FOOTPRINT ECOLOGY

Chris Panter & Durwyn Liley.

FOOTPRINT ECOLOGY, FOREST OFFICE, BERE ROAD,
WAREHAM, DORSET BH20 7PA
WWW.FOOTPRINT-ECOLOGY.CO.UK
01929 552444

FOOTPRINT
ECOLOGY

Footprint Contract Reference: 494
Date: 8th May 2019
Version: Final
Recommended Citation: Panter, C. & Liley, D., (2019). Cannock Chase Visitor Survey 2018. Unpublished report by Footprint Ecology for the Cannock Chase SAC Partnership.

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 approach 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 was1.6 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: Penkridge 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 approxmiate 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 stastically significant. Differences between weekdays (median 5 km) and weekends (median 7 km) however were stastically signficant 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 commonyl 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 includedMarquis 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.

Contents

Acknowledgements

We are grateful to the Cannock Chase SAC team; Chris Walsh and Kristie Charlesworth, and the wider partnership of local authorities and Natural England for their help and guidance.
Survey work was undertaken by our surveyors; Graham Blight, Hannah Howells, Alison Jay, Kim Leyland, Marie Micol, Mel Roach, Phil Rotherham and Jan Winder.

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 activites, 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 Comission, National Trust etc.). The survey was commissioned to provide a snapshot of current levels of access, identify the range of activities occuring 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 km^2 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 signficiant 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.

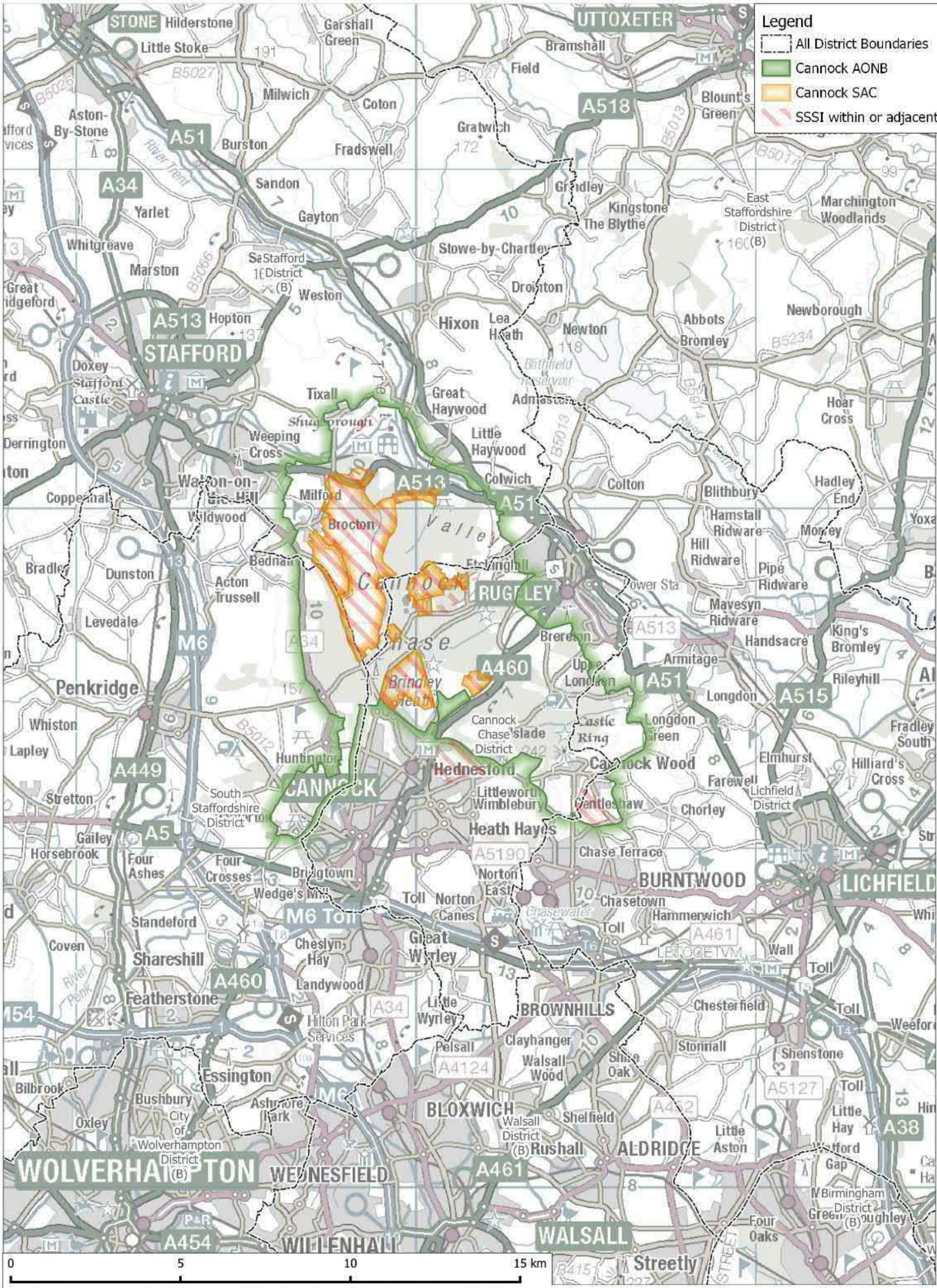
1.6 Visitor surveys were last conducted across Cannock Chase in 2011 (Liley, 2012) and some of the key results included;

- 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.



Contains Ordnance Survey data © Crown copyright and Database Right 2018. Contains map data © OpenStreetMap contributors. Terms: www.openstreetmap.org/copyright Designated site boundaries download from the Natural England website © Natural England.

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 Roa[1]d) - 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.

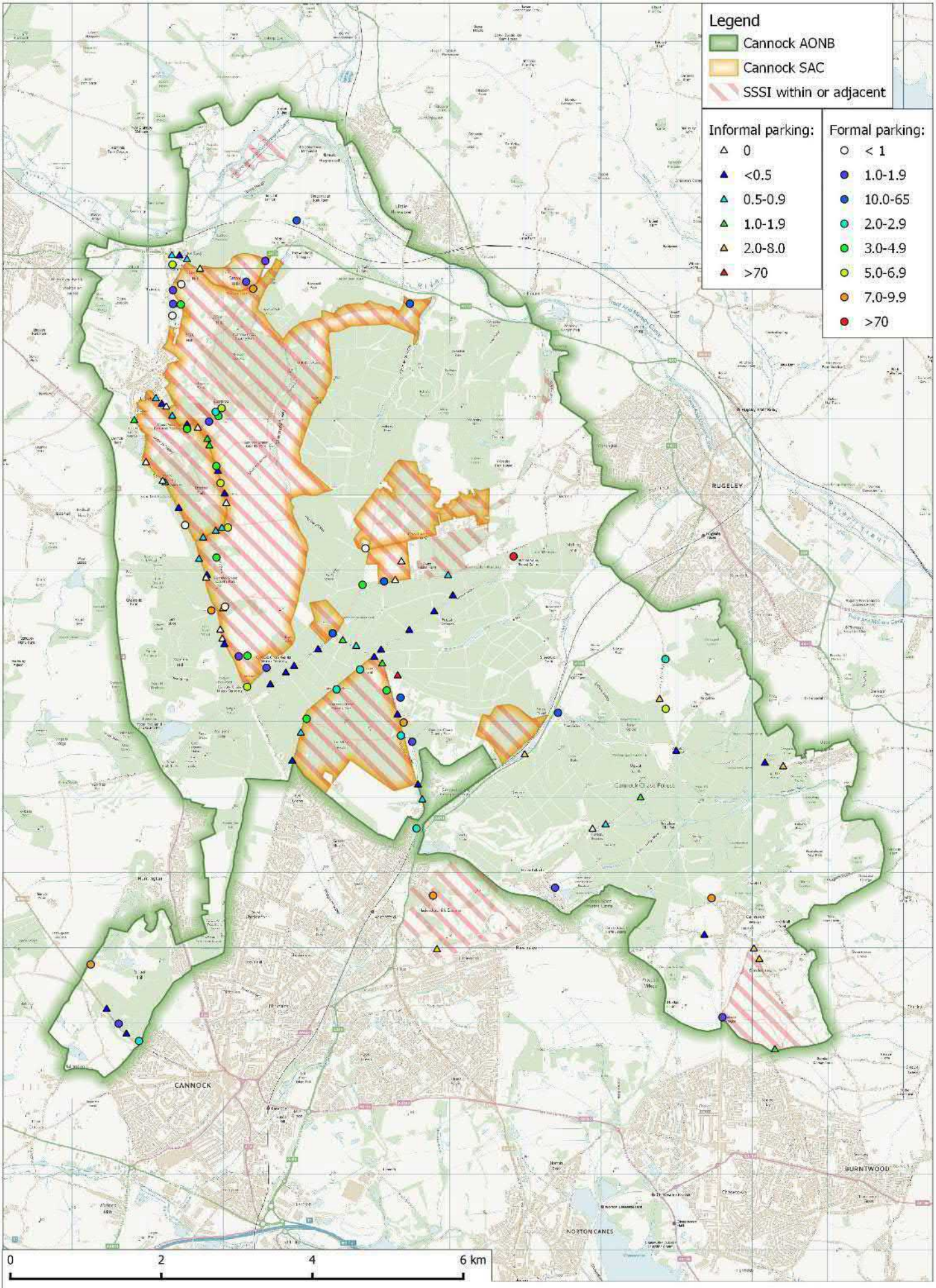
Location type	Mean number of cars per transect	Number of parking locations in group across the Chase	Number of parking locations selected for survey
Formal parking area	>70	1	1
	10.0-65	7	3
	7.0-9.9	6	2
	5.0-6.9	6	3
	3.0-4.9	9	0
	2.0-2.9	7	2
	1.0-1.9	11	2
	< 1	5	0
Other parking area	>70	1	1
	2.0-8.0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

