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Cannock Chase Visitor Survey 2018

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Summary

Visitor surveys were undertaken across Cannock Chase in summer through to winter 2018. Surveys involved interviews with site users and tally counts of all people using sites.

Twenty locations were selected for surveying, and included a wide range of access points, from two main visitor hubs (Birches Valley and Marquis Drive) through a range of other parking locations and two foot access points. Surveys were conducted at three separate periods: the summer school holidays (August), autumn term time (September) and winter term time (November/December). Autumn surveys involved both weekday and weekend surveys (8hrs on each), winter surveys just weekdays (for 8 hrs) and summer school holidays just weekdays (8 hrs), at a subset of just five locations.

Tally counts were conducted over 504 hours (no tally counts were taken at two survey points due to the logistical challenges of counting people at those specific locations). Key results were:

- Highest total counts were of an average 37 people per hour (pph) passing in a day at Seven Springs, followed by 35 pph at Milford Common and 32 pph at Castle Ring.
- The total across all survey points in the autumn showed a 54% increase at weekends compared to the weekday values – a ratio of roughly 60:40.
- The overall average group size was 1.5 people per group, of which 0.2 were minors, and around 0.8 dogs per group. There were significantly larger group sizes at weekends.
- Overall tallies showed 18% of people entering were cyclists and 14% minors and 1% horse riders (note that these groups are not mutually exclusive)
- Surveys in winter revealed smaller group sizes, and fewer minors in groups, but a similar number of dogs and cyclists, compared to the autumn. Weekends appeared to have fewer dogs per group and fewer minors, but more cyclists compared to weekdays.

Interviews were conducted for 520 hours, and a total of 988 people (or groups of people) were interviewed. However, 18% of people approached refused to take part (people too busy, runners/cyclists which were hard to stop etc.) – this was highest at the pull in after Stile Cop (41%, mostly cyclists). Furthermore, 8% of people approached had already been interviewed – this was highest at Brocton Lane Corner (19% of people approached already interviewed). Key results from interviews were:

- Across all interviews, 97% were on a short visit directly from home. This was slightly different between seasons; 89% in summer, 97% in autumn and 98% in winter.
- Across all interviews, 43.2% of interviewees were dog walkers, 22.7% walkers and 20.8% cyclists, 4.9% jogging/running and 2.8% on a family outing. Of the interviewed groups with a dog, the average number was 1.6 dogs per dog walking group (compared to an overall 0.8 dogs per group across all activities from tally data) and roughly 60% of dogs seen were off lead.
- During the autumn-winter, key locations for cyclists were: 1: Birches Valley CP (73%), 2: Marquis Drive Triangle (34%), 4: Penkrudge Bank Road CP (47%), 5: Moors Gorse CP (92%)

and 10: Pull in after Stile Cop (67%). Key locations for walkers were; 7: Punchbowl (33%) and 11: Milford Common (47%). All other locations were mostly dog walkers (between 41% and 86%).

- Most interviewees suggested their visit was 1 to 2 hours (37%), followed by 30 mins to 1 hour (30%) – giving an approximate average dwell time of 1 hr 35 minutes. The shortest visits were by dog walkers (rough average c.60 mins), compared to cyclists (c. 140 mins).
- Most interviewees suggested they visited 1 to 3 times a week (40-180 visits a year; 27%), followed by daily visitors (at least once a day, 24%) – giving an approximate average at around 140 visits per year per interviewee. Weekday visitors were more frequent visitors (17% daily, c.170 visits a year) compared to weekend visitors (11% daily, c.110 visits a year). For dog walkers 48% visited sites daily (estimate c. 227 visits per year), compared to 7% for all other activities pooled (c. 82 visits per year).
- 71% of interviewees had been visiting the site for more than 10 years (78% for dog walkers, 73% walkers and 48% for cyclists).
- 87% of interviewees arrived by car (91% among those whose activity on site was cycling).
- Typical route length was around 6.2 km (mean) although 50% of interviewees conducted routes less than 3.8 km (median). Slightly longer routes were reported on weekends, but with no statistically significant difference.
- There were highly significant differences in route length between survey points, with 50% of routes over 10 km (median) at Penkridge Bank and Birches Valley, and in activity with 50% of cycling routes at least 12 km long compared to 2.6 km for dog walkers and 4.5 for walkers.
- The average percentage of route in SAC land across interviewees was: 58% for dog walkers; 53% for walkers, and 48% for joggers/runners (highest were 82% of photography/filming and 77% for horse riders, but sample sizes were small). The Pull in 2 after Bednall Belt, Duffields, Freda's Grave, pull in before Aspens Chase Road corner all had average percentages of routes in SAC of over 90%.
- Average total length of route in SAC across interviewees was: 3.8 km for joggers/runners, 2.4 km for walkers, and 1.9 km for cyclists (highest was 5.2 km for horse riders, but sample sizes were small). At Punchbowl, the pull in to Coppice Hill, Glacial Boulder, Whitehouse and Brocton Lane, the length of route in SAC was more than 3.5 km.
- Across all interviewees, roughly a third were from Stafford Borough, around a quarter from Cannock Chase District and around one in ten from Lichfield District.
- There appeared to be subtle differences in the distances travelled between seasons, but these were not statistically significant. Differences between weekdays (median 5 km) and weekends (median 7 km) however were statistically significant and these values remained very similar when considering interviewees only visiting directly from home.
- Considering interviewees travelling directly from home, in both the autumn only and autumn-winter pooled data, the median value was 6 km and Q3 value (75% nearest) was 15 km.
- Distances from home were highly significantly different between activities; the smallest Q3 value was 6.4 km for dog walking, compared to 40 km for cycling.
- There were significant differences in the distance from home postcode to survey point for frequent and less frequent visitors. Daily visitors (Q3, 4.8km) tended to live closer to Cannock Chase, while first time visitors come from a very wide area (Q3, 79 km).

- The most common reasons for visiting the site were: close to home (36%), the appropriate place for the activity (22%), scenery/views (19%), good for dog/dog enjoys it and good/easy parking (both 17%).
- Across all interviewees, the most commonly stated alternative site was Chasewater (7.1%), followed by the Peak District (4.5%), the "canal" (4.2%). Alternative sites were often referred to within the AONB and included Marquis Drive (3.7%) and Birches Valley (3.6%).
- Awareness of conservation issues among interviewees was very much focused on deer, with very little consideration or awareness of habitats as sensitive.
- 70% of interviewees did not use any information sources before visiting Cannock Chase, however this was just 50% amongst cyclists.
- Interviewees were in support of: more dog bins, enforcement on dog fouling, routes for particular activities and interviewees were opposed to: compulsory parking charges and the closure of some car parks and laybys.

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1. Introduction

Overview

- 1.1 This report presents the results of a visitor survey undertaken in Cannock Chase in summer through to winter 2018. The surveys included tally counts of passing footfall and interviews with a subset of passing people. Interviews collated visitor activities, frequency of visit, and home postcodes.
- 1.2 The surveys were conducted on behalf of Cannock Chase SAC Partnership – set up to reduce impacts to the internationally designated Special Area of Conservation (SAC). The partnership includes all local landowners (Staffordshire County Council, Forestry Commission, National Trust etc.). The survey was commissioned to provide a snapshot of current levels of access, identify the range of activities occurring and summarise visitor patterns and opinions. This information will inform future recreation management at Cannock Chase.

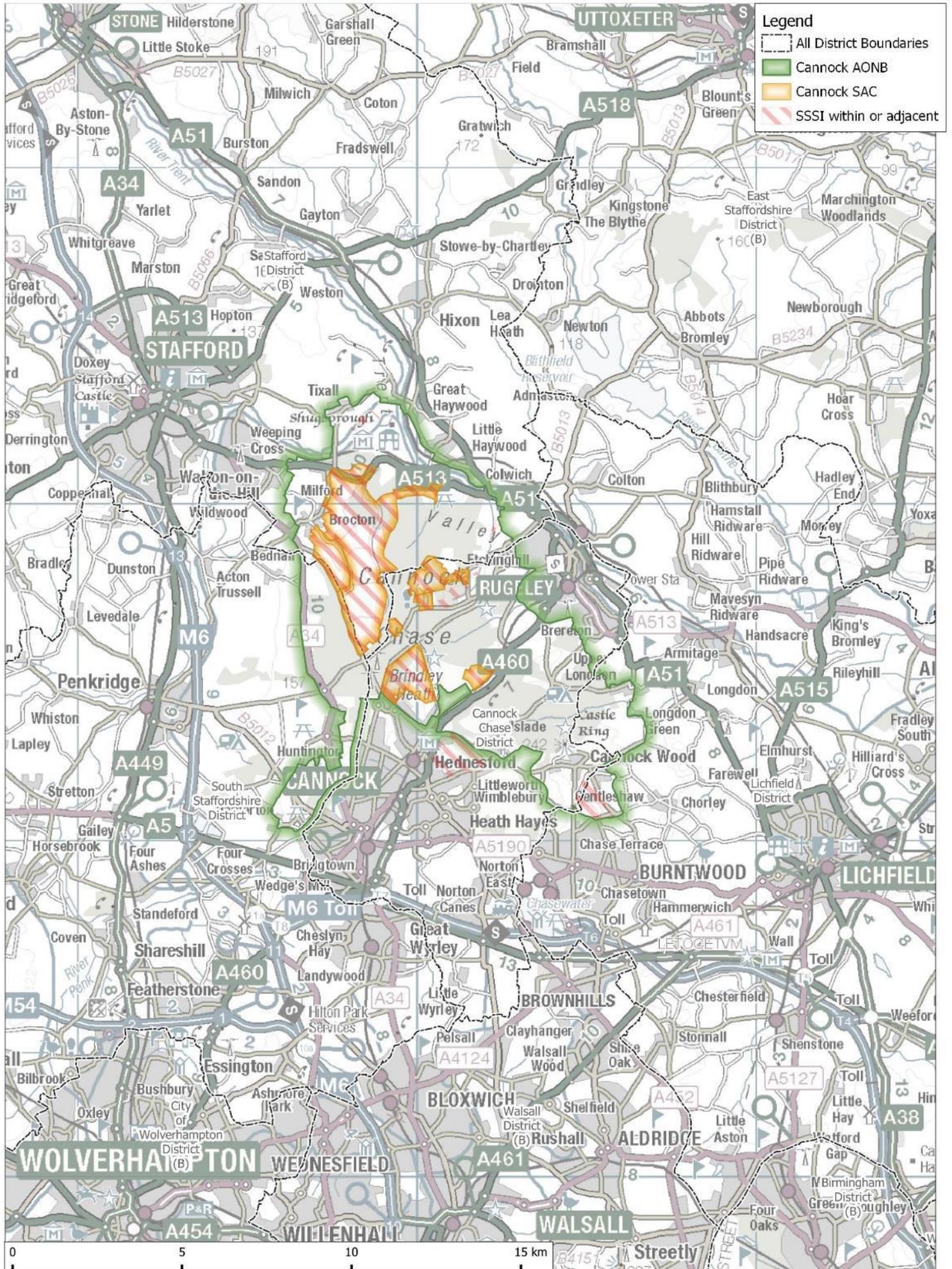
Context

- 1.3 Cannock Chase AONB covers roughly 68 km² of heathland, forestry and agricultural land. The area is located immediately adjacent to two key towns, Cannock and Rugeley, and smaller villages. Other larger towns are in close proximity such as Stafford, Lichfield and the Birmingham conurbation. The area is an expansive area of open countryside and as such is an important resource for recreation, providing a range of access opportunities.
- 1.4 The volume of recreational activities can have an impact upon sensitive features in the AONB. Much of the AONB is lowland heath and roughly 18% is designated as a SAC for its European dry heath. There are additionally a number of areas designated as Sites of Special Scientific Interest (SSSIs) and important species such as White-Clawed Crayfish, Small Pearl-bordered Fritillary and Nightjar. Furthermore the area has significant historic interest, from Iron Age features to the military presence in World War I and II, and these archaeological remains are potentially sensitive to recreational pressures.
- 1.5 Map 1 shows the context of the site, local authorities and some of the key ecological designations.
- 1.6 Visitor surveys were last conducted across Cannock Chase in 2011 (Liley, 2012) and some of the key results included;
 - Weekends were significantly busier than weekdays;

- Tally counts recorded 33% of visitors were walking, 26% dog walking, 24% cycling;
- Interviews allowed for multiple activities and suggested key activities were: walking (62% of interviewees), dog walking (45%), mountain biking (18%) and cycling (17%);
- 85% of interviewees arrived by car;
- 60% of interviewees stayed up to 2 hrs;
- Half of visitors lived within 6 km and three-quarters within 15 km;
- Mountain bikers came the furthest, dog walkers and runners the shortest distance from home.

1.7 The current visitor survey aims to update the results of the 2011 visitor survey and provide an update as part of gathering an evidence base to support decision making on Cannock Chase for its future management.

Map 1: Cannock Chase AONB, surrounding local authorities and designated areas.



2. Visitor survey methodology

2.1 Surveys utilised our standard survey approach involving interviews with a sample of site users and simultaneous counts of people. This produces two key sets of results:

- Tally data - provides a count of the number of individual people, the number of groups of people, and other key groups passing (e.g. cyclists, dogs).
- Interview data – from face-to-face interviewing of a random sample of the people passing, using a wide range of questions including activity, visit duration, frequency and home postcode.

2.2 The standardised approach will allow direct comparisons with any future surveys. The locations selected for surveys were also carefully chosen to ensure a range of types of access were covered.

Procedure for selection of survey points

2.3 Survey locations were carefully selected to ensure a representative sample of the wide range of access points on Cannock Chase (good spatial coverage, range of types of access points, size etc.). We chose 20 survey points comprising:

- 2 survey points at main hubs/large car-parks: Birches Valley and Marquis Drive (roadside parking at the triangle. Not the smaller, main, paid car park);
- 13 survey points at formal car-parks;
- 3 survey points at informal small parking locations;
- 2 survey points at foot-only access points.

2.4 Two foot access points were selected to represent the relatively low level of informal access from nearby housing. These two survey points were where main paths enter the SAC directly from nearby housing. These are the two key areas of housing near the SAC, Brocton and Pye Green. The exact locations used were; Brook Lane Corner, Brocton, and West Cannock Farm, Hednesford – both locations used in the 2011 visitor survey.

2.5 For parking locations an ideal approach would have been to select a stratified sample, based on the level of use at each, so that a range of very busy to very quiet locations could be included (and therefore large to small parking locations). In order to achieve a stratified sample, we classified the informal and formal car-parking locations into categories based on the typical number of cars recorded

from driving transect data collated by the Cannock Chase Partnership SAC Team (see Table 1).

2.6 The two main visitor hubs - the formal parking at Birches Valley and the informal roadside around Marquis Drive triangle (including fly-parking along Brindley Heath Roa¹d) - fall into the mean of >70 cars per transect. Locations which were likely to be too quiet for surveying were excluded (i.e. formal parking locations <1 vehicle per transect and informal parking locations <0.5 vehicles per transect). To select an initial list of locations for surveying we selected one location in each informal category, and two in each formal category in Table 1, as a way to stratify by 'busyness'.

Table 1: Selection method of parking locations, dividing into formal and informal parking areas and categorising by mean number of cars per transect.

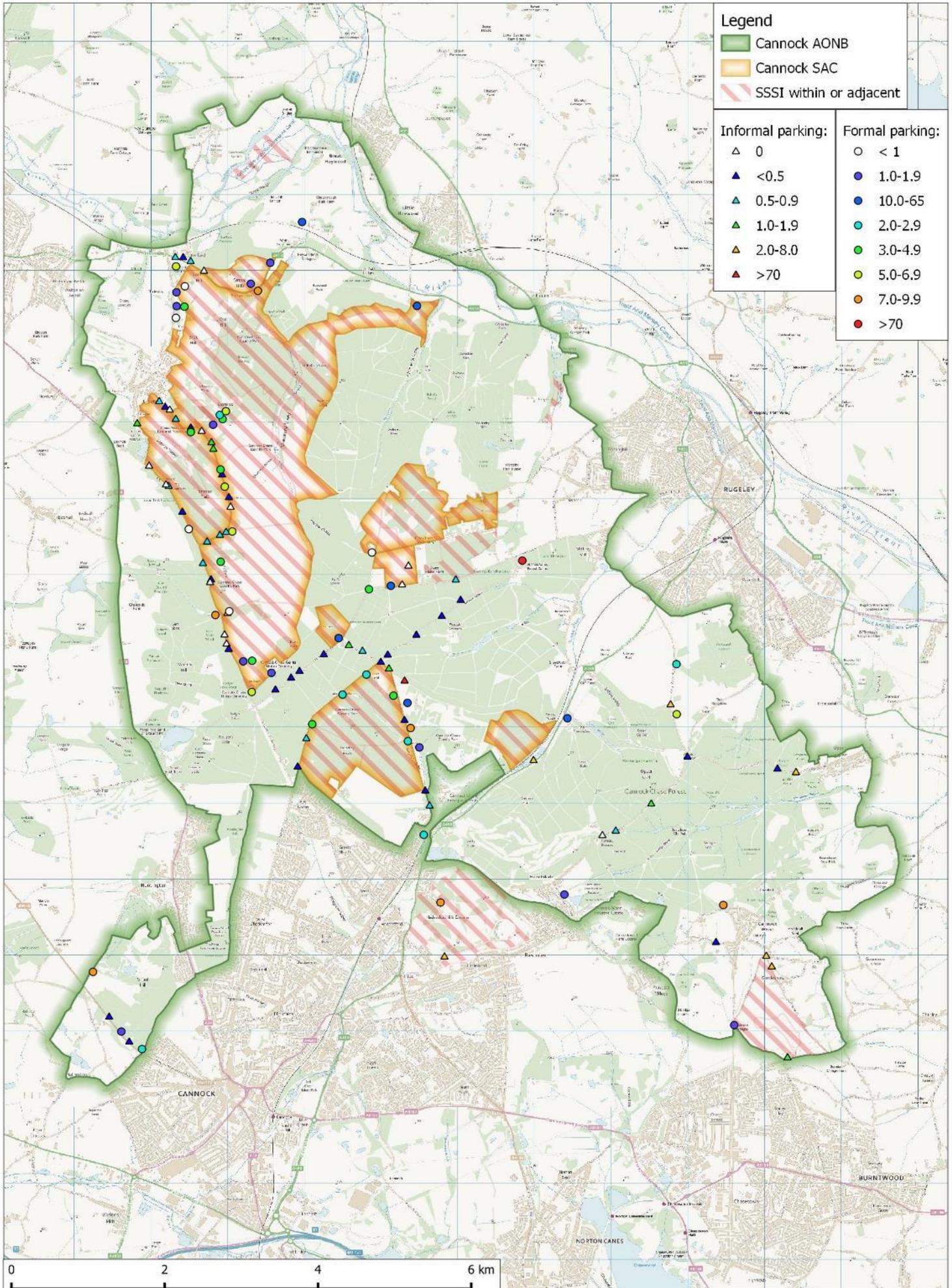
Location type	Mean number of cars per transect	Number of parking locations in group across the Chase	Number of parking locations selected for survey
Formal parking area	>70	1	1
	10.0-65	7	3
	7.0-9.9	6	2
	5.0-6.9	6	3
	3.0-4.9	9	0
	2.0-2.9	7	2
	1.0-1.9	11	2
	< 1	5	0
Other parking area	>70	1	1
	2.0-8.0	6	1
	1.0-1.9	7	1
	0.5-0.9	14	1
	<0.5	25	0
	0	13	0

2.7 Survey points initially selected within each category were then checked to ensure they provided a good geographic spread; included locations relevant to the site user/parking strategies and were broadly representative of visitor patterns. Furthermore, parking locations with known anti-social behaviour issues and those

¹ this fly-parking along the Brindley Road edge of the Marquis Drive triangle is counted during transects and incorporated into the parking numbers.

potentially difficult to survey (e.g. a car park layout where it would be difficult to intercept visitors) were avoided. Our selection was then presented to the steering group (who have an intimate knowledge of the site) and a number of final minor amendments made.

Map 2: Parking locations around Cannock Chase categorised by the mean number of vehicles.



2.8 All these changes resulted in no locations in the formal 3.0 – 4.9 group, and extra locations in the 10.0 – 65.0 and 5.0 – 6.9 categories. These amendments ensured the surveys capture the range of visitor access. It should be noted that over half of these locations are exactly the same as the locations used in the previous Cannock Chase visitor survey (13 out of the 30 surveyed), and a further three were in a roughly similar area.

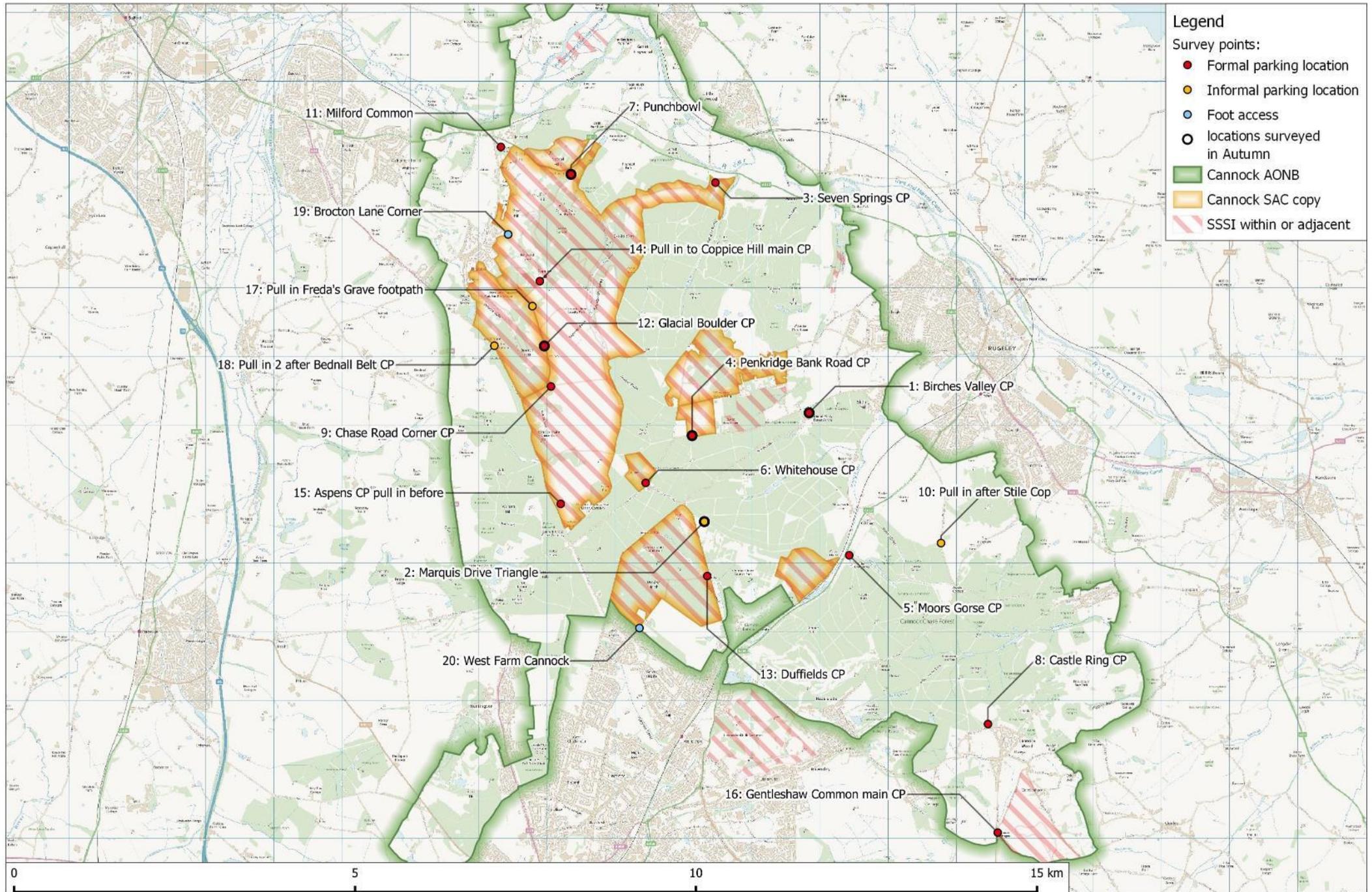
Survey locations selected

2.9 The final list of locations selected for survey is given in Table 2 and shown in Map 3.

Table 2: Survey points. 20 locations are listed. Those highlighted with an asterisk are those selected for surveying in August as well in the main survey pulses of autumn and winter. The column of “average cars category” is using those in Table 1.

ID	Survey point name	Estimated number of spaces	Location type	Average vehicles	Average vehicles category	ID from parking count
1	Birches Valley CP *	510	Formal	207.2	>70	69
2	Marquis Drive Triangle *	120	Informal	73.5	>70	81
3	Seven Springs CP	50	Formal	15.5	10.0-65	1
4	Penkridge Bank Road CP *	62	Formal	13.9	10.0-65	65
5	Moors Gorse CP	30	Formal	11.2	10.0-65	109
6	Whitehouse CP	58	Formal	10.8	10.0-65	62
7	Punchbowl *	46	Formal	8.6	7.0-9.9	4
8	Castle Ring CP	30	Formal	7.9	7.0-9.9	95
9	Chase Road Corner CP	20	Formal	6.7	5.0-6.9	35
10	Pull in after Stile Cop	4	Informal	6.5	2.0-8.0	107
11	Milford Common	47	Formal	5.4	5.0-6.9	10
12	Glacial Boulder CP *	18	Formal	5.0	5.0-6.9	32
13	Duffields CP	12	Formal	2.6	2.0-2.9	86
14	Pull in to Coppice Hill CP	6	Formal	2.5	2.0-2.9	26
15	Aspens CP pull in before	13	Formal	1.9	1.0-1.9	54
16	Gentleshaw Common main CP	8	Formal	1.1	1.0-1.9	99
17	Pull in Freda's Grave footpath	2	Informal	1.0	1.0-1.9	28
18	Pull in 2 after Bednall Belt CP	2	Informal	0.9	0.5-0.9	41
19	Brocton Lane Corner	-	Foot	-	-	N/A
20	West Cannock Farm	-	Foot	-	-	N/A

Map 3: Location of survey points categorised by access type and pulses surveyed.



Timing

- 2.10 Survey timings were selected to match those periods when impacts occur, covering a range of times of the year, with separate 'pulses' at different times of year. The 'main' pulse of surveying was undertaken during the autumn (September). These surveys were conducted in term time, and therefore provide data from an 'off-peak' period, when visitor use, travel distances etc. are likely to reflect general patterns, which are representative of much of the year. This autumn period also reflects the time when erosion, soil compaction etc. are relevant. During this main pulse each location was surveyed for 8 hours on a weekday and 8 hours on a weekend day. Dates for the surveys ranged from the 1st to 30th September 2018.
- 2.11 To ensure sufficient data, a further pulse was also conducted in the winter (November/early December) when visitor numbers may be slightly less, but site impacts on soils likely to be equal or greater. This additional pulse was conducted with half the survey effort, with only weekdays selected for surveying (but still for the full 8 hours). Surveying dates ranged from 6th November to 14th December 2018 and therefore avoided the run up to Christmas when visitor patterns were likely to be atypical.
- 2.12 In addition, a pulse was conducted prior to the main pulse in August, allowing some data to be collected at peak visitor times when footfall is heaviest. Risks at this time of year relate to fires and the overall volume of foot traffic, but damage from trampling is potentially less in the drier weather. This pulse also had half the survey effort with surveying only for 8 hours on a weekday.
- 2.13 The August survey in a "peak" period of the summer holidays were targeted to main honeypot locations. These surveys were conducted in the second to last week of the school holidays (schools in Staffordshire went back week commencing 3rd September) with exact dates from the 20th to 24th of August 2018. Just five key locations were selected for surveying, these were:
- 1: Birches Valley Car Park
 - 2: Marquis Drive Triangle
 - 4: Penkridge Bank Road Car Park
 - 7: Punchbowl
 - 12: Glacial Boulder Car Park.

2.14 The aim of this approach is to understand if there is a change in the draw of sites in this period, particularly in the summer Holidays (August period). Because all three pulses include weekday surveys these can all be directly compared. The timing also avoided dates of any major local events or major sporting fixtures that may influence people's access. This approach should cover main periods when impacts occur, however it is noted that unplanned fires (deliberate or accidental) occur most frequently in March/April, which is not surveyed.

Table 3: Summary of the number of hours at each survey point and in each season. September surveys had 16 hours of survey at each location, evenly split between weekday and weekend. All other seasons had just eight hours on a weekday.

		summer (Aug)	autumn (Sept)	winter (Nov/Dec)
1	Birches Valley CP	8	16	8
2	Marquis Drive Triangle	8	16	8
3	Seven Springs CP		16	8
4	Penkridge Bank Road CP	8	16	8
5	Moors Gorse CP		16	8
6	Whitehouse CP		16	8
7	Punchbowl	8	16	8
8	Castle Ring CP		16	8
9	Chase Road Corner CP		16	8
10	Pull in after Stile Cop		16	8
11	Milford Common		16	8
12	Glacial Boulder CP	8	16	8
13	Duffields CP		16	8
14	Pull in to Coppice Hill CP		16	8
15	Aspens Car Park pull in before		16	8
16	Gentleshaw Common main CP		16	8
17	Pull in Freda's Grave footpath		16	8
18	Pull in 2 after Bednall Belt CP		16	8
19	Brocton Lane Corner		16	8
20	West Cannock Farm		16	8
	Total	40	320	160

Approach

- 2.15 While stationed at a survey point the surveyor would maintain a tally of all people passing, recording groups and individuals (to allow calculation of group size) and also note the number of dogs, minors, horses and bicycles. The counts enable us to compare sites in terms of visitor volume/footfall, and to identify what proportion of visitors were interviewed at each location. The counts are approximate as they are maintained while interviews are being conducted and, at busy sites in particular, it is difficult to maintain an accurate count simultaneously while talking to someone. Nonetheless the totals broadly capture the level of busyness at each location and are comparable.
- 2.16 At two large locations, Marquis Drive and Birches Valley, it was considered too difficult to see and count all people. As such no tally count was collected as it would be impossible to gain an accurate count. This allowed the surveyor to focus solely on gathering interview data and increase the number of interviews recorded here.
- 2.17 The interview was conducted by means of a face-to-face questionnaire. The surveyors use tablet computers running SNAP survey software to store the questionnaire and record responses. Potential interviewees were selected at random, based on the next person seen by the surveyor (if not already conducting an interview). The interviewee's route was plotted in the field as part of the interview as lines on paper maps, cross referenced to the questionnaire data by a unique map number. Furthermore, surveyors were provided with maps of main trails to ensure they could map named trails.
- 2.18 Each surveyor carried a photo ID badge, wore a branded hi-vis jacket and provided information cards for members of the public wishing to verify that they are bona fide. No unaccompanied minors were approached or interviewed.
- 2.19 Counts and visitor interviews took place within standard two-hour periods, although times of survey reflect daylight hours.
- For the first surveys in the summer school holidays (August) the surveys the sessions were spread out between 7 am to 7 pm (exact periods; 0700-0900; 1030-1230; 1400-1600; 1700-1900).

- For the second surveys in the autumn (September) these times were adjusted slightly for 7 am to 6 pm (0700-0900; 1000-1200; 1300-1500; 1600-1800).
- For the final surveys in winter (Nov/Dec), times were 7 am to 5 pm (0700-0900; 0930-1130; 1230-1430; 1500-1700).

2.20 Survey effort for the main autumn pulse was stratified across weekdays and weekends, and effort was made to avoid adverse weather conditions (continuous heavy rain, severe weather warnings, storms etc.) or reduce the impact by conducting half days at different locations.

