



Thames Basin Heaths SANG Visitor Survey Analysis 2018

Chris Panter

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



FOOTPRINT
ECOLOGY

Footprint Contract Reference: 530

Date: 8th May 2019

Version: Final

Recommended Citation: Panter, C. (2019). Thames Basin Heaths SANG Visitor Survey Analysis 2018.

Unpublished report by Footprint Ecology.

Summary

This report summarises the results of visitor surveys conducted by the Thames Basin Heath Partnership on a subset of SANG sites during winter 2018.

Visitor surveying involved tally counts and face-to-face questionnaires. Tally counts were conducted to record the number of people passing at each discrete access point and understand visitor footfall. Interviewing of site users yielded a wide range of data on visitors' activities, visit patterns, likes and dislikes, other places visited and point of origin (home postcode).

Surveys were conducted at 14 sites for a total of 252 hours. This used a standardised methodology with 12 hours on a weekday and 6 hours on a weekend, spread evenly over three 2-hour surveying windows of; 8:00-10:00, 11:00-13:00 and 14:00-16:00.

Across all survey locations a total of 2,737 people were recorded during the 252 hours of surveying - an average of 10.9 people per hour passing surveyors (i.e. entering and leaving). The number of people per hour (pph) was typically higher at weekends than weekdays; an overall average was 9.5 pph on weekdays and 13.6 on weekends. At individual sites, the totals ranged from 501 people (27.8 pph) at Heather Farm, to 47 (2.6 pph) at Timber Hill. Using the two-hour survey session totals for each site we observed clear differences between sites, weekdays and weekends, but not the different times of day.

In total, 706 interviews were conducted and site totals ranged from 16 at Timber Hill to 112 at Heather Farm. Interviews could be conducted with lone visitors, or single members from a party of visitors. The average number of people in an interviewee group was 1.5 people per group and consisted of 0.1 minors per group, 0.3 over 65's per group and 0.9 dogs per group. Typical number of dogs per group was always above 0.7, apart from at Timber Hill (0.5 – typically half of interviewees without a dog). The average number of minors was low at most sites, except for Popes Meadow where this was 0.3 minors per groups – roughly one third of interviewed groups.

Almost four in five interviewees were dog walkers, 79% of interviewees, followed by 12% walkers and 3% outing with the family. Dog walking was the main activity at all but one site (Timber Hill) and ranged from 50% at Timber Hill to 95% at Dilly Lane.

Visit patterns of interviewees were examined and a typical visit duration was estimated to be around 50 minutes – 25% of interviewees stated they visited less than 30 minutes and 57% between 30 minutes and 1 hour. Visit frequency was estimated to be around 189 visits per year - 34% of interviewees visited 1 to 3 times a week and 21% daily (increasing to 31% examining those who visited daily or more than once a day). Sites with a high percentage of frequent visitors were Dilly Lane and Hare Hill, compared to very infrequent visitors at Heather Farm and Horseshoe Lake. Overall, three quarters of interviewees arrived on site by

car. The two sites with the highest percentage of visitors on foot (>90%) were Dilly Lane and Hare Hill.

Using interviewees' postcodes, we observed that 98% of interviewees were residents of the 11 local authorities which are in the TBHP. The mean distance between interviewee's home and the survey point was 3.8 km, but half lived within a 1.7km radius (median value) and three quarters within 3.7 km (Q3, 75th percentile value). However, these varied values greatly between survey sites; median value ranged from 0.4 km at Hare Hill to 4.1 km at Heather Farm. Local knowledge was key in how visitors became aware of the sites, with word of mouth and proximity to the sites the main ways.

Interviewees were asked to state their reasons for visiting the current site and across all sites the main reason was that sites were close to home, given by 35% of interviewees. This was followed by factors for dogs; the fact that visitors could let the dog off lead (133 interviewees, 19%) and the site being good for dogs (130, 18%). At individual sites, the fact the site was close to home was the main reason at eight of the fourteen sites.

Ratings given by interviewees highlight some sites with issues in regards to paths, parking and site quality for dogs. Lower ratings for paths were noticeable at Chobham water meadows and Hare Hill, for parking at Dilly Lane and Timber Hill, and for dogs at Timber Hill. Sites with low ratings often had issues which were again mentioned in the suggested improvements from interviewees. Most common improvements given were; better paths, more dog poo bins/dog fouling issues, more parking, new or better fencing, and more paths/choice of paths. However, it should be noted that overall ratings were generally positive and around a third of interviewees thought no improvements were necessary.