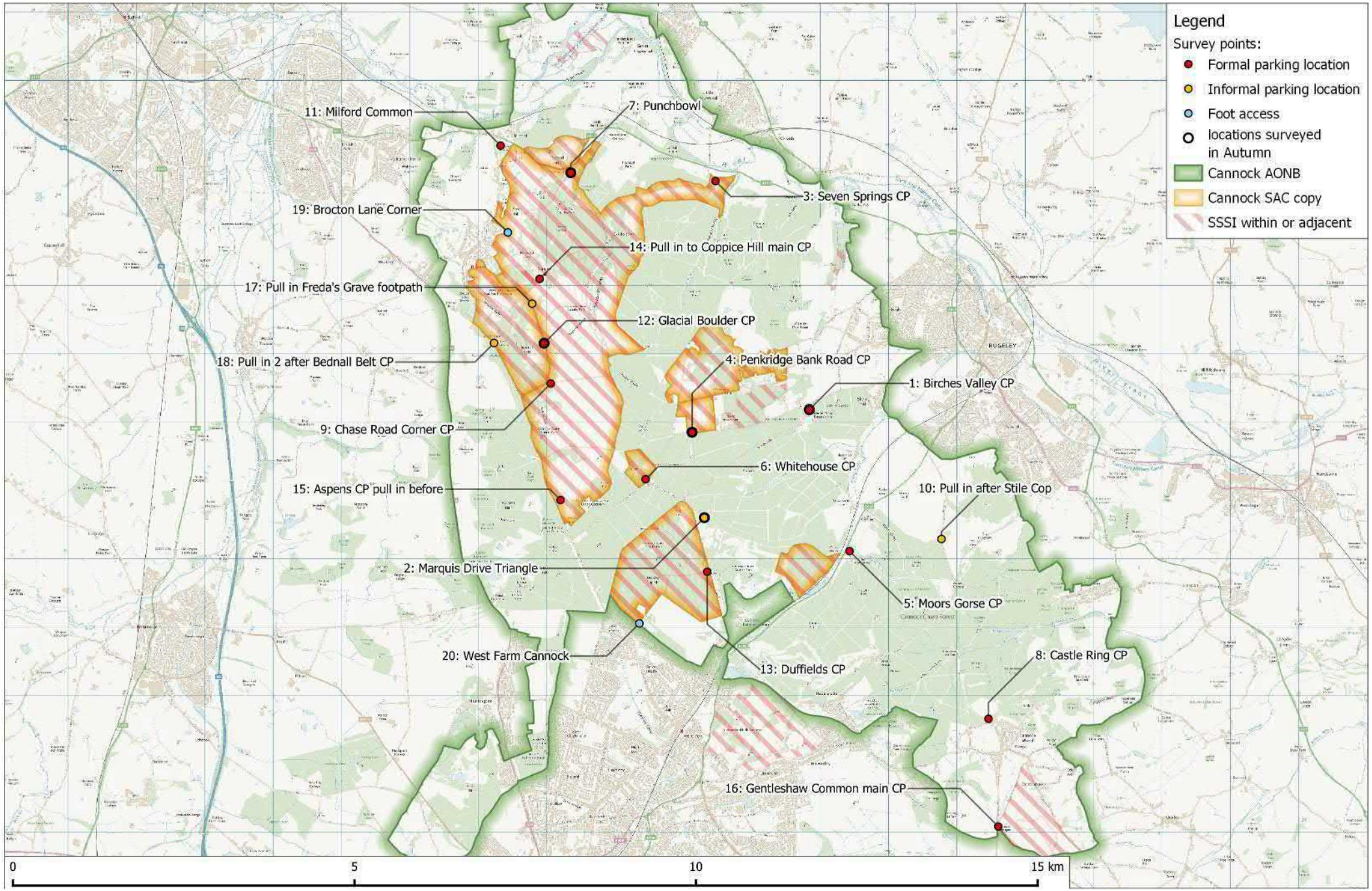
Survey locations selected

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	Locaton 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 slighted 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 showers[2]. 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 month[3] . The weather during the winter surveying in November was generally warmer than the long-term average, usually cloudy and with variable amounts of rain[4].

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: Penkridge bank) were lower than any day in autumn, but greater than winter. Summing all values for the three locations together, the total

