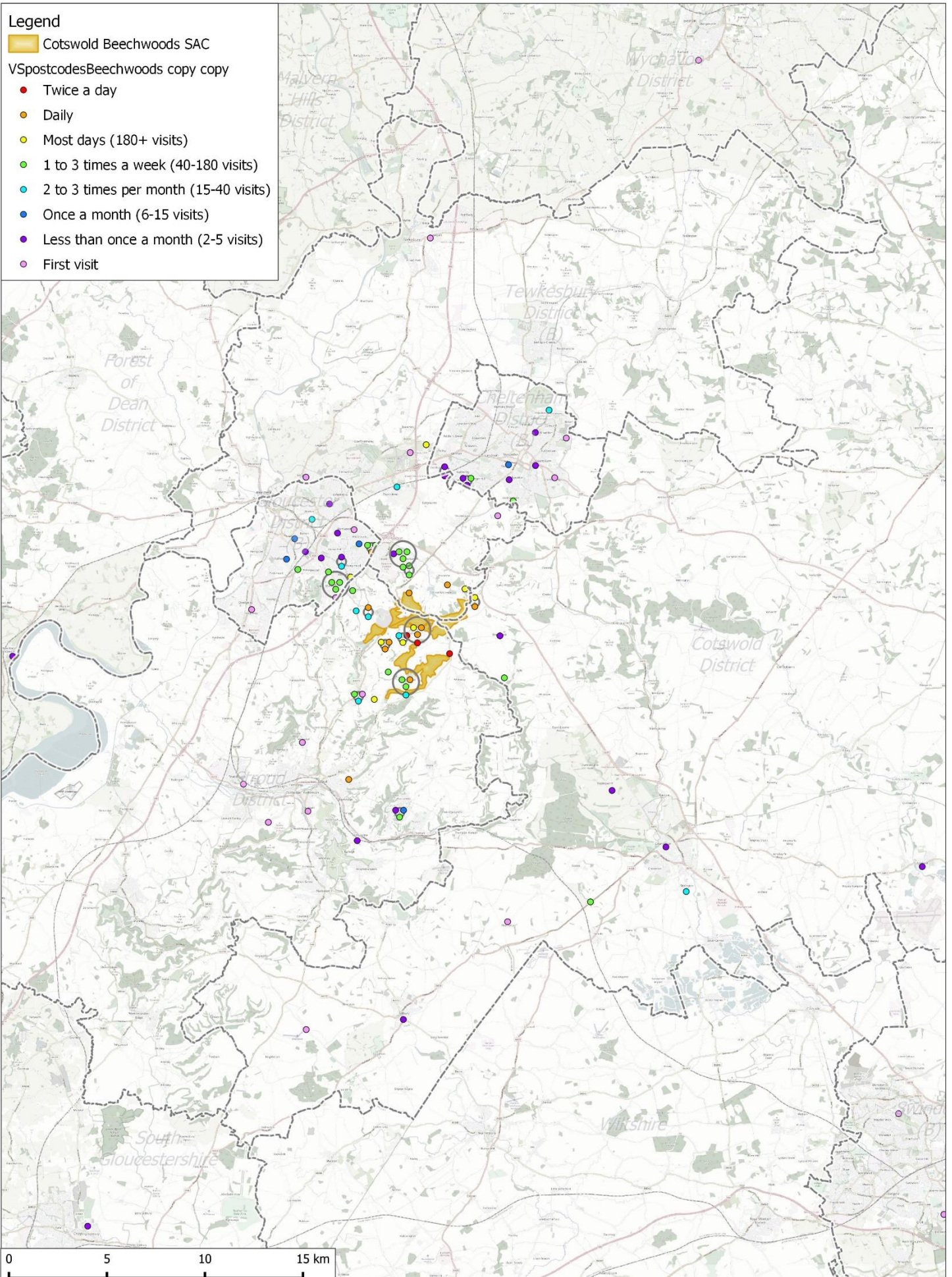
4.44 Table 16 shows a summary of the 75th percentile distances for interviewees, based on only those visiting directly from home. This shows how variable the distances were, particularly by visit frequency. In addition to Table 16, the visit frequency is shown in Map 9.

Table 16: Summary of 75th percentile (Q3) distances for grouped activity and visit frequency classes. Those interviewees not visiting directly from home (n=11) are not shown. Those that visit less than once a month or on a first visit (n=2) are not shown as a separate row, but are included in the total row.