Analysis

2.21 All route and postcode analysis were conducted in GIS, QGIS 3.4.1. Home postcodes were geocoded using Royal Mail Postzon postcode data, from 2018. Only full, valid postcodes were used in the analysis of visitor origins - partial postcodes or named towns/villages were not included in any analysis due to the variation in precision.

2.22 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. Box plots are often used to explore these data and show median values (horizontal lines), interquartile range (boxes) and the upper and lower limits of the data (whiskers). Mean values have been overlaid, shown as cross markers.

2.23 The analysis categorises the data collected in a number of ways. Some analysis is conducted on all survey data collected, while other analysis is conducted on subsets of the data. Summer data was collected for only five locations, so we often use autumn-winter pooled data. We use only autumn data when we wish to have a balanced weekday-weekend result. While examination for differences between summer-autumn-winter are often conducted on just the five locations which were surveyed in all three.

Weather & other factors

2.24 The full list of survey dates is given in the Appendix in Table 27. Winter surveys were completed in November, with the exception of a single session

which was completed in December due to the initial visit in November being incomplete as a result of the surveyor having transport issues.

- 2.25 Weather during surveys was fairly typical for the seasons examined. Although the survey sessions in the summer holidays were noted to be often overcast, with some rain during sessions – overall weather conditions for the last two weeks of August were notably much more autumnal, with a mix of sunshine and showers². Weather in the autumn surveys (September) started settled, generally warm and sunny, but became more unsettled and windier and turning much colder towards the end of the month³. The weather during the winter surveying in November was generally warmer than the long-term average, usually cloudy and with variable amounts of rain⁴.
- 2.26 Overall visitor surveys proceeded well. One notable incident was a large school group of 75 children at Milford Common. This was recorded in tallies (both entering and again on leaving) and included in analysis. Other educational groups were also encountered, although often much smaller (some of whom were interviewed, see interview data). As such this was considered reasonably normal for the site's visitor patterns, although data is occasionally repeated without this group for context, and is explicated stated if this has been removed.

² <https://www.metoffice.gov.uk/climate/uk/summaries/2018/august>

³ <https://www.metoffice.gov.uk/climate/uk/summaries/2018/september>

⁴ <https://www.metoffice.gov.uk/climate/uk/summaries/2018/november>

3. Visitor survey tally results

Total footfall

- 3.1 Surveys were conducted for a total of 520 hours on site. However, not all survey locations involved a tally count of passing people - survey points 1: Birches Valley and 2: Marquis Drive triangle, did not include a count (as counts were too difficult over a wide open area). Therefore 504 hours of surveying included tally counts.
- 3.2 A summary of the total number of people passing at each survey point is given in Table 4, with values also presented as people per hour. These values are of all people seen entering, leaving or passing the survey point during the 8 hours of surveying on each day. As such these can be seen to show the overall footfall occurring.
- 3.3 Values in the different seasons ranged from 37 people per hour (pph) at 3: Seven Springs, followed by 35 pph at 11: Milford Common and 32 pph at 8: Castle Ring to 0.8 pph at 10: Pull in after Stile Cop, 0.9 pph at 18: Pull in after Bednall Belt.

Table 4: Summary of the total number of people recorded passing during 8 hours of survey on a weekday or weekend day during each survey pulse by survey point. Values in brackets show the number of people per hour (pph). The final autumn column shows the ratio of weekday to weekend people passing at each survey point in autumn.

		summer (Aug)	autumn (Sept)		autumn ratio weekday to weekend people	winter (Nov/Dec)
		Wkday	Wkday	Wkend		Wkday
1	Birches Valley CP	n/a	n/a	n/a	n/a	n/a
2	Marquis Drive Triangle	n/a	n/a	n/a	n/a	n/a
3	Seven Springs CP		142 (17.8)	295 (36.9)	37:63	180 (22.5)
4	Penkridge Bank Road CP	95 (11.9)	126 (15.8)	225 (28.1)	39:61	75 (9.4)
5	Moors Gorse CP		30 (3.8)	66 (8.3)	32:68	55 (6.9)
6	Whitehouse CP		62 (7.8)	161 (20.1)	30:70	45 (5.6)
7	Punchbowl	118 (14.8)	65 (8.1)	128 (16)	33:67	42 (5.3)
8	Castle Ring CP		138 (17.3)	256 (32)	44:56	116 (14.5)
9	Chase Road Corner CP		76 (9.5)	164 (20.5)	35:65	41 (5.1)
10	Pull in after Stile Cop		30 (3.8)	75 (9.4)	34:66	7 (0.9)
11	Milford Common		279 (34.9)	103 (12.9)	44:56	25 (3.1)
12	Glacial Boulder CP	81 (10.1)	40 (5)	87 (10.9)	37:63	15 (1.9)
13	Duffields CP		44 (5.5)	77 (9.6)	39:61	42 (5.3)
14	Pull in to Coppice Hill CP		26 (3.3)	23 (2.9)	60:40	18 (2.3)
15	Aspens Car Park pull in before		32 (4)	51 (6.4)	44:56	30 (3.8)
16	Gentleshaw Common main CP		45 (5.6)	42 (5.3)	61:39	33 (4.1)
17	Pull in Freda's Grave footpath		34 (4.3)	23 (2.9)	63:37	28 (3.5)
18	Pull in 2 after Bednall Belt CP		11 (1.4)	18 (2.3)	47:53	6 (0.8)
19	Brocton Lane Corner		47 (5.9)	79 (9.9)	45:55	27 (3.4)
20	West Cannock Farm		22 (2.8)	49 (6.1)	35:65	42 (5.3)
	Total	294 (12.3)	1249 (8.7)	1922 (13.3)	40:60	827 (5.7)

Differences between weekdays and weekends

- 3.4 Only the autumn surveys were conducted on a weekday and a weekend, and therefore it was only from the autumn surveys that the differences between weekdays and weekends could be compared. Overall totals showed a 54% increase at weekends (1,922 people passing) compared to the weekday values (1,249 people passing) – a ratio of roughly 60:40.
- 3.5 At individual locations, 14 of the 18 survey points showed greater values at weekends compared to weekdays (exceptions were survey points 11, 14, 16, 17). Most notable of these was 11: Milford Common which included a school visit during the weekday survey (an additional 75 minors recorded entering and leaving again later). However, even excluding these the total on a weekday was greater than the weekend (129 people passing in the day, 16.1 people per hour).
- 3.6 Although there are some apparent differences between the weekend and weekday counts, there was no statistically significant difference between weekdays and weekends (Kruskal Wallis; $H=3.14$, $df=1$, $p=0.076$).

Differences between seasons

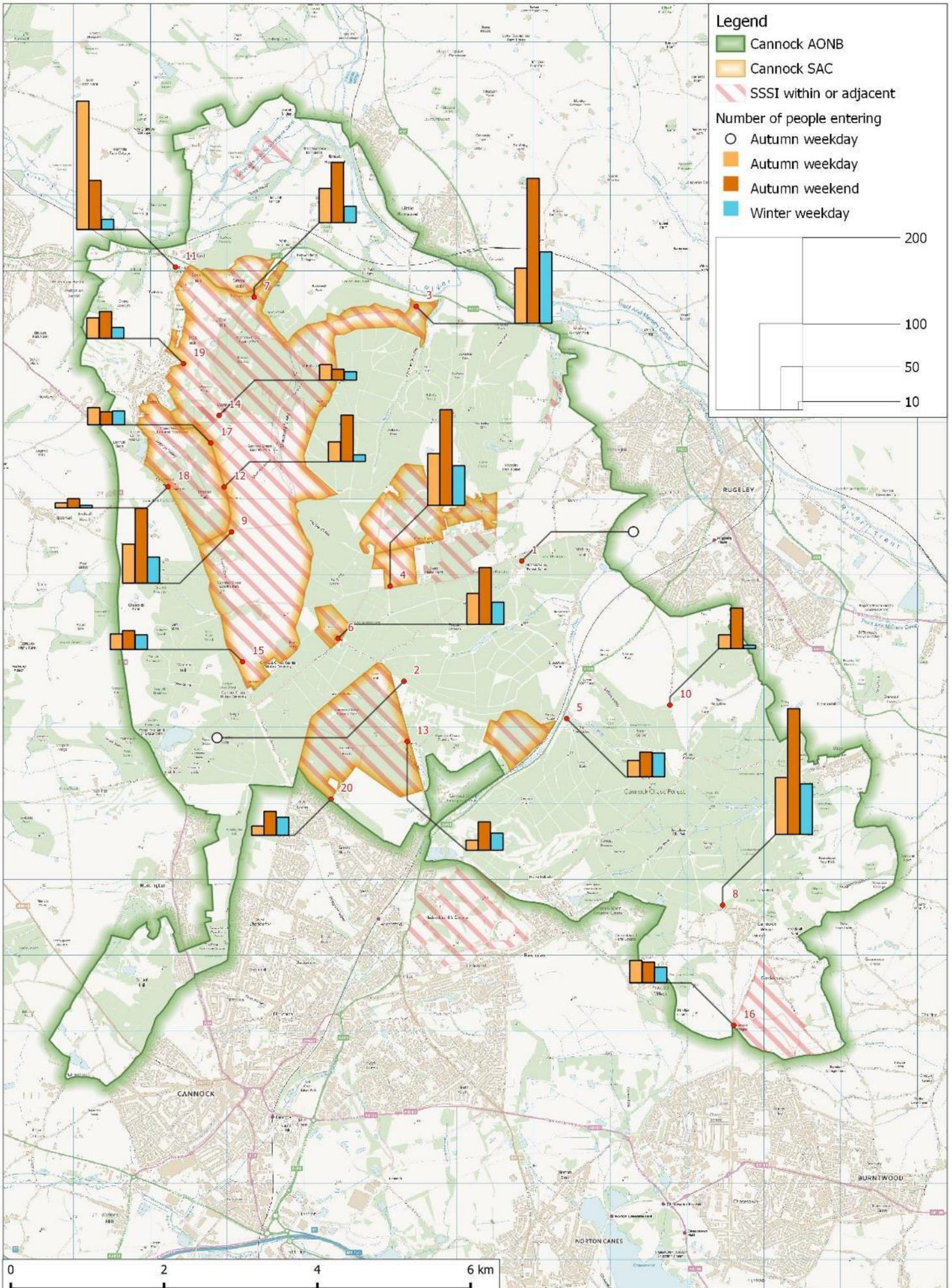
- 3.7 Examining differences between seasons was more difficult and other datasets may be better suited to examine change over a year (e.g. car count data already collected). However, differences between seasons were examined using comparable weekdays (given the noted difference between weekdays and weekends). A simple test for differences in the total number of people recorded at each location on weekdays in autumn compared to weekdays in winter suggested no significant difference (KW; $H=2.07$, $df=1$, $p=0.150$).
- 3.8 Examination of differences between summer and the other seasons was more difficult. Only three of the five locations surveyed in summer recorded tally data. Two of these locations (7: Punchbowl and 12: Glacial Boulder) showed summer weekday footfall values which were greater than autumn weekday values and much greater than winter weekday values (but not greater than autumn weekend values). However, summer values at the other location (4: Penkrudge bank) were lower than any day in autumn, but greater than winter. Summing all values for the three locations together, the total

was 27% greater on the summer weekday compared to the autumn weekday.

People entering

- 3.9 Tally data was also considered using just the number of people entering the site at the access point being surveyed. This is considered a more accurate way of trying to estimate the number of people recorded using the specific access point, rather than all passing traffic. The data is given in the Appendix (Table 28) and shows a repeat of Table 4 using the numbers of people entering only rather than all passing traffic. The overall patterns displayed by these data were broadly similar and the visitor numbers are shown visually in Map 4.
- 3.10 The ranking of each survey point by the total people passing compared to people entering was usually only very slightly different (overall a mean of 1 rank different). Comparison of the ranks showed the location which differed most was 13: Duffields, with more people recorded passing (163) compared to people entering (65). This suggests lots of through traffic from other access points passing by the survey point.

Map 4: Total number of people recorded from tallies entering at each survey location.



Group sizes

- 3.11 The tally totals of the number of people and groups allowed for simple average group sizes to be calculated. For each survey location and survey period the group size is given in Table 5.
- 3.12 The overall group size was 1.5 people per group, but values in Table 5 ranged from 1.00 (where all people were walking alone) to 7.45 people per group (at Milford Common, influenced by the school group). On average there were 1.5 people per group, of which 0.2 were minors, and there were 0.8 dogs in a group.
- 3.13 Testing for differences in the group sizes recorded at each location on weekdays in autumn compared to weekdays in winter, suggested no significant difference (KW; $H=1.61$, $df=1$, $p=0.204$). However, differences between the weekday and weekend in autumn were significant (KW; $H=8.87$, $df=1$, $p=0.003$), with notably larger group sizes at weekends.

Table 5: Summary of group sizes (number of people per group) recorded in each season pulse, separately for weekdays and weekends, for each survey point.

		summer	autumn		winter
		(Aug)	(Sept)		(Nov/Dec)
		Wkday	Wkday	Wkend	Wkday
1	Birches Valley CP	n/a	n/a	n/a	n/a
2	Marquis Drive Triangle	n/a	n/a	n/a	n/a
3	Seven Springs CP		1.58	1.95	1.53
4	Penkridge Bank Road CP	1.67	1.70	1.97	1.67
5	Moors Gorse CP		1.58	1.65	1.77
6	Whitehouse CP		1.72	1.89	1.67
7	Punchbowl	2.36	1.97	1.94	1.56
8	Castle Ring CP		1.37	2.00	1.66
9	Chase Road Corner CP		1.62	1.86	1.86
10	Pull in after Stile Cop		1.30	1.70	1.40
11	Milford Common		7.54	2.15	1.56
12	Glacial Boulder CP	2.31	1.82	2.29	1.15
13	Duffields CP		1.57	1.79	1.20
14	Pull in to Coppice Hill CP		1.73	2.30	1.00
15	Aspens Car Park pull in before		1.33	1.70	1.43

		summer (Aug)	autumn (Sept)		winter (Nov/Dec)
		Wkday	Wkday	Wkend	Wkday
16	Gentleshaw Common main CP		1.05	1.56	1.03
17	Pull in Freda's Grave footpath		1.42	1.64	1.56
18	Pull in 2 after Bednall Belt CP		1.22	1.80	1.00
19	Brocton Lane Corner		1.34	1.88	1.13
20	West Cannock Farm		1.10	1.32	1.45
	Total	2.07	1.84	1.89	1.48

Tally composition

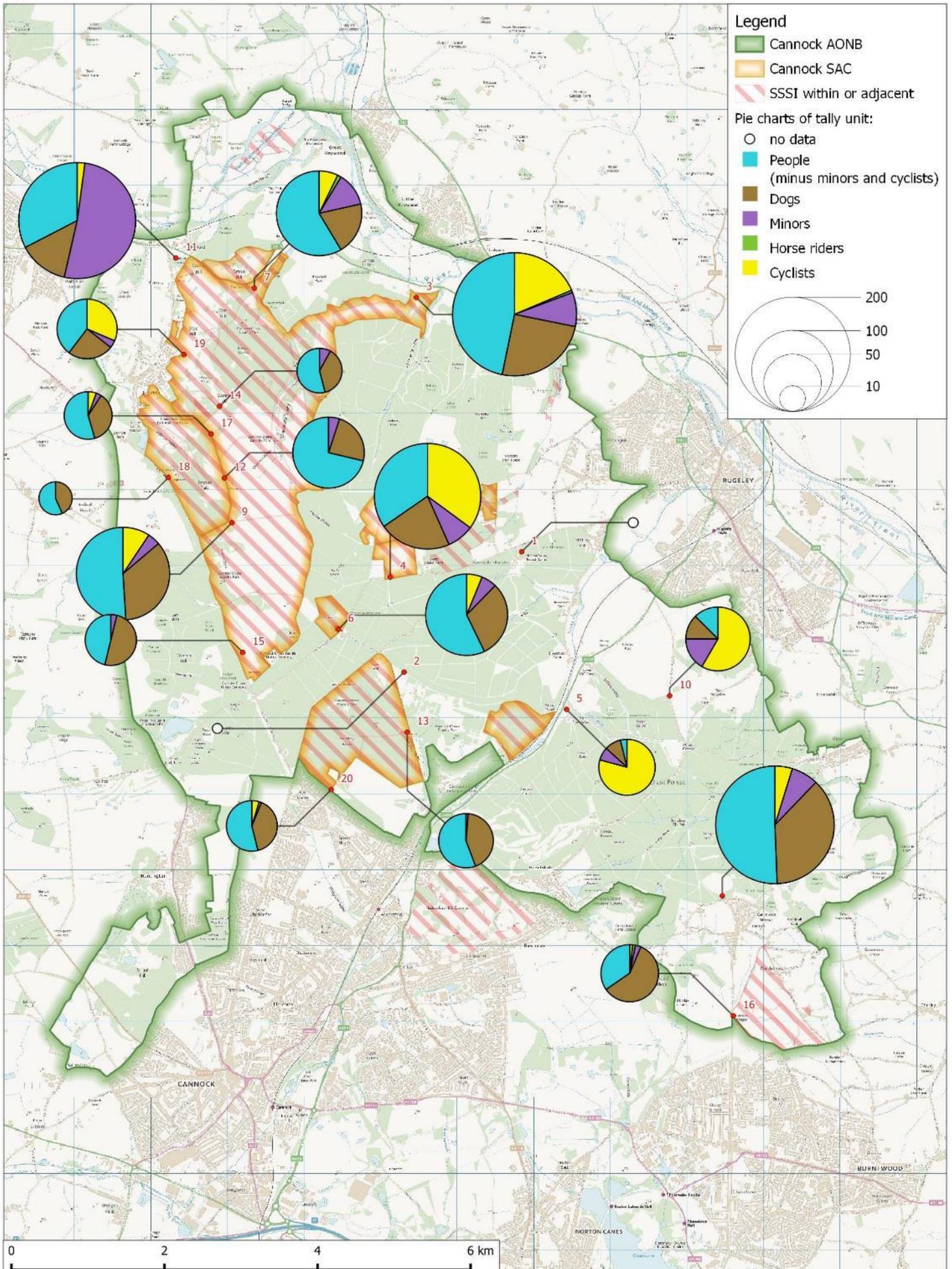
- 3.14 During tally counts the composition of groups or simple activities were noted, with the counts recording the numbers of cyclists, horse riders, minors (e.g. family outings) and of dogs (e.g. dog walking). From these counts, overall 18% of people entering were cyclists, 14% were minors and 1% horse riders. The count data are shown in Map 5 and we have used pie-charts which provide an intuitive way to visualise the data. However, it should be noted that these groups were not mutually exclusive (e.g. children cycling are double counted) and the pie charts are therefore illustrative only. Pie charts also include the number of dogs and therefore pie charts should be representative of all visitor flows entering.
- 3.15 Map 5 shows that the proportion of cyclists and minors in relation to the total footfall entering were the most variable – the percentage of cyclists range from 0-88% and minors from 0-60%. High numbers of cyclists were observed entering at survey points 4: Penkridge Bank (77 cyclists, 45% of people entering), 3: Seven Springs (58, 25%), 5: Moors Gorse (42, 88%) and 10: Pull in after Stile Cop (42, 67%)
- 3.16 Map 5 is based solely on data collected in the autumn surveys, but a breakdown of the numbers of groups, people, dogs, minors, cyclists and horse riders by season is given in Table 6. Due to the differences between seasons the comparison to the summer is difficult, however all other seasons are comparable, as are weekdays and weekends days in autumn.

3.17 Comparisons of weekdays in autumn and winter showed winter surveys were characterised by smaller group sizes, and fewer minors in groups, but a similar level of dogs per group and level of cycling use. Comparison of weekdays and weekend days suggests weekends had a similar group size, but fewer dogs per group and fewer minors, but more cyclists.

Table 6: Summary of people entering, and the different composition observed from tallies being undertaken in each survey season period.

	summer (Aug)	autumn (Sept)		winter (Nov/Dec)	Total
	Wkday	Wkday	Wkend	Wkday	
Survey points covered	3	20	20	20	20
Hours of survey	24	160	160	160	504
Total groups entering	79	353	533	288	1253
Total people entering (people per group)	159 (2.0)	653 (1.8)	1012 (1.9)	433 (1.5)	2257 (1.8)
Total dogs entering (dogs per group)	49 (0.6)	343 (1.0)	370 (0.7)	283 (1.0)	1045 (0.8)
Total minors entering (as % of all people)	19 (12%)	140 (21%)	129 (13%)	19 (4%)	307 (14%)
Total horse riders entering (as % of all people)	9 (6%)	3 (0%)	3 (0%)	2 (0%)	17 (1%)
Total cyclists entering (as % of all people)	38 (24%)	87 (13%)	222 (22%)	51 (12%)	398 (18%)

Map 5: Pie charts to indicate the approximate proportions of people, dogs, minors, horse riders and cyclists recorded in tally counts. Charts are sized by the number of total people seen.



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4. Visitor survey interview results

Number of interviews

- 4.1 In total surveyors approached 1,325 people or groups of people to be interviewed. Of these, 988 people (or groups of people) were willing to be interviewed (75%) – hereafter referred to as interviewees. The mean length of time to conduct an interview was 11.5 minutes (including the information logged by the surveyor after the interview was complete).
- 4.2 Of the 1,325 people approached, 237 people refused to be interviewed (18%). People refusing to be interviewed included people who were in a hurry/no time, cyclists who simply did not stop, and a small number of people who were caught in the rain or runners. Refusals were roughly evenly split between seasons (14% summer, 20% autumn and 14% winter) but were very unevenly distributed between survey points (see Table 7). Across all seasons, the percentage of refusals at survey points ranged from 6% (at location 2: Marquis Drive) to 41% (at location 10: Pull in after Stile Cop where cyclists predominated). Refusals by cyclists could mean this group is poorly represented, however this is not considered a major concern, as overall 18% of tallied people were cyclists and cyclists constituted 21% of interviewees.
- 4.3 Since surveyors spent extended periods at the same sites and visited on multiple dates, it was inevitable that some people were encountered that had already interviewed. Overall, 100 people (or groups of people) were approached who had already been interviewed; roughly 8% of people/groups of people approached - see Table 7. These again did not occur in equal proportions between survey points. Overall, the survey point at Brocton Lane Corner had the highest proportion of 'repeat visitors' (14 interviewees, 19%), while Birches Valley had the lowest proportion (1 interviewee, 1%).

Table 7: Summary of the total number of people approached at each location, and the number (%) who; 1) refused to be interviewed, 2) who had previously been interviewed or 3) were interviewed. Table combines data from all survey seasons.

		Total people approached	Number (percentage) of refusals	Number (percentage) of people already approached	Number (percentage) of interviewees
1	Birches Valley CP	110	35 (32)	1 (1)	74 (67)
2	Marquis Drive Triangle	126	8 (6)	2 (2)	116 (92)
3	Seven Springs CP	94	13 (14)	5 (5)	76 (81)
4	Penkridge Bank Road CP	97	17 (18)	8 (8)	72 (74)
5	Moors Gorse CP	49	10 (20)	1 (2)	38 (78)
6	Whitehouse CP	54	7 (13)	4 (7)	43 (80)
7	Punchbowl	91	8 (9)	4 (4)	79 (87)
8	Castle Ring CP	86	12 (14)	9 (10)	65 (76)
9	Chase Road Corner CP	63	18 (29)	5 (8)	40 (63)
10	Pull in after Stile Cop	46	19 (41)	6 (13)	21 (46)
11	Milford Common	50	7 (14)	5 (10)	38 (76)
12	Glacial Boulder CP	52	4 (8)	1 (2)	47 (90)
13	Duffields CP	72	6 (8)	13 (18)	53 (74)
14	Pull in to Coppice Hill CP	50	9 (18)	4 (8)	37 (74)
15	Aspens Car Park pull in before	42	11 (26)	3 (7)	28 (67)
16	Gentleshaw Common main CP	62	14 (23)	9 (15)	39 (63)
17	Pull in Freda's Grave footpath	50	12 (24)	3 (6)	35 (70)
18	Pull in 2 after Bednall Belt CP	17	2 (12)	1 (6)	14 (82)
19	Brocton Lane Corner	74	10 (14)	14 (19)	50 (68)
20	West Cannock Farm	40	15 (38)	2 (5)	23 (58)
	Total	1325	237 (18)	100 (8)	988 (75)

4.4 The number of interviews at each location was highly variable as each site received a different number of visitors. due to the inherently variable busyness of sites. The number of interviewees recorded in each survey period is given in Table 8 and ranged from 2 to 41 a day. The number of interviewees was lower in winter, when the sites were less busy and refusals were more frequent, probably due to cold or rainy weather. The number of interviews in the combined autumn-winter survey period s ranged from 14 to 93 over the three days.

Table 8: Number of interviews by 8-hr day by survey period periods.

		summer	autumn		winter
		(Aug)	(Sept)		(Nov/Dec)
		Wkday	Wkday	Wkend	Wkday
1	Birches Valley CP	25	14	27	8
2	Marquis Drive Triangle	23	30	41	22
3	Seven Springs CP		23	27	26
4	Penkridge Bank Road CP	17	20	19	16
5	Moors Gorse CP		11	17	10
6	Whitehouse CP		16	16	11
7	Punchbowl	16	18	33	12
8	Castle Ring CP		21	27	17
9	Chase Road Corner CP		13	19	8
10	Pull in after Stile Cop		5	14	2
11	Milford Common		12	20	6
12	Glacial Boulder CP	11	10	20	6
13	Duffields CP		14	26	13
14	Pull in to Coppice Hill CP		13	14	10
15	Aspens Car Park pull in before		9	12	7
16	Gentleshaw Common main CP		14	13	12
17	Pull in Freda's Grave footpath		12	8	15
18	Pull in 2 after Bednall Belt CP		5	4	5
19	Brocton Lane Corner		18	19	13
20	West Cannock Farm		5	10	8
	Total	92	283	386	227

Visit type

- 4.5 Across all interviews, the majority of interviewees (97%, 955 interviewees) were on a short visit directly from home. Of the remaining interviewees, 1.5% (15) of interviewees were staying away from home on holiday and 1.1% (11) people were staying away from home, but with friends or family. Four interviewees (<0.5%) were on site as part of an educational group, and three were in the area for work.
- 4.6 The proportion of interviewees visiting directly from home was consistently high, but did show some slight variations: in the summer 89% were visiting from home compared to 97% in autumn and 99% in winter. Considering just the subset of five survey locations which were surveyed in all three seasons

the percentages are similar, with 89% visiting from home in the summer, 97% in autumn and 98% in winter.

4.7 Table 9 shows the data for interviewees at the five survey locations. Summer surveys were conducted in the school holidays and therefore the period in which we would expect to find more interviewees on holiday. The percentage of visitors from home in the summer were: 76% at 1: Birches Valley, 82% at 12: Glacial Boulder, 94% at 4: Penkridge Bank, 96% at 2: Marquis Drive and 100% at 7: Punchbowl. All locations showed an increase in this percentage in the autumn and winter surveys (see Table 9).

Table 9: Examination of the percentage of interviewees travelling directly from home, over the different survey periods at the subset of five locations surveyed in all periods.

		summer (Aug)	autumn (Sept)		winter (Nov/Dec)
		Wkday	Wkday	Wkend	Wkday
1	Birches Valley CP	76%	86%	96%	88%
2	Marquis Drive Triangle	96%	93%	100%	100%
4	Penkridge Bank Road CP	94%	100%	100%	100%
7	Punchbowl	100%	100%	100%	100%
12	Glacial Boulder CP	82%	100%	90%	100%
	Total	89%	96%	98%	98%

Interviewee group size

4.8 Of the 988 interviewed groups, the average number of people in the group was 1.9, average number of minors 0.4 per group, and average number of dogs 0.9 per group (broadly similar to values from tally counts).

Activity

4.9 Interviewees were asked to state the single main activity they were undertaking. Overall, three main groups of activities appeared. Across all surveying periods, 43% of interviewees were dog walkers (426 interviewees), followed by 22% walkers (224) and 21% cyclists (205). All other activities (e.g. runners, family outings, bird watchers) had less than 50 interviewees (> 5%)

in each group. Activities were put into set categories, with a single “other” group for any which did not fit these (see questionnaire and map 6 for categories). This “other” category consisted of two interviewees visiting for history (including one on a survey) and two interviewees breaking a car journey (wandering the car park for a break).

4.10 Although 43% of interviewees gave their main activity as dog walking, some other interviewees were in a group that included a dog. The top five activities for this were: 29% of interviewees on family outings, 25% joggers/runners, 9% walkers and 4% cyclists. The number of dogs per interviewee was recorded for each interviewee and ranged from 0-6. On average the number of dogs with a person with one or more dogs was 1.6. Surveyors recorded if dogs were off lead at the time of interviewing and in total 390 of the 657 dogs were off lead – roughly 60% of dogs seen.

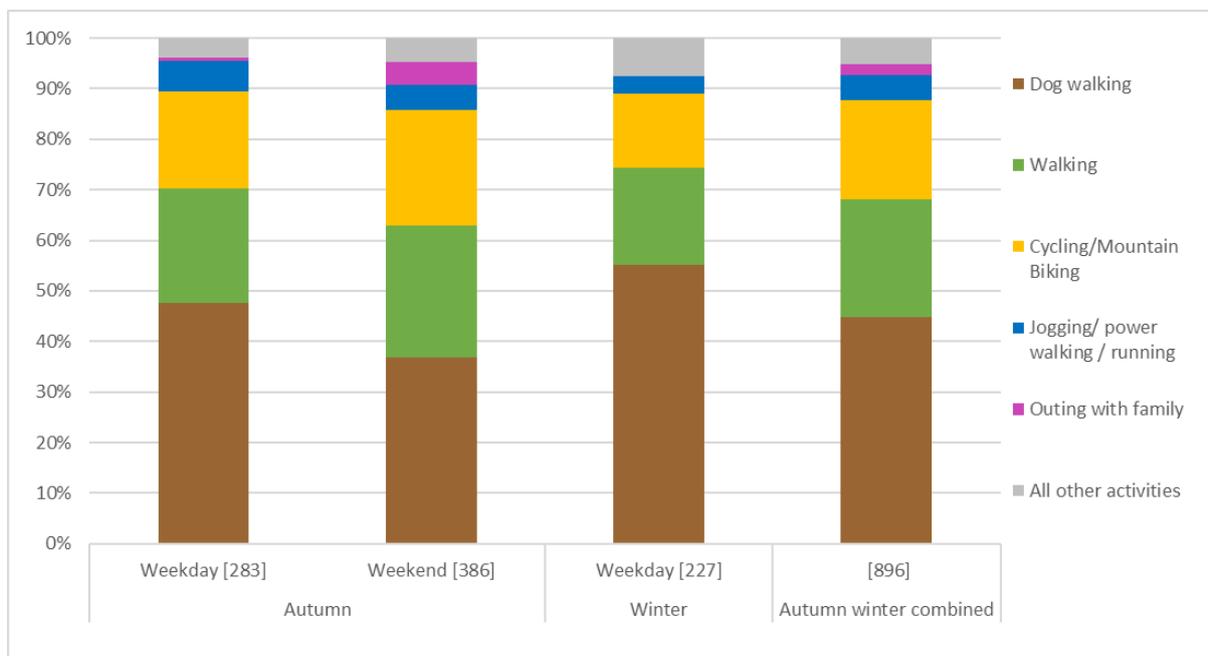


Figure 1: Stacked bar charts of interviewees' activities recorded across all survey points in autumn, winter, and autumn winter combined.

4.11 The proportion of interviewees conducting each activity during the autumn and winter survey periods is explored in Figure 1. The proportions in the autumn-winter pooled data were very similar compared to all data: 45% dog walkers, 23% walkers and 20% cyclists. From the data collected, winter appeared to have a greater proportion of cyclists and a slightly smaller proportion of dog walkers and walkers.