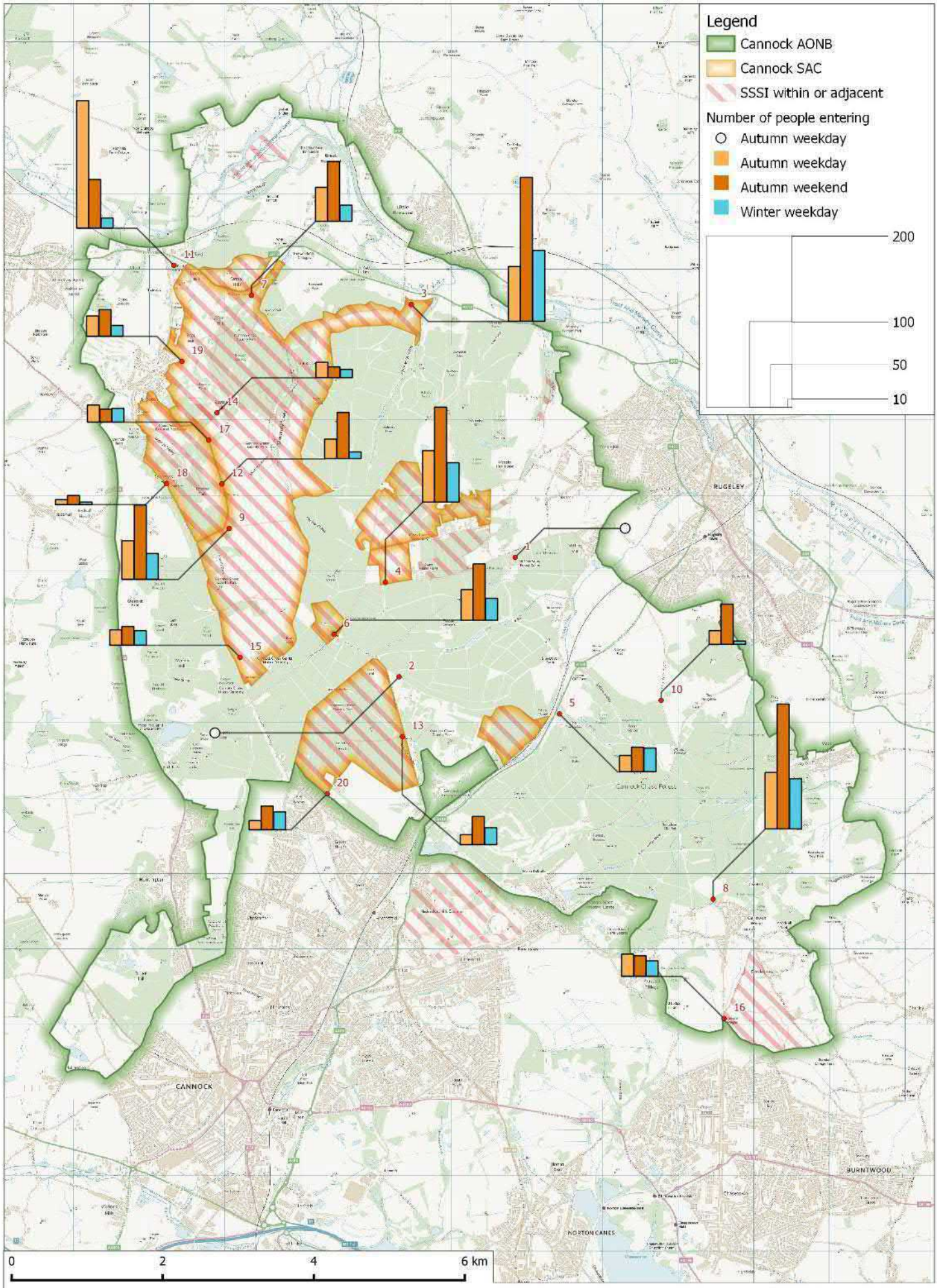
was 27% greater on the summer weekday compared to the autumn weekday.

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 (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		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%)

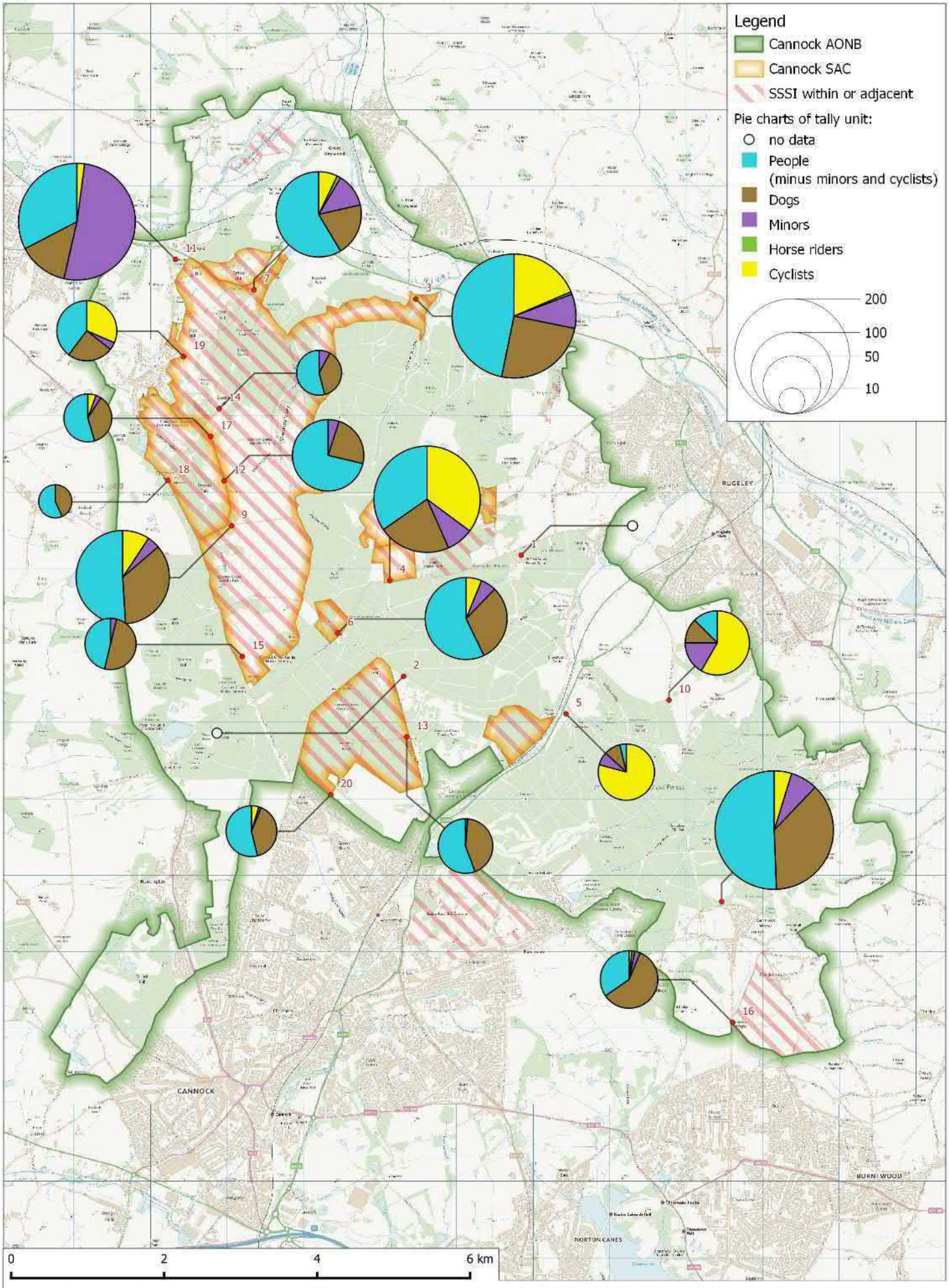
3.16 Map 5 is based solely on data collected in the autumn surveys, but a breakdown of the numbers of groups, people, dogs, minors, cyclists and horse riders by season is given in Table 6. Due to the differences between seasons the comparison to the summer is difficult, however all other seasons are 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**
		160	160	160	
Total **groups** entering	79	353	533	288	**1253**
		653 (1.8)	1012 (1.9)	433 (1.5)	
Total **dogs** entering (dogs per group)	49 (0.6)	343 (1.0)	370 (0.7)	283 (1.0)	**1045 (0.8)**
	19 (12%)	140 (21%)	129 (13%)	19 (4%)	
Total **horse riders** entering (as % of all people)	9 (6%)	3 (0%)	3 (0%)	2 (0%)	**17 (1%)**
	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.



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 (Aug)	autumn (Sept)		winter (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.