	Dog walking	Walking	Other	Total
Daily/Most days	2.6km (15%. n=18)	n/a (3%. n=3)	n/a (2%. n=2)	2.3km (19%. n=23)
1 to 3 times a week	6.2km (14%. n=17)	3.8km (3%. n=3)	2.9km (3%. n=4)	4.5km (20%. n=24)
1 to 3 times a month	15.3km (8%. n=10)	10.3km (3%. n=4)	6.5km (3%. n=4)	10km (15%. n=18)
Less than once a month (2-5 visits)	7.6km (4%. n=5)	18.6km (13%. n=15)	73.1km (3%. n=3)	20.4km (19%. n=23)
First visit	65km (3%. n=3)	44.1km (19%. n=22)	56.3km (4%. n=5)	49km (25%. n=30)
Total	7.2km (45%. n=53)	27km (40%. n=47)	35.8km (15%. n=18)	15.4km (100%. n=113)

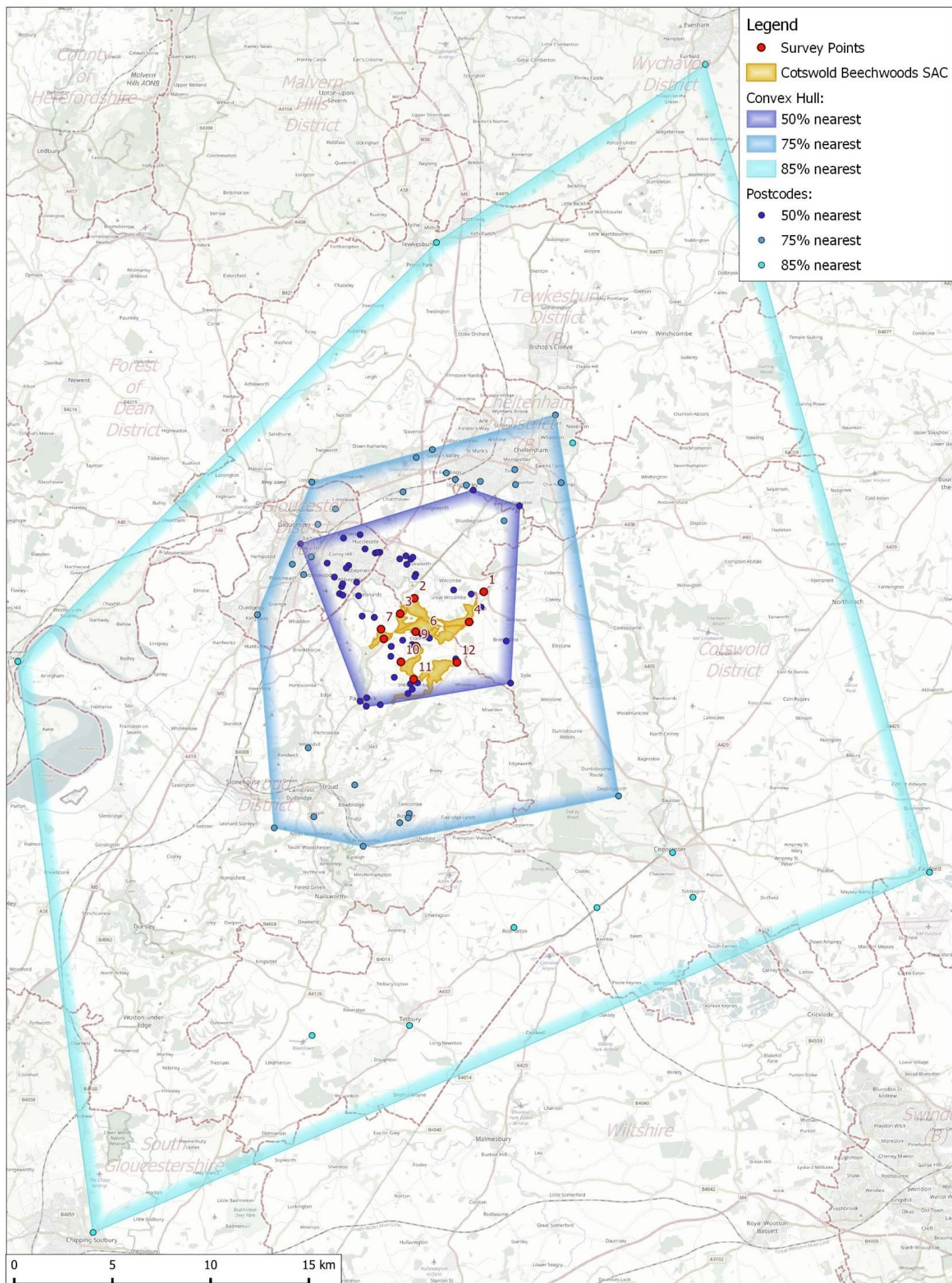
- 4.45 Map 10 shows the distribution of postcodes for interviewees who had travelled directly from home within a local area. Overall, three quarters (75%) of those from home lived within a 15.4 km radius, and 85% within a 34.3 km radius.
- 4.46 However, the catchment may be directional, rather than a single value radius, and as such the 75th percentile catchment may be better expressed a polygon. The polygon used is a convex hull, which wraps to the individual postcodes which are included in the percentile cut offs. These convex hulls will better represent a catchment that is directionally unequal. The postcodes within these distance bands, visualised as convex hulls are shown in Map 10.
- 4.47 The area for 50% of interviewees covers the SAC and nearby small villages, including Painswick and around half of Gloucester. The area for 75% of interviewees largely included the whole of Gloucester, Cheltenham and Stroud. While the area for 85% included an area west to the Severn, as far south as Chipping Sodbury, including Tetbury, Nailsworth and Dursley, east to Cirencester and Fairford, and north to Tewkesbury and Fairfield.
- 4.48 The 75% radius (15.4 km) applied as a single buffer to the entire Beechwoods SAC would include the whole of Stroud, Gloucester and Cheltenham, extending to Bishop's Cleeve, Cirencester and Nailsworth (but just short of Tetbury and Dursley).