4.12 Comparison of weekday and weekend surveys in autumn suggest the proportion of cyclists was slightly greater on weekdays. These patterns are explored in more detail in Table 10 which details the single main activity for each survey point and surveying period.

Table 10: Summary table to show the most frequent interviewee activity recorded at each survey point. Activities are coded as cycling (C), dog walking (D) and walking (W). The percentage of interviewees for the activity are also given in brackets.

		summer (Aug)	autumn (Sept)		winter (Nov/Dec)
		Wkday	Wkday	Wkend	Wkday
1	Birches Valley CP	C (44)	C (64)	C (81)	C (63)
2	Marquis Drive Triangle	C (43)	C (33)	D (29)	C (50)
3	Seven Springs CP		D (61)	W (37)	D (50)
4	Penkridge Bank Road CP	C (53)	C (55)	C (58)	D (38)
5	Moors Gorse CP		C (82)	C (94)	C (100)
6	Whitehouse CP		D (63)	D (44)	D / W (45)
7	Punchbowl	D (63)	W (44)	D / W (27)	D (50)
8	Castle Ring CP		D / W (48)	D (52)	D (76)
9	Chase Road Corner CP		D (69)	D (63)	D (100)
10	Pull in after Stile Cop		C / W (40)	C (79)	D / C (50)
11	Milford Common		D / W (42)	W (55)	D (67)
12	Glacial Boulder CP	D (45)	D / W (40)	W (60)	D (100)
13	Duffields CP		D (79)	D (69)	D (69)
14	Pull in to Coppice Hill CP		D / W (46)	D / W (36)	D (40)
15	Aspens Car Park pull in before		D (89)	D (58)	D (100)
16	Gentleshaw Common main CP		D (86)	D (92)	D (75)
17	Pull in Freda's Grave footpath		D (50)	W (63)	D (67)
18	Pull in 2 after Bednall Belt CP		D (80)	D (100)	D (80)
19	Brocton Lane Corner		D (56)	D / W (37)	D (69)
20	West Cannock Farm		D (80)	D (60)	D (63)
	Total	C (33)	D (48)	D (37)	D (55)

4.13 The proportion of each activity is also presented in Map 6 (with numbers given in Appendix, Table 31), based on surveys conducted in the autumn and winter period pooled.

4.14 From all these results the key locations for cyclists are;

- 1: Birches Valley CP (73%)

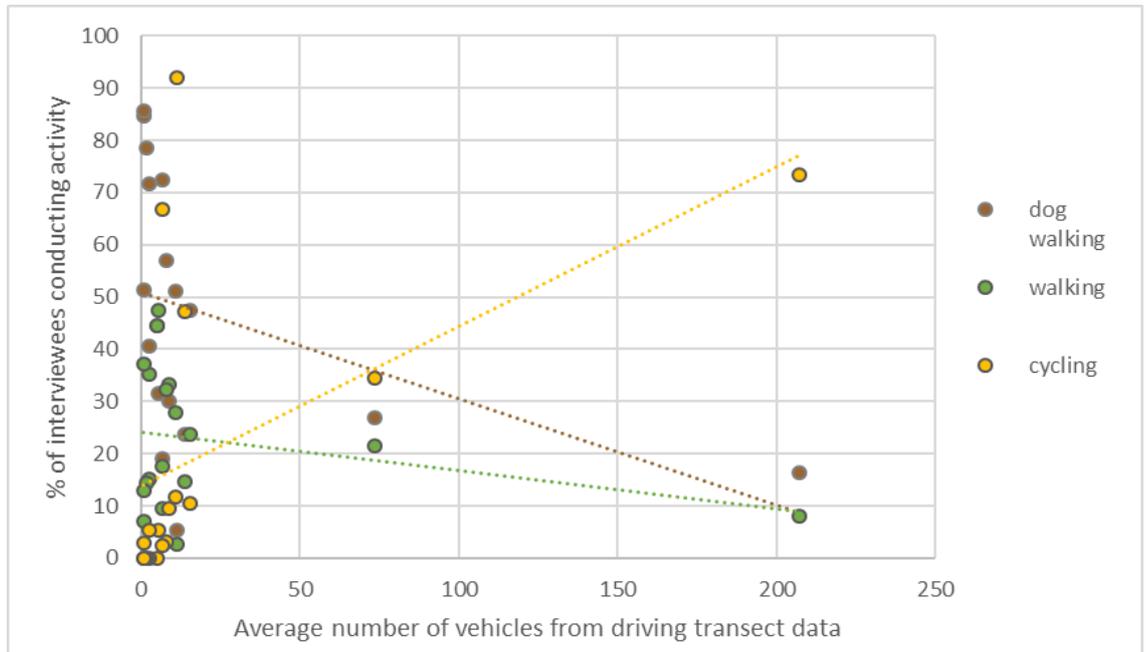
- 2: Marquis Drive Triangle (34%)
- 4: Penkridge Bank Road CP (47%)
- 5: Moors Gorse CP (92%)
- 10: Pull in after Stile Cop (67%).

4.15 Key locations for walkers appear to be;

- 7: Punchbowl (33%)
- 11: Milford Common (47%).

4.16 All other locations were mostly dog walkers (between 41% to 86% in autumn winter pooled data).

4.17 The list of survey points in tables are roughly sorted by high to low access (see driving transect data in Table 2) and as such seem to suggest patterns of visitor activities relate to levels of access (Table 10).



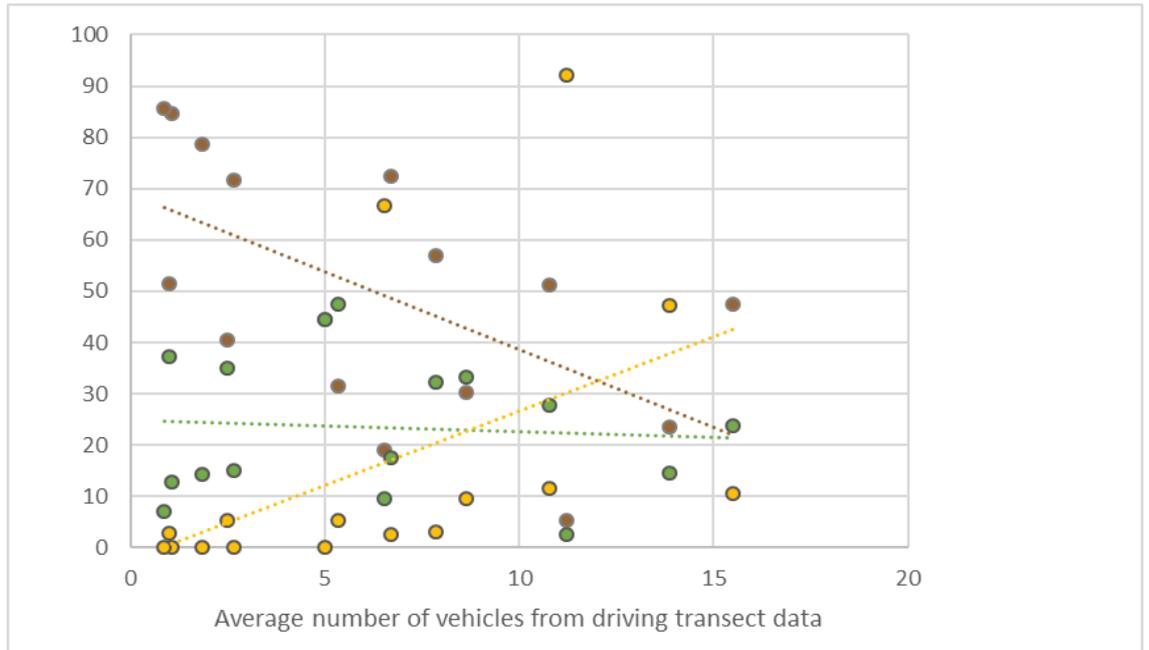
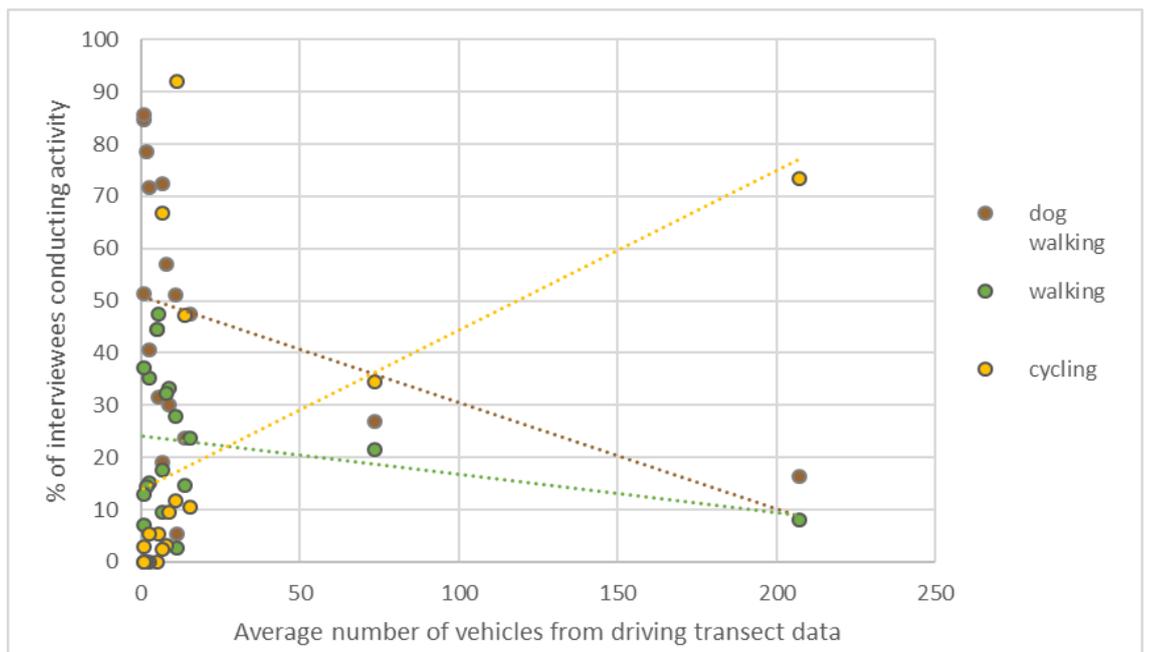


Figure 2 presents scatterplots of the percentage of interviewees conducting a main activity by level of access (the average number of vehicles at each location from driving transect data). There is very general indication that low level access sites are more commonly used by dog walkers and less likely to be used by cyclists – i.e. cycling seems to be focussed at the busy sites while dog walking is more scattered.

4.18 Conducting any statistical test on these patterns is likely influenced by exceptionally high levels of access at Birches Valley and Marquis Drive, and therefore these were removed - see



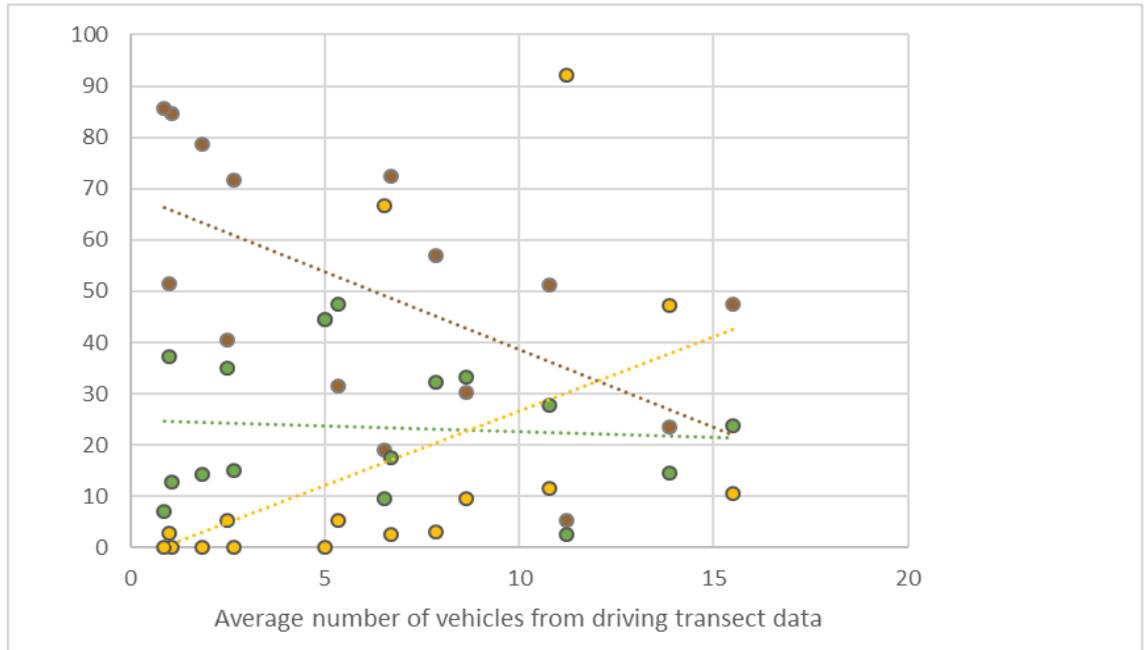


Figure 2 for scatterplots with and without these locations. Simple correlations were conducted on these data with and without Birches Valley and Marquis Drive. Tests showed a marginally significant, positive relationship for the percentage of cyclists and the average number of vehicles using all data (Pearson's $r = -0.489$, $p = 0.040$). However, conducting the same tests without Birches Valley and Marquis Drive did not show a statistically significant relationship at any reasonable level.

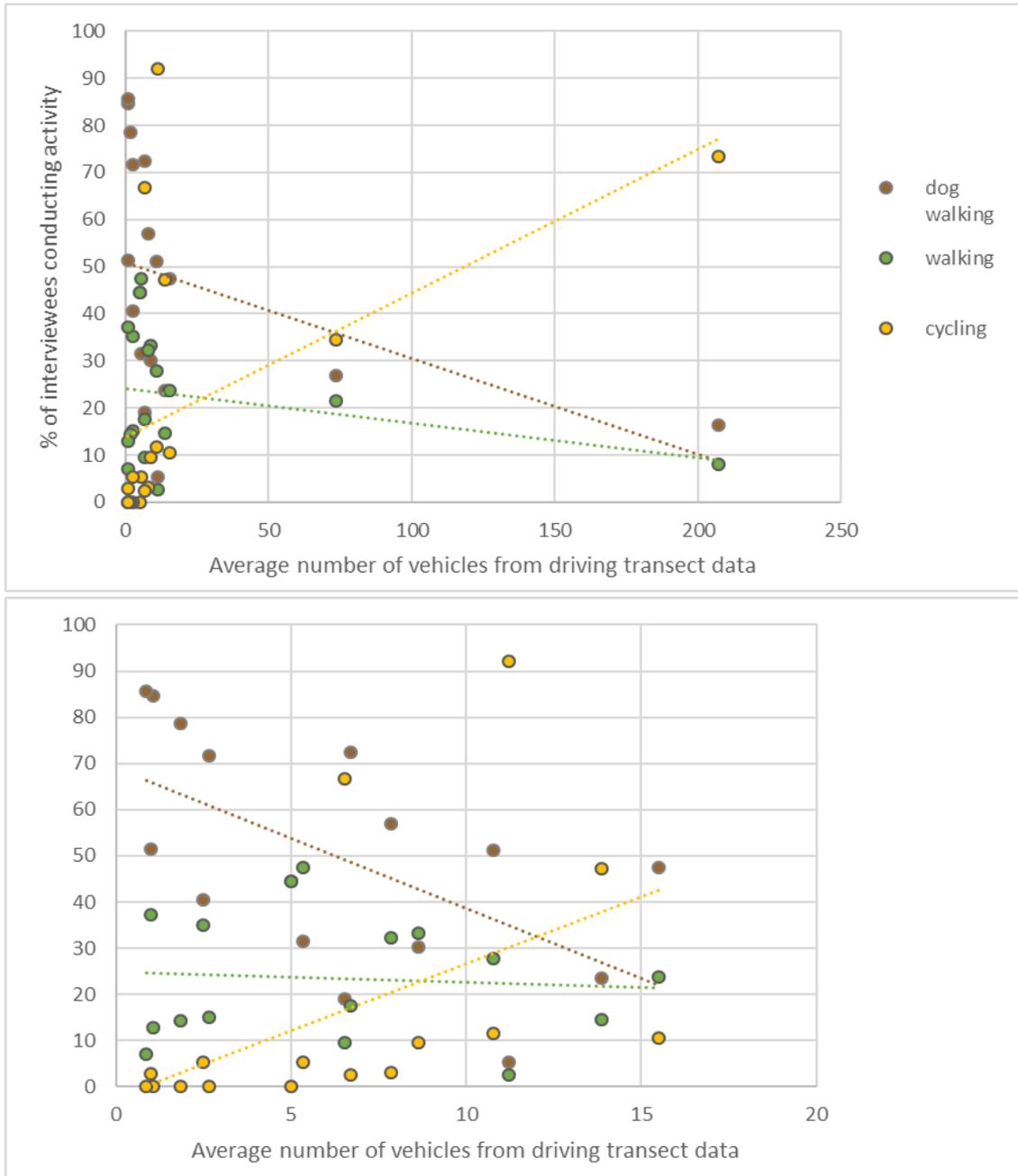


Figure 2: Scatterplot of the percentage of interviewees conducting activities and the average number of vehicles recorded at locations from driving transect data. Top panel shows the scatterplot including all survey points (except for the two foot access locations without data). Bottom panel shows the same scatter plot without Birches Valley and Marquis Drive.

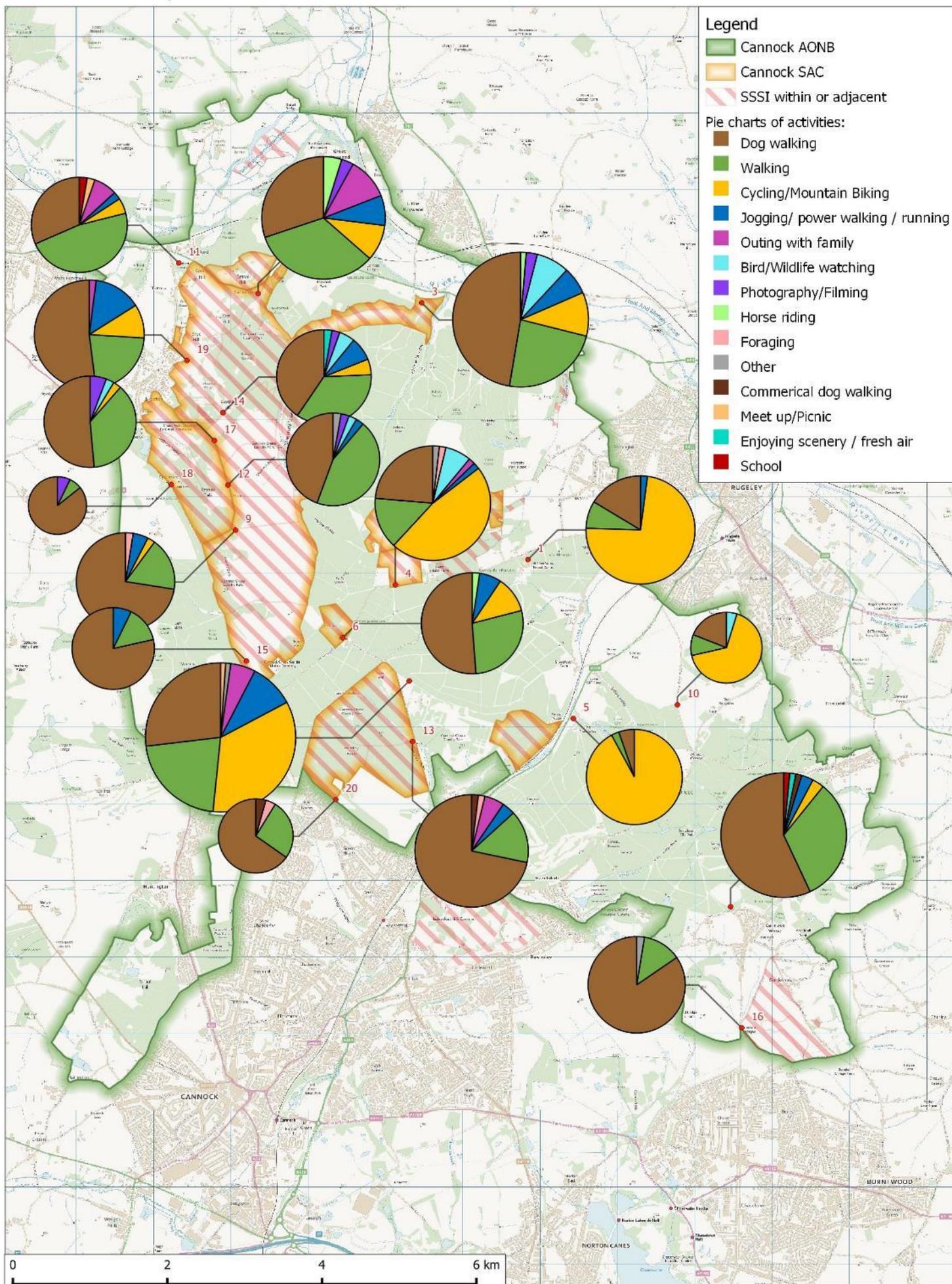
4.19 Another difference in activities investigated was regarding the SAC habitats. Table 11 shows a summary of interviewee activities after categorising survey points by whether they were in the SAC or not. The percentages reported

suggest a slightly greater proportion of dog walkers and walkers on the SAC and fewer cyclists on the SAC.

Table 11: Number (%) of interviewees by activity on SAC and non-SAC survey points.

SAC or non-SAC	Number of survey points (number of interviewees)	Dog walking	Walking	Cycling /M. Biking	Jog/ power walk / run	Outing with family
non-SAC	7 (266)	88 (33%)	56 (21%)	94 (35%)	13 (5%)	8 (3%)
SAC	13 (403)	189 (47%)	109 (27%)	48 (12%)	23 (6%)	12 (3%)
Total	20 (669)	277 (41%)	165 (25%)	142 (21%)	36 (5%)	20 (3%)

Map 6: Pie charts to show the activities recorded from interviews during the autumn and winter only. Charts are sized by the number of interviewees.



Visit patterns

4.20 Surveyors asked questions concerning interviewees' visit patterns. Interviewees were asked the duration of their visit and also the frequency of visits to Cannock Chase. Responses given in these two questions were categorised into classes by the surveyor⁵.

Visit duration

4.21 Overall, the most common visit duration (given by 363 interviewees, 37%) was between 1 and 2 hours.). The second most common (301 interviewees, 30%) was between 30 minutes and 1 hour and 147 interviewees (15%) were visiting for 2 to 3 hours. The percentages for each category are presented in Figure 3. Figure 3 breaks down the results into the different survey periods and suggests a very similar pattern of visit duration between seasons and between weekdays / weekends.

4.22 The overall visit duration as an estimated averaged time⁶ on site was 95 minutes (1 hr 35 mins). Percentages were very similar when considering only data collated during autumn – winter pooled (36% visiting for 1-2 hours; 32% visiting for 30mins-1hour and 14% for 2-3 hours) and the average duration very similar (92 minutes).

⁵ For the classes see questionnaire in the Appendices and Figure 3 and Figure 5

⁶ 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.

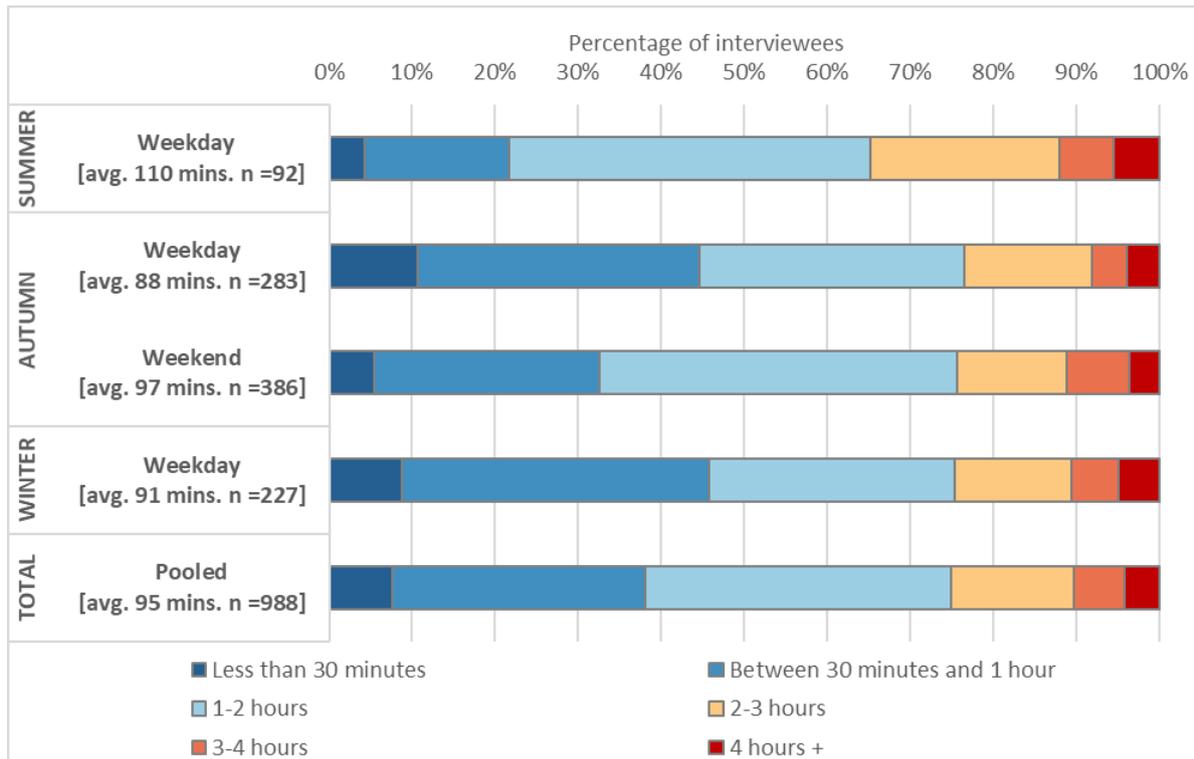


Figure 3: Interviewee visit duration (or expected duration) shown as the percentage of interviewees in grouped time categories for each survey period and as a pooled total. Beside each survey period an approximate average visit duration and the sample size (number of interviewees is given).

4.23 One of the key factors in visit duration was the activity interviewees were undertaking – see Figure 4. Shortest visits were generally undertaken by dog walkers: 63% of visits were less than 1 hour, and an estimated average time of around 60 minutes. The longest visits were mostly by cyclists: 60% of interviewees were visiting for more than 2 hours with an estimated average time approximately 140 minutes. There were also some clear differences between survey points as shown in Map 7. which may be largely attributable to the differences in activities.

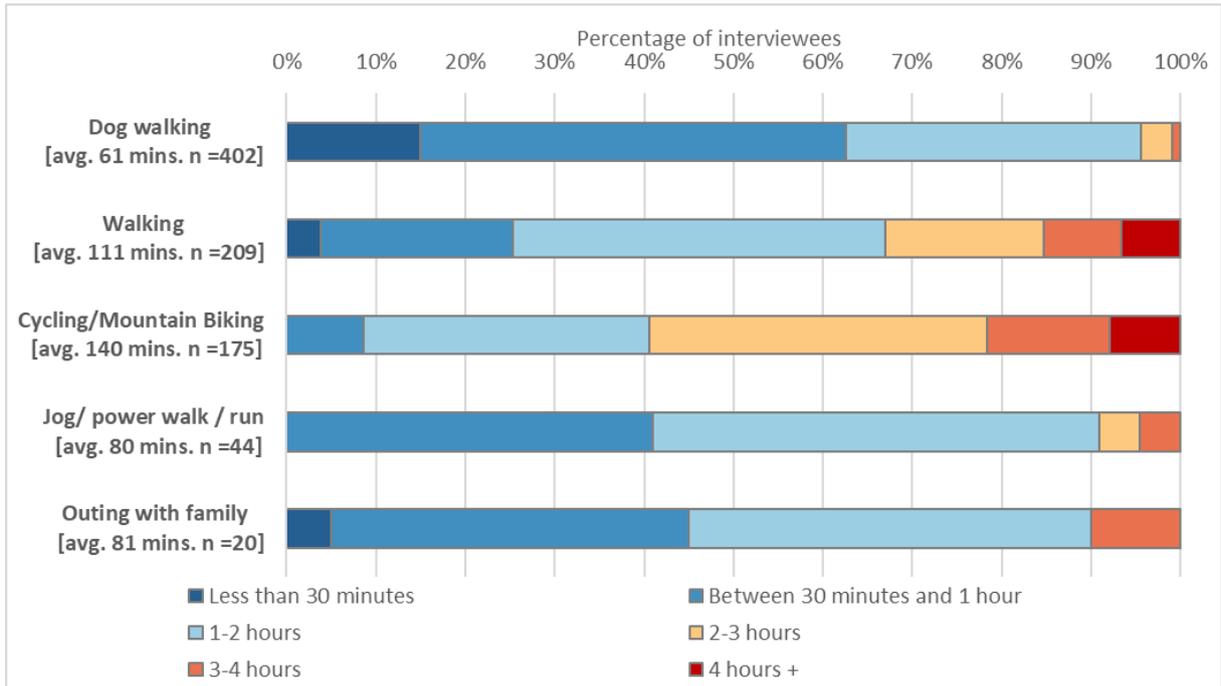
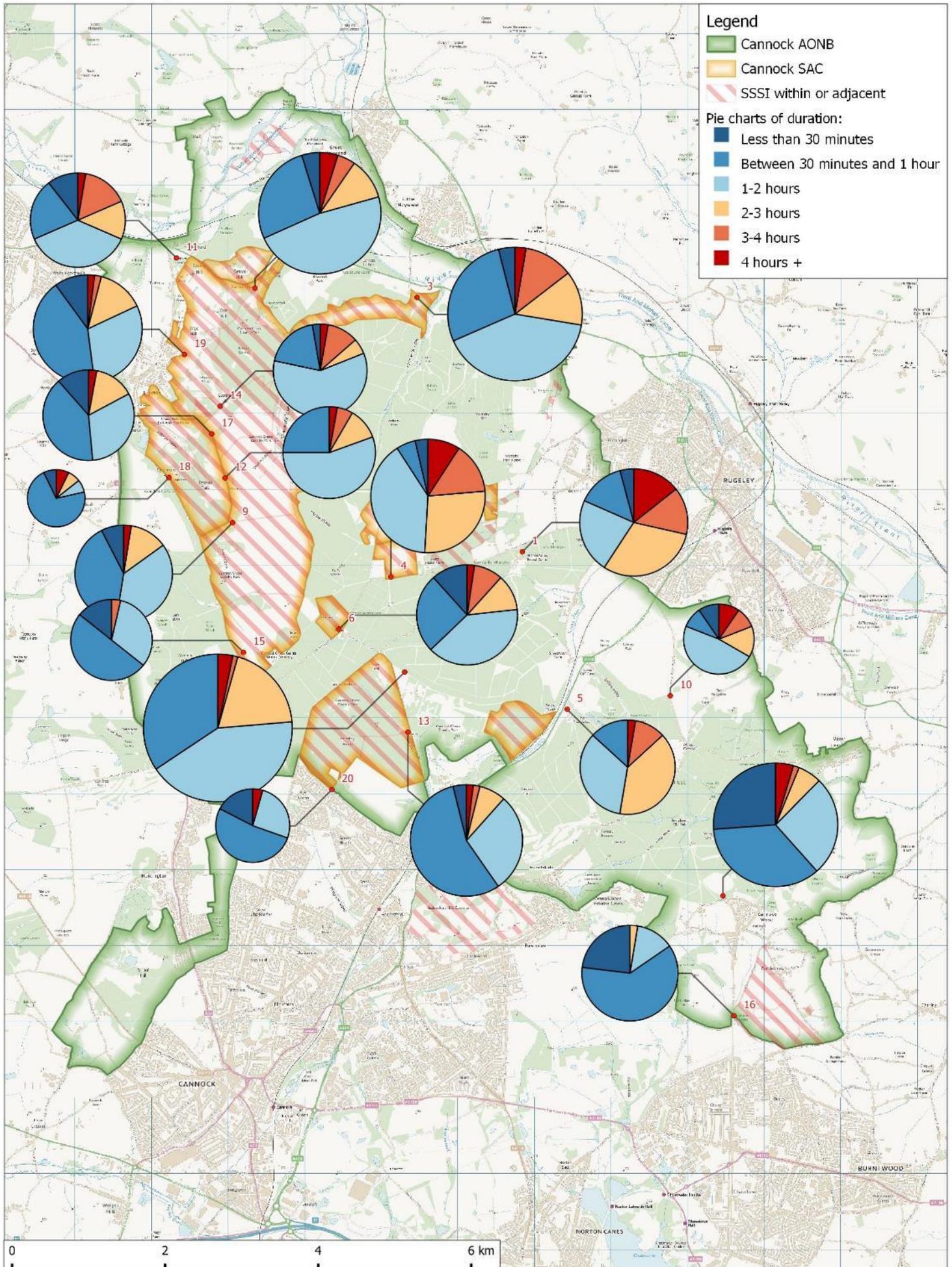


Figure 4: Interviewee visit duration (or expected duration) shown as the percentage of interviewees in grouped time categories for the five most common activities. Beside each activity an approximate average visit duration and the sample size of number of interviewees is given. Data presented are based on the autumn and winter surveys only.