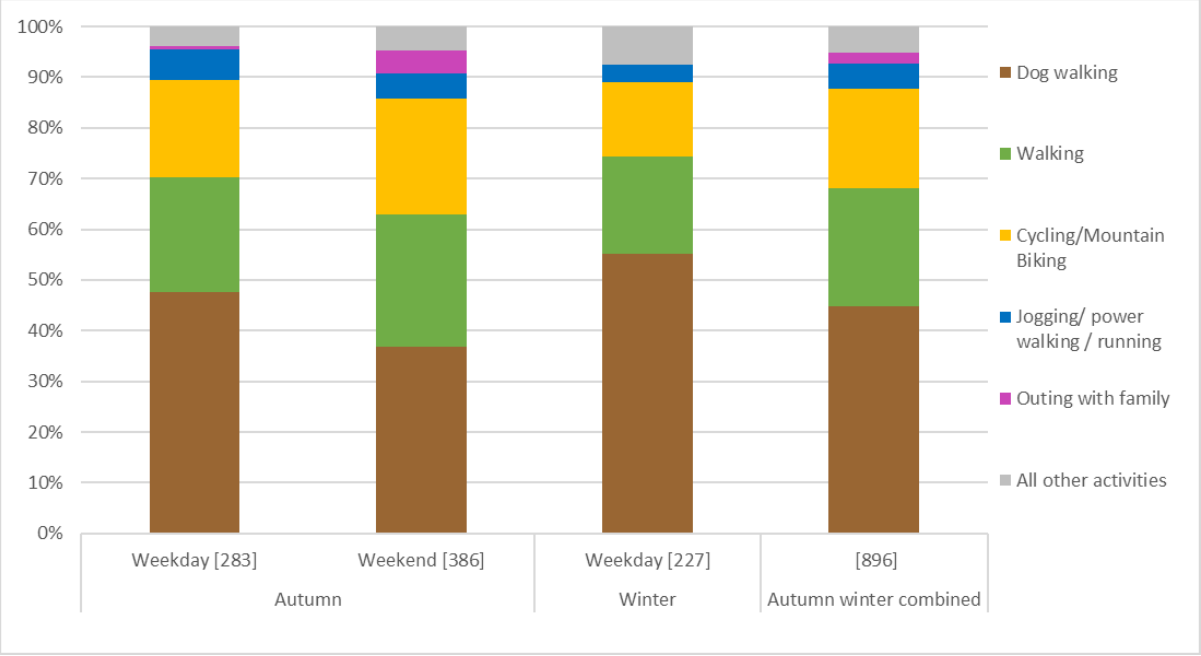


Figure 1: Stacked bar charts of interviewees' activities recorded across all survey points in autumn, winter, and autumn winter combined.

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%)

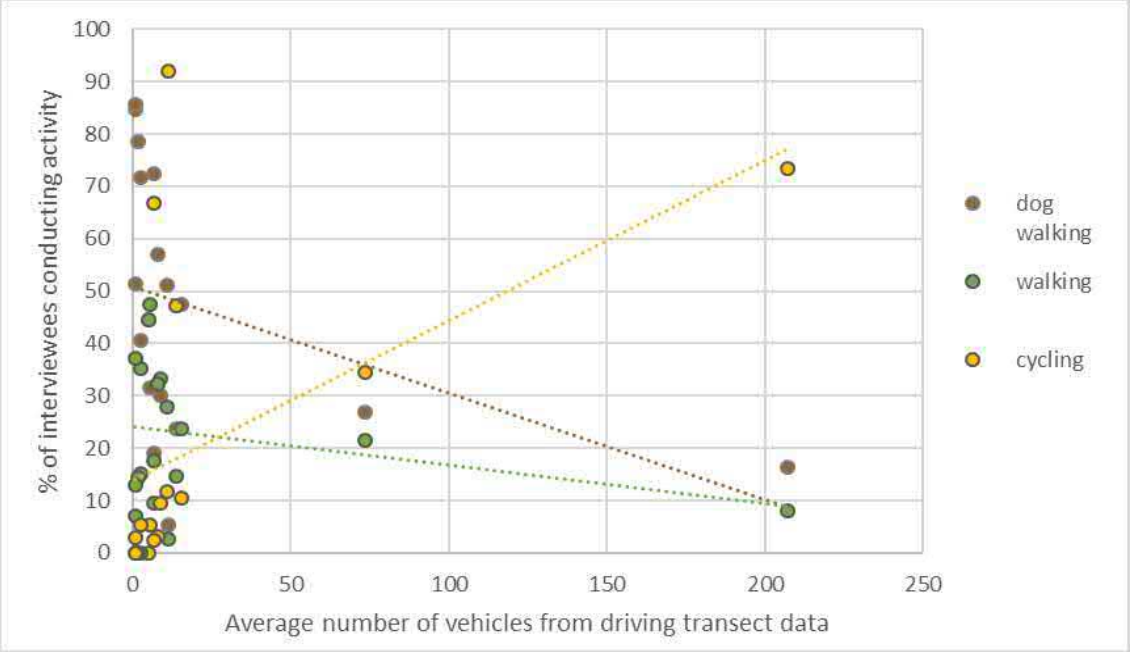
- 2: Marquis Drive Triangle (34%)
- 4: Penkridge Bank Road CP (47%)
- 5: Moors Gorse CP (92%)
- 10: Pull in after Stile Cop (67%).

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).



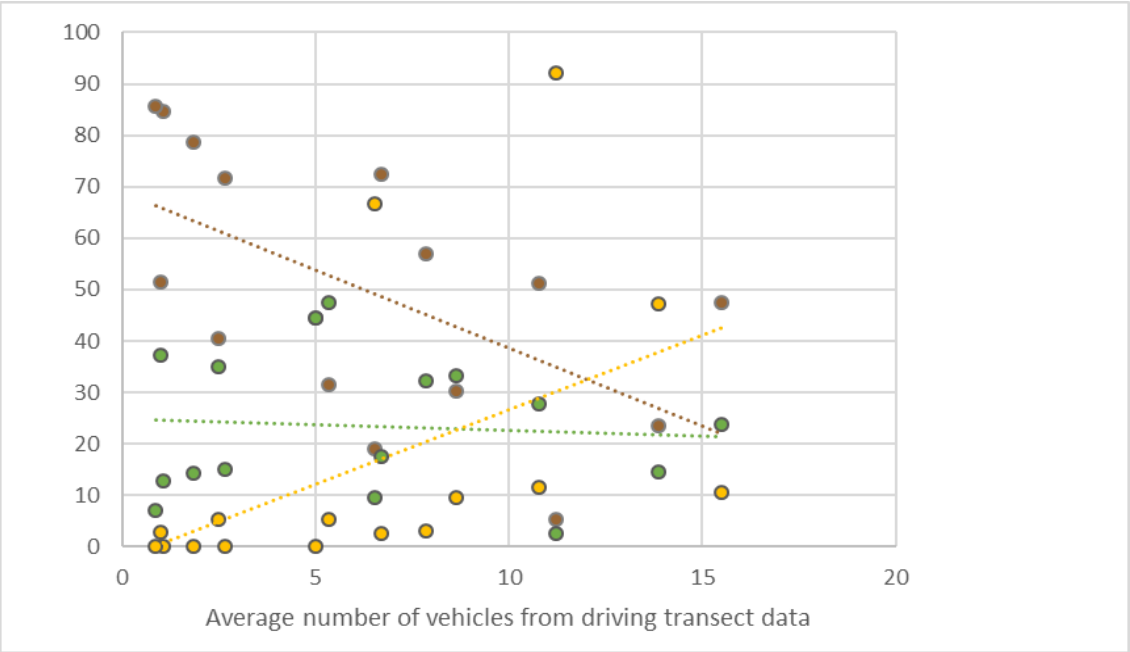
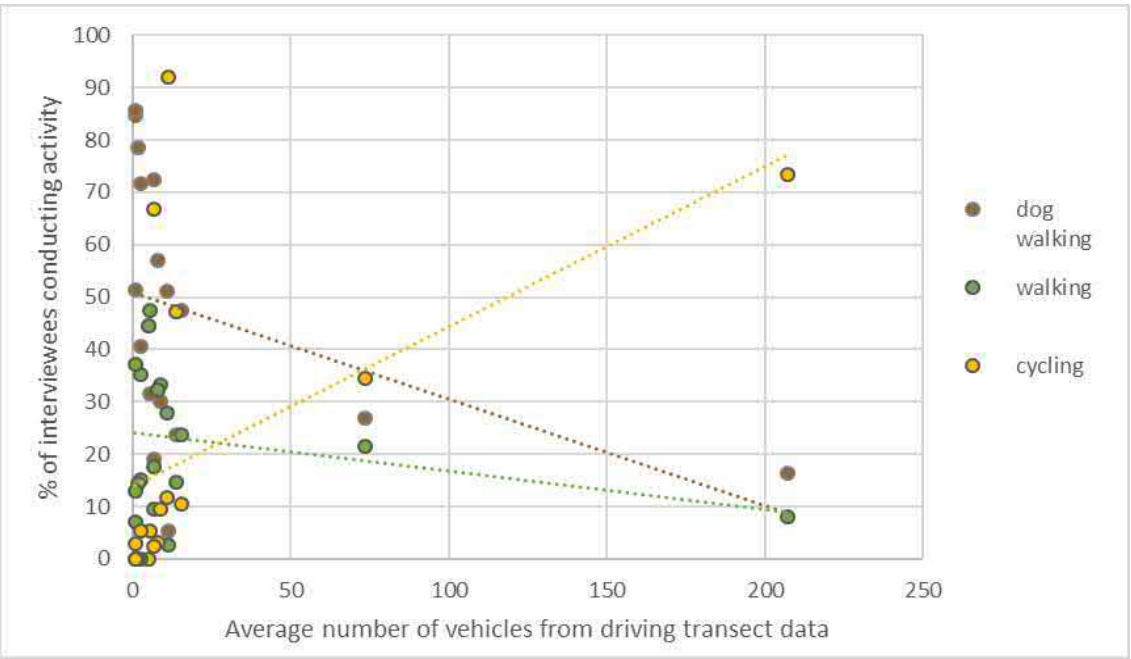