Map 9: Distribution of interviewees within a wider area (encompassing 85% of interviewees) categorised by the interviewees visit frequency to the Cotswold Beechwoods.



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Map 10: Distribution of the 50%, 75% and 85% nearest interviewee home postcodes to each survey point. Minimum boundary area is shown using a convex hull.



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5. Discussion

5.1 The purpose of this survey was to provide a snapshot of the access patterns on the Cotswold Beechwoods SAC, in order to give an indication of typical visitor behaviour at the site. The report forms key evidence to underpin effective mitigation strategies.

Table 17: Summary metrics from the visitor survey.

Visitor metric	
Season and Year	Summer 2019
Number of survey points	12
Total hours fieldwork	192
Mean group size (from tally)	2.1
Mean number dogs per group (from tally)	0.6
Mean people per hour passing (from tally)	4.0
Mean people per hour entering (from tally)	1.6
Mean dogs per hour entering (from tally)	0.5
Number of interviews	139
% interviewees on short day visit from home	85
% interviewees activity: dog walking	40
% interviewees activity: walking	45
% interviewees arriving by car	67
% interviewees visiting daily or more than once a day	11
Average number of visits per year for an interviewee	57
Median distance to home postcode (short visit from home only)	7.2
75th percentile for postcode data (short visit from home only)	20.5
Median route length (km)	3.0

*based on four survey points with an entering count

5.2 Results of the visitor survey (summarised in Table 17) suggest very different types of access are occurring simultaneously within the site. There was a fairly even split between walkers (without a dog) and dog walkers at the Beechwoods, with certain locations popular for individual activities. For example, the survey point at the Royal William along the Cotswold Way was the most popular location with walkers, while the NNR car park very close to Cranham Village was most popular with dog walkers. Similarly, these two locations represent examples of the disparity between frequent and infrequent visitors, short and long routes and some of the widest ranging home postcode catchments. Our data would suggest most visitors live within

20.5 km (75% of all interviewees), and when considering only those travelling directly from home this reduces to within a 15.4 km radius.

- 5.3 An obvious limitation in the survey was the reduced survey effort due to anti-social behaviour. This was noted at survey point 3, the A46 car park, and survey point 4, B4070 layby. Only at survey point 3, did the surveyor feel forced to leave, resulting in 740 minutes (12.3 hours) of survey effort completed out of the anticipated 960 minutes (16 hours). The impact of this is unlikely to influenced the overall patterns observed as the anti-social behaviour would most likely have deterred many other visitors.
- 5.4 It may be that levels of cycling have been underestimated. Three biking groups were interviewed equating to 2% of interviewees, but 6% of people in the tally counts were cycling.
- 5.5 Anecdotally evidence suggests that mountain bikers use the SAC reasonably often, but can be variable in number, occurrence and starting points. Use will involve local clubs and those not affiliated to local groups. Such activity can be hard to pick up in visitor surveys where use is erratic, involves use in pulses and involves interviewees who may be reluctant to stop.
- 5.6 Local clubs include Bigfoot Mountain Bike Club⁹ and Cheltenham and County Cycling Club¹⁰. The Bigfoot Club have potentially regular, but relatively infrequent rides around Cranham Woods, with meeting points at Royal William Pub, Cranham (surveyed) and George Hotel, Birdlip.
- 5.7 The Bigfoot Club have been in contact with the local Council and Natural England regarding the pressure and provide maps of permissive routes on their website. Those not part of organised groups or clubs may be more likely to go off set routes and are more often those who can perhaps inadvertently cause damage (to wildlife and heritage features) through creation of new biking earthworks.
- 5.8 Further work could be undertaken to check levels of mountain bike use. Options could include direct contact with the clubs to ask about favoured routes, frequency of use, membership and for anecdotal information on local use by those who are not part of the club. Other approaches could

⁹ <https://www.bigfootmbc.co.uk/>

¹⁰ <https://www.cheltenhamandcounty.cc/>

include automated counters (such as motion sensitive cameras placed at ground level) that can be deployed on trails to monitor levels of use.