Map 7: Pie charts to show interviewees visit duration on site, from the autumn and winter surveys only. Charts are sized by the number of interviewees.



Visit frequency

- 4.24 Interviewee 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 visit duration, we used simple averages of the number of annual visits to indicate how often people visited⁷.
- 4.25 Across all data, the most common visit frequency was 1 to 3 times a week (40-180 visits), given by 266 interviewees (27%), closely followed by daily visitors (at least once a day) with (237 interviewees, 24%) – see total pooled data in Figure 5. Roughly 5% were unable to comment as they were on their first visit to the site. Overall, our approximate averages would suggest each interviewee makes around 143 visits per year to the site. These proportions remained fairly consistent when considering the autumn winter data only (27% 1 to 3 times a week, and 25% daily), and the estimated number of visits per year was also very similar (147 per year). Figure 5 also suggests greater use of the site by daily visitors on weekdays (17% daily in autumn weekdays) compared to weekend days (11% daily in autumn weekdays).

⁷ “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.

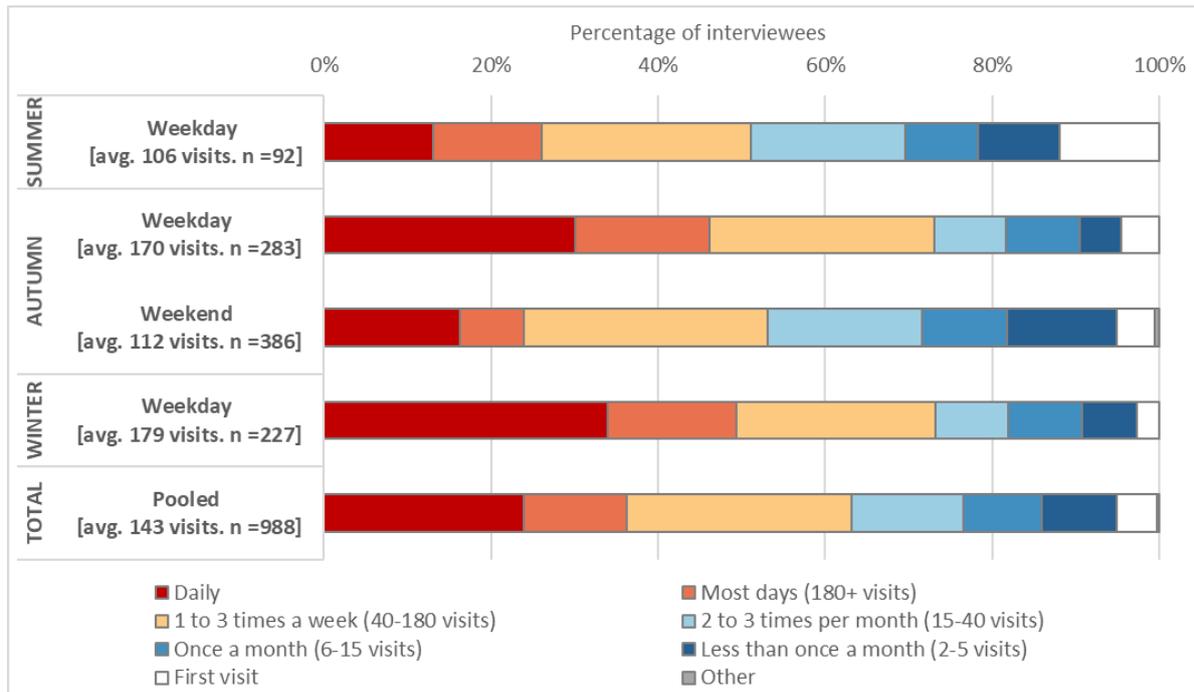


Figure 5: Interviewee visit frequencies by survey period and as a pooled total. Beside each survey period an approximate average number of visits per year and the sample size of interviewees is given.

4.26 Differences between seasons were noticeable – as shown in Figure 5. Autumn and winter, weekend and weekdays can be compared but the summer is not directly comparable due to different survey points being covered. To examine the summer correctly, the subset of five locations surveyed in all three seasons is shown in Figure 6. This suggests the highest proportion of first-time visitors were recorded on the summer weekday (during school holidays, 12% of interviewees) and a relatively low proportion of daily visitors (13%); although this was not as low as during the autumn weekends (11% daily). Overall, winter weekdays had the most regular visitors – an estimate of around 153 visits per year - and these five locations surveyed are some of the more high-profile sites expected to draw infrequent visitors.

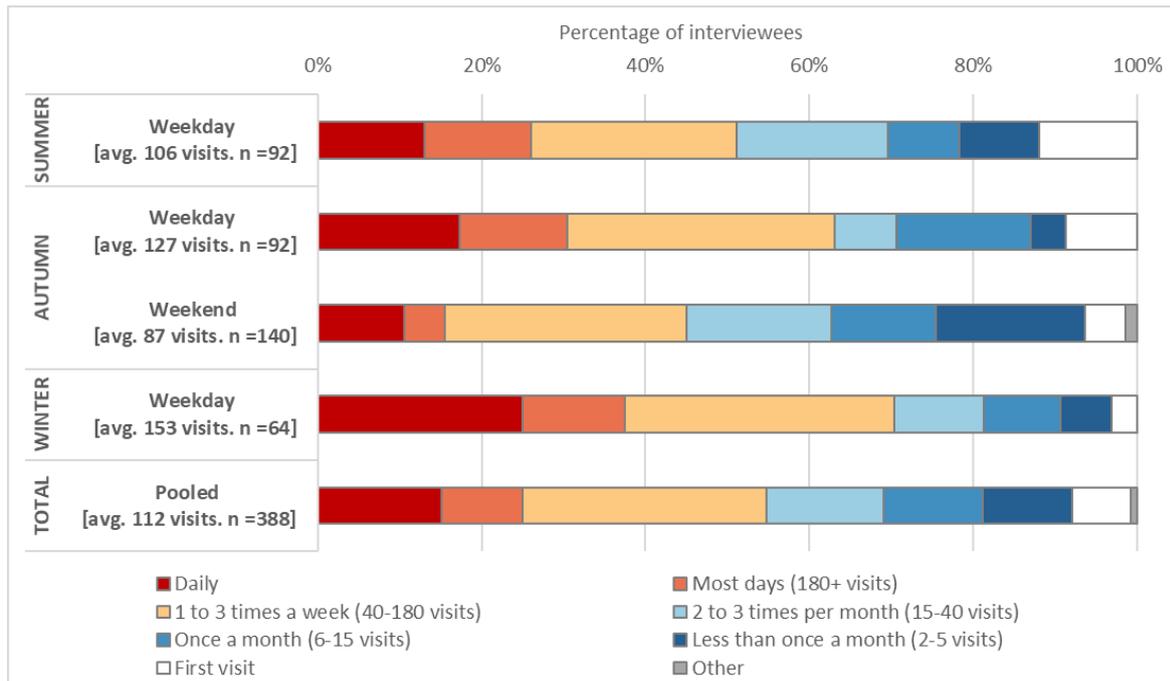


Figure 6: Interviewee visit frequencies by survey period and as a pooled total. Beside each survey period an approximate average number of visits per year and the sample size of interviewees is given. Data used are from the subset of five survey points which were surveyed in all surveying periods.

4.27 Visitor activity was one of the key factors determining visit frequency – as shown in Figure 7 (using pooled autumn-winter data only). The key difference was between dog walkers and all other activities. Amongst dog walkers, 48% of those interviewed visited sites daily and the overall estimate of visit frequency per interviewee was around 227 visits per year. There were three commercial dog walkers interviewed and all used sites daily. For all other activities pooled (i.e. non dog walkers), 7% visited daily and the estimated visit frequency was around 82 visits per year per interviewee.

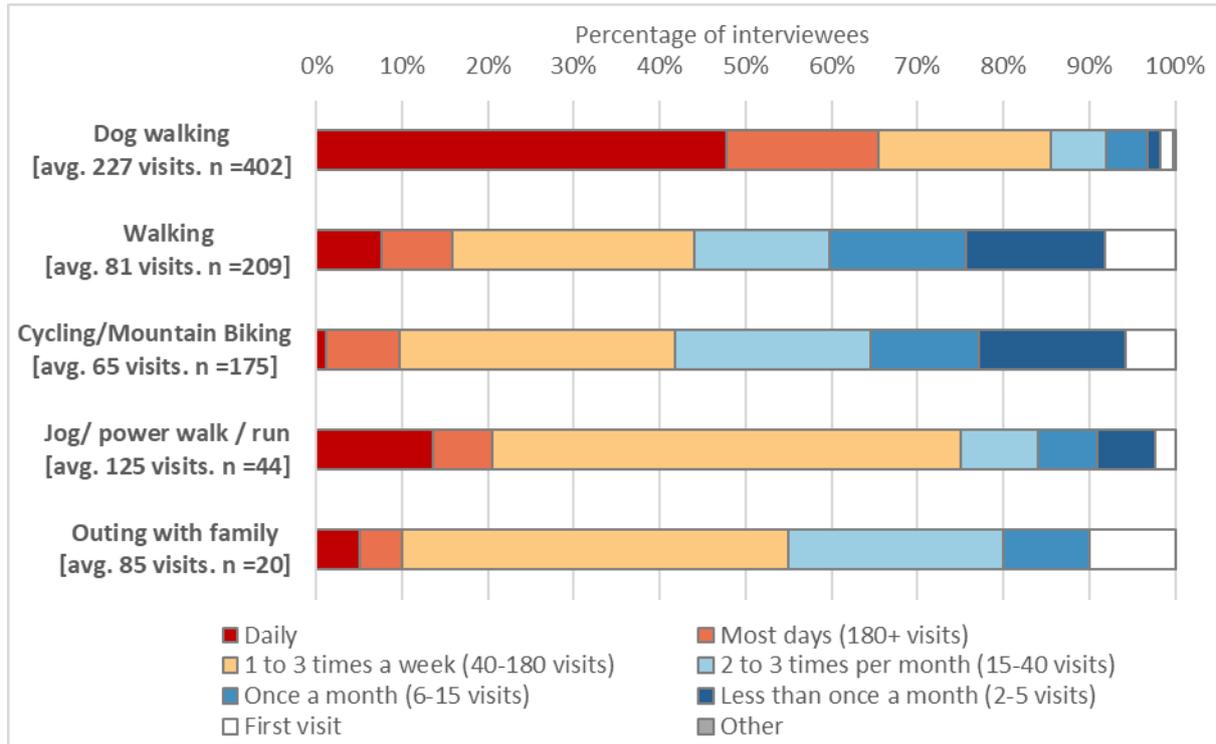
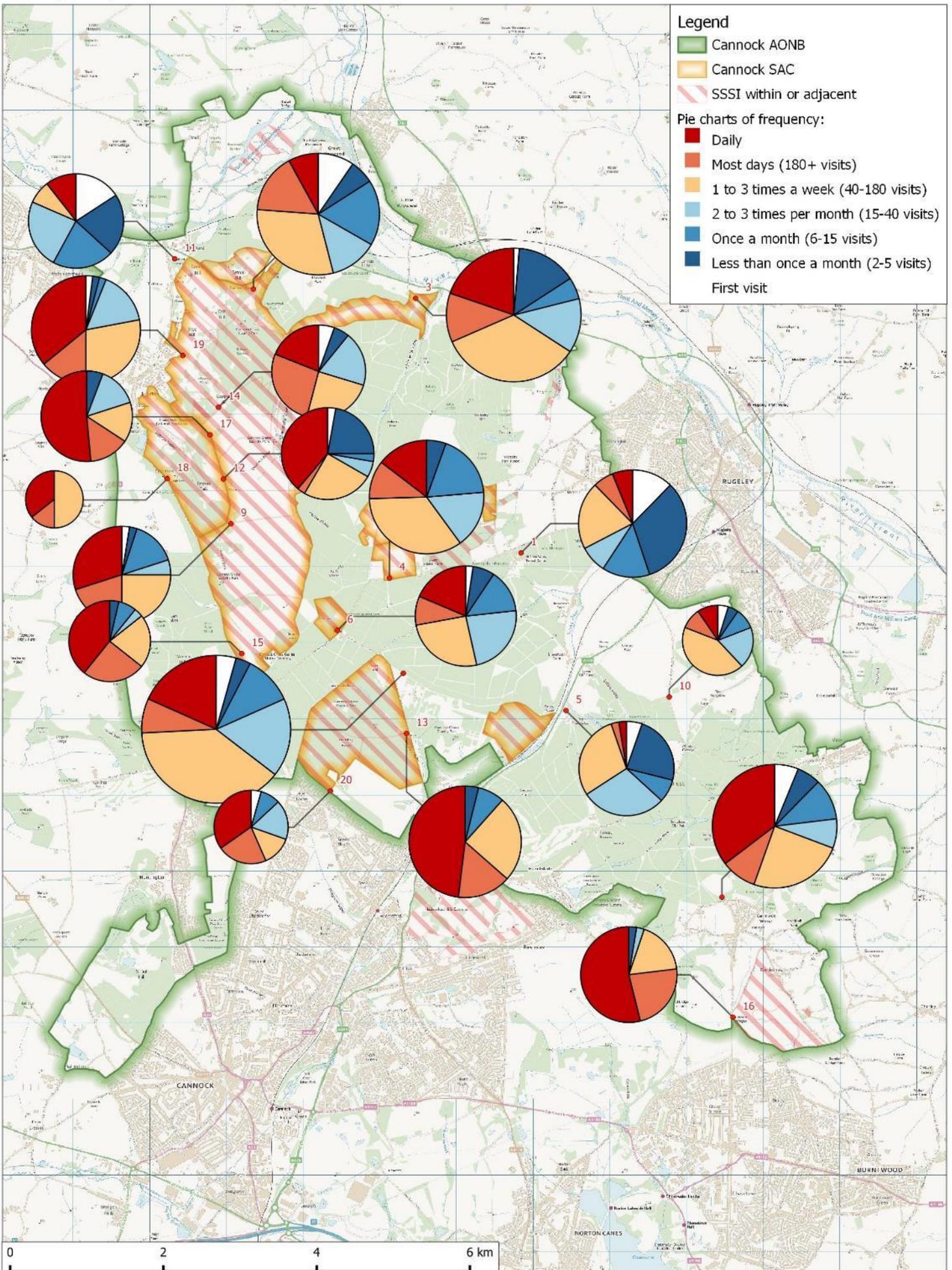


Figure 7: Interviewee visit frequencies for the five most common activities. Beside each activity an approximate average number of visits per year and the sample size of number of interviewees is given. Data presented are based on the autumn and winter surveys only.

4.28 Visit frequency at the individual survey points is visualised in Map 8. Differences between locations are likely to be highly related to the differences in activities occurring at each location. It also appears that daily visitors are more likely to use the less frequently used locations – for example survey points such as 17 and 18 had large proportions of daily visitors, compared to more infrequent visitors at high footfall survey points 1 and 2. However a simple test between the averaged visit frequency (number of visits per year) and the level of use (average number of vehicles in driving transects) suggested no significant correlation (Pearson’s = -0.424, p =0.079).

Map 8: Pie charts to show interviewees frequency of visit to the location from the autumn and winter surveys only. Charts are sized by the number of interviewees.



Number of years visiting

- 4.29 Across interviewees roughly 4% (37 interviewees) were on their first visit to the site. Relatively few had been visiting for only a few years: 10% (100) for less than 3 years, and 25% (245) less than 10 years. All other interviewees had been visiting the site for more than 10 years (71%, 702 interviewees).
- 4.30 The percentage visiting for more than 10 years was greatest amongst dog walkers (78%) and walkers (73%), but relatively low amongst cyclists (48%).

Time of visit

- 4.31 Interviewees were asked whether they tended to visit Cannock Chase more at any particular time of day. Overall, 41% of interviewees (350) from the autumn-winter surveys suggested their time of visit varied, or they simply did not know. For those who did state one, or more than one time period (as grouped by surveyors), the average was 1.3 responses per interviewee. The most common single response (35% of responses) was for late mornings (between 7 and 10 am), followed by midday (between 10 am and 2 pm, 21% of responses) and late afternoon (between 4 and 6 pm, 14%) – see Table 12.
- 4.32 Table 12 also shows the results for individual activities and that the highest percentage of interviewee responses in the early mornings was for dog walkers (14% of responses). The highest percentage for an activity in the evenings was cycling (14% of interviewees responses).

Table 12: Number of interviewees (% of responses) for different activities and times of day interviewees tended to visit. Data shown for the five most common activities only and data are based on the pooled autumn/winter surveys. Times of day allowed for multiple choices (i.e. interviewees might tend to visit for more than one time of day) and cells are coloured from red (high percentage of responses) to green (low percentage) for each column.

	Dog walking	Walking	Cycling/ Mountain Biking	Jog/ power walk / run	Outing with family	All activities
Varies / Don't know	152 (38)	92 (44)	55 (31)	16 (36)	11 (55)	350 (41)
First visit	4 (1)	16 (8)	10 (6)	1 (2)	2 (10)	34 (4)
Early morning (before 7 am)	59 (14)	7 (5)	9 (6)	3 (9)	(0)	81 (10)
Late morning (7 am - 10 am)	153 (36)	41 (27)	54 (35)	20 (57)	2 (18)	277 (35)
Midday (between 10 am and 2 pm)	65 (15)	50 (33)	36 (23)	6 (17)	3 (27)	166 (21)
Early afternoon (2 pm - 4 pm)	36 (8)	28 (18)	13 (8)	0 (0)	3 (27)	84 (10)
Late afternoon (4 - 6 pm)	67 (16)	19 (13)	20 (13)	2 (6)	2 (18)	113 (14)
Evening (after 6 pm)	45 (11)	7 (5)	22 (14)	4 (11)	1 (9)	81 (10)

4.33 Around three quarters of interviewees suggested they visited equally all year round (autumn and winter data pooled, 73% of interviewees). This remained the main response across the top five most common activities (see Table 13). However, the percentage of interviewees selecting this answer could vary between the different activities. Dog walkers most commonly stated they visited equally all year, 89% of interviewees, compared to 58% for walkers. For interviewees who selected one or more individual seasons, summer was the main season selected across all activities (44% of the responses selected one or more seasons). This was greatest for the interviewees who were on a family outing (67%) and least so for the walkers (38%).

Table 13: Number of interviewees (% of responses) for different activities and times of year interviewees tended to visit. Data shown for the five most common activities only and data are based on the pooled autumn/winter surveys. Times of year allowed for multiple choices (i.e. interviewees might tend to visit at various times of year).

	Dog walking	Walking	Cycling/ Mountain Biking	Jog/ power walk/ run	Outing with family	All activities
Equally all year	369 (89)	146 (58)	132 (65)	39 (78)	17 (77)	731 (73)
Don't know	1 (0)	4 (2)	4 (2)	(0)	(0)	11 (1)
First visit	4 (1)	16 (6)	10 (5)	1 (2)	2 (9)	34 (3)
Spring (Mar-May)	10 (26)	17 (20)	11 (20)	2 (20)	1 (33)	47 (21)
summer (Jun-Aug)	20 (51)	32 (38)	30 (54)	4 (40)	2 (67)	96 (44)
autumn (Sept-Nov)	6 (15)	27 (32)	12 (21)	3 (30)	0 (0)	59 (27)
winter (Dec-Feb)	3 (8)	9 (11)	3 (5)	1 (10)	0 (0)	18 (8)

Mode of transport

- 4.34 The vast majority of interviewees arrived by car (87% of interviewees, autumn-winter data), however there were marked differences between survey locations. The percentage of interviewees arriving by car at locations with parking ranged from 68% – 100% at survey points 1 to 18 (pooled as 92%) but was only 4% - 28% (pooled as 21%) at the two locations 19 and 20, identified as primarily foot only. The main parking location which had a lower than expected proportion of access by car was Castle Ring (68% car), where 29% of interviewees had come on foot.
- 4.35 Interviewee's main activity was a factor in the mode of transport used - see Table 14. The bicycle was only a mode of transport for interviews who were then cycling on site, but a high proportion of cyclists had still travelled to Cannock Chase by car (91%).

Table 14: Mode of transport used by interviewees to reach Cannock Chase, shown separately for the top five most common activities. Data presented are from autumn - winter surveys pooled.

Transport	Dog walking	Walking	Cycling/ Mountain Biking	Jog/ power walk / run	Outing with family	Total
Car / van	344 (86)	175 (84)	160 (91)	38 (86)	19 (95)	736 (87)
Bicycle			15 (9)			15 (2)
On foot	57 (14)	29 (14)		6 (14)	1 (5)	93 (11)
Other		5 (2)				5 (1)

Interviewee routes

4.36 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 using an appropriate scale map (the largest scale was the whole AONB). The routes were then digitised within GIS allowing us to extract data on route lengths and present pooled data on maps.

Route length

4.37 Overall, 927 interviewees (94% of 988 interviewees) were able to give a route. For those who were unable to give a route, this was either because they could not recall on the map where they had been, were unsure of where they were going to go, or were not doing a walk extending beyond the bounds of the car park (some walkers, photographers etc.). Route lengths ranged from 173 m to 41 km; these could include routes which extended beyond the AONB. The overall average route was 6.2 km (mean) and 3.8 km (median).

4.38 Differences between seasons were examined using the subset of the five survey locations which were surveyed in all three seasons – see Table 15. However, a test of differences between values on weekdays in the three seasons did not conclude any statistically significant differences ($H=0.57$, $df=2$, $p=0.753$).

Table 15: Summary statistics for interviewee route length. Data used are the subset of five locations which were surveyed in all seasons, shown separately for each season period, weekdays and weekend.

Survey period	n	mean (\pm SE)	median	Q3	Min-max
summer: weekday	87	8 (\pm 0.8)	4.9	10.7	0.2 - 31.3
autumn: weekday	92	8.4 (\pm 0.7)	6.2	11.6	0.4 - 33.4
autumn: weekend	117	8.8 (\pm 0.7)	4.9	13.6	1 - 41.5
winter: weekday	59	7.4 (\pm 0.7)	4.5	10.3	0.4 - 18.6

- 4.39 Differences between weekdays and weekends were investigated using autumn data only, and suggested routes at weekends were slightly greater than weekdays. The weekday average route length was around 6.1 km (mean) and 3.8 km (median), compared with weekend values of 6.7 km and 4.1 km (mean and median). However, a statistical test suggested no significant differences between weekdays and weekends ($H=1.49$, $df=1$, $p=0.223$).
- 4.40 Based on the autumn-only data we did note some highly significant factors in route length. One of these was visit frequency, which showed highly significant differences between categories ($H = 267.31$, $df = 6$, $p < 0.001$). The shortest routes were conducted by those who visited daily (2.9 km, median and 2.4km, mean), compared to those who visited “most days” (5.1 km and 3.0 km) and all other categories of visit frequency (>6.9 km and >4.5 km).
- 4.41 There were also significant differences in route length between survey points ($H=302.20$, $df=13$, $p<0.001$) with the longest median routes (over 10 km) at locations 4: Penkridge Bank Road and 1: Birches Valley, and shortest routes (medians less than 2.2 km) at locations 15: Castle Ring, 16: Aspens Car Park pull in, 18: Gentleshaw Common, and 8: Pull in 2 after Bednall Belt. These median values are given for each survey point in the Appendix (Table 32) but visualised as a simple diameter applied to the survey point in Map 9. This assumes an even dispersal of people, which is of course not true, and is better examined in the section on route distributions, but gives an indication of the scale of potential distance most visitors are traveling at each survey point.

4.42 A key factor which may influence both these patterns is the activities being undertaken. There were clear differences in route length by activity, as shown in Figure 8 and Table 16, and these differences were highly significant ($H = 302.20$ $df = 13$, $p < 0.001$).

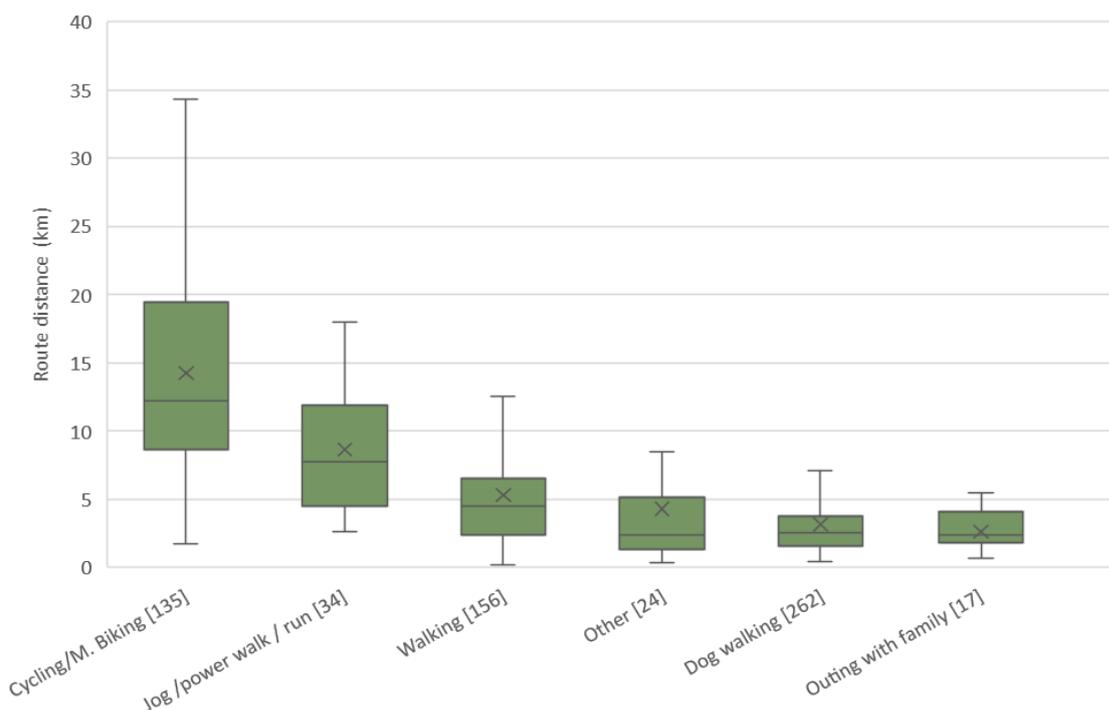


Figure 8: Boxplots showing interviewee route length for the five main activities and all other interviewees combined. Autumn data only. Activity categories sorted by mean value. Boxes show the range between Q1 (25%) and Q3 (75%), cross line within this indicates the median. Whiskers indicate the range of values, excluding outliers. The cross indicates the mean. Values in brackets next to activities indicate the sample size.

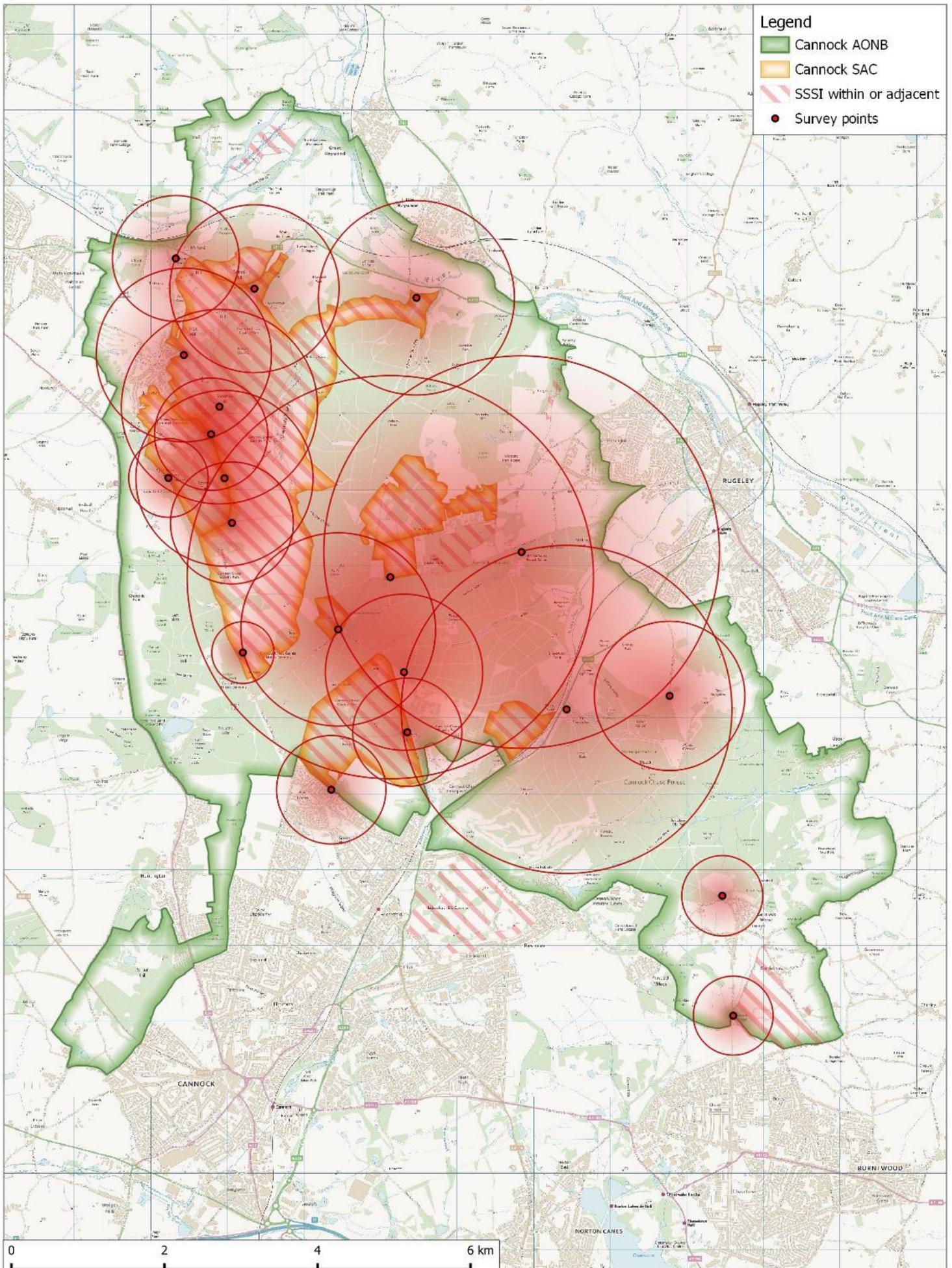
Table 16: Summary statistics of interviewee route lengths by activity. Data are from the autumn period only. Only activities with data for 4 or more interviewee routes are given. Table sorted by sample sizes (number of interviewees).