Figure 2 presents scatterplots of the percentage of interviewees conducting a main activity by level of access (the average number of vehicles at each location from driving transect data). There is very general indication that low level access sites are more commonly used by dog walkers and less likely 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



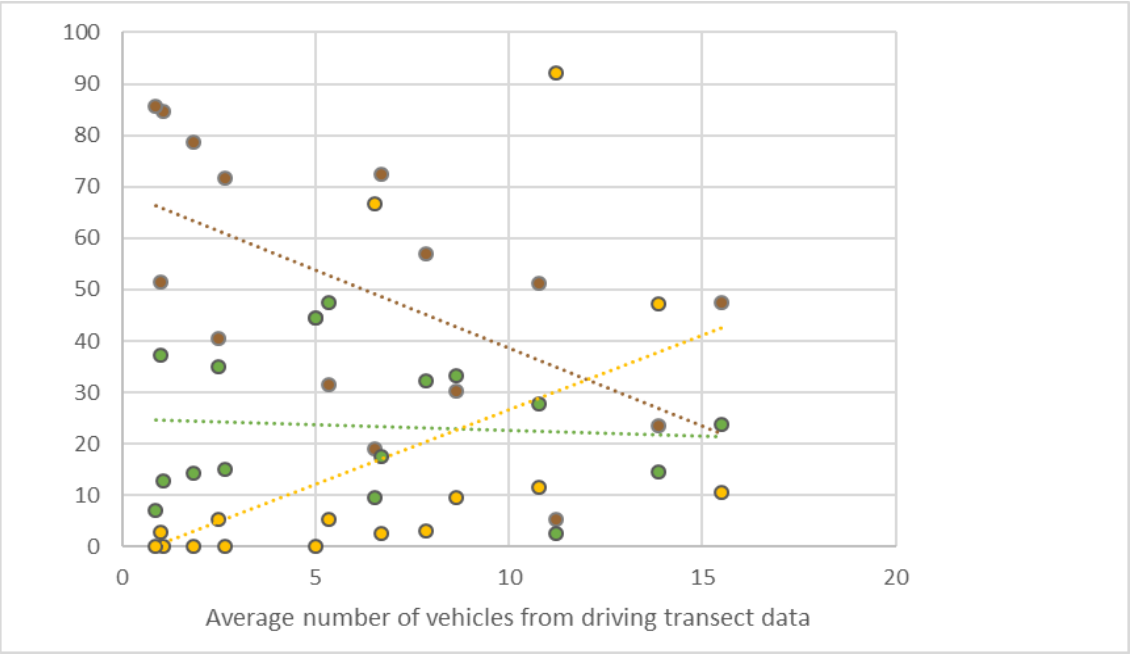


Figure 2 for scatterplots with and without these locations. Simple correlations were conducted on these data with and without Birches Valley and Marquis Drive. Tests showed a marginally significant, positive relationship for the percentage of cyclists and the average number of vehicles using all data (Pearson's =-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.

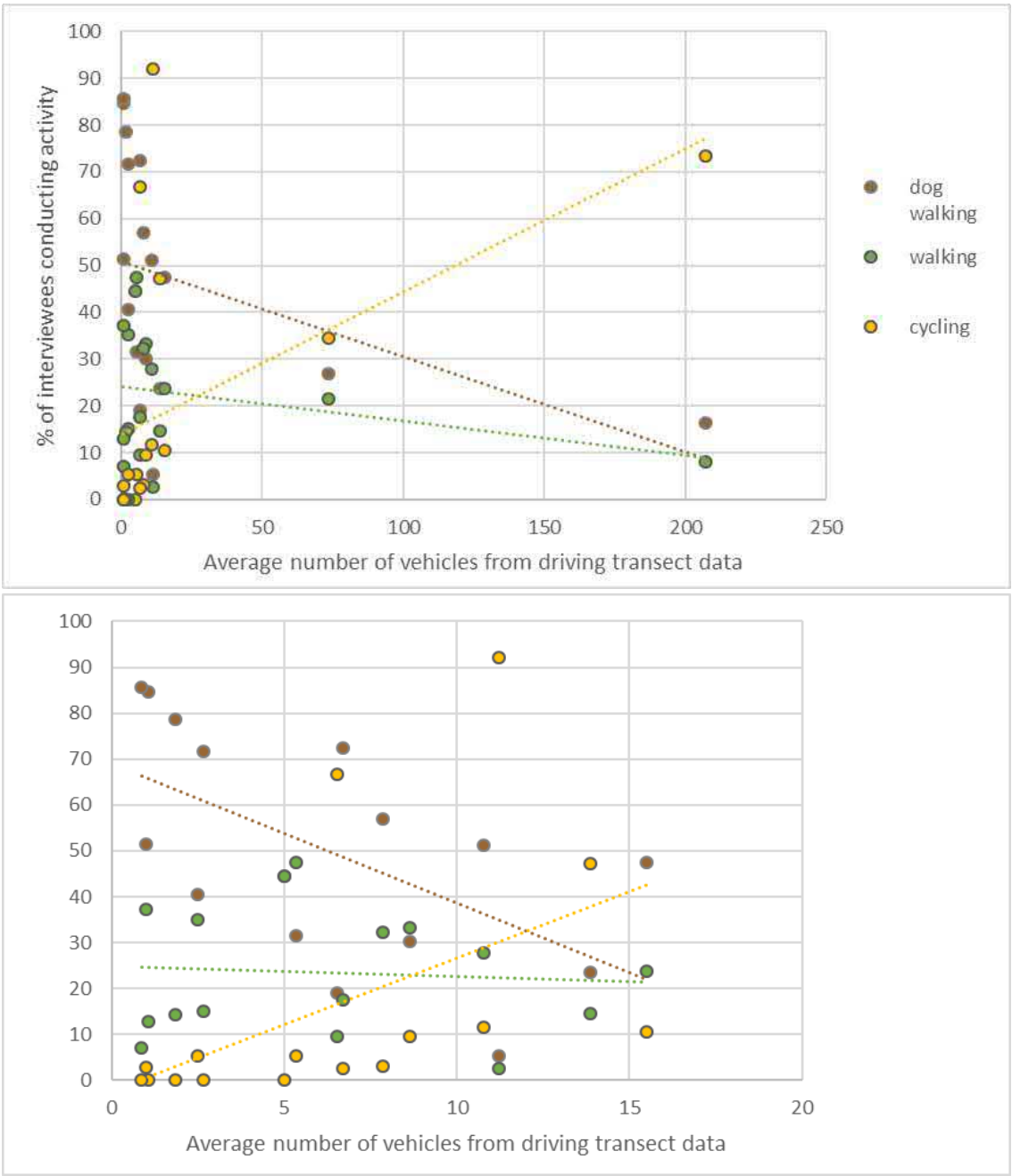


Figure 2: Scatterplot of the percentage of interviewees conducting activities and the average number of vehicles recorded at locations from driving transect data. Top panel shows the scatterplot including all survey points (except for the two foot access locations without data). Bottom panel shows the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