- 5.9 Another source of information on cyclists (and runners) is available using Strava. Strava users route data can be freely viewed as heatmaps¹¹ and such data provides interesting complimentary maps to the routes collated here. Although the road cyclists and mountain bikers cannot be separated on Strava maps, their routes are obviously different. Strava route maps show high levels of use along the Buckholt Road (by road cyclists and possibly mountain bikers) and the Cranham woods in close proximity to the road. The maps also show a wide number of different routes, especially in around Kites' Hill / Popes Wood.
- 5.10 In recent interviews at Cannock Chase, Strava was used by a relatively small proportion of cyclists - just 12.5% (Panter & Liley, 2019). While there was difficulty in stopping cyclists in this Beechwoods study, in Cannock the survey had greater focus on parking locations for cyclists and therefore able to intercept more cyclists so there is reasonable confidence in this proportion.
- 5.11 Based on our experience from visitor surveys at other locations we often see different patterns. To a degree this will be because these visitors are less well represented and diluted amongst other visitors. But also, because Strava data are focused to a small community of more dedicated recreational users. Strava states a high proportion of the routes recorded are commutes (c.40%) and furthermore refers to users as "athletes". For example, the average distance cycled in a year for Strava users was 829 km (for men) or 425 km (for women)¹². In comparison, UK national data suggested people who cycle make an average of 15 trips, totalling 85 km in a year¹³. Clearly Strava does well to target and record information on this higher level of "athlete", who are likely to be some of the users of the Cotswold Beechwoods. However, due to the difficulties of interviewing active cyclists, the representation of this group is an acknowledged limitation in our visitor surveying. Clearly there is a middle ground which represents the true

¹¹ <https://www.strava.com/heatmap#13.66/-2.16960/51.81371/hot/ride>

¹² See <https://keyassets.timeincuk.net/inspirewp/live/wp-content/uploads/sites/2/2017/12/Strava-Year-in-Sport-UK.pdf>

¹³ See https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/674503/walking-and-cycling-statistics-england-2016.pdf

picture of access from high level mountain bikers, through to family off road cyclists, and the all other recreation.

- 5.12 The overall proportion of access by car (67%) and on foot (28%), showed higher levels of access on foot compared to some other surveys. The proportion of access by car, on foot, bike etc. will be highly influenced by the selection of locations for surveying.
- 5.13 Furthermore, there were some busy access points and some extremely quiet access points. The distribution of visitor routes confirms this while highlighting high footfall in certain locations, including along the Cotswold Way.
- 5.14 Comparison to other sites Footprint Ecology has surveyed is difficult, as while we use a consistent surveying methodology, selected locations can vary greatly. This survey showed a per survey point mean of 4.0 people per hour passing for the Cotswold Beechwoods. Our visitor surveys at Burnham Beeches, conducted in summer and autumn suggested overall mean values of 6.5 people per hour (Liley, Floyd, & Fearnley, 2014). Cannock Chase showed an overall mean in the autumn of between 8.7 (weekday) and 13.3 (weekend), and a winter mean of 5.7 (Panter & Liley, 2019). However, at Cannock, the tally counts did not include the two main visitor hubs, both large and busy locations, so mean values would be much higher had these been included. At Hatfield Forest the mean people per hour ranged from 120 at the main visitor centre on Boxing Day to 2 on a quiet edge location on the summer Bank Holiday weekend (Saunders, Liley, Panter, & Weitowitz, 2019). Across all days and locations, the average was 18.5 people per hour.
- 5.15 Using evidence from our recently published pooled data, the mean number of visitor entering per hour (note entering counts, as opposed to figures above which are passing) was 2.9 for woodland sites (Weitowitz, Panter, Hoskin, & Liley, In Review), which compares to 1.6 for the Cotswold Beechwoods. Overall, this would confirm a general anecdotal feeling that levels of use are relatively low at the Cotswold Beechwoods. However, the Cotswold Beechwoods are very unusual in the patterns of visitor access caused by concentrated use along the Cotswold Way, which may influence this overall feeling of comparatively lower use. It should also be noted that use may be higher in school holidays and our experiences show woodland sites are often busier in autumn.