The SANG sites used represent one of a pool of local sites used by the visitors. The most commonly named alternative sites given by interviewees were: Horsell Common (8%), Chobham Common (6%), Virginia water (5%) and Cabbage Hill (3%). The alternative sites were categorised as to the type of sites they represent. Using the first named alternative sites, 29% of interviewees named a SANG site, 34% named a SPA site and 38% named other sites. The reason interviewees chose these sites was most frequently for variety (21%), followed by the fact sites are close to home (18%) and because they offer large open areas (16%).

Contents

| | |
|-------------------------------------------------------|-----------|
| Summary | ii |
| Contents..... | iv |
| Acknowledgements | v |
| 1. Introduction | 1 |
| <i>The Thames Basin Heaths SPA.....</i> | <i>1</i> |
| <i>TBH SPA Area Delivery Framework and SAMM.....</i> | <i>2</i> |
| <i>SANGs.....</i> | <i>3</i> |
| 2. Methods..... | 6 |
| Approach..... | 6 |
| <i>Tally counts</i> | <i>7</i> |
| <i>Interviews</i> | <i>7</i> |
| <i>Data processing.....</i> | <i>8</i> |
| Surveying..... | 8 |
| <i>Weather</i> | <i>9</i> |
| 3. Visitor survey tally results | 11 |
| Total footfall | 11 |
| <i>Weekday and weekend day.....</i> | <i>13</i> |
| 4. Visitor survey interview results | 15 |
| Number of interviews..... | 15 |
| <i>Site totals.....</i> | <i>15</i> |
| <i>Group composition</i> | <i>16</i> |
| Activity | 19 |
| Visit patterns..... | 23 |
| <i>Visit duration</i> | <i>23</i> |
| <i>Visit frequency</i> | <i>25</i> |
| <i>Length of visitation.....</i> | <i>29</i> |
| <i>Time of visit.....</i> | <i>30</i> |
| Postcodes | 34 |
| Reasons for visiting | 41 |
| <i>Awareness of site.....</i> | <i>45</i> |
| Rating | 46 |
| Suggested improvements..... | 51 |
| Alternative locations visited..... | 54 |
| <i>SPA and SANG sites</i> | <i>55</i> |
| <i>Proportion of visits.....</i> | <i>58</i> |
| <i>Reasons for visiting alternative visits.....</i> | <i>59</i> |
| Time at current address | 60 |
| 5. Discussion and recommendations..... | 62 |
| Surveying methodology and data collected | 62 |

| | |
|-----------------------------------------|-----------|
| <i>Recommendations</i> | 62 |
| Visitor survey conclusions | 63 |
| References | 64 |
| Appendix 1: | 65 |

Acknowledgements

This work was commissioned by Natural England as part of the Thames Basin Heath Strategic Access and Management and Monitoring (SAMM) project. Our thanks to Ann Conquest for commissioning and overseeing the work and the other members of the Thames Basin Heaths Partnership.

We are grateful to the Thames Basin Heaths Partnership staff who undertook the surveying (N. Buckland, B. Crompton, R. Papworth, T. Righton, M. Taylor, J. Wilsher) and to all those people who gave up their time while visiting the various sites to participate in the survey.

1. Introduction

The Thames Basin Heaths SPA

- 1.1 The Thames Basin Heaths (TBH) Special Protection Area (SPA) covers an area of approximately 8,400 ha and was classified under the Birds Directive in 2005. The area consists of 13 Sites of Special Scientific Interest (SSSI) distributed in three counties (Surrey, Berkshire and Hampshire) and covers 11 local authorities. About half (ca 4,000 ha) is within the Ministry of Defence Training Estate, with the remainder owned and managed by Local Authorities, Conservation NGOs, Forestry Commission and private landowners.
- 1.2 The SPA includes areas of dry and wet heathland, mire, oak and birch woodland, gorse scrub and acid grassland, plus conifer plantation. UK southern heathlands, an open habitat found on poor, acid soils and dominated by heathers and gorse (*Calluna vulgaris*, *Erica* ssp. and *Ulex* ssp.), have a very limited global distribution, and are among the most threatened habitats in Britain and Europe. A subset of the area is also designated as a Special Area of Conservation (SAC).
- 1.3 The TBH are located to the south west of London, along the M3 corridor, and this proximity to London has led to high pressure for development, which started in the mid-20th century and continues to the present day. Heathlands in southern England now occupy about a sixth of the area they formerly covered. In TBH it has been estimated that the decline in area was 53% between 1904 and 2003 with fragmentation of 52 main blocks to 192 smaller blocks during the same period (Land Use Consultants 2005).
- 1.4 The TBH SPA is classified for three species of birds listed on Annex I of the Birds Directive: Nightjar *Caprimulgus europaeus*, Woodlark *Lullula arborea* and Dartford warbler *Sylvia undata*. All three species are ground nesting (or in the case of Dartford warbler, low nesting) species, and are therefore particularly vulnerable to disturbance.
- 1.5 A range of impacts to heathlands are particularly associated with the proximity to urban areas. These 'urban effects' (see Haskins 2000; Underhill-Day 2005 for review) include; increased fire incidence, trampling, fly-tipping, pollution, soil erosion, predation by cats, increased natural predators, and disturbance by humans and their dogs. Studies of the Annex I bird species