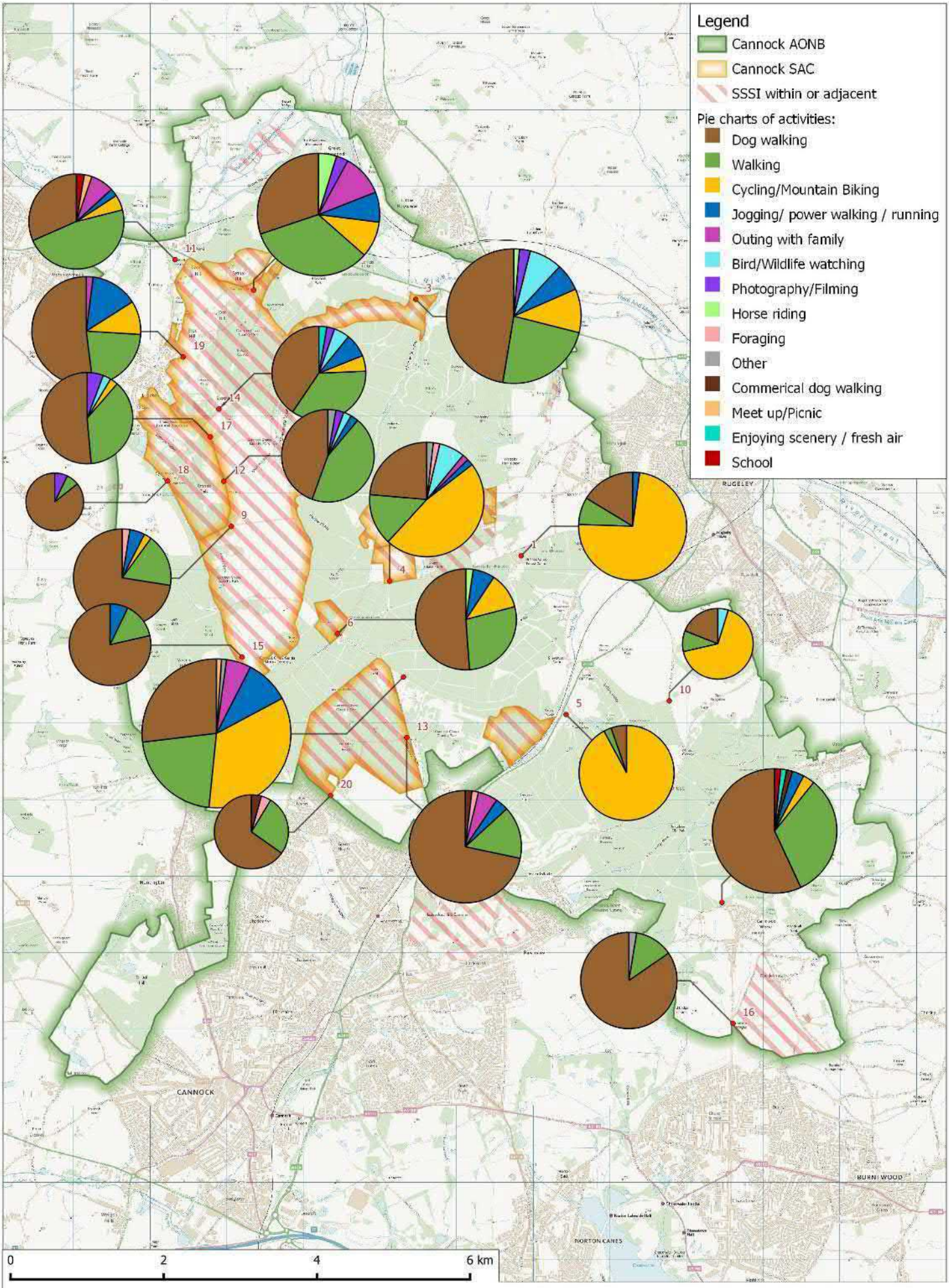
4.19 Another difference in activities investigated was regarding the SAC habitats. Table 11 shows a summary of interviewee activities after categorising survey points by whether they were in the SAC or not. The percentages reported

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%)	
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. Reponses given in these two questions were categorised into classes by the surveyor[5].

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 time[6] 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.

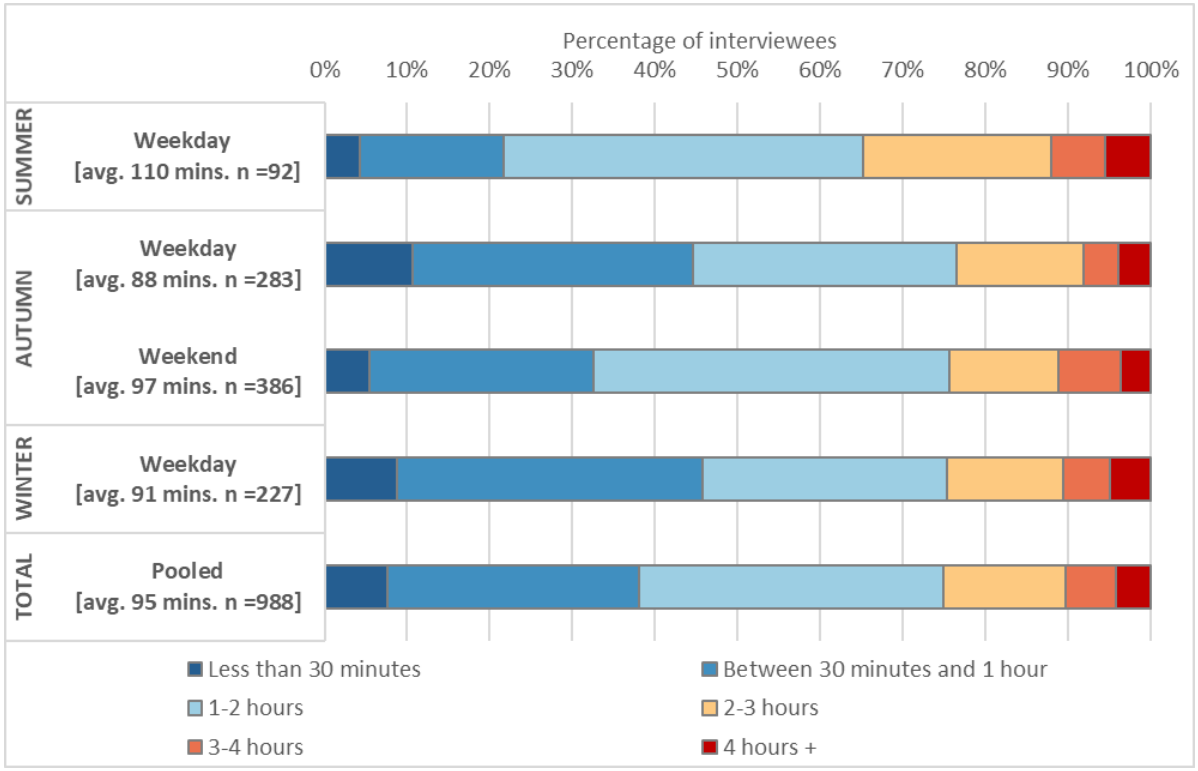


Figure 3: Interviewee visit duration (or expected duration) shown as the percentage of interviewees in grouped time categories for each survey period and as a pooled total. Beside each survey period an approximate average visit duration and the sample size (number of interviewees is given).