- 5.16 Regardless of current levels, visitor pressure can cause a wide range of impacts and potential increases are further cause for concern. Visitor impacts include; trampling and compaction of soils, erosion pressures, damage to ground flora, eutrophication of relatively poor soils from dog fouling, but also wear to trees, wood/fungi harvesting and contamination. Beechwood habitats are often particularly vulnerable due to the typically limited ground flora, which creates an open impression and allows people to roam off paths easily.
- 5.17 The results indicate that the long-distance walkers have a large footprint on the site, but in a confined and manageable area along the marked trail. Whereas short distance, frequent visitors have a year-round impact and are less confined to a marked trail. They have a smaller single visit footprint but are regularly impacting and are potentially less likely to repeat consistently the same route.
- 5.18 Mountain biking is a particular cause for concern to erosion. A survey this summer on a subset of the SSSI units has shown some serious localised impacts from mountain bike use (*Natural England pers. comm.*). These were particularly noted in the steep locations and where earthworks had been created (e.g. ramps and berms). It would suggest for this site that while numbers of cyclists are lower than walkers and dog walkers, the activity may be having a greater impact particularly in focused areas. Quantifying the levels of use by mountain bikers is important and recommendations for the future as could include monitoring numbers using counters/cameras.
- 5.19 Around a fifth of interviewees stated that their main reason for visiting was because the site was close to home, despite the relatively large distances being travelled. This suggests that people perceived the Beechwoods to be accessible to them because of a relatively proximity.
- 5.20 Just over half of interviewees responded positively to the use of a new country park – perhaps in part because “country parks” feature prominently in the alternative greenspaces already use e.g. Robinswood Hill Country Park. However, a third of interviewees stated they would not use a country park as an alternative, and remaining visitors unsure.
- 5.21 Three-quarters of routes undertaken by those interviewed were 7 km. This highlights the potential difficulties in replicating the experience offered at such an extensive site.

5.22 In conclusion it is clear that the Cotswold Beechwoods has a relatively large catchment, but that people perceive the distances travelled to still be relatively close to their home, indicating that the site has a large draw as a greenspace. People are coming to the site to undertake fairly long-distance walks, reflective of the expansive nature of the site and the options it provides for taking long routes. Visits are being made from home locations in multiple local planning authority areas in the vicinity of the site. The data provided here offers a range of analysis options for predicting future visitor behaviour in relation to new residential growth coming forward in Local Plans for administrative areas around the Cotswold Beechwoods.

Appendix 1: Questionnaire



Good morning/afternoon. I am conducting a visitor survey on behalf of the Stroud District Council who are interested in gathering visitor's views about the area and recreation. Can you spare me a few minutes please?

Q1 ...

- Are you on a day trip/short visit and have travelled directly from your home today... *if no*
- Are you on a short trip/short visit & staying away from home with friends or family ... *if no*
- Are you staying away from home, e.g. second home, mobile home or on holiday
- If none of the above, How would you describe your visit today?

Further details

Q2 **What is the main activity you are undertaking today?** *Tick closest answer. Do not prompt. Single response only. Avoid reasons e.g "keeping fit", but stick to activities.*

- Dog walking
- Commercial dog walking
- Walking
- Jogging/ power walking / running
- Outing with family
- Cycling/Mountain Biking
- Bird/Wildlife watching
- Enjoying scenery / fresh air
- Photography
- Meeting up with friends
- Picnic
- Horse riding
- Motorbike/ Scrambler
- Off roading / 4 x 4 Green laning
- Other, please detail:

Further details

Q3 Over the past year, roughly how often have you visited this site? *Tick closest answer, single response only. Only prompt if interviewee struggles.*

- More than twice a day
- Twice a day
- Daily
- Most days (180+ visits)
- 1 to 3 times a week (40-180 visits)
- 2 to 3 times per month (15-40 visits)
- Once a month (6-15 visits)
- Less than once a month (2-5 visits)
- Don't know
- First visit
- Other, please detail

Further details:

Q4 How long have you spent / will you spend at this site today? *Single response only.*

- Less than 30 minutes
- Between 30 minutes and 1 hour
- 1-2 hours
- 2-3 hours
- 3-4 hours
- 4 hours +

Further details

Q5 Do you tend to visit this site at a certain time of day? *Tick closest answers. Multiple answers ok.*

- Early morning (before 7 am)
- Late morning (between 7 am and 10 am)
- Midday (between 10 am and 2 pm)
- Early afternoon (between 2 pm and 4 pm)
- Late afternoon (between 4 and 6 pm)
- Evening (after 6 pm)
- Varies / Don't know
- First visit

Q6 **Do you tend to visit this site more at a particular time of year for [insert given activity]?** *Multiple answers ok.*

- Spring (Mar-May)
- Summer (Jun-Aug)
- Autumn (Sept-Nov)
- Winter (Dec-Feb)
- Equally all year
- Don't know
- First visit

Q7 **How long have you been visiting this site for?** *Single response only. Do not prompt.*

- Don't know
- First visit
- less than or approximately 6 months
- less than or approximately 1 year
- less than or approximately 3 years
- less than or approximately 5 years
- less than or approximately 10 years
- more than 10 years

Further details:

Q8 **How did you get here today?** *if necessary prompt with: What form of transport did you use? Single response only.*

- Car / van
- On foot
- Bicycle
- Other, please detail

Further details:

Q9 **Would you have used any other means of transport had it been available, such as better bus or cycle routes?**

- Yes, public transport
- Yes, bicycle
- Yes, walked
- Yes, other
- No
- Not sure / Dont know

Now I'd like to ask you about your route today. Looking at the area shown on this map, can you show me where you started your visit today, the finish point and your route please. Probe to ensure route is accurately documented. Use **P** to indicate where the visitor parked, **E** to indicate the start point and **X** to indicate the exit. Mark the route with a line; a solid line for the actual route and a dotted line for the expected or remaining route.