show clear impacts of increased housing on both breeding success and numbers (Murison 2002; Liley & Clarke 2003; Liley *et al.* 2006; Mallord *et al.* 2007)

TBH SPA Area Delivery Framework and SAMM

- 1.6 Acting upon this evidence of the urban effects, it was recognised that mitigation measures were necessary to ensure continued residential development did not adversely impact the TBH SPA. The local authorities, with Natural England, worked to produce a series of mitigation and avoidance measures. The background to these is discussed in detail in Burley's report on the TBH SPA draft delivery plan (2007) and details of the agreed approach set out in the Thames Basin Heaths Special Protection Area Delivery Framework (Thames Basin Heaths Joint Strategic Partnership Board 2009).
- 1.7 The delivery framework states a series of development zones around the SPA that inform where and how residential development can be taken forward, including the use of alternative sites, visitor access management and the accompanying monitoring of the actions:
 - A 400m zone around the SPA boundary within which there is a premise of no net development.
 - A zone of influence from 400m to 5km from the SPA boundary (up to 7km for large developments) within which any new residential development should provide, or contribute to the provision of, avoidance measures to mitigate the impacts of the new residents.
 - Avoidance measures such as the provision of additional green space ('SANGs'– suitable alternative natural greenspace) and on-site access management ('SAMM' –strategic access management and monitoring).
- 1.8 Access management is coordinated strategically by Natural England working with the local authorities and partners, under the Thames Basin Heaths Partnership. The TBHP is made up of 26 organisations, primarily the 11 local authorities, but also relevant government bodies and NGOs. The access management can include 'soft' measures, such as education and wardening, or 'hard' measures such as limiting car parking, managing path networks etc. Wardening staff, which have been on the ground since 2015, promote appropriate behaviour on the SPA and encourage use of alternative sites, including the use of a website to detail alternative sites for visitors to use (<http://www.tbhpartnership.org.uk/sites/>).

- 1.9 The other part of SAMM is the monitoring of the mitigation measures. SAMM recognises that continual monitoring is needed to evaluate the levels of recreational use on heaths and on SANGs. Monitoring should allow a check on the effectiveness of measures, act as an early warning and allow mitigation measures to be adjusted as necessary to reflect changes in access patterns, and types of use on both heathland and SANG mitigation sites.