Activity	n	mean (\pm SE)	median	Q3	Min-max
Cycling/Mountain biking	135	14.3 (\pm 0.6)	12.2	19.4	1.8 - 41.5
Dog walking	262	3.2 (\pm 0.1)	2.6	3.8	0.4 - 16.4
Walking	156	5.3 (\pm 0.3)	4.5	6.5	0.2 - 22.9
Jog/ power walk / run	34	8.6 (\pm 0.8)	7.7	11.9	2.7 - 23.1

Outing with family	17	2.7 (± 0.3)	2.4	4.1	0.7 - 5.5
Photography/Filming	5	6.9 (± 4.6)	2.8	14.1	1.5 - 25.2
Foraging	4	1.3 (± 0.4)	1.4	1.9	0.4 - 2.0
Horse riding	4	8.9 (± 1.3)	8.0	11.7	7.1 - 12.7

- 4.43 As a control to ensure route lengths were not being influenced by any other factors, interviewees were asked to state if their route was of a normal length, and if anything had influenced their choice of route. Overall, 63% of interviewees stated their route was a normal / typical length, 11% were not sure and 4% on a first visit. However, a reasonable proportion, 19% of interviewees, suggested their visit was shorter than normal, while just 2% suggested it was longer.
- 4.44 There was no obvious difference between season, and no great differences between activity groups – although slightly lower for cyclists (10% of interviewees conducting shorter routes). Factors which seemed important for interviewees who were conducting shorter than usual routes were time (26%), the activity being undertaken (e.g. presence of dog, 15%), weather (14%) and previous knowledge of the area (11%). A further 19% stated other reasons which did not fit set categories. These covered a diverse range of responses including selecting flat routes, selecting a route to a café/pub, too hot (especially in reference to dogs) and due to illness or injury (the person or their dog/horse).

Map 9: Median values of interviewees route length (e.g. distance of 50% of interviewees) for each survey point visualised as a simple diameter applied to each survey point.



Distribution of routes

- 4.46 The distribution of interviewees' routes are shown in Maps 10-14 (and raw route data in Map 17 in appendices). Distributions are visualised in a number of different ways and these maps use all data collected from all survey periods. Map 10 shows the overall distribution interviewee routes expressed as a heatmap. This map shows concentrations along the Forestry Commission bike routes; Follow the Dog, the Monkey Trail and the Sherbrook Trail. Other notable hotspots are the route to Stepping Stones from Punchbowl and Milford Common.
- 4.47 Maps 11 and 12 show these routes in more detail, with the individual route lines overlaid. Purple lines show each individual interviewee's route, but become darker, and then black, when high numbers of lines overlap. Maps 11 and 12 focus on routes on the SAC which individually often have a lower footfall, but paths are numerous, and a criss-cross of routes across large areas, especially around Glacial Boulder is evident.
- 4.48 Maps 13 and 14 show the route data using a grid-based approach (200 m hexagonal grids) to allow the numbers of routes to be quantified. Map 13 shows the overall distribution of all interviewees, while Map 14 shows the density for specific groups of interviewees: cyclists, walkers, dog walkers and daily visitors.

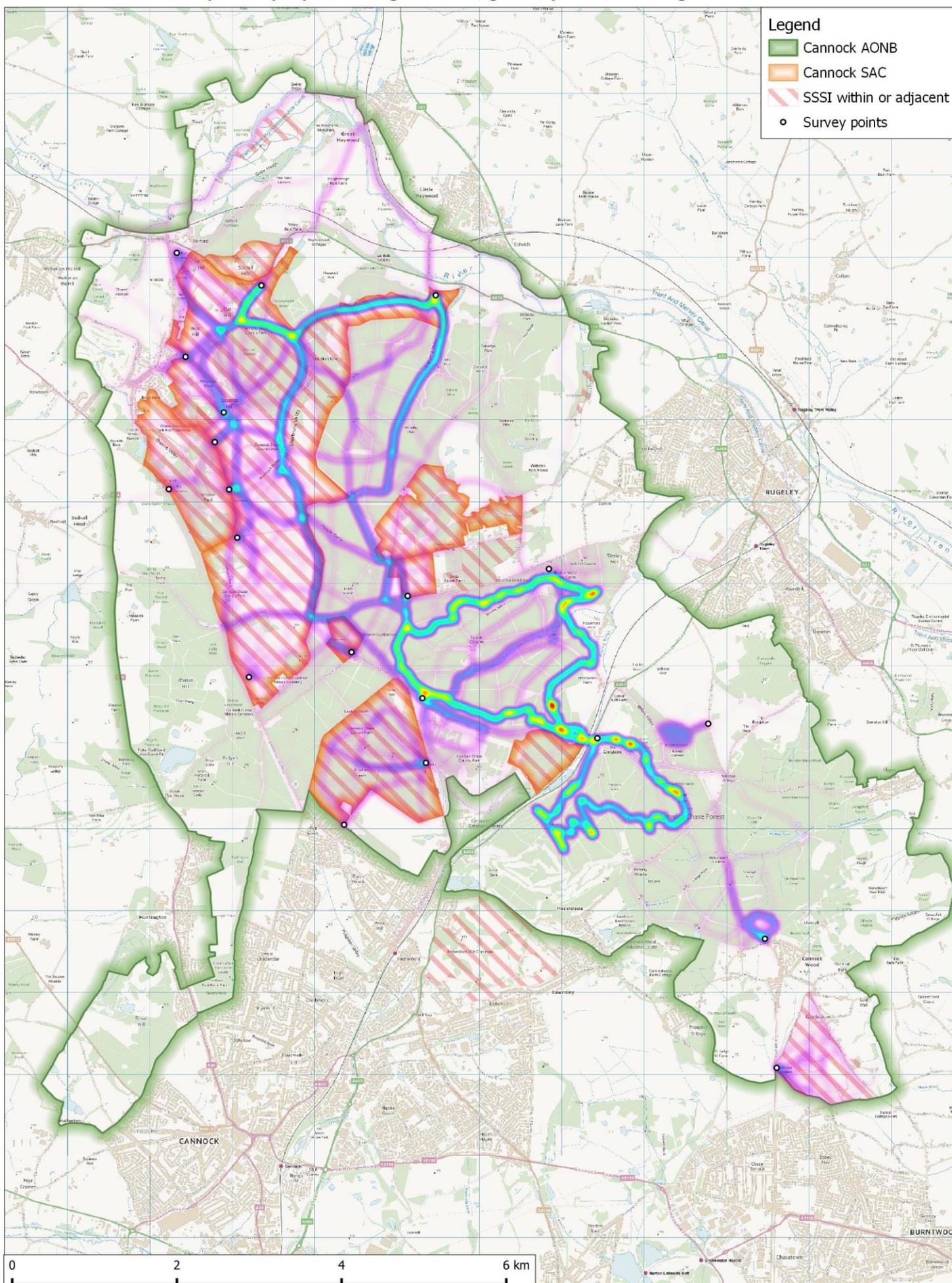
SAC habitat

- 4.49 Routes were mapped with relevance to the SAC habitat, overall 66% of routes were recorded through SAC habitat at least in part. But this varied markedly between survey points – at 12 survey points all interviewees routes were in part through SAC habitat (13 survey points were located in the SAC) and just three locations where no interviewees used SAC habitat.
- 4.50 Furthermore, length of route with reference to the SAC was calculated and a percentage of the route that included the SAC estimated for each interviewee. For survey points which were in the SAC the percentage of route in the SAC as an average across interviewees was 73%, compared to just 8% for all other survey points.
- 4.51 For the top five most frequently recorded activities, the average percentage of route in the SAC across interviewees was:

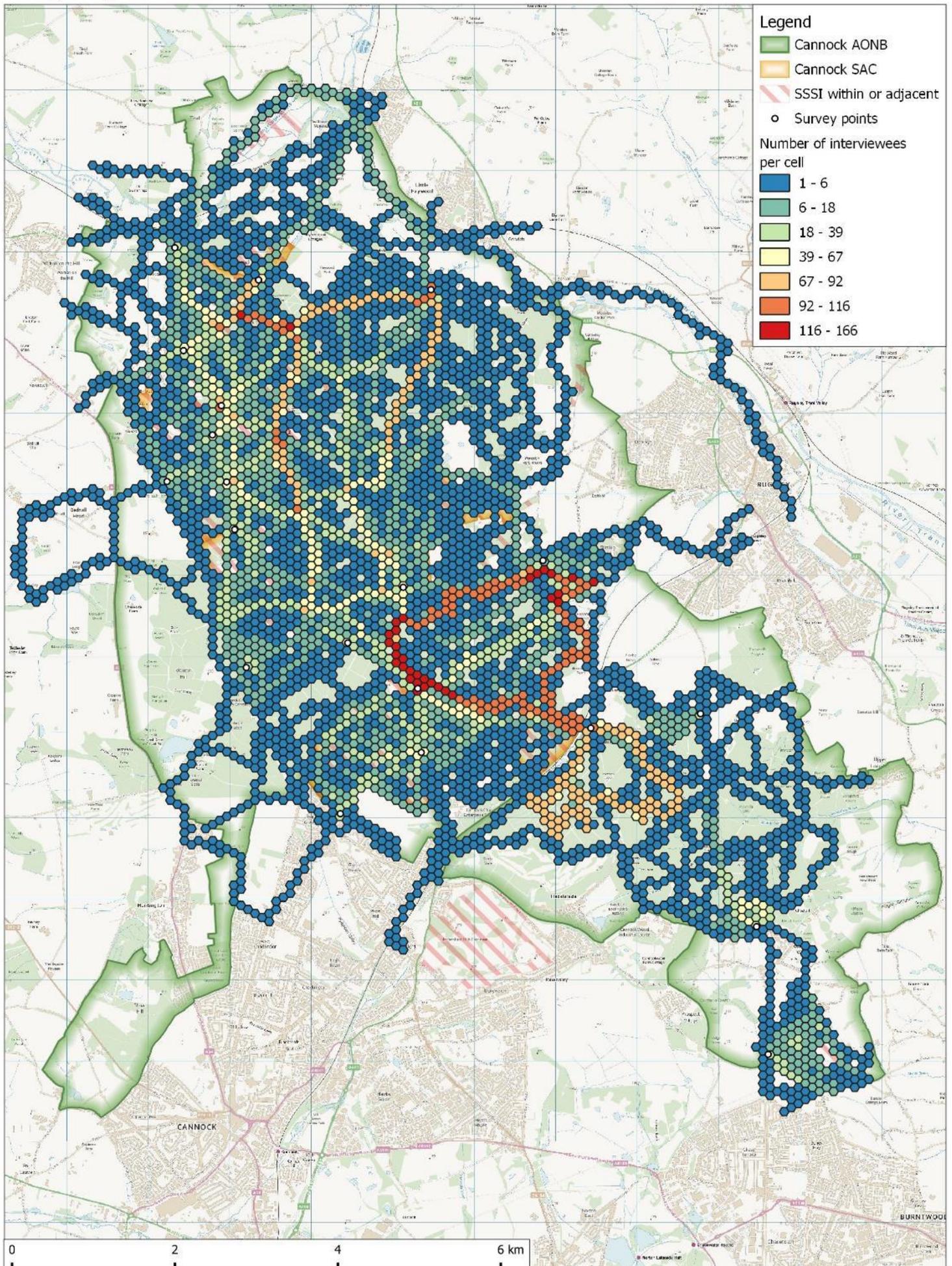
- dog walking, 58% of route in SAC;
- walking, 53%;
- jogging/running, 48%;
- outing with family, 42%; and
- cycling, 13%.

- 4.52 Across all activities the two highest percentages were for interviewees conducting photography or filming (82%) and horse riders (77%), but sample sizes for these activity groups were low.
- 4.53 When considering the typical total length of route through the SAC, the average length of route in SAC per interviewee was (for the top five activities): 3.8 km for joggers/runners, 2.4 km for walkers, 1.9 km for cyclists, 1.8 km for dog walkers and 1.1 km for outing with the family. Overall, the highest value was 5.2 km of route through the SAC for horse riders.
- 4.54 The average percentage of route and average length of route in the SAC are given for each survey point in the Appendix in Table 32. Key locations with the highest average percentage of route on the SAC were location 18 (Pull in 2 after Bednall Belt), 13 (Duffields), 17 (Freda's Grave), 15 (pull in before Aspens) and 9 (Chase Road corner) - all more than 90%. Locations with the longest average route lengths in the SAC were locations 7 (Punchbowl), 14 (pull in to Coppice Hill), 12 (Glacial Boulder), 6 (Whitehouse) and 19 (Brocton Lane) - all more than 3.5 km.

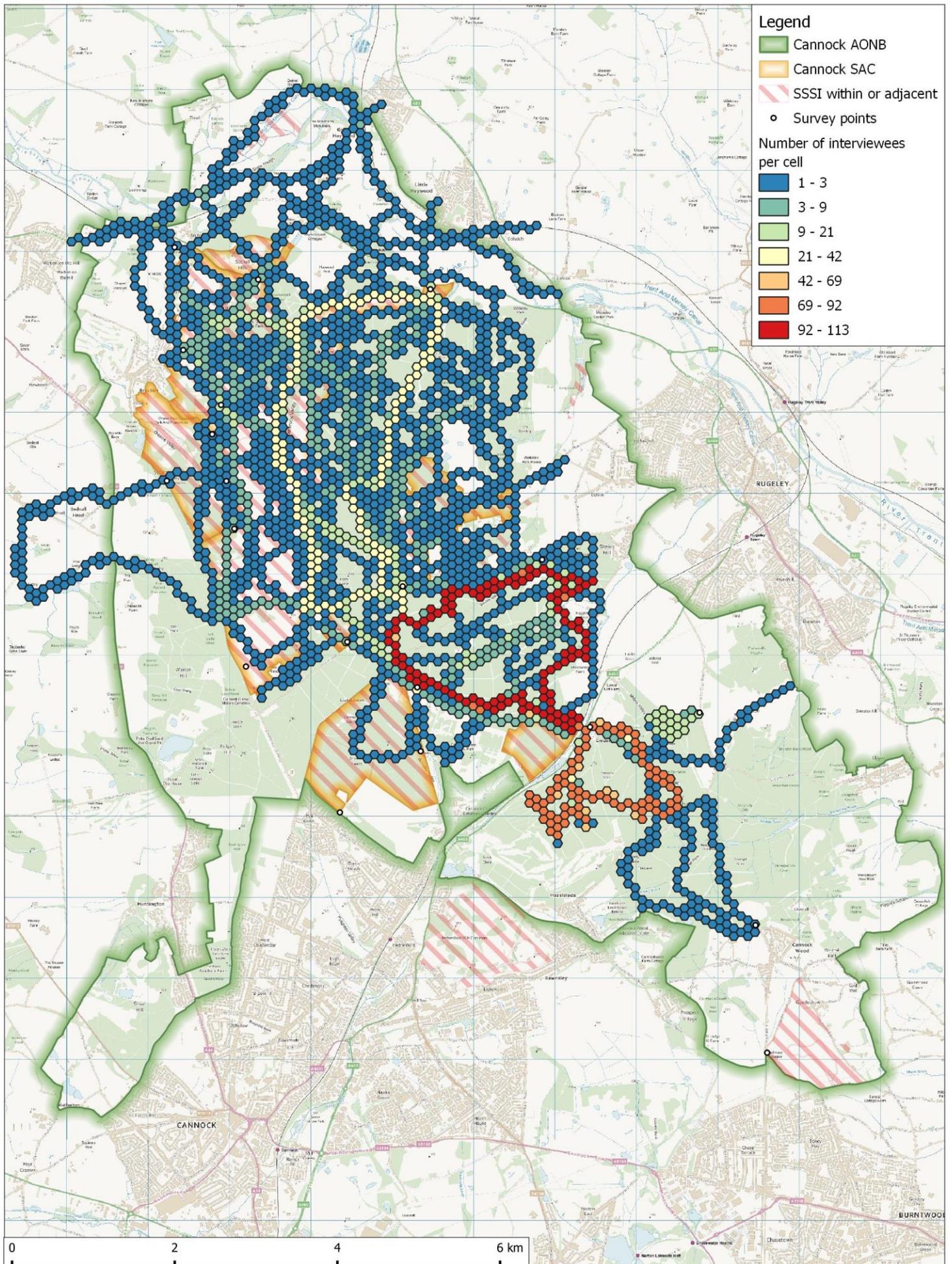
Map 10: Interviewee routes recorded on site show as a heatmap. Heatmap colours range from low densities in semi-transparent purple, through to blue, green, yellow, with highest densities in red.



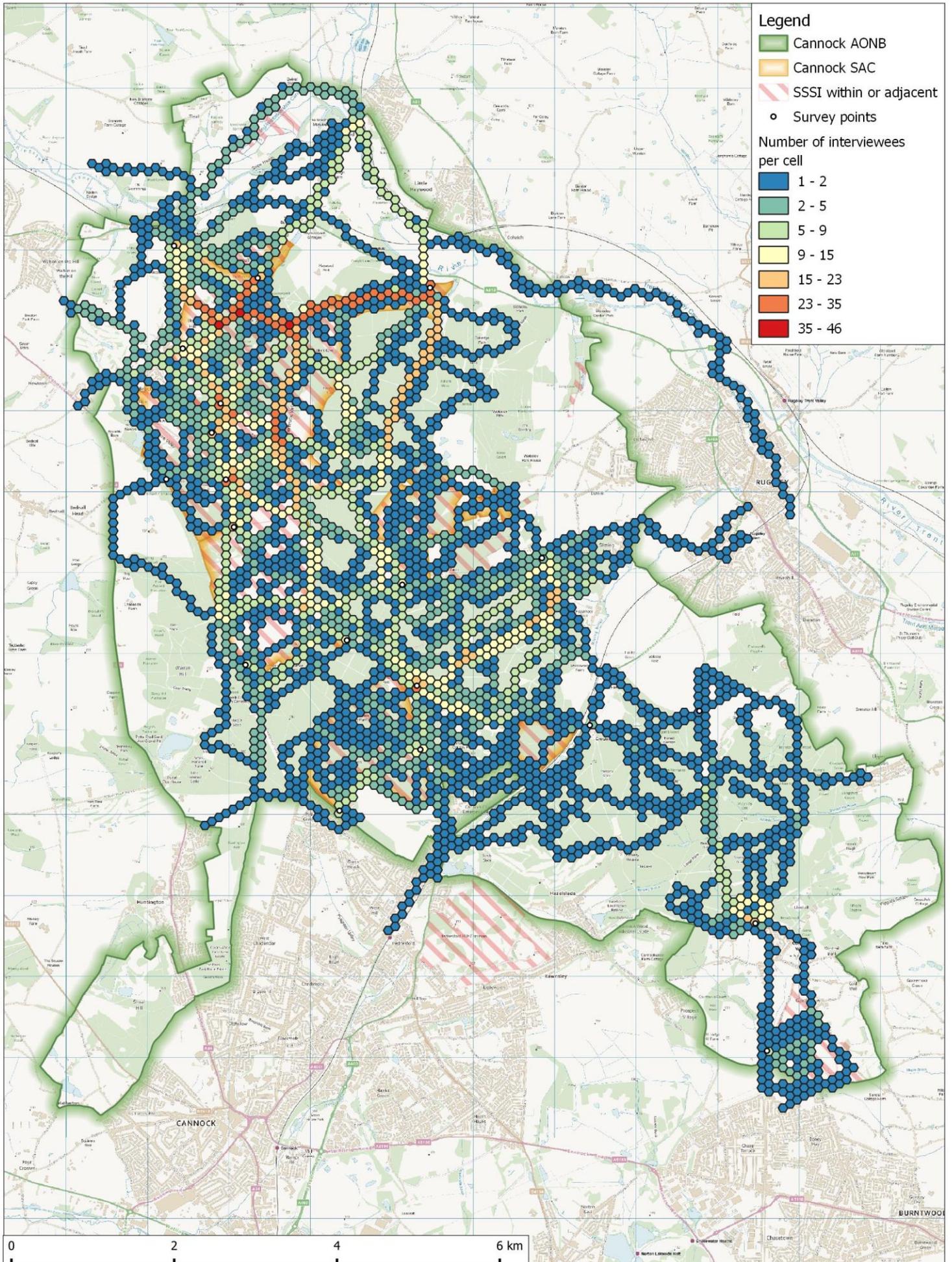
Map 13: Density of interviewee routes presented as the number of interviewees in each cell of a 200m hexagonal grid.



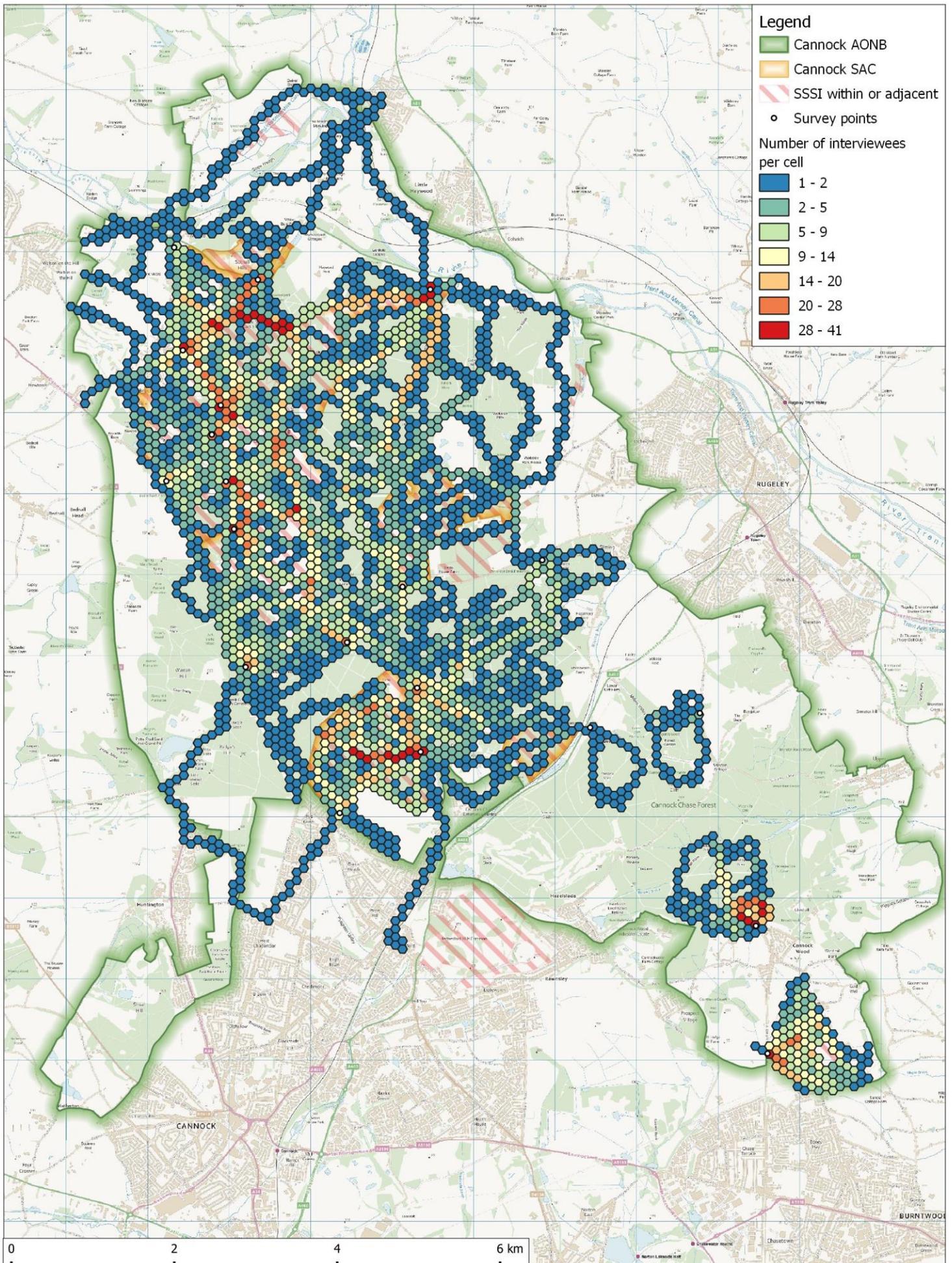
Map 14a: Density of interviewee routes presented as the number of interviewees in each cell of 200m hexagonal grid shown for interviewees who were cycling/mountain biking.



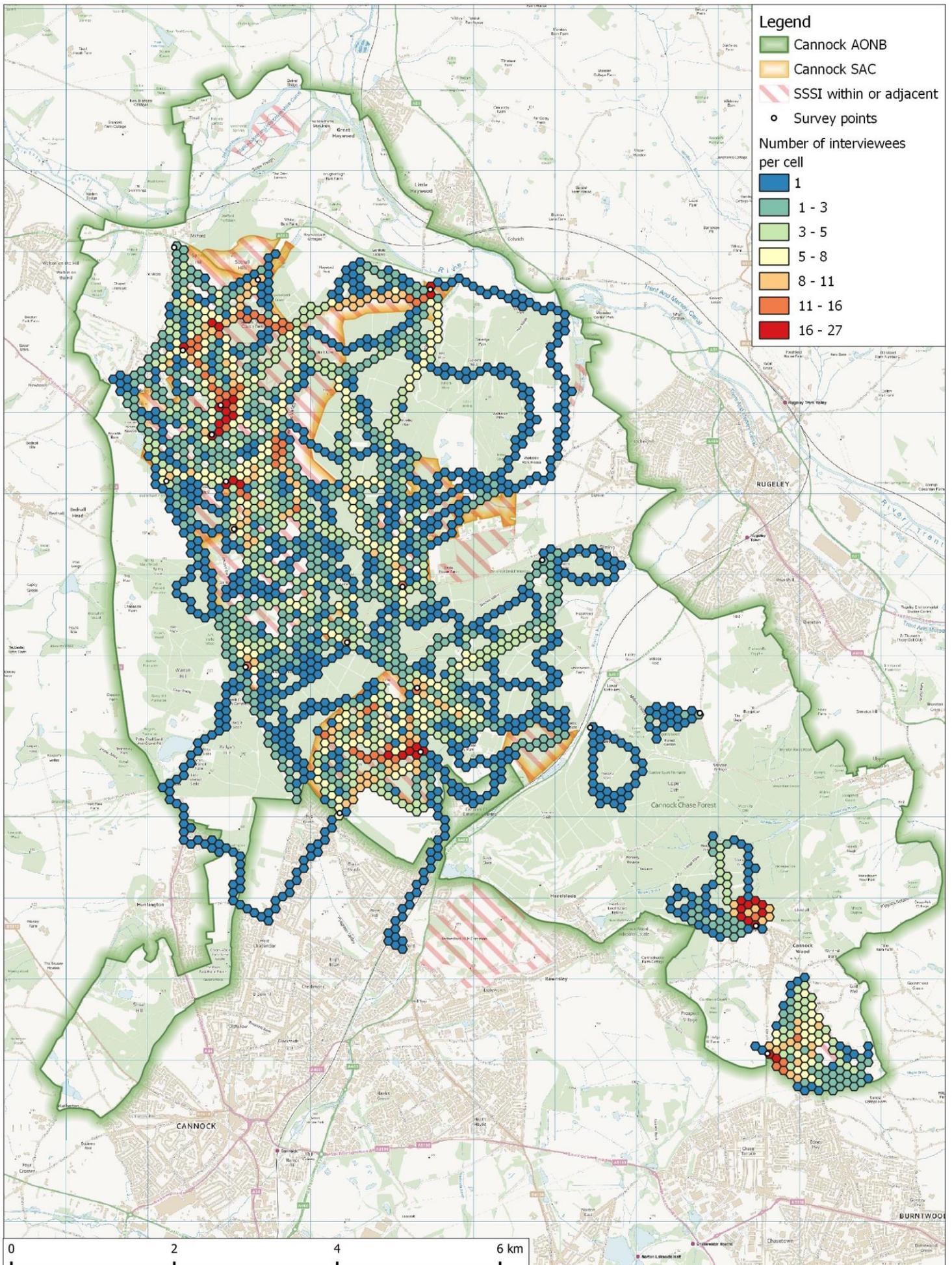
Map 14b: Density of interviewee routes presented as the number of interviewees in each cell of 200m hexagonal grid shown for interviewees who were walking.



Map 14c: Density of interviewee routes presented as the number of interviewees in each cell of 200m hexagonal grid shown for interviewees who were dog walking.



Map 14d: Density of interviewee routes presented as the number of interviewees in each cell of 200m hexagonal grid shown for interviewees who were daily visitors.



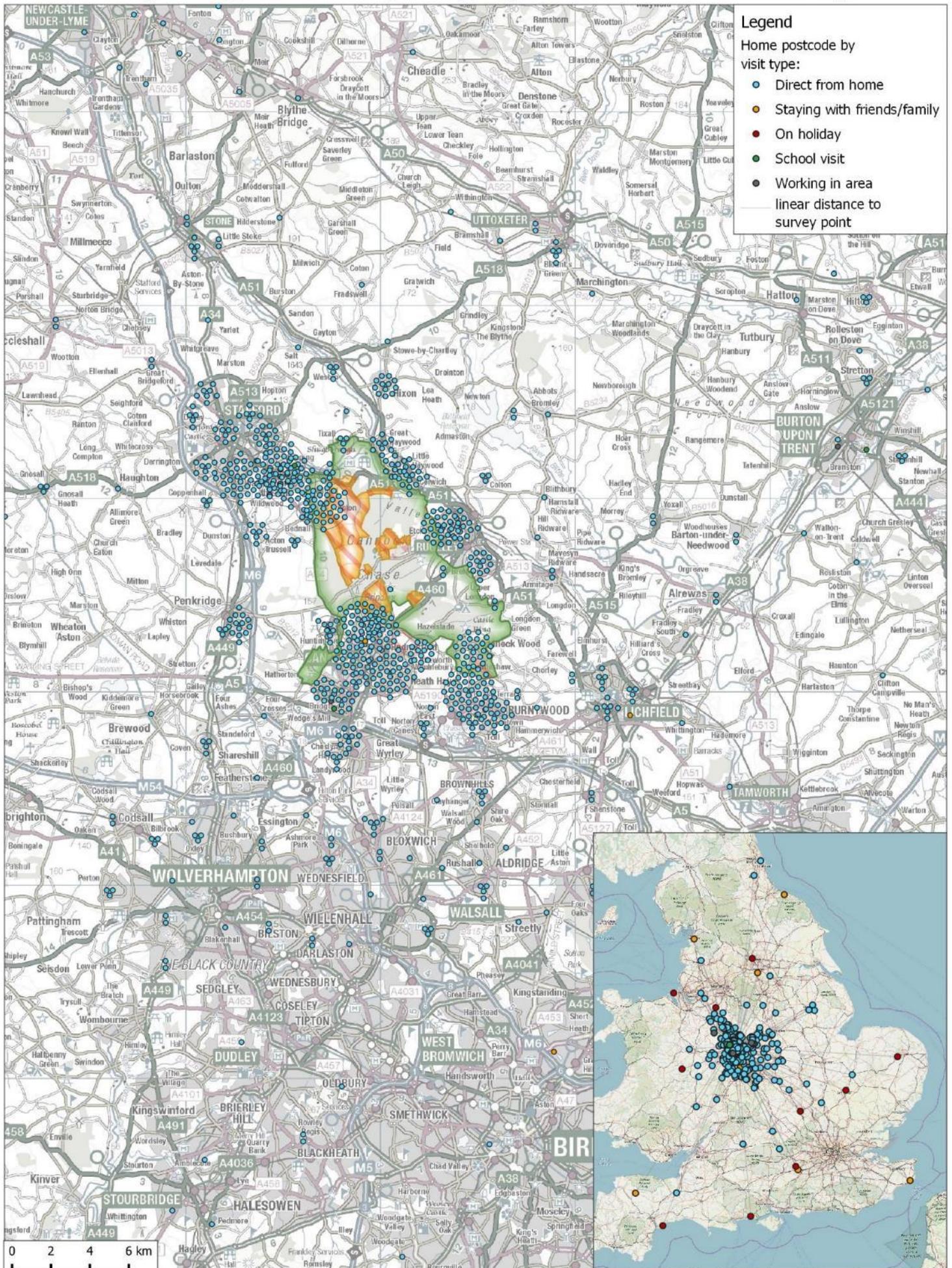
Home postcodes

- 4.55 An important piece of information obtained during surveys was the interviewee's home postcode. Interviewees were asked for their full home postcode, and 14 refused or were unable, including 4 interviewees from abroad (who were on holiday or staying with friends/family). Of the remaining 947 interviewees who gave a postcode 937 were full, georeferenced postcodes that could be accurately mapped within the GIS (i.e. 95%).
- 4.56 The distribution of all postcodes (visualised on inset map in Map 15) show visitor origins were widely distributed across England, ranging from as far afield as Tyne and Wear, Devon, Kent and Norfolk. However, 96% of interviewees were from the East or West Midlands. A breakdown of postcodes by different local authority districts is shown in Table 17. Roughly a third of interviewees were from Stafford Borough (30% of interviewees in pooled autumn-winter data), around a quarter from Cannock Chase District (26%) and around one in ten from Lichfield (12%). Other local authorities with more than 1% of interviewees were South Staffordshire District, Walsall Borough, East Staffordshire Borough and City of Wolverhampton.