Q10 **Is / was your route today the normal length when you visit here for [insert given activity]?** Tick closest answer, do not prompt. Single response only.

- Yes, normal
- Much longer than normal
- Much shorter than normal
- Not sure / no typical visit
- First visit

Q11 **What, if anything, influenced your choice of route here today?** Tick closest answers, do not prompt. Multiple responses ok.

- Weather
- Daylight
- Time
- Other users (avoiding crowds etc)
- Group members (eg kids, less able)
- Muddy tracks / paths
- Followed a marked trail
- Previous knowledge of area / experience
- Activity undertaken (eg presence of dog)
- Interpretation / leaflets / promotion
- Viewpoint / Feature
- Other, please detail

Further details:

Q12 **Why did you choose to visit this specific location today, rather than another local site?** Tick all responses given by visitor in the 'other' column. Do not prompt, tick closest answers. Then ask **Which single reason would you say had the most influence over your choice of site to visit today?** Tick only one main reason. Use text box for answers that cannot be categorised and for further information.

	Other	Main
Don't know / others in party chose	<input type="radio"/>	<input type="radio"/>
Close to home	<input type="radio"/>	<input type="radio"/>
No need to use car	<input type="radio"/>	<input type="radio"/>
Quick & easy travel route	<input type="radio"/>	<input type="radio"/>

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Good / easy parking	<input type="radio"/>	<input type="radio"/>
Particular facilities	<input type="radio"/>	<input type="radio"/>
Refreshments / cafe / pub	<input type="radio"/>	<input type="radio"/>
Choice of routes	<input type="radio"/>	<input type="radio"/>
Feels safe here	<input type="radio"/>	<input type="radio"/>
Quiet, with no traffic noise	<input type="radio"/>	<input type="radio"/>
Not many people	<input type="radio"/>	<input type="radio"/>
Scenery / variety of views	<input type="radio"/>	<input type="radio"/>
Rural feel / wild landscape	<input type="radio"/>	<input type="radio"/>
Particular wildlife interest (including trees)	<input type="radio"/>	<input type="radio"/>
Habit / familiarity	<input type="radio"/>	<input type="radio"/>
Good for dog / dog enjoys it	<input type="radio"/>	<input type="radio"/>
Ability to let dog off lead	<input type="radio"/>	<input type="radio"/>
Closest place to take dog	<input type="radio"/>	<input type="radio"/>
Closest place to let dog safely off lead	<input type="radio"/>	<input type="radio"/>
Appropriate place for activity	<input type="radio"/>	<input type="radio"/>
Suitability of area in given weather conditions	<input type="radio"/>	<input type="radio"/>
Presence of water	<input type="radio"/>	<input type="radio"/>
Openness / wide open spaces	<input type="radio"/>	<input type="radio"/>
Variety of habitats	<input type="radio"/>	<input type="radio"/>
For a change / variety	<input type="radio"/>	<input type="radio"/>
Other, please detail	<input type="radio"/>	<input type="radio"/>
Further details:		

I would now like to ask about other local sites that you visit for *[given activity]*.

Q13 **What proportion of your weekly visits for [given activity] take place at this site compared to other sites. Can you give a rough percentage? Do not prompt**

- All take place here
- 75% or more
- 50-74%
- 25-49%
- less than 25%
- Not sure/don't know/first visit

Please could you tell us the name of up to 3 other locations you visit most often for [given activity]? Please list them in order, starting with the one you visit most.

Q14 **Name of Site 1 (Most visited)**

Q15 **Name of Site 2**

Q16 **Name of Site 3**

Q17 Thinking about other green spaces, are there any changes to additional green spaces around the site which encourage you to use them more? Do not give options. Do not prompt.

- More / better parking
- New / better cafe/ visitor facilities
- Improved accessibility (pushchair / disabled access, better gates etc.)
- Better path condition
- Improved footpaths
- Improved cyclepaths
- More / better toilets
- More litter bins
- More dog poo bins
- Better managed / maintained sites
- Better signposting / interpretation / maps
- Better advertised / promoted
- Dont know/ Not sure
- No / None / Wouldnt visit these more regardless

Further details:

Q18 If a new country park was created near here for [insert given activity], do you think you would be likely to use it?

- Not sure/ Dont know / Cant tell
- Yes
- Maybe
- No

Q19 **What features would you like to see at such a new country park in order for it to draw [given activity]?** Do not prompt. Tick any options as relevant.