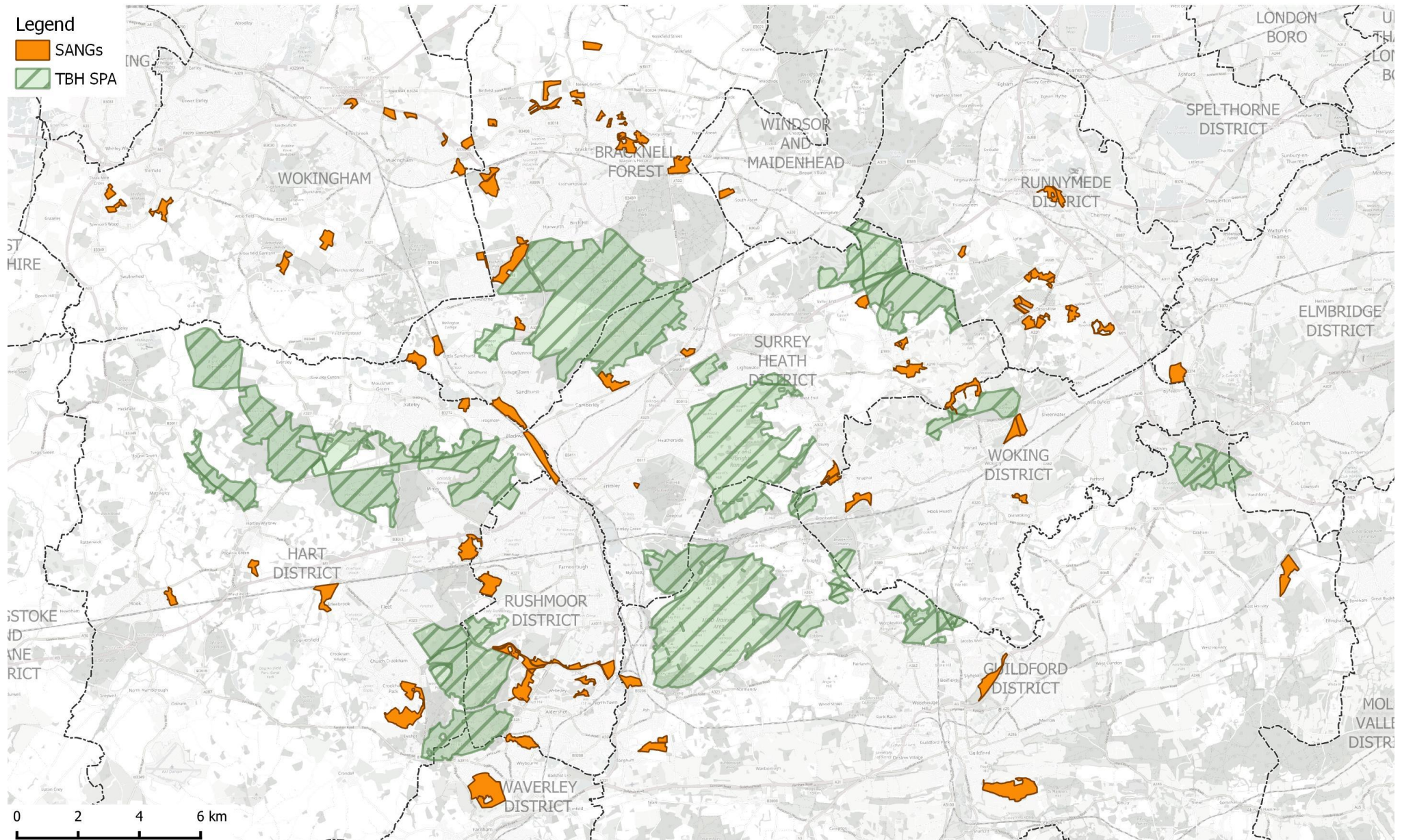
SANGs

- 1.10 Suitable Alternative Natural Greenspace (SANG) is the term given to greenspaces that are created or enhanced with the specific purpose of absorbing recreation pressure that would otherwise occur at sites designated at the protected wildlife sites. By providing alternative greenspaces that meets users' needs and provides a similar recreation experience to the SPA, some of the recreation pressure that would otherwise be inflicted on the protected wildlife sites can be diverted.
- 1.11 Creating easy to access sites, which are safe, large and interesting, are well maintained but also feel similar to the SPA is a difficult balancing act.
- 1.12 SANGs can be created as entirely new sites, that previously had no public access, or on greenspaces with existing access which can be enhanced to create a SANG. Such enhancements may include the addition of car-parks, marked routes or new planting, for example.
- 1.13 Although also established in other areas, the approach has become strongly linked to the Thames Basin Heaths and there are now some 61 blocks of SANGs established (additional sites in progress not included), as shown in Map 1. Individual SANGs may be located in close proximity to new development but may also occur more widely across the SPA. It is recognised that a SANG may not fully prevent all visits by new residents to the SPA but is however likely to take up some existing pressure, and the placement of SANGs more strategically in the context of existing housing and the SPA is relevant. By providing sites for both new residents and the existing local population, it is recognised that new residents will still exert some pressure on the SPA, but that the 'net effect' of a SANG should prevent an increase in recreation pressure on protected wildlife sites.
- 1.14 As part of SAMM there is an explicit requirement to monitor the outcome of access management. Monitoring is critical to establish whether SANG sites are functioning effectively as an alternative destination for people who also visit the SPA. It can also be used gauge visitor opinion of historic

management and inform future management decisions. Management actions which consider visitor opinion are more likely to enhance the visitor experience; encouraging more frequent visits or a longer visits are likely to result in reduced visitor pressure on the SPA. Monitoring across a number of sites, examined simultaneously can be used more strategically to examine the access management network as a whole.