Table 17: Summary of the number and percentage of interviewees in each local authority.

Local authority	summer (Aug)	autumn (Sept)		winter (Nov/Dec)	Total
	Wkday	Wkday	Wkend	Wkday	
Stafford Borough	25 (29)	88 (33)	98 (27)	73 (34)	284 (30)
Cannock Chase District	24 (28)	74 (28)	86 (23)	58 (27)	242 (26)
Lichfield District	4 (5)	35 (13)	45 (12)	25 (12)	109 (12)
South Staffordshire District	5 (6)	20 (7)	28 (8)	18 (8)	71 (8)
Walsall Borough	1 (1)	8 (3)	18 (5)	9 (4)	36 (4)
East Staffordshire Borough	4 (5)	9 (3)	9 (2)	5 (2)	27 (3)
City of Wolverhampton	0 (0)	7 (3)	7 (2)	5 (2)	19 (2)
South Derbyshire District	3 (3)	5 (2)	3 (1)	1 (0)	12 (1)
Solihull Borough	1 (1)	0 (0)	10 (3)	1 (0)	12 (1)
Birmingham Borough	2 (2)	2 (1)	5 (1)	2 (1)	11 (1)
City of Stoke-on-Trent	2 (2)	1 (0)	5 (1)	2 (1)	10 (1)
Shropshire	1 (1)	1 (0)	5 (1)	1 (0)	8 (1)
Cheshire East	1 (1)	0 (0)	3 (1)	2 (1)	6 (1)
Coventry District	0 (0)	1 (0)	2 (1)	2 (1)	5 (1)

Map 15: Interviewee postcodes shown across the whole UK (inset map) and more locally around Cannock Chase (main map). In the main map overlapping postcodes are offset as concentric rings.



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Table 18: Summary of the interviewee data for each local authority. Data from autumn (weekday and weekend) only. Values in bold indicate top two values for each column.

Local authority	Number of interviewees	% of interviewees (% down column)			% of people (% down column)			% of interviewees (% across rows for each group)					
		Wkday	Wkend	Both	Wkday	Wkend	Both	Activity				75% or more visits to here	Visit daily or most days
								Dog walker	Walker	Cyclist	Other		
Stafford Borough	259	33	27	29	46	24	33	48	24	11	18	59	39
Cannock Chase District	218	28	23	25	21	23	22	63	19	7	11	68	59
Lichfield District	105	13	12	13	9	13	11	49	26	13	13	61	36
South Staffordshire District	66	7	8	8	7	7	7	35	27	19	19	75	29
Walsall Borough	35	3	5	4	3	5	4	8	46	38	8	50	8
East Staffordshire Borough	23	3	2	3	2	3	2	28	17	50	6	56	17
City of Wolverhampton	19	3	2	2	3	2	2	21	50	21	7	64	7
Other	102	10	20	16	8	24	18	23	61	2	1	25	0

4.57 The visitor profile for each local authority from the interview data is summarised in Table 18.

Linear distances

4.58 For each interviewee home postcode, the linear (Euclidean) distance from the postcode to the interview location was calculated. Overall, using all 937 postcodes the distances ranged from 76 m (resident of Pye Green, West Cannock Farm) to 289 km (an interviewee from Dover who was staying with friends and family locally). The mean distance value was 16.0 km, median value 6.2 km (this value is the distance of the nearest 50% of interviewees) and the third quartile value was 15.3 km (often stated as “Q3” and representing the 75% nearest) – see Table 19.

4.59 Table 19 also separates out one of the key differences in these distances, whether interviewees were travelling from home or staying away from home (either with friends and family, or on holiday). The average distances for those groups staying away from home were an order of magnitude greater than those from home – e.g. around 130 – 150 km for those staying away from home and 8 – 11 km for those visiting directly from home.

Table 19: Summary of linear distances for each visit type.

Visit type	n	mean (\pm SE)	median	Q3	Min-max
Home	912	13.4 (\pm 0.7)	6.1	14.8	0.1 - 248.7
Holiday	10	149.4 (\pm 20.7)	136.3	217.6	55.3 - 253
Friends/Family	9	135 (\pm 34.6)	153.2	222.5	3.2 - 288.7
School	3	11.3 (\pm 6.0)	8.4	22.8	2.8 - 22.8
Work	3	20.4 (\pm 8.2)	22.2	33.7	5.4 - 33.7
All interviewees	937	16 (\pm 1.0)	6.2	15.3	0.1 - 288.7

4.60 However, these overall values are potentially influenced by differences between survey effort (extra effort at a subset in summer) and differences between weekdays, weekends and seasons.

Differences between seasons

4.61 Differences between summer, autumn and winter were investigated using the subset of five locations which were surveyed in all three periods. Summary statistics for these are given in Table 20. This suggests some large draws in the summer and on weekends in the autumn. Differences in the range of distance values recorded at different times of year were investigated using a statistical test on weekday values in the three seasons. This showed no significant difference between the three seasons (K-W; $H=1.00$, $df=2$, $p=0.608$).

Table 20: Summary statistics of the interviewee linear distances between survey points and home postcodes. Data from the subset of five locations which were surveyed in all seasons, shown separately for each season period, weekdays and weekend (includes visitors not directly from home e.g. on holiday).

Survey period	n	mean (\pm SE)	median	Q3	Min-max
summer: Weekday	86	25.3 (\pm 5)	7.9	26.7	0.4 - 288.7
autumn: Weekday	90	15.7 (\pm 2.4)	7.9	18.2	0.2 - 158.8
autumn: Weekend	133	26.7 (\pm 3.8)	9.9	30.8	1 - 253
winter: Weekday	61	18.1 (\pm 4.4)	9.0	18.3	2.2 - 248.7

Differences between weekdays and weekends

4.62 The summary of values using all collated survey points in autumn on weekdays and weekends are given in Table 21, suggesting a larger draw at weekends. A statistical test on these values showed differences were highly significant (K-W; $H=15.52$, $df=1$, $p<0.001$).

Home interviewees

4.63 While examining distances from all interviewees is interesting, it is often more relevant to examine the distances for interviewees who were visiting directly from home (rather than interviewees who were on holiday, staying with friends or family etc). Table 21 provides a summary of distances from all interviewees (for the autumn and autumn-winter period) and for interviewees who had travelled directly from home only. This still shows a broadly similar radius, but all values are slightly smaller.

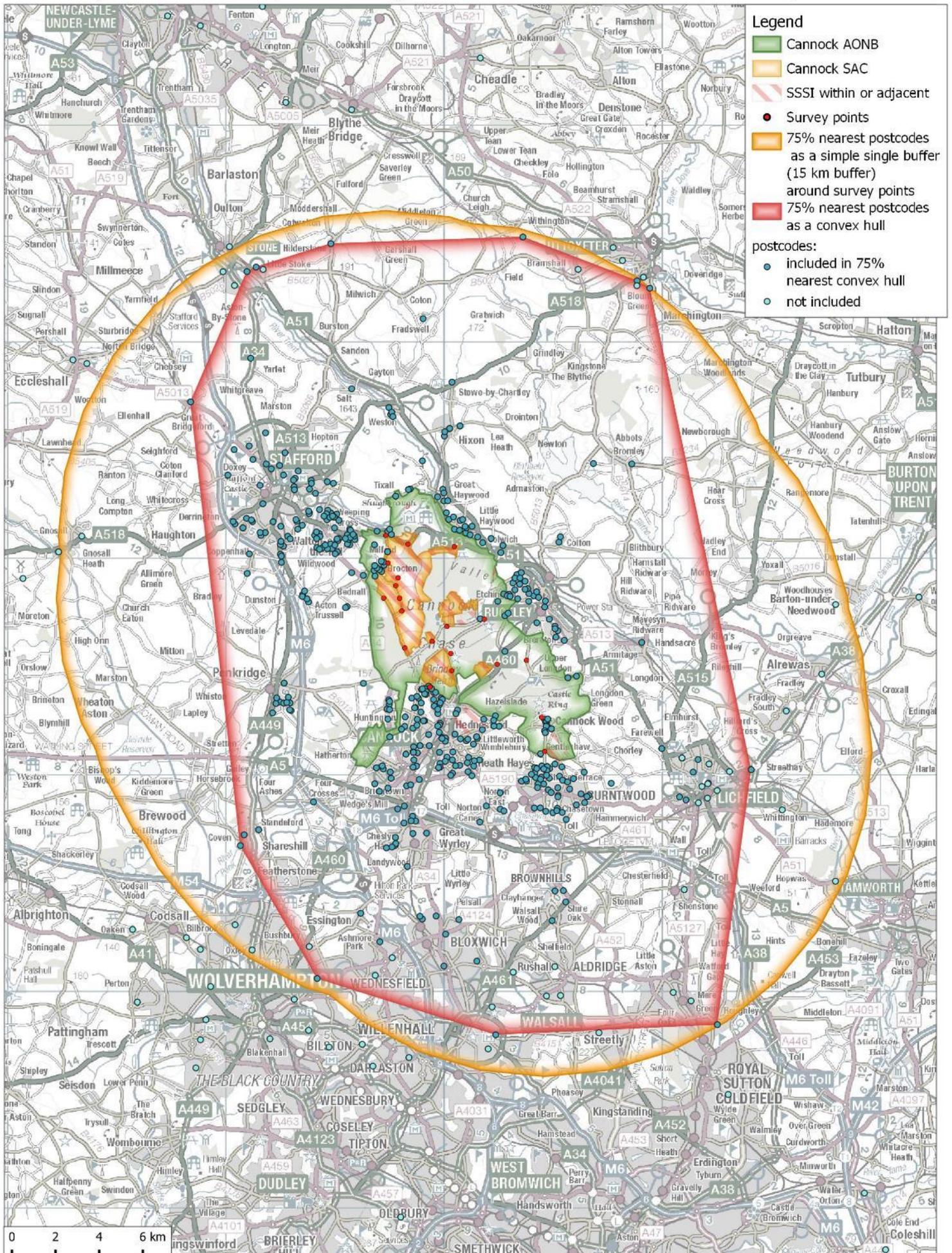
4.64 For interviewees from home, there were still clear differences between weekdays and weekends in the autumn. As such the pooled autumn-winter period is influenced by the effect of two weekdays compared to one weekend day. The pooled autumn value is therefore also shown, as this includes just one weekday and one weekend day. However, the values for median and Q3 are broadly similar between pooled autumn (6.2 km and 15.2 km) and autumn-winter pooled data (6.0 km and 14.8 km).

Table 21: Summary statistics of the interviewee linear distances between survey points and home postcodes. Data from autumn winter period only used, shown separately for each season period, weekdays and weekend and for interviewees who have travelled directly from home and all interviewees.

Survey period	n	mean (\pm SE)	median	Q3	Min-max
All interviewees					
autumn: Weekday	268	11.7 (\pm 1.4)	5.3	11.9	0.1 - 218.9
autumn: Weekend	366	18.8 (\pm 1.8)	7.1	18.5	0.1 - 253.0
Pooled: autumn	634	15.8 (\pm 1.2)	6.4	16.2	0.1 - 253.0
winter: Weekday	217	12.9 (\pm 1.8)	5.3	13.2	0.1 - 248.7
Pooled autumn-winter	851	15.1 (\pm 1)	6.0	15.1	0.1 - 253
Home interviewees					
autumn: Weekday	262	10.3 (\pm 1)	5.2	11.5	0.1 - 158.8
autumn: Weekend	358	16.2 (\pm 1.4)	7.0	17.7	0.1 - 228.6
Pooled: autumn	620	13.7 (\pm 0.9)	6.2	15.2	0.1-228.6
winter: Weekday	214	11.7 (\pm 1.5)	5.2	12.7	0.1 - 248.7
Pooled autumn-winter	834	13.2 (\pm 0.8)	6.0	14.8	0.1 - 248.7

4.65 The Q3 value - the distance which encompasses 75% of the nearest postcodes to the survey point- is shown in Map 16 (using autumn only data and interviewees only travelling directly from home). The area or "catchment" these postcodes cover is expressed using a simple single distance buffer (rounded to 15 km) of the survey points, and as a convex hull, which wraps to the individual postcodes which are included in the 75% cut off.

Map 16: Distribution of the 75% nearest postcodes from interviewees during the autumn only. Area covered by the 75% nearest expressed as single distance radius and as convex hull around postcodes.



4.66 A key factor affecting the distance interviewees travelled was the activity they were undertaking, and a statistical test shows these differences were highly significant ($H=170.80$, $df=12$, $p<0.001$). A summary of the distances for the top seven most commonly encountered activities is shown in Figure 12 and values for top five in Table 22. Shortest distances and therefore most local use was recorded for dog walkers - the mean value was 6.5 km, 50% lived within 4.1 km (median value) and 75% within 6.4 km (Q3 value). In contrast, the largest distances were for cyclists; with a mean of 31 km, median of 20.5 km and Q3 of 39.9 km.

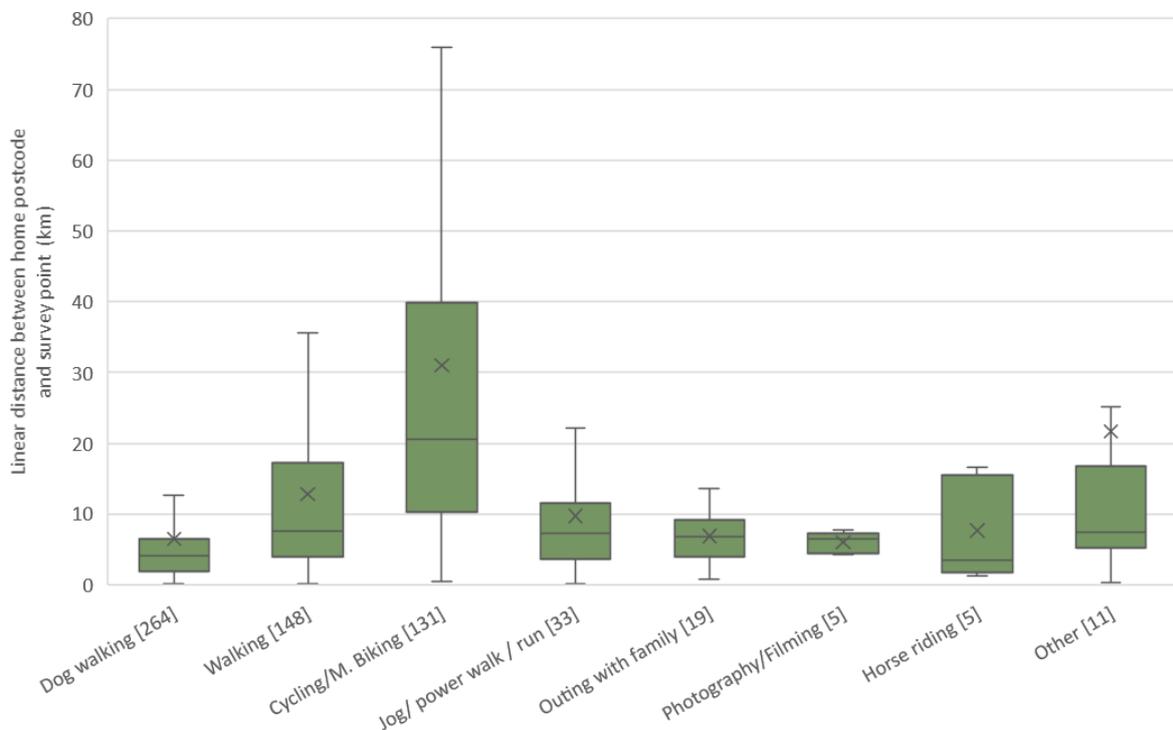


Figure 9: Boxplots to summarise the linear distances between survey point and home postcodes for the top seven activities. Data sorted by sample size (shown in brackets) and using autumn data only. Boxes show the range between Q1 (25%) and Q3 (75%), cross line within this indicates the median. Whiskers indicate the range of values, excluding outliers. The cross indicates the mean. Values in brackets next to activities indicate the sample size.

4.67 The distances recorded can also be visualised for individuals as cumulative curve to show at what distance the percentage of visitors starts to level off. A

curve for all interviewees, and separately for dog walking, walking and cycling is shown in Figure 10.

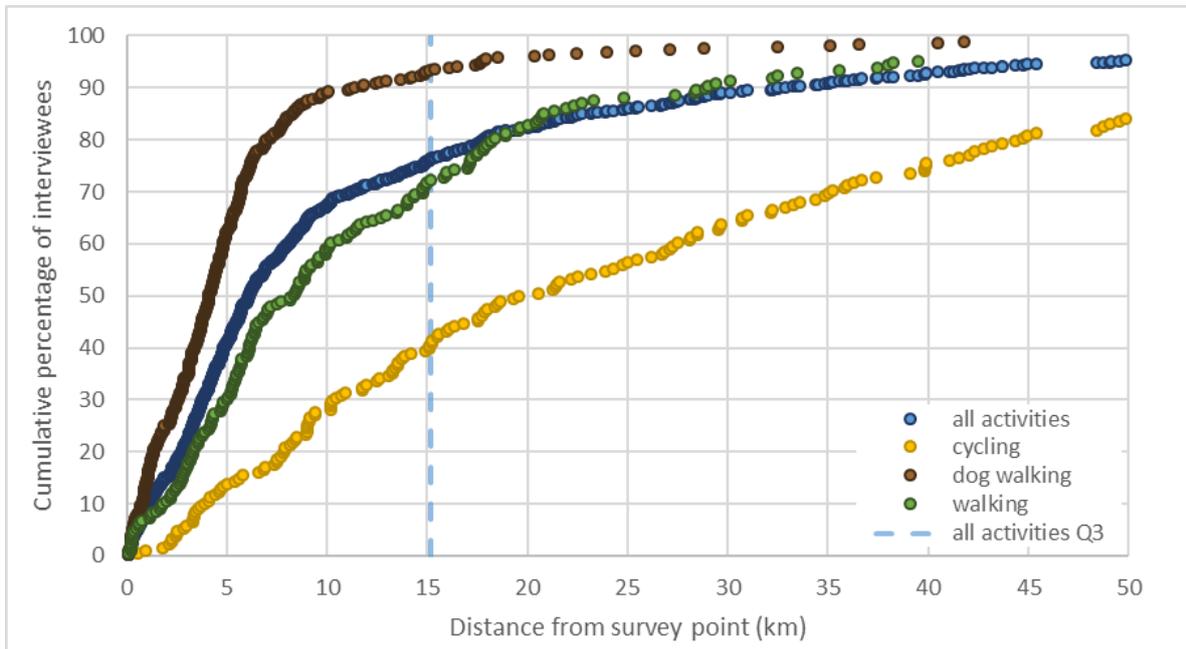


Figure 10: Interviewees distance from survey point to home postcode shown as a cumulative percentage. The graph shows overall curve for all activities and then for the top three activities. Note distances beyond 50 km occur for all activities. Line indicates the Q3 (75th) percentile distance (15.2 km) across all interviewees.

4.68 Table 22 also gives the distances summarised by visit frequency and this showed highly significant differences in the values for each category too ($H=242.77$, $df=7$, $p<0.001$). Ranking of the distances reported from mean, median, and Q3 values match with the ranking according to visit frequency. Daily visitors showed the smallest distance – mean 3.3 km, median, 2.7 km and Q3 4.8km – compared to first time visitors – 53.3 km, 34 km and 78.9 km. Using the approximate number of annual visits made for each visit frequency category, the average for each distance band is visualised in Figure 11 to show how visit frequency declines with distance away from the site.

Table 22: Summary statistics of the interviewee linear distances between survey points and home postcodes for two key factors; interviewee activity and visit frequency. Data from autumn period and those travelling from home only used.

Survey period	n	mean (\pm SE)	median	Q3	Min-max
Activities					
Dog walking	264	6.5 (\pm 0.7)	4.1	6.4	0.1 - 131.5
Walking	148	12.8 (\pm 1.3)	7.6	17.2	0.2 - 126.3
Cycling/Mountain	131	31.0 (\pm 3.1)	20.5	39.9	0.5 - 228.6
Jog/ power walk/run	33	9.7 (\pm 1.6)	7.2	11.5	0.2 - 41.7
Outing with family	19	6.8 (\pm 0.8)	6.7	9.1	0.8 - 13.6
Visit frequency					
Daily	142	3.3 (\pm 0.2)	2.7	4.8	0.1 - 17.6
Most days	74	5.1 (\pm 0.4)	4.3	6.8	0.1 - 16.4
1 to 3 times a week	176	9.7 (\pm 0.7)	6.9	11.9	0.2 - 51.5
2 to 3 times per month	90	16.9 (\pm 1.7)	10.6	28.2	0.3 - 73.9
Once a month	60	18.8 (\pm 2.8)	13.4	21.1	1.8 - 145.9
Less than once a month	57	39.2 (\pm 5.6)	22.7	49.7	2.8 - 228.6
First visit	20	53.3 (\pm 11.8)	34.0	78.9	2.6 - 206.7

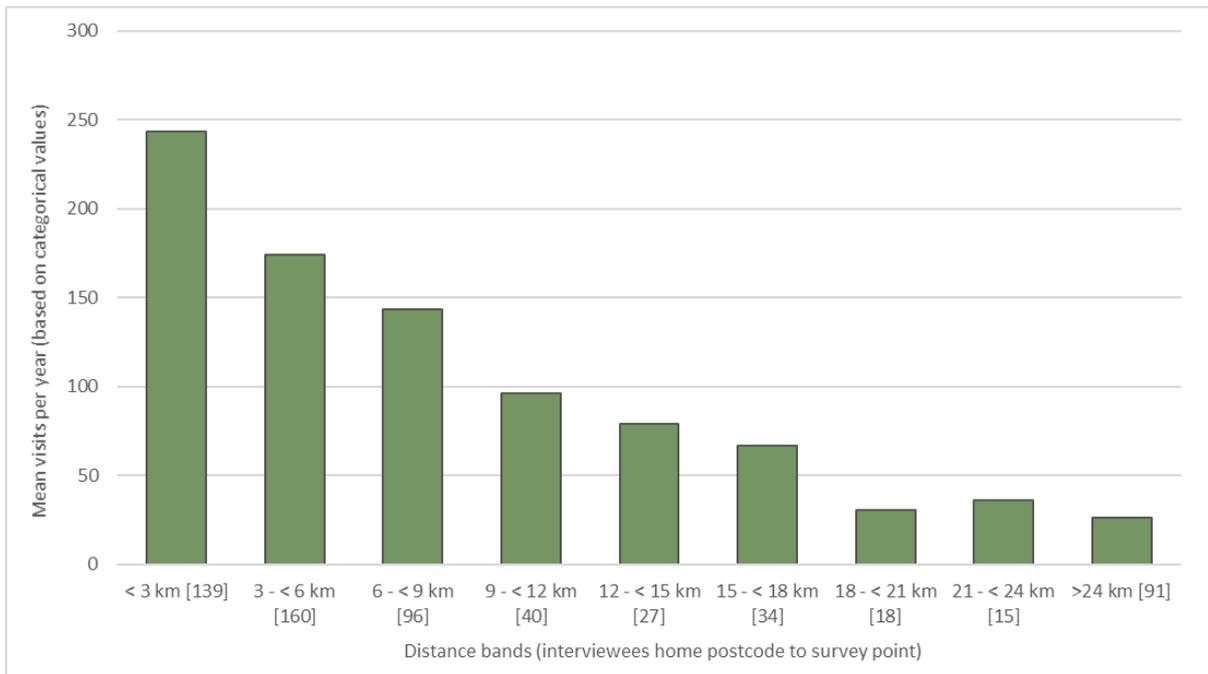


Figure 11: interviewee visit frequency categories, with assigned values of visits per year, averaged for 3 km distance bands, based on interviewees home postcode to the survey point linear distance.

4.69 Survey points were categorised in different ways to examine the variation in distances between home postcode and survey point in more detail. Table 23 gives a summary of the linear distances between interviewee's home postcode and the survey point, categorised by whether survey points were within the SAC and by access type (using data collected from the autumn, and interviewees who were travelling directly from home). The results suggest a minor (but not highly significant) difference in the distances travelled to SAC compared to non-SAC survey points.

4.70 One factor in this is that most visitor hubs are located off SAC habitat and foot access points are often located on SAC habitat. Table 23 also gives the distances summarised to highlight some of these key types of access. The two visitor hubs of Birches Valley & Marquis Drive showed a very large draw, with three quarters of interviewees living within a 32 km radius (Q3 value). This compared to just a 3.6 km radius at the two primarily foot access points. The differences between the four groups were highly significant ($H=79.34$, $df=3$, $p<0.001$).

Table 23: Summary statistics of the interviewee linear distances between survey points and home postcodes for two key factors; interviewee activity and visit frequency. Data from autumn period and those travelling from home only used.

Survey period [survey points]	n	mean (\pm SE)	median	Q3	Min-max
SAC/non-SAC					
non-SAC [7]	246	18.9 (\pm 1.9)	7.0	22.4	30.4 - 228.6
SAC [13]	374	10.3 (\pm 0.7)	6.0	11.5	14.2 - 131.5
Categorised survey points					
Birches Valley & Marquis Drive [2]	103	24.7 (\pm 3.8)	9.6	32.2	0.2 - 228.6
Foot access points [2]	51	4.4 (\pm 1.8)	0.6	3.6	0.1 - 73.9
Chase road [4]	92	9.7 (\pm 1.2)	6.2	11.3	0.9 - 92.8
All other survey points [12]	374	12.9 (\pm 0.9)	6.5	15.3	0.2 - 131.5

4.71 The interviewee visitor profile is summarised for each 3km distance band in Table 24. Also additional postcode maps of group size and visit frequency are included in the Appendix.

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Table 24: Summary of the interviewee data for each 3 km distance band. Data from autumn (weekday and weekend) only. Values in bold indicate top two values for each column

Distance band	Number of interviewees	% of interviewees (% down column)			% of people (% down column)			% of interviewees (% across rows for each group)					
		Wkday	Wkend	Both	Wkday	Wkend	Both	Activity				75% or more visits to here	Visit daily or most days
								Dog walker	Walker	Cyclist	Other		
< 3 km	140	26	19	22	35	17	24	68	6	16	9	80	69
3 - < 6 km	161	29	22	25	24	20	21	59	7	23	11	63	47
6 - < 9 km	96	13	17	15	15	18	17	43	8	23	26	53	33
9 - < 12 km	40	6	6	6	5	7	6	20	35	30	15	63	18
12 - < 15 km	28	4	4	4	4	4	4	25	29	36	11	64	11
15 - < 18 km	34	4	6	5	4	5	5	24	32	35	9	47	9
18 - < 21 km	18	2	4	3	2	4	3	0	28	61	11	39	0
21 - < 24 km	16	3	2	3	2	2	2	13	44	25	19	31	0
>24 km	101	11	20	16	9	23	17	10	60	23	7	26	0

Current location choice

- 4.72 Surveyors asked interviewees to suggest reasons why they visited the specific location where the interview took place, rather than another local site. Surveyors recorded all the reasons given using set categories (and an “other” category) and multiple reasons could be logged. Interviewees usually gave, on average, 2.6 reasons. However, surveyors then asked the interviewee to select just one reason which was the most important factor (referred to as the main reason).
- 4.73 Interviewee’s single main reason and other reasons are expressed as a percentage of all interviewees in Figure 12. The most commonly stated reason was close to home, a factor for just over a third of interviewees (36%). Other important reasons were the site being the appropriate place for the activity (22%), scenery/views (19%), good for dog/dog enjoys it and good/easy parking (both 17%).

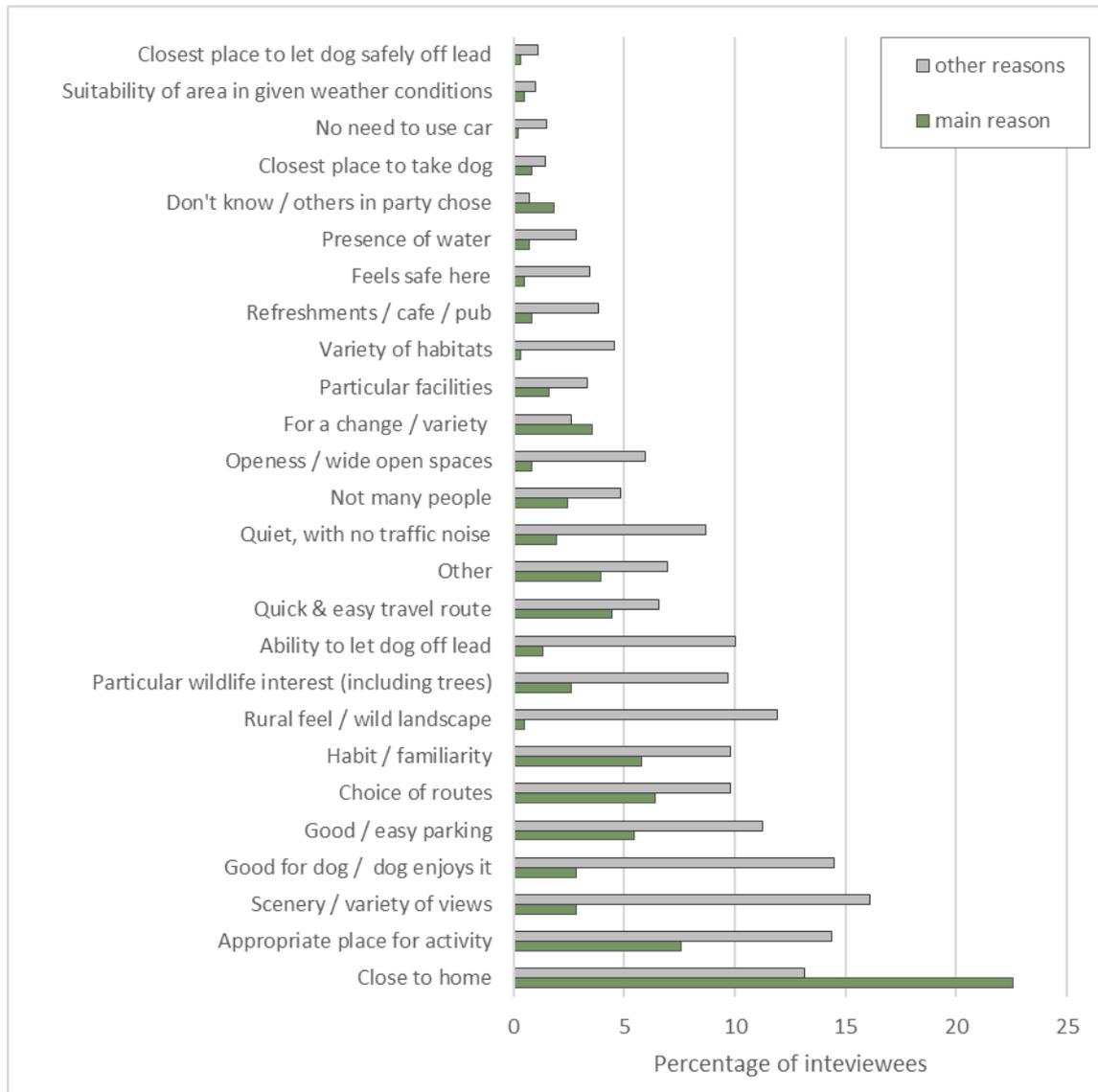


Figure 12: Reasons for site choice. Main reasons were single choice and other reasons multiple responses. Reasons ranked by the total number of reasons, main and other combined. Data used are from all seasons surveyed.