- cafe
- visitor centre
- toilets
- sufficient parking spaces
- free parking
- extensive / long routes
- good path quality
- dedicated cycling routes
- bike hire
- dedicated horse riding routes
- off-lead areas for dogs
- play facilities for children
- good views / scenery
- well maintained space
- safe feel
- woodland
- open water
- none
- other (give details)

Q20 Further details:

Q21 **Are there any changes you would like to see here with regards to how this area is managed for recreation and people?** *Do not give options*

Q22 **Do you have any further comments or general feedback about your visit and access to this area?**

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Q23 **And what is your full home postcode?** *This is an important piece of information, please make every effort to record correctly.*

Q24 *If visitor is unable or refuses to give postcode:* **What is the name of the town or village where you live?**

Q25 *If visitor is on holiday ask:* **Which town / village are you staying in?** *[Routed from above Q]*

Q26 **Finally, was your dog off lead at any point on your visits?** *(no need to ask if can clearly see the dog is off lead!)*

- Yes
- No
- Not sure / Dont know

That is the end. Thank you very much indeed for your time.

Q27 **TO BE COMPLETED AFTER INTERVIEW FINISHED.**

Surveyor initials	<input type="text"/>
Survey location code	<input type="text"/>
Map Reference Number	<input type="text"/>
Gender of respondent	<input type="text"/>
Total number in interviewed group	<input type="text"/>
Total males	<input type="text"/>
Total females	<input type="text"/>
Total minors (under 18)	<input type="text"/>
Total number of dogs	<input type="text"/>
Number of dogs seen off lead	<input type="text"/>

Q28 **Surveyor comments.** *Note anything that may be relevant to the survey, including any changes to the survey entry that are necessary, eg typos/mistakes/changes to answers/additional information.*

Further details:

Appendix 2: Tables

Table 18: Full list of alternative named sites ranked by the number of times mentioned by any interviewees, and then considering only the first named sites. Note these names have not been comprehensively checked and may include spelling errors.

	All named sites (number times mentioned, site as a percentage of all named locations n=195)	First named site only (number of interviewees naming site, percentage of interviewer choices n=281)
1	Painswick beacon (20, 7%)	Painswick beacon (8, 4%)
2	Robinswood hill (11, 4%)	Robinswood hill (7, 4%)
3	Crickley hill (10, 4%)	Crickley hill (6, 3%)
4	Leckhampton hill (9, 3%)	Cleeve hill (5, 3%)
5	Sheepscombe (8, 3%)	Coopers hill (4, 2%)
6	Cirencester (7, 2%)	Painswick (3, 2%)
7	Cleeve hill (7, 2%)	Sheepscombe (3, 2%)
8	Painswick (6, 2%)	Bristol (3, 2%)
9	Miserden (6, 2%)	Chosen hill (3, 2%)
10	Winchcombe (6, 2%)	Cotswold way (3, 2%)
11	Haresfield beacon (5, 2%)	Leckhampton hill (3, 2%)
12	Cranham woods (5, 2%)	Forest of dean (3, 2%)
13	Chosen hill (5, 2%)	Workmans wood (2, 1%)
14	Coopers hill (5, 2%)	Miserden (2, 1%)
15	Cotswold way (5, 2%)	Buckle woods (2, 1%)
16	Birdlip (4, 1%)	Ebworth (2, 1%)
17	Forest of dean (4, 1%)	Bath (2, 1%)
18	Bristol (3, 1%)	Haresfield beacon (2, 1%)
19	Mendips (3, 1%)	Cranham common (2, 1%)
20	Malvern hills (3, 1%)	Mendips (2, 1%)
21	Minchinhampton (3, 1%)	Cirencester (2, 1%)
22	Cleeve common (3, 1%)	Cranham woods (2, 1%)
23	Frith woods (3, 1%)	Slad valley (2, 1%)
24	Cranham (3, 1%)	Birdlip (2, 1%)
25	Woods (3, 1%)	Winchcombe (2, 1%)
26	Brockworth (2, 1%)	Barnwood park (1, 1%)
27	South west coast path (2, 1%)	Westonbirt (1, 1%)
28	Penn woods (2, 1%)	Bircher (1, 1%)
29	Chilterns (2, 1%)	Chilterns (1, 1%)
30	Chipping campden (2, 1%)	Bisley (1, 1%)
31	Bath (2, 1%)	Cranham sawmills (1, 1%)
32	Buckholt woods (2, 1%)	Selsley (1, 1%)
33	Cirencester park (2, 1%)	Chipping sodbury (1, 1%)
34	Westonbirt (2, 1%)	Tibberton (1, 1%)
35	Birdlip hill (2, 1%)	Buckholt woods (1, 1%)
36	Buckle woods (2, 1%)	Netherlands (1, 1%)