- 1.15 The purpose of this report is to analyse the SANG visitor survey data from 14 SANG sites during the winter of 2018 conducted by the SAMM project team as part of their ongoing monitoring of access.

Map 1: Location of the SANGs in relation to the Thames Basin Heaths SPA.



2. Methods

Approach

- 2.1 The face-to-face visitor surveying was undertaken by Thames Basin Heaths Partnership staff and resulting visitor data were collated and provided to us. Data were in the form of the questionnaire responses from visitors and count data on the number of people seen (overall visitor numbers) in the surveying period. Visitor surveying was conducted at 14 SANG sites (see Table 1 and Map 2).
- 2.2 At each survey site a single point location was used to intercept visitors. These discrete point locations were at key access points onto sites, mostly main car parks.

Table 1: Summary of the 14 sites which were surveyed by TBHP staff. See also Map 2.

| SANG | Local Authority | Size of site (ha) |
|---------------------------------------|----------------------------|-------------------|
| Ambarrow Court | Bracknell | 13.7 |
| Chobham Water Meadows | Surrey Heath | 24.9 |
| Dilly Lane ¹ | Hart | 9.8 |
| Ether Hill and Queenswood | Runnymede | 15.9 |
| Hare Hill | Runnymede | 13.5 |
| Hawley Meadows (and Blackwater Park)* | Hart/Surrey Heath/Rushmoor | 39.0 |
| Heather Farm | Surrey Heath/ Woking | 24.9 |
| Horseshoe Lake | Bracknell | 19.4 |
| Larks Hill ² | Bracknell | 22.6 |
| Peacock Meadows | Bracknell | 35.6 |
| Popes Meadow | Bracknell | 5.3 |
| Shepherds Meadows | Bracknell/Hart | 33.8 |
| Timber Hill ³ | Runnymede | 20.7 |
| Woodham Common | Woking | 28.9 |

* Hawley Meadows and Blackwater Park hereafter referred to just Hawley Meadows

- 2.3 Surveys were conducted within standard two-hour periods of 8:00-10:00, 11:00-13:00 and 14:00-16:00. Surveying was conducted for a total of two weekday days (6 hours on each) and one weekend day (6 hours), giving 18

¹ Queen Elizabeth II Fields in GIS.

² The Cut Countryside Corridor - Cut Cluster

³ 3 blocks; Chaworth Copse, Ottershaw Chase and Timber Hill

hours of survey in total. In most cases the survey sessions at a single location were spread over several different dates. This approach is potentially ideal, compared to completing all surveying sessions on one date, as it can minimise the effect of unusual visitor patterns on a single day (e.g. visitor events, or effects of bad weather). For each survey location the surveys were all completed within the same winter period (e.g. all sessions at a location completed within January to April 2018 or September to December 2018 and not spread between these).

Tally counts

- 2.4 While stationed at a survey point the surveyor would maintain a tally of all people passing during the 2-hour slot. These counts enable us to compare sites in terms of visitor volume/footfall.
- 2.5 Counts are always considered approximate, as they are maintained while interviews are being conducted and, at busy sites in particular, it is difficult to maintain an accurate count while talking to someone. Nonetheless the totals will be largely accurate, broadly capture the level of busyness at each location and are directly comparable with each other.

Interviews

- 2.6 The interviewing of visitors was conducted by means of a face-to-face questionnaire led by the surveyor. Face-to-face interviews were carried out with a random selection of visitors, with the surveyor interviewing the first person/s they saw after completing the previous interview. When groups were encountered, only one person within each was interviewed, and no unaccompanied minors were approached.
- 2.7 Interviewees were asked several questions regarding their visiting patterns, including: their activity, visit patterns, point of origin (home postcode), reasons for using the area, other sites visited etc. The questionnaire took an average of 9 minutes to complete.
- 2.8 Surveys were conducted on tablets hosting SNAP survey software⁴, a dedicated market research software which allows surveys to be completed on tablets in the field. A GPS facility in the tablet acted as a check to ensure that the surveyor was standing in the correct place.

⁴ <https://www.snapsurveys.com/>

Data processing

- 2.9 The survey data collected were checked over by TBHP and Footprint staff as a data cleaning exercise. This included checking data gaps, recoding any categories as necessary and examining free text fields. The list of free text site names was examined by Footprint and TBHP staff to correct any mistakes, reduce the number of duplicate variations and categorise the sites into whether they were SPA, SANG or other sites.

Surveying

- 2.10 Surveys were