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.

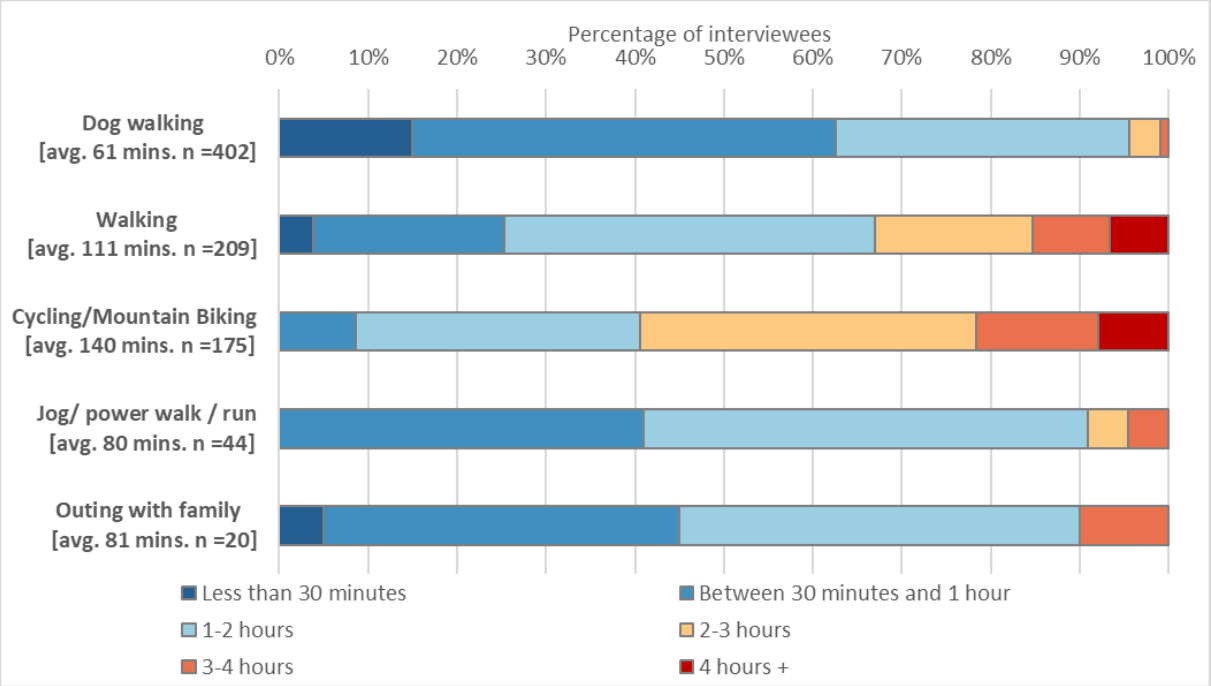
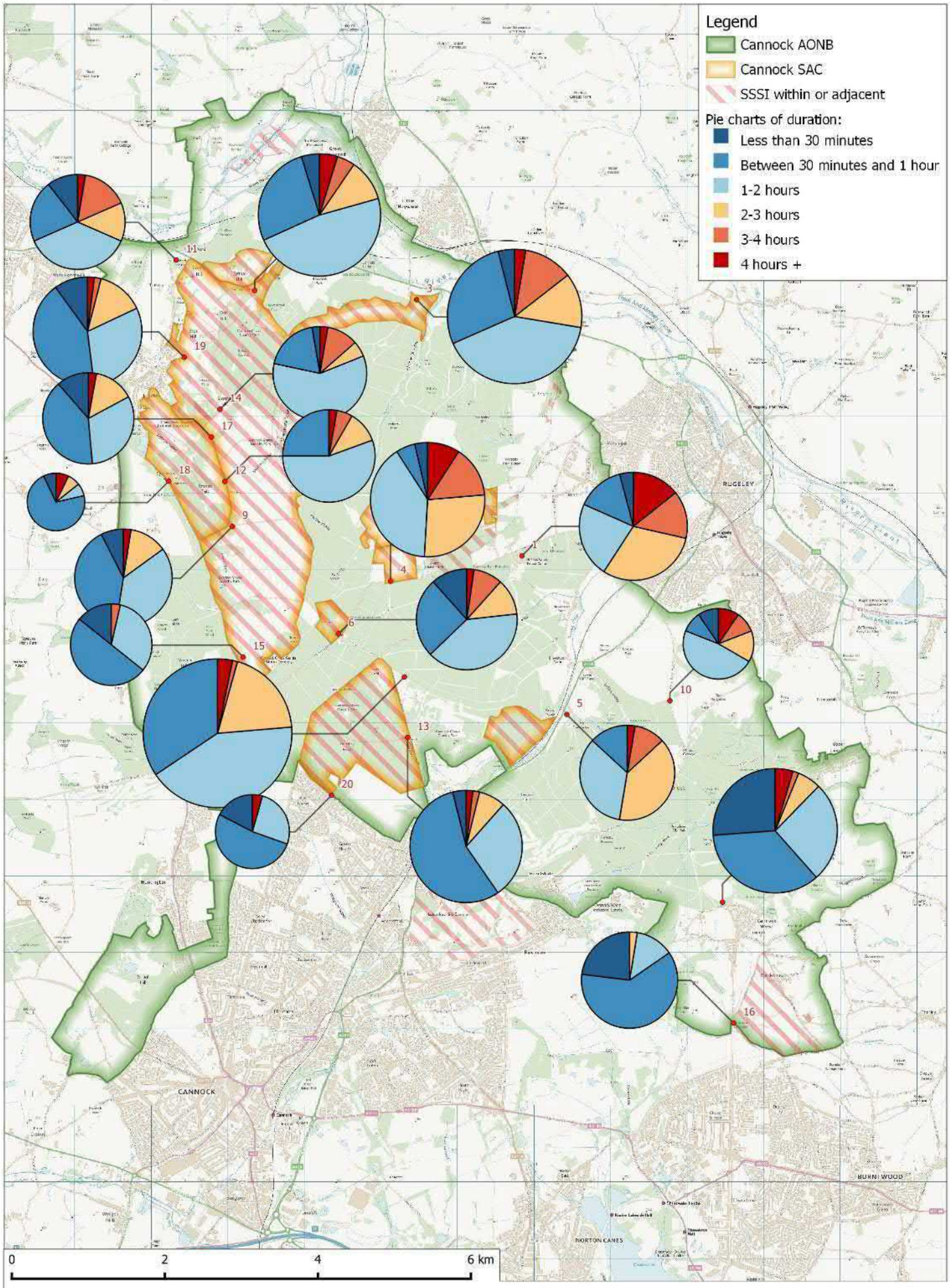


Figure 4: Interviewee visit duration (or expected duration) shown as the percentage of interviewees in grouped time categories for the five most common activities. Beside each activity an approximate average visit duration and the sample size of number of interviewees is given. Data presented are based 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 visited[7].

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.