- 4.74 The pooled category of “other” were those which did not fit the set categories. Reasons given in “other” were most notable for the mention of free parking, avoiding other users (mostly referring to avoiding cyclists), safe play areas for children, a good central location/convenient and topography (usually cyclists selecting undulations and walkers/horse riders selecting flat areas).
- 4.75 The main reasons only are shown in Table 25. The list of main reasons given was similar to the ranking in Figure 12 – although scenery/views were

notably less important in main choices. Table 25 also gives the ranked main responses for the three main activities. Across all these three activities, close to home was consistently the main reason: 30% for interviewees who were dog walkers and 20% for both cyclists and walkers. For dog walkers, other important factors were: it is good for the dog, habit/familiarity (both 6%), and good/easy parking (5%). Amongst cyclists, other than close to home, important reasons were; the choice of routes (20%), being an appropriate place for the activity (19%) and good/easy parking (6%).

Table 25: Top five ranked interviewee main reasons for visiting the current site, by activity (top 3 activities only)

All interviewees	Cyclists	Dog walkers	Walkers
Close to home (223, 22.6%)	Close to home (41, 20%)	Close to home (126, 29.5%)	Close to home (44, 19.6%)
Appropriate place for activity (71, 7.2%)	Choice of routes (38, 18.5%)	Good for dog / dog enjoys it (26, 6.1%)	Habit / familiarity (17, 7.6%)
Choice of routes (62, 6.3%)	Appropriate place for activity (28, 13.7%)	Habit / familiarity (26, 6.1%)	For a change / variety (16, 7.1%)
Habit / familiarity (57, 5.8%)	Good / easy parking (13, 6.3%)	Good / easy parking (21, 4.9%)	Appropriate place for activity (12, 5.4%)
Good / easy parking (53, 5.4%)	Other, please detail (13, 6.3%)	Quick & easy travel route (18, 4.2%)	Quick & easy travel route (12, 5.4%)

Other visits to the countryside

Proportion of visits

- 4.76 It is to be expected the people are likely to visit a range of different greenspaces for their chosen activity. Surveyors asked interviewees to describe what proportion of their visits to the countryside for their current activity took place at the survey location. Across all survey data, most interviewees suggested that a large proportion of their visits took place at the interview location. Overall, 28% of interviewees suggested all their visits took place at the current site, while a further 29% of interviewees suggested it was around three-quarters of their visits.
- 4.77 There were few differences in the percentage of interviewees between seasons, but some more noticeable differences between activities - see Figure 13. The highest proportion of interviewees who indicated all of their visits took place at the site where interviewed were those who were jogging/running (36%), followed by dog walkers (33%). The lowest was for those were on a family outing (10%) and walkers (18%).

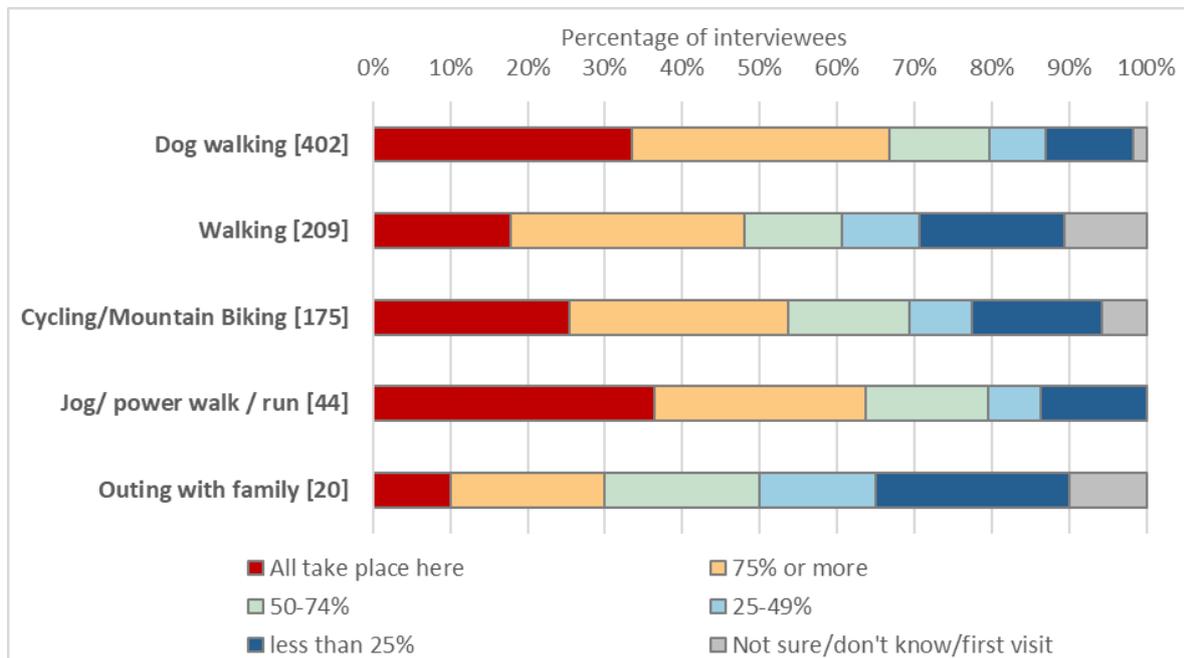


Figure 13: Interviewee's visits to the location interviewed at, as a proportion of all visits for the current activity. Shown using autumn-winter data only and separately for the five main activities.

Alternative sites

- 4.78 Interviewees were asked if they could name another location they would have visited, had they not been able to come to the current site. Overall, 11% (112 interviewees) were not sure or did not know and, 21% (203) said they would not have visited anywhere else. Just over two thirds, 68% of interviewees (673), named an alternative site and this proportion was fairly consistent between the three main activity groups.
- 4.79 The site names given showed some clear differences between different interviewee groups. Table 26 gives the highest ranked named alternative for all interviewees, and also just for cyclists, dog walkers and walkers. Overall the most commonly named site was Chasewater – cited by 7% of interviewees who gave an alternative site (8% of dog walkers, 7% of walkers and 4% of cyclists). The second most popular was the Peak District, 5%, which was ranked highest amongst cyclists (9%) and walkers (9%). Other sites in Cannock were also popular - especially amongst dog walkers and walkers – and overall 4% named Birches Valley, 4% Marquis Drive and 2% Shugborough. Other common responses were the various parts of the canal, Sutton park in Sutton Coldfield and, for cyclists, various locations in north Wales.

Table 26: Named alternative sites, shown for all interviewees, and separately for cyclists, dog walkers and walkers. Values shown are the number of interviewees (and percentage of the total conducting that activity). Only those given by 2% of interviewees or more, are shown.

All interviewees	Cyclists	Dog walkers	Walkers
Chasewater (48, 7.1%)	Peak District (13, 9.4%)	Chasewater (26, 8.4%)	Peak District (14, 9.2%)
Peak District (30, 4.5%)	Wales (13, 9.4%)	Canal (17, 5.5%)	Chasewater (11, 7.2%)
Canal (28, 4.2%)	Sherwood Pines (11, 8%)	Near Home (13, 4.2%)	Marquis Drive (8, 5.3%)
Marquis Drive (25, 3.7%)	Birches Valley (7, 5.1%)	Marquis Drive (11, 3.6%)	Canal (8, 5.3%)
Birches Valley (24, 3.6%)	Chasewater (6, 4.3%)	Shugborough (11, 3.6%)	Sutton Park (6, 3.9%)
Near Home (19, 2.8%)	Llandegla (5, 3.6%)	Birches Valley (10, 3.2%)	Shugborough (5, 3.3%)
Shugborough (16, 2.4%)	Coed Y Brenin (4, 2.9%)	Pipe Hall Farm (9, 2.9%)	Milford (4, 2.6%)
Sutton Park (16, 2.4%)	Sutton Park (4, 2.9%)	Hednesford Hills (9, 2.9%)	Birches Valley (4, 2.6%)
Wales (15, 2.2%)	Coed Llandegla (4, 2.9%)	Shoal Hill (7, 2.3%)	Castle Ring (3, 2%)
	Near Home (4, 2.9%)		Seven Springs (3, 2%)
	Sherwood Forest (3, 2.2%)		Hednesford Hills (3, 2%)
	Clent Hills (3, 2.2%)		Wolseley (3, 2%)

Interviewee opinions

Visitor awareness

4.80 Awareness of conservation issues on site was briefly explored by asking interviewees to state any habitats or species in Cannock Chase that they were aware were vulnerable to recreation impacts. Most interviewees were unable to name any habitats or species – 53% of interviewees (458) in the autumn and winter surveys (see Figure 14). Of those who did name one (or more than one) habitats or species, almost a third of responses referred to the deer (28% of interviewees), followed by “other” comments (18%) and breeding birds in general (16%). The “other” comments were recorded as free text and many related to adders (5%). Awareness of habitats and ground nesting birds was therefore limited.

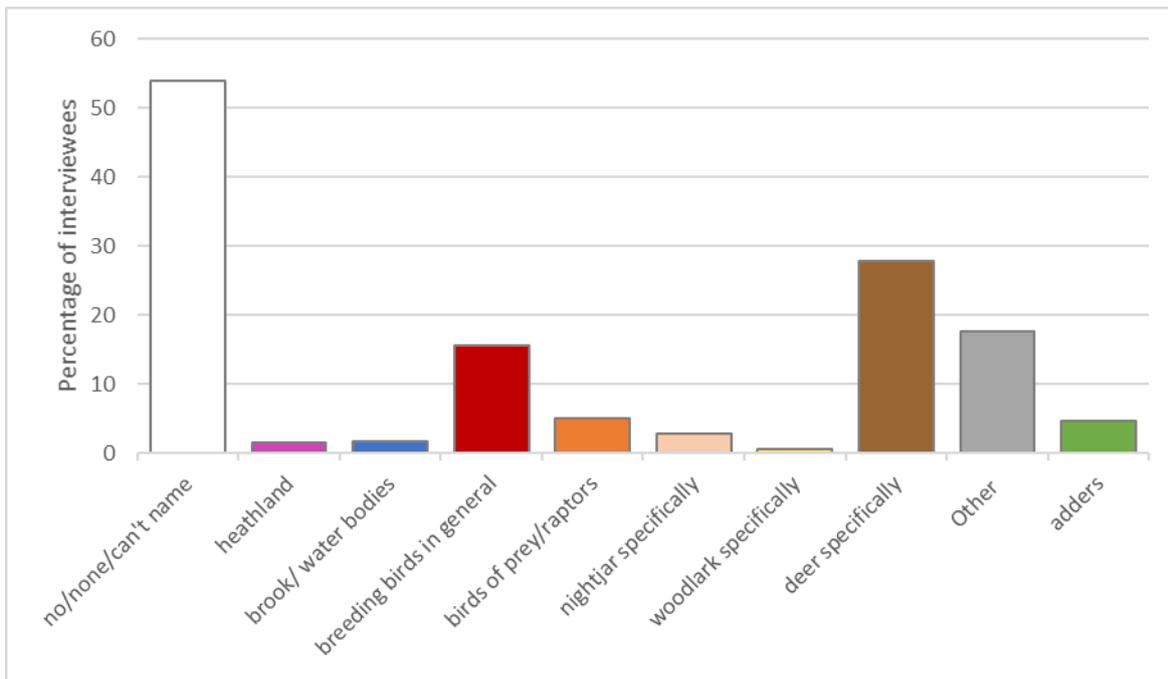


Figure 14: The percentage of interviewees who gave each of the following responses to the question “Are you aware of any habitats or species that occur here and are vulnerable to impacts from recreation? If so, can you name them?”. The question allowed for multiple responses. Data from pooled autumn winter surveys only.

4.81 There was some variability amongst different activities. Among the top five activities, the highest proportion of interviewees who were unaware of any habitats or species or could not name them were those on an outing with

family (85%), followed by cyclists (64%), joggers/runners (59%), walkers (53%) and dog walkers (48%). Dog walkers also had the highest awareness of general comments regarding breeding birds, with 20% of interviewees stating this.

Information sources

- 4.82 Surveyors asked interviewees to state what sources of information they used before visiting Cannock Chase. Overall, seven in ten interviewees (71%) did not use any information sources before visiting on the day of the interview (based on autumn-winter survey data). Whether information sources were used or not varied between activities. Amongst the five main activities, those interviewees who were on a family outing had the lowest level of information use (85% did not use any), compared to cyclists (50% of whom used some information sources) – see background shading in Figure 15.
- 4.83 The types of sources are also given in Figure 15. The most common sources of information were maps (online or paper) given by 13% of interviewees, followed by websites, 10%, and family/friends, 8%. Forty-seven interviewees (13%) suggested they had used a smart phone or app before visiting. A reasonably diverse range of apps were mentioned (e.g. google maps, map my walk, map my run, OS maps, trailforks) but often by just one or two interviewees. The exception to this was Strava, which was the most commonly given app, by 3% of interviewees (26 interviewees), but a greater proportion amongst cyclists (22 cyclists, 12.5%). Social media was rarely used, overall just 3% of interviewees (29 interviewees). Specific platforms were; Facebook (26, 3%), Instagram (4, 0.5%), and Twitter (3 interviewees, 0.4%). Other sources given included books, local knowledge, and information in visitor centres.

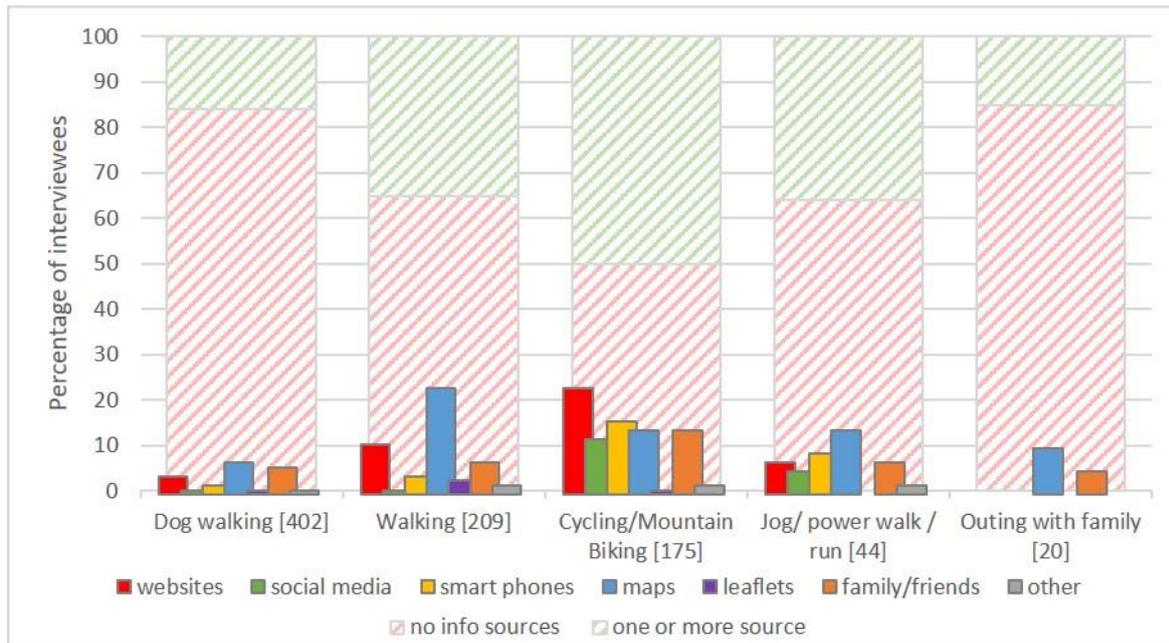


Figure 15: Summary of interviewee’s use of information sources shown separately for the five main activities. The background stacked bar chart (crosshatched bars) shows the percentage of interviewees who did or did not use information sources. Foreground unstacked bars show which of the one or more sources were used. Based on autumn winter data only.

New measures at Cannock Chase

- 4.84 A final question asked interviewees for their views on how Cannock Chase is managed. Interviewees were asked to indicate their level of support for suggested measures at Cannock Chase. Interviewees scored their level of support from 1 (do not support at all) to 5 (strongly support the measure) for 13 different measures. The order of the suggested measures was randomised in each interview to ensure no effect of the asking order.
- 4.85 The opinions of interviewees for each measure are summarised in Figure 16. These show the percentage of interviewees in each of the 1-5 categories of level of support and an averaged overall score. Measures which received the highest level of support (average score of 4 or more) were more dog bins, enforcement on dog fouling, and routes for particular activities. Those which received the lowest level of support (average score of 2 or less) were compulsory parking charges and closure of some car parks and laybys.

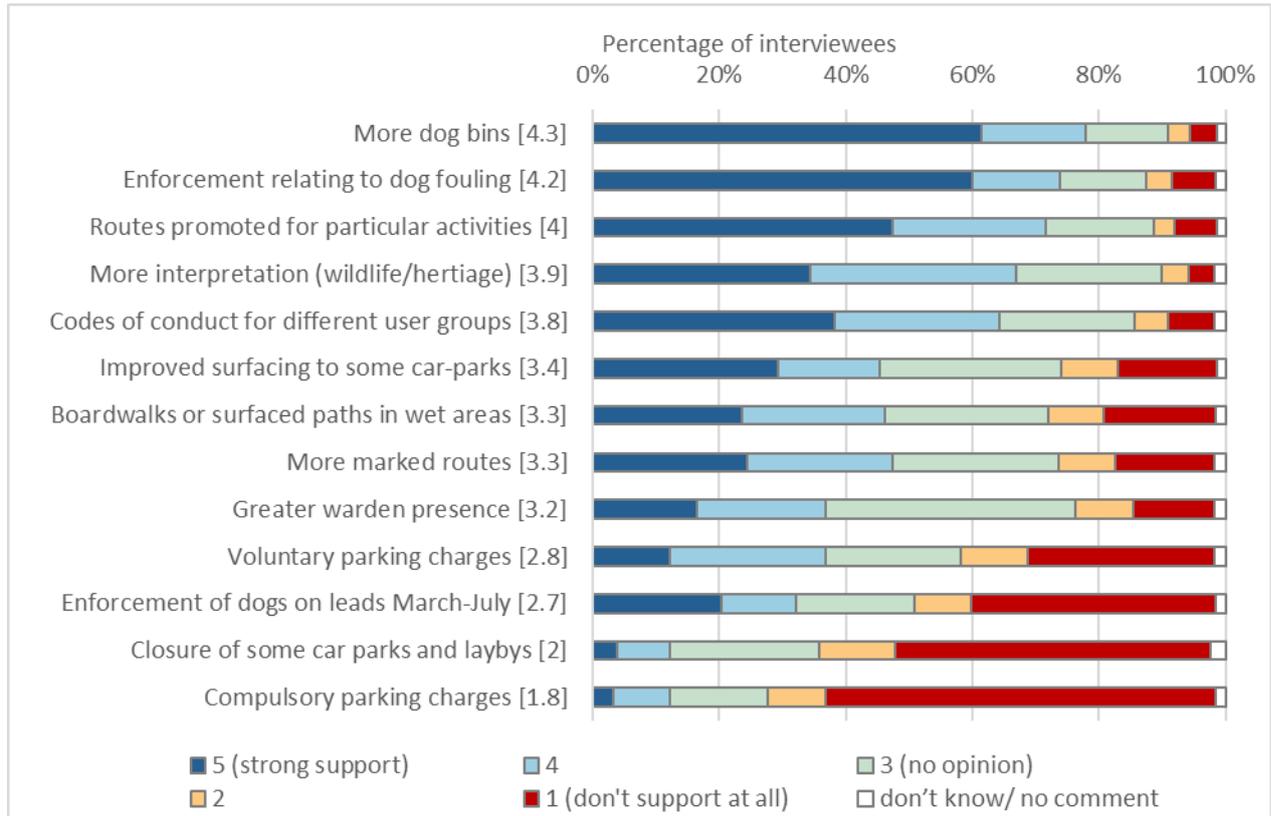


Figure 16: Interviewee's level of support from 5 (strong support) to 1 (don't support at all) for a range of potential changes at Cannock Chase. Values in square brackets indicate a single average value for each change. Data used are autumn-winter data only.

5. Discussion

- 5.1 The data presented provides a comprehensive and robust evidence base to understand recreation use at Cannock Chase. Visitor surveys have followed a standard methodology which has been used at a wide range of other sites. Although only a sample of access points across the Chase were surveyed and therefore the results cannot not reflect overall visitor numbers and all access, the interviewing locations were carefully selected to be representative and cover the range of types of access (e.g. high to low, informal and formal, car parks and foot access) and to have good geographic spread. Timing of surveys cover a range of periods of use; peak use in summer holidays, moderate levels in autumn and lowest likely use in winter. Spring was not surveyed, and this may be an important period for impacts from unplanned fires, but we consider levels of access likely to be generally similar to the autumn.
- 5.2 Nevertheless, there are some limitations in the approach. We recorded a number of refusals to be interviewed. These were usually people who were too busy, but will include a number of runners and cyclists who are difficult to stop when active and this group could therefore be under-represented in the data to some extent. Other activities, such as night time cycling, will have also been missed. However, cyclists constituted 21% of interviewees and were 18% of tallied people – suggesting that any bias will be non-existent or very slight.
- 5.3 We surveyed five locations during the summer school holidays to understand the level of increase at this time of year and the potential increased draw. The data collected is from only a subset of locations which makes analysis harder and the strength of results less clear. Examining differences in the levels of use between seasons will be best undertaken by other datasets which look at year-round and long term data patterns, such as the car park count data already collected.
- 5.4 It is interesting to be able to show the proportion of interviewees using different apps/websites to plan their visit. The interviews show one of the more popular websites is Strava, with just over 1 in 10 cyclists using this to plan their visit. Routes of cyclists and runners using Strava can be freely

viewed as heatmaps⁸ and such data provides interesting and useful complimentary data to that collated here. When we have visually compared Strava to visitor survey data in other locations we often see different patterns. We feel this is because Strava data is focused to a small community of more dedicated recreational users - a high proportion of the routes recorded are commutes (c.40%), and Strava 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)⁹. In comparison, UK national data suggested people who cycle make an average of 15 trips, totalling 85 km in a year¹⁰. 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 Cannock Chase. However, due to the difficulties of interviewing active cyclists, the representation of this group is an acknowledged limitation in our visitor surveying.

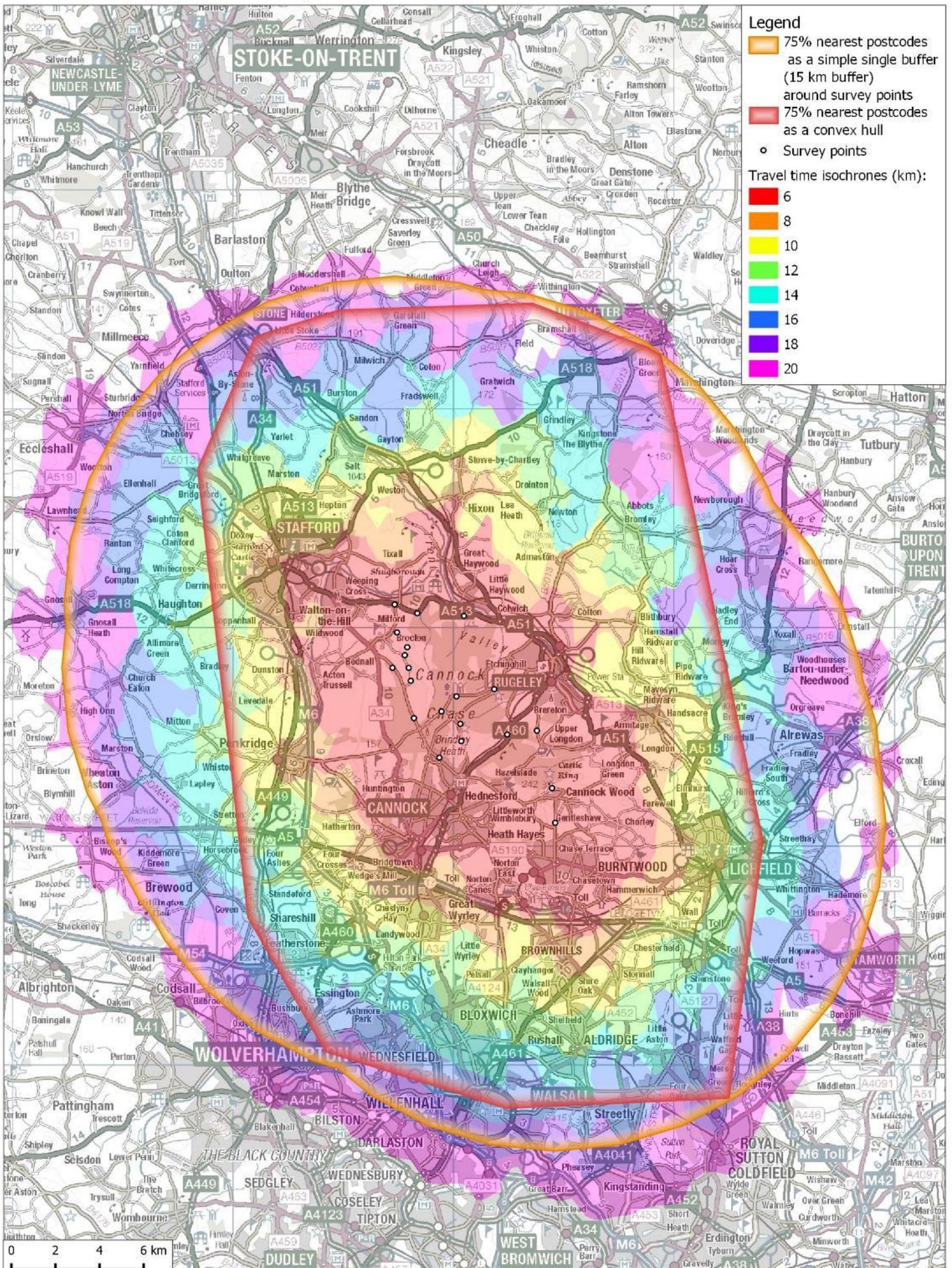
- 5.5 Finally, we consider linear (Euclidean) distances, rather than travel times or distances. Travel distances can vary due to barriers such as rivers or canals or fast roads (e.g. motorways) which facilitate access from particular locations where there is easy access to the motorway. While linear distances are more simplistic they are easier to work with and are likely to be highly correlated with travel time or travel distance. However, for reference, we show travel distance isochrones in relation to the 15 km buffer and convex hulls in Map 17. The data suggest that the travel distance isochrones are approximately concentric rings and are not markedly skewed in any one area by particular barriers or the road distribution. It can be seen that the 15km buffer is broadly equivalent to the 20km travel isochrone.

⁸ <https://www.strava.com/heatmap#12.76/-2.00171/52.75140/hot/ride>

⁹ See <https://keyassets.timeincuk.net/inspirewp/live/wp-content/uploads/sites/2/2017/12/Strava-Year-in-Sport-UK.pdf>

¹⁰ See https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/674503/walking-and-cycling-statistics-england-2016.pdf

Map 17: The 75% nearest postcodes from interviewees during the autumn only, expressed as single distance band and as convex hulls, overlaid onto travel time isochrones.



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6. Reference

Liley, D. (2012) *Cannock Chase SAC Visitor Report*. Unpublished Report, Footprint Ecology.

Appendix 1: Additional data tables

Table 27: Summary of the surveying dates. The summer and winter surveying included just a single day (8 hrs) of surveying, but this could be split between a morning on one date and an afternoon on another.

		summer (Aug)		autumn (Sept)		winter (Nov/Dec)	
		First	Last	First	Last	First	Last
1	Birches Valley CP	23/08	24/08	06/09	08/09	07/11	07/11
2	Marquis Drive Triangle	22/08	22/08	21/09	22/09	16/11	16/11
3	Seven Springs CP			07/09	09/09	13/11	13/11
4	Penkridge Bank Road CP	21/08	21/08	28/09	30/09	14/11	14/11
5	Moors Gorse CP			06/09	08/09	23/11	23/11
6	Whitehouse CP			27/09	29/09	26/11	14/12
7	Punchbowl	20/08	20/08	27/09	29/09	26/11	26/11
8	Castle Ring CP			07/09	09/09	28/11	28/11
9	Chase Road Corner CP			07/09	09/09	27/11	27/11
10	Pull in after Stile Cop			21/09	23/09	27/11	27/11
11	Milford Common			15/09	17/09	29/11	29/11
12	Glacial Boulder CP	23/08	24/08	14/09	16/09	28/11	28/11
13	Duffields CP			20/09	23/09	30/11	30/11
14	Pull in to Coppice Hill CP			08/09	10/09	29/11	29/11
15	Aspens Car Park pull in before			01/09	03/09	09/11	09/11
16	Gentleshaw Common main CP			27/09	29/09	30/11	30/11
17	Pull in Freda's Grave footpath			22/09	24/09	06/11	06/11
18	Pull in 2 after Bednall Belt CP			28/09	30/09	12/11	12/11
19	Brocton Lane Corner			28/09	30/09	15/11	15/11
20	West Cannock Farm			02/09	04/09	21/11	21/11

Table 28: Summary of the number of people entering into the site during the 8 hours of survey on a weekday or weekend day during each pulse for individual survey points. Values in brackets show people per hour.

		summer (Aug)	autumn (Sept)		winter (Nov/Dec)
		Wkday	Wkday	Wkend	Wkday
1	Birches Valley CP	n/a	n/a	n/a	n/a
2	Marquis Drive Triangle	n/a	n/a	n/a	n/a
3	Seven Springs CP		64 (8.0)	168 (21.0)	83 (10.4)
4	Penkridge Bank Road CP	57 (7.1)	60 (7.5)	111 (13.9)	46 (5.8)
5	Moors Gorse CP		19 (2.4)	29 (3.6)	28 (3.5)
6	Whitehouse CP		36 (4.5)	66 (8.3)	26 (3.3)
7	Punchbowl	62 (7.8)	40 (5.0)	70 (8.8)	19 (2.4)
8	Castle Ring CP		66 (8.3)	146 (18.3)	59 (7.4)
9	Chase Road Corner CP		45 (5.6)	87 (10.9)	30 (3.8)
10	Pull in after Stile Cop		16 (2.0)	47 (5.9)	4 (0.5)
11	Milford Common		149 (18.6)	57 (7.1)	12 (1.5)
12	Glacial Boulder CP	40 (5)	23 (2.9)	54 (6.8)	8 (1)
13	Duffields CP		12 (1.5)	33 (4.1)	20 (2.5)
14	Pull in to Coppice Hill CP		18 (2.3)	13 (1.6)	10 (1.3)
15	Aspens Car Park pull in before		18 (2.3)	22 (2.8)	17 (2.1)
16	Gentleshaw Common main CP		26 (3.3)	24 (3.0)	18 (2.3)
17	Pull in Freda's Grave footpath		20 (2.5)	15 (1.9)	16 (2)
18	Pull in 2 after Bednall Belt CP		6 (0.8)	11 (1.4)	3 (0.4)
19	Brocton Lane Corner		24 (3.0)	31 (3.9)	13 (1.6)
20	West Cannock Farm		11 (1.4)	28 (3.5)	21 (2.6)
	Total	159 (6.6)	653 (4.5)	1012 (7.0)	433 (3.0)

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Table 29: Summary of total number of people, minors, dogs, horse riders and cyclists recorded at each survey point. Values in brackets show the number of each category per hour of survey (8 hrs in summer and winter, 16 hrs in autumn).