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37	Barnwood park (2, 1%)	Daneway (1, 1%)
38	Brockwoth (2, 1%)	Prinich (1, 1%)
39	Black stable wood (2, 1%)	Dorset (1, 1%)
40	Nailsworth (2, 1%)	Sand bay (1, 1%)
41	Cranham common (2, 1%)	Dublin (1, 1%)
42	Rodborough common (2, 1%)	Siccaridge woods (1, 1%)
43	Brecon beacons (2, 1%)	South west coast path (1, 1%)
44	Slad valley (2, 1%)	Edge common edge (1, 1%)
45	Dublin (2, 1%)	Upton st leonards (1, 1%)
46	Standish woods (2, 1%)	Essex coast (1, 1%)
47	Ebworth (2, 1%)	Whitcombe woods (1, 1%)
48	Workmans wood (2, 1%)	Evesham (1, 1%)
49	Broadway (2, 1%)	North downs (1, 1%)
50	Tibberton (1, 0%)	Fairford area (1, 1%)
51	Selsley (1, 0%)	Brempsfield footpath (1, 1%)
52	Quickly hill (1, 0%)	Cleveland way (1, 1%)
53	Burrows field (1, 0%)	Quickly hill (1, 1%)
54	Staffordshire way (1, 0%)	Golf course (1, 1%)
55	Cleveland way (1, 0%)	Saltbox (1, 1%)
56	West highland way (1, 0%)	Cleeve common (1, 1%)
57	Edge common edge (1, 0%)	Sapperton canal (1, 1%)
58	Saltbox (1, 0%)	Kilkenny (1, 1%)
59	Essex coast (1, 0%)	Brockworth (1, 1%)
60	Abberley hills (1, 0%)	Beacon (1, 1%)
61	Evesham (1, 0%)	Wiltshire downs (1, 1%)
62	Stroud canal (1, 0%)	South coast path (1, 1%)
63	Fairford area (1, 0%)	Woolpack slad (1, 1%)
64	Upton st leonards (1, 0%)	Standish woods (1, 1%)
65	Fields (1, 0%)	Malvern hills (1, 1%)
66	Willsbridge (1, 0%)	Upton cheney (1, 1%)
67	Brempsfield footpath (1, 0%)	Cold aston (1, 1%)
68	Catwalk way (1, 0%)	West highland way (1, 1%)
69	Frampton (1, 0%)	Minchinhampton (1, 1%)
70	Sapperton canal (1, 0%)	Westonbirt arboretum (1, 1%)
71	Brimpsfield (1, 0%)	Bewl water (1, 1%)
72	Siccaridge woods (1, 0%)	Cranham (1, 1%)
73	Golf course (1, 0%)	Nailsworth (1, 1%)
74	South coast path (1, 0%)	Birdlip hill (1, 1%)
75	Bircher (1, 0%)	Brockwoth (1, 1%)
76	Stonley (1, 0%)	Lords and ladies wood (1, 1%)
77	Hazel woods (1, 0%)	Lake district (1, 1%)
78	Temple gutting (1, 0%)	
79	Wiltshire downs (1, 0%)	
80	Ullenwood (1, 0%)	
81	Wistley (1, 0%)	
82	Warwick castle (1, 0%)	

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83	Beechenhurst (1, 0%)	
84	Westonbirt arboretum (1, 0%)	
85	Chippenham (1, 0%)	
86	Prinich (1, 0%)	
87	Lake district (1, 0%)	
88	Aston court woods (1, 0%)	
89	Lakes (1, 0%)	
90	Rudge hill (1, 0%)	
91	Lasborough (1, 0%)	
92	Sand bay (1, 0%)	
93	Canals (1, 0%)	
94	Selfridge wood (1, 0%)	
95	Lords and ladies wood (1, 0%)	
96	Beacon (1, 0%)	
97	Yanworth (1, 0%)	
98	Cricklade hill (1, 0%)	
99	Cold aston (1, 0%)	
100	Snowhill (1, 0%)	
101	May hill (1, 0%)	
102	Crown common (1, 0%)	
103	Bisley (1, 0%)	
104	Daneway (1, 0%)	
105	Chipping sodbury (1, 0%)	
106	Stroud (1, 0%)	
107	Blenheim palace (1, 0%)	
108	Swifts hill (1, 0%)	
109	Bewl water (1, 0%)	
110	The heavens (1, 0%)	
111	Netherlands (1, 0%)	
112	Tewksbury (1, 0%)	
113	North downs (1, 0%)	
114	Upton cheney (1, 0%)	
115	Norton (1, 0%)	
116	Wales (1, 0%)	
117	Ozleworth (1, 0%)	
118	Wendover woods (1, 0%)	
119	Bathurst woods (1, 0%)	
120	Devils chimney (1, 0%)	
121	Cranham sawmills (1, 0%)	
122	Whitcombe woods (1, 0%)	
123	Popes wood (1, 0%)	
124	Dorset (1, 0%)	
125	Prinage (1, 0%)	
126	Isle of wight (1, 0%)	
127	Woodchester park (1, 0%)	
128	Juniper hill (1, 0%)	

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129	Woolpack slad (1, 0%)	
130	Kilkenny (1, 0%)	
131	Wotton (1, 0%)	
132	Kimber edge (1, 0%)	
133	avon way (1, 0%)	