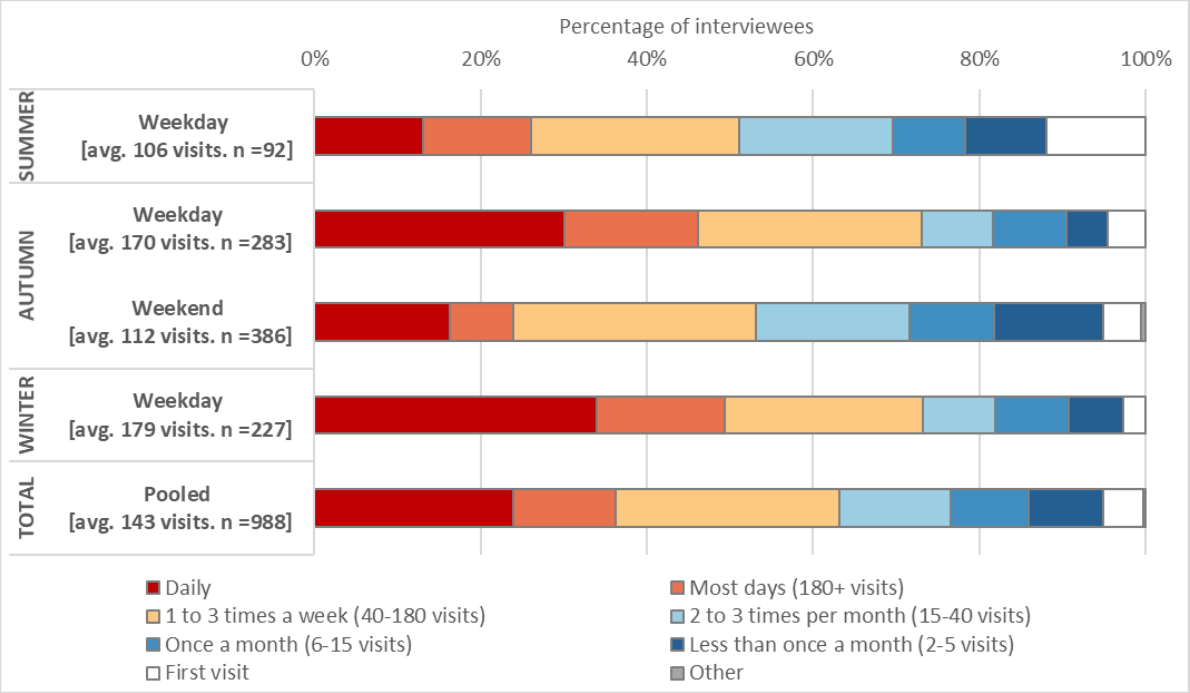


Figure 5: Interviewee visit frequencies by survey period and as a pooled total. Beside each survey period an approximate average number of visits per year and the sample size of interviewees is given.

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.

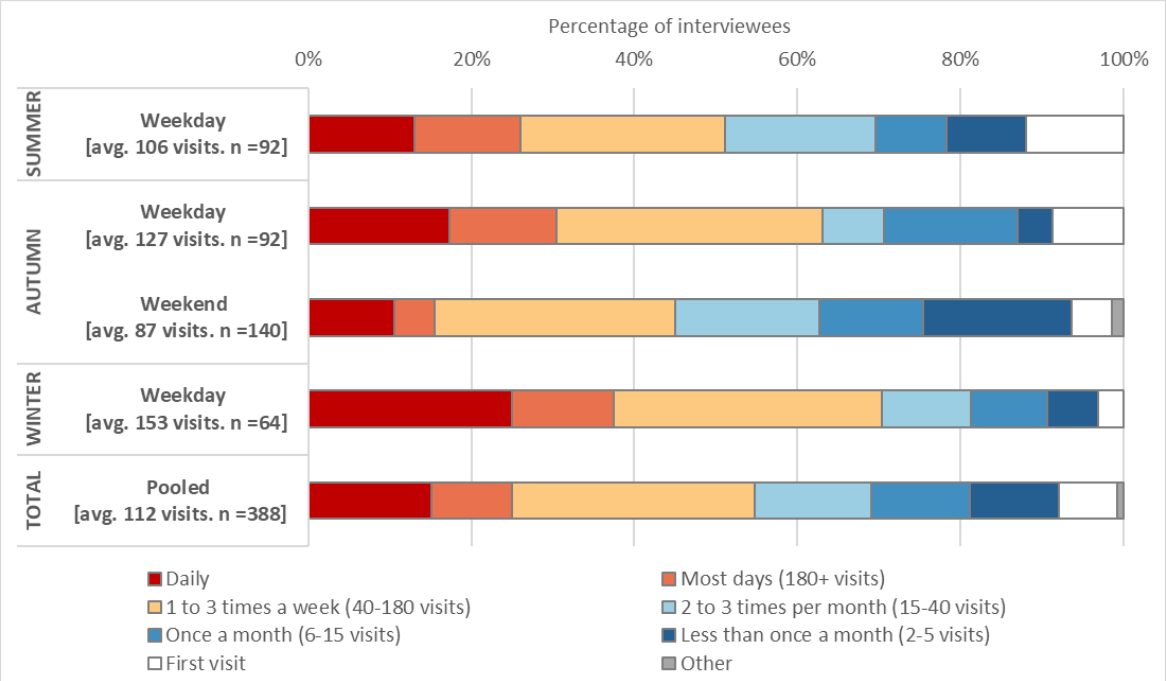


Figure 6: Interviewee visit frequencies by survey period and as a pooled total. Beside each survey period an approximate average number of visits per year and the sample size of interviewees is given. Data used are from the subset of five survey points which were surveyed in all surveying periods.

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.

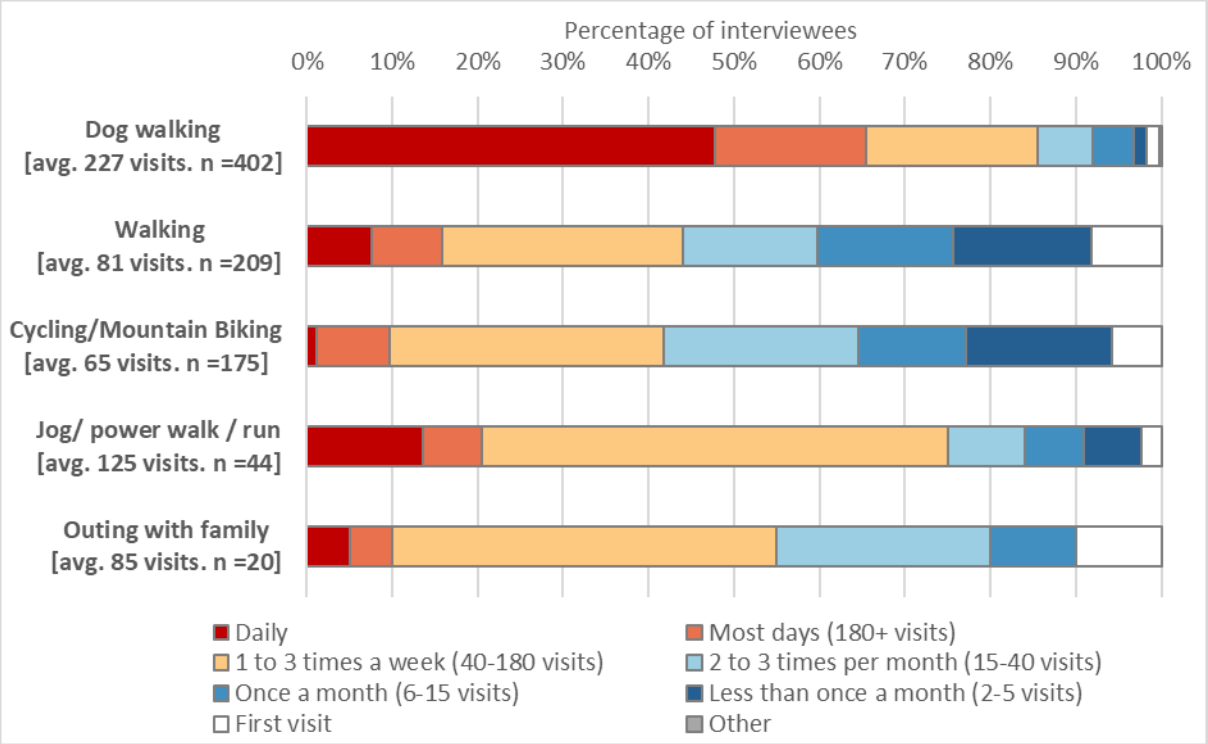


Figure 7: Interviewee visit frequencies for the five most common activities. Beside each activity an approximate average number of visits per year and the sample size of number of interviewees is given. Data presented are based on the autumn and winter surveys only.

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).