ID	People			Minors			Dogs			Horse riders			Cyclists		
1	(0)	(0)	0 (0)	(0)	(0)	0 (0)	(0)	(0)	0 (0)	(0)	(0)	0 (0)	(0)	(0)	0 (0)
2	(0)	(0)	0 (0)	(0)	(0)	0 (0)	(0)	(0)	0 (0)	(0)	(0)	0 (0)	(0)	(0)	0 (0)
3	(0)	232 (14.5)	83 (10.4)	(0)	78 (4.9)	35 (4.4)	(0)	28 (1.8)	0 (0)	(0)	2 (0.1)	0 (0)	(0)	58 (3.6)	4 (0.5)
4	57 (7.1)	171 (10.7)	46 (5.8)	17 (2.1)	48 (3)	12 (1.5)	6 (0.8)	18 (1.1)	0 (0)	1 (0.1)	0 (0)	0 (0)	25 (3.1)	77 (4.8)	12 (1.5)
5	(0)	48 (3)	28 (3.5)	(0)	5 (0.3)	0 (0)	(0)	4 (0.3)	1 (0.1)	(0)	0 (0)	0 (0)	(0)	42 (2.6)	28 (3.5)
6	(0)	102 (6.4)	26 (3.3)	(0)	45 (2.8)	17 (2.1)	(0)	9 (0.6)	2 (0.3)	(0)	0 (0)	0 (0)	(0)	9 (0.6)	1 (0.1)
7	62 (7.8)	110 (6.9)	19 (2.4)	21 (2.6)	28 (1.8)	15 (1.9)	13 (1.6)	18 (1.1)	0 (0)	0 (0)	2 (0.1)	2 (0.3)	13 (1.6)	10 (0.6)	1 (0.1)
8	(0)	212 (13.3)	59 (7.4)	(0)	126 (7.9)	51 (6.4)	(0)	25 (1.6)	10 (1.3)	(0)	0 (0)	0 (0)	(0)	16 (1)	0 (0)
9	(0)	132 (8.3)	30 (3.8)	(0)	72 (4.5)	15 (1.9)	(0)	9 (0.6)	0 (0)	(0)	0 (0)	0 (0)	(0)	19 (1.2)	0 (0)
10	(0)	63 (3.9)	4 (0.5)	(0)	9 (0.6)	1 (0.1)	(0)	12 (0.8)	0 (0)	(0)	0 (0)	0 (0)	(0)	42 (2.6)	3 (0.4)
11	(0)	206 (12.9)	12 (1.5)	(0)	33 (2.1)	10 (1.3)	(0)	123 (7.7)	1 (0.1)	(0)	0 (0)	0 (0)	(0)	5 (0.3)	0 (0)
12	40 (5)	77 (4.8)	8 (1)	11 (1.4)	24 (1.5)	10 (1.3)	0 (0)	5 (0.3)	0 (0)	8 (1)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
13	(0)	45 (2.8)	20 (2.5)	(0)	34 (2.1)	22 (2.8)	(0)	1 (0.1)	0 (0)	(0)	0 (0)	0 (0)	(0)	0 (0)	0 (0)
14	(0)	31 (1.9)	10 (1.3)	(0)	19 (1.2)	11 (1.4)	(0)	4 (0.3)	0 (0)	(0)	0 (0)	0 (0)	(0)	0 (0)	0 (0)
15	(0)	40 (2.5)	17 (2.1)	(0)	40 (2.5)	22 (2.8)	(0)	3 (0.2)	2 (0.3)	(0)	0 (0)	0 (0)	(0)	0 (0)	0 (0)
16	(0)	50 (3.1)	18 (2.3)	(0)	75 (4.7)	28 (3.5)	(0)	4 (0.3)	0 (0)	(0)	2 (0.1)	0 (0)	(0)	2 (0.1)	0 (0)
17	(0)	35 (2.2)	16 (2)	(0)	20 (1.3)	8 (1)	(0)	2 (0.1)	0 (0)	(0)	0 (0)	0 (0)	(0)	3 (0.2)	0 (0)
18	(0)	17 (1.1)	3 (0.4)	(0)	13 (0.8)	3 (0.4)	(0)	0 (0)	0 (0)	(0)	0 (0)	0 (0)	(0)	0 (0)	0 (0)
19	(0)	55 (3.4)	13 (1.6)	(0)	18 (1.1)	12 (1.5)	(0)	3 (0.2)	0 (0)	(0)	0 (0)	0 (0)	(0)	23 (1.4)	2 (0.3)
20	(0)	39 (2.4)	21 (2.6)	(0)	26 (1.6)	11 (1.4)	(0)	1 (0.1)	3 (0.4)	(0)	0 (0)	0 (0)	(0)	3 (0.2)	0 (0)
Total	159 (6.6)	1665 (5.8)	433 (3)	49 (2)	713 (2.5)	283 (2)	19 (0.8)	269 (0.9)	19 (0.1)	9 (0.4)	6 (0)	2 (0)	38 (1.6)	309 (1.1)	51 (0.4)

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Table 30: Summary at each survey point of the total number of people approached, number of refusals and number already interviewed. Values in brackets for refusals and people already interviewed are the value expressed as a percentage of the total people approached.

ID	Total people approached				Refusals				Already interviewed			
	autumn	summer	winter	Total	autumn	summer	winter	Total	autumn	summer	winter	Total
1	28	65	17	110	3 (11)	23 (35)	9 (53)	35 (32)	0 (0)	1 (2)	0 (0)	1 (1)
2	25	74	27	126	2 (8)	2 (3)	4 (15)	8 (6)	0 (0)	1 (1)	1 (4)	2 (2)
3	0	64	30	94		11 (17)	2 (7)	13 (14)		3 (5)	2 (7)	5 (5)
4	22	57	18	97	5 (23)	12 (21)	0 (0)	17 (18)	0 (0)	6 (11)	2 (11)	8 (8)
5	0	35	14	49		7 (20)	3 (21)	10 (20)		0 (0)	1 (7)	1 (2)
6	0	41	13	54		6 (15)	1 (8)	7 (13)		3 (7)	1 (8)	4 (7)
7	20	56	15	91	4 (20)	3 (5)	1 (7)	8 (9)	0 (0)	2 (4)	2 (13)	4 (4)
8	0	58	28	86		10 (17)	2 (7)	12 (14)		0 (0)	9 (32)	9 (10)
9	0	54	9	63		17 (31)	1 (11)	18 (29)		5 (9)	0 (0)	5 (8)
10	0	42	4	46		19 (45)	0 (0)	19 (41)		4 (10)	2 (50)	6 (13)
11	0	38	12	50		4 (11)	3 (25)	7 (14)		2 (5)	3 (25)	5 (10)
12	12	32	8	52	1 (8)	2 (6)	1 (13)	4 (8)	0 (0)	0 (0)	1 (13)	1 (2)
13	0	53	19	72		5 (9)	1 (5)	6 (8)		8 (15)	5 (26)	13 (18)
14	0	37	13	50		8 (22)	1 (8)	9 (18)		2 (5)	2 (15)	4 (8)
15	0	33	9	42		10 (30)	1 (11)	11 (26)		2 (6)	1 (11)	3 (7)
16	0	45	17	62		12 (27)	2 (12)	14 (23)		6 (13)	3 (18)	9 (15)
17	0	30	20	50		9 (30)	3 (15)	12 (24)		1 (3)	2 (10)	3 (6)
18	0	12	5	17		2 (17)	0 (0)	2 (12)		1 (8)	0 (0)	1 (6)
19	0	56	18	74		6 (11)	4 (22)	10 (14)		13 (23)	1 (6)	14 (19)
20	0	28	12	40		12 (43)	3 (25)	15 (38)		1 (4)	1 (8)	2 (5)
Total	107	910	308	1325	15 (14)	180 (20)	42 (14)	237 (18)	0 (0)	61 (7)	39 (13)	100 (8)

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Table 31: Number and percentage (in brackets) of interviewee's activities at each survey point during the autumn and winter combined.

ID	Dog walking	Walking	Cycling/Mountain Biking	Jogging/power walking/running	Outing with family	Bird/Wildlife watching	Photography/Filming	Horse riding	Foraging	Other	Commercial dog walking	Meet up/Picnic	Enjoying scenery/fresh air	School	Total
1	8 (16)	4 (8)	36 (73)	1 (2)											49
2	25 (27)	20 (22)	32 (34)	9 (10)	5 (5)					1 (1)		1 (1)			93
3	36 (47)	18 (24)	8 (11)	5 (7)		6 (8)	2 (3)	1 (1)							76
4	13 (24)	8 (15)	26 (47)	1 (2)	1 (2)	4 (7)			1 (2)	1 (2)					55
5	2 (5)	1 (3)	35 (92)												38
6	22 (51)	12 (28)	5 (12)	3 (7)				1 (2)							43
7	19 (30)	21 (33)	6 (10)	5 (8)	7 (11)		2 (3)	3 (5)							63
8	37 (57)	21 (32)	2 (3)	2 (3)							1 (2)		1 (2)	1 (2)	65
9	29 (73)	7 (18)	1 (3)	2 (5)					1 (3)						40
10	4 (19)	2 (10)	14 (67)			1 (5)									21
11	12 (32)	18 (47)	2 (5)	1 (3)	3 (8)							1 (3)		1 (3)	38
12	16 (44)	16 (44)		1 (3)		1 (3)	1 (3)			1 (3)					36
13	38 (72)	8 (15)		2 (4)	3 (6)				1 (2)		1 (2)				53
14	15 (41)	13 (35)	2 (5)	3 (8)		2 (5)	1 (3)						1 (3)		37
15	22 (79)	4 (14)		2 (7)											28
16	33 (85)	5 (13)								1 (3)					39
17	18 (51)	13 (37)	1 (3)			1 (3)	2 (6)								35
18	12 (86)	1 (7)					1 (7)								14
19	26 (52)	11 (22)	5 (10)	7 (14)	1 (2)										50
20	15 (65)	6 (26)							1 (4)		1 (4)				23
Total	402 (45)	209 (23)	175 (20)	44 (5)	20 (2)	15 (2)	9 (1)	5 (1)	4 (0)	4 (0)	3 (0)	2 (0)	2 (0)	2 (0)	896

Table 32: Summary statistics for interviewee’s route lengths shown for each survey point. The final columns give the average percentage of each interviewees route length through the SAC and average total length of route in the SAC. Data used are from the autumn period only.

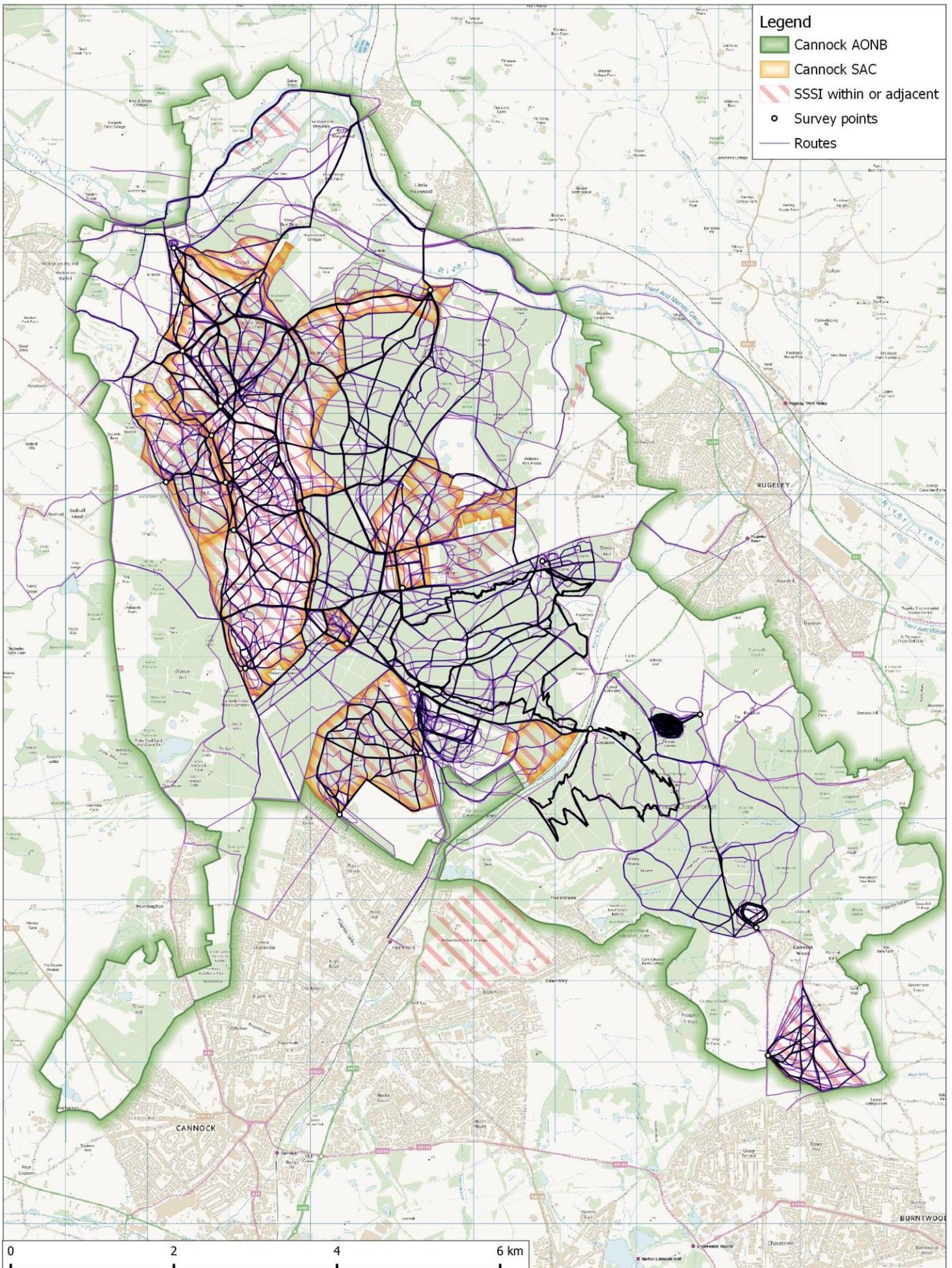
Survey location	n	mean (\pm SE)	median	Q3	Min-max	Average % of route in SAC	Average length of route in SAC
1	40	13.2 (\pm 1.4)	10.3	19.4	0.4 - 41.5	2.6	0.6
2	70	6.5 (\pm 0.7)	4.1	10.3	0.5 - 18.6	2.7	0.3
3	49	8.2 (\pm 1.1)	5.1	10.2	0.7 - 39.3	51.1	3.4
4	37	11.1 (\pm 1.3)	10.6	16.2	1.3 - 33.4	37.1	3.3
5	27	11.9 (\pm 1)	8.6	19.5	2.8 - 19.5	0.3	0.0
6	30	7 (\pm 1.2)	5.1	9.5	0.9 - 34.3	54.5	3.8
7	33	7.7 (\pm 1.2)	4.4	11.1	1 - 25.2	82.3	5.0
8	47	3.4 (\pm 0.6)	2.1	4.1	0.9 - 18.4	0.0	0.0
9	31	4.2 (\pm 0.7)	3.2	4.8	0.5 - 16	90.8	3.4
10	16	3.7 (\pm 0.3)	3.9	4.7	0.8 - 5.3	0.0	0.0
11	28	4.9 (\pm 0.8)	3.3	6.9	0.3 - 16.6	57.9	2.9
12	29	5.1 (\pm 0.6)	4.6	5.4	1.8 - 13.1	86.2	3.8
13	40	3.6 (\pm 0.5)	2.9	4.1	0.4 - 22.9	93.9	2.9
14	25	7.2 (\pm 1.2)	5.1	11.3	0.7 - 20.8	76.1	4.3
15	21	2.7 (\pm 0.6)	1.6	3.8	0.2 - 8.9	91.8	2.3
16	26	2.3 (\pm 0.2)	2.1	3.1	0.8 - 4.3	0.0	0.0
17	19	3.7 (\pm 0.7)	3.0	4.5	1 - 11.7	92.1	3.2
18	9	2.6 (\pm 0.5)	2.1	3.6	1.3 - 5.5	99.4	2.5
19	37	6.2 (\pm 0.9)	4.6	9.6	1.2 - 25.9	71.0	3.6
20	14	3 (\pm 0.5)	2.9	3.9	0.4 - 7.6	75.0	2.1

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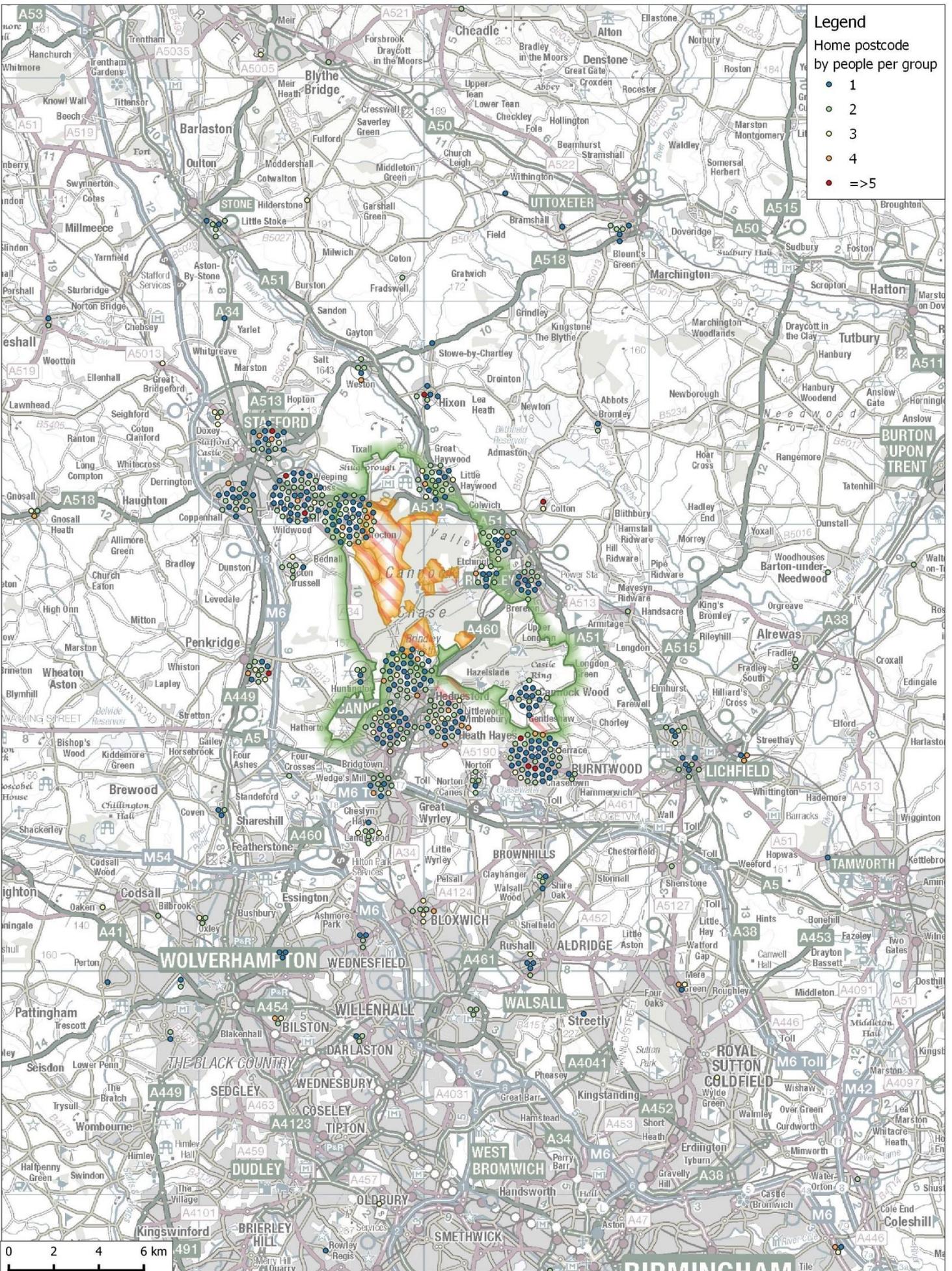
Table 33: Summary of the interviewee's distance between home postcode and the survey point, shown using the median value (distance of the 50% nearest) and Q3 value (75% nearest). Based on home interviewees only and autumn and winter data.

Survey point	autumn (Sept)									winter (Nov/Dec)			autumn-winter pooled data		
	Wkday			Wkend			Pooled autumn			Wkday					
	n	50%	75%	n	50%	75%	n	50%	75%	n	50%	75%	n	50%	75%
1	12	18.9	40.9	24	40.8	61.4	36	37.1	52.2	6	21.4	101.2	42	35.0	52.2
2	28	5.1	10.9	39	7.0	12.7	67	6.4	11.3	22	12.5	19.1	89	7.0	15.1
3	22	4.9	15.4	24	9.6	15.1	46	7.9	15.0	26	9.0	26.0	72	8.4	15.1
4	20	9.0	20.2	19	13.6	35.9	39	13.3	27.4	15	9.5	17.5	54	10.3	20.8
5	11	23.2	35.9	16	32.3	49.2	27	29.7	42.3	8	37.2	60.4	35	30.7	48.4
6	16	7.7	10.0	15	7.4	17.9	31	7.6	11.8	10	9.9	15.3	41	7.7	13.5
7	18	5.0	18.7	32	8.3	16.5	50	7.4	17.3	12	5.6	13.6	62	6.9	15.2
8	18	3.2	4.5	25	3.5	5.9	43	3.3	4.8	16	0.9	4.6	59	3.1	4.8
9	10	6.1	8.9	19	7.0	8.9	29	6.4	8.8	8	6.1	11.8	37	6.4	8.8
10	5	6.0	25.1	12	14.6	38.7	17	11.8	34.1	2	52.1	n/a	19	11.8	35.2
11	11	7.0	14.2	19	14.4	22.7	30	9.6	22.4	6	10.1	26.5	36	9.6	22.1
12	10	5.9	12.7	16	12.3	19.4	26	8.0	18.2	5	4.4	6.3	31	6.9	17.6
13	12	3.5	5.8	24	4.6	6.9	36	4.5	6.9	12	3.5	4.6	48	4.3	6.7
14	9	3.5	7.7	10	4.5	8.5	19	4.3	6.1	9	5.1	8.0	28	4.9	6.6
15	8	7.6	16.1	12	6.6	11.0	20	6.8	14.2	7	5.7	6.9	27	6.2	10.0
16	13	2.1	3.3	13	1.1	2.0	26	1.5	2.6	12	1.3	1.5	38	1.3	2.4
17	11	5.8	7.7	7	5.5	17.2	18	5.6	8.7	15	4.1	5.4	33	4.3	7.7
18	5	5.8	18.3	4	5.7	8.1	9	5.8	7.6	5	5.5	7.0	14	5.6	6.9
19	18	2.1	3.4	19	1.9	4.7	37	2.0	4.1	13	0.7	2.9	50	1.9	3.9
20	5	0.1	0.6	9	0.4	0.5	14	0.3	0.5	5	0.4	1.0	19	0.4	0.6
Total	262	5.2	11.5	358	7	17.7	620	6.2	15.2	214	5.2	12.7	834	6.0	14.8

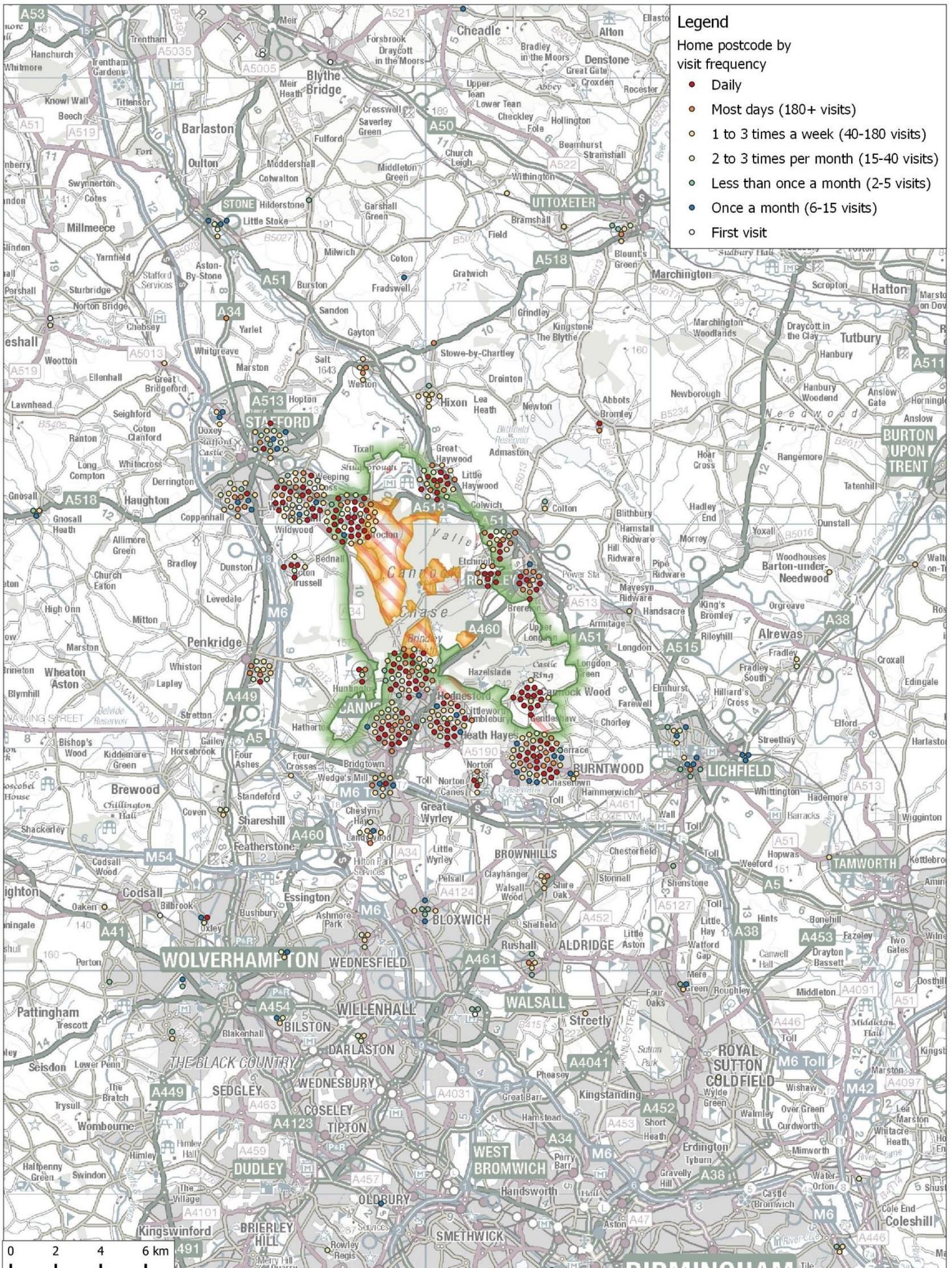
Map 17: Interviewee routes recorded on site show as the raw route lines. Overlapping route lines are visualised as darker routes.



Map 18: Interviewee postcodes categorised by the number of people per interviewed group. Note overlapping postcodes are offset as concentric rings.



Map 19: Interviewee postcodes categorised by visit frequency. Note overlapping postcodes are offset as concentric rings.



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Appendix 2: Questionnaire

Good morning/afternoon. I am conducting a visitor survey on behalf of the Cannock Chase conservation partnership, 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.*

- 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
- Commerical dog walking
- Visiting cafe/visitor centre
- Fitness/formal sports
- Other, please detail:

Further details

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

- 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 Cannock Chase 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 Cannock Chase 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 Cannock Chase 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 Cannock Chase?** *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:

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.

Q9 **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

Q10 **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:

Q11 **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"/>
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:	<input type="text"/>	

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

Q12 What proportion of your weekly visits for *[given activity]* take place at Cannock Chase 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

Q13 Which one location would you have visited instead today if you could not visit here?
Do not prompt, tick closest answer. Note this can include other locations within Cannock Chase.

- Not sure/Don't know
- Nowhere/wouldn't have visited anywhere
- Site Named

Record site name:

I'd now like to ask about how you plan your visit to Cannock Chase.

Q14 Which information sources do you use to plan your visit. Did any of the following influence your choice to come here today;

	Yes	No	Don't know/unsure
websites	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
social media	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
smartphone app	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
maps (online or paper)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
leaflets	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
recommendation from friends or family	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
or any other information sources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q15 You indicated that a website influenced your visit today, which websites did you use? *[Routed from above Q]*

Q16 You indicated that social media influenced your visit today, which social media did you use? *[Routed from above Q]*

- Twitter
- Facebook
- Instagram
- Other

Other

Q17 You indicated that you have used a smartphone app specifically relating to your activity. Which apps do you use? *[Routed from above Q]*

Q18 **You indicated that leaflets influenced your visit. Which leaflet did you mean?**
[Routed from above Q]

Q19 **You indicated that other information sources influenced your visit today, what were these?** *[Routed from above Q]*

I'd now like to ask you your views on how Cannock Chase is managed for access.

Q20 **Please score each of the following to indicate your level of support for the suggested measure at Cannock Chase. Please give a score from 1 to 5, giving a score of 3 if you have no particular opinion about the measure, 5 would indicate you strongly support the measure and a score of 1 would indicate you do not support the measure at all. Note order of questions is randomised. .**

	1 don't support at all	2	3 no opinion	4	5 strong support
Voluntary parking charges	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Compulsory parking charges	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Closure of some car parks and laybys	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Greater warden presence	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Codes of conduct for different user groups	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Routes promoted for particular activities such as mountain bikes or horse riding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enforcement of dogs on leads March-July	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enforcement relating to dog fouling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More interpretation relating to wildlife and heritage interest	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Boardwalks or surfaced paths in wet areas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improved surfacing to some car-parks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More dog bins	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More marked routes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q21 **Are you aware of any habitats or species that occur here and are vulnerable to impacts from recreation? If so, can you name them?** *Do not prompt. Tick any groups mentioned.*

- No/none/can't name
- heathland mentioned
- brook/ water bodies mentioned
- breeding birds in general mentioned
- birds of prey/raptors mentioned
- nightjar specifically mentioned
- woodlark specifically mentioned
- deer specifically mentioned
- Other (give details)

Further details:

Q22 **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*

Q23 **Do you have any further comments or general feedback about your visit and access to this area?**

Q24 **Finally, what is your full home postcode?** *This is an important piece of information, please make every effort to record correctly.*

Q25 *If visitor is unable or refuses to give postcode:* **What is the name of the town or village where you live?**

Q26 *If visitor is on holiday ask: Which town / village are you staying in? [Routed from above Q]*

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 **Did the interviewee struggle with answering questions because English was not their first language?** Tick yes if you feel this may have influenced the responses.

Yes, interviewee struggled because English was not their first language

Q29 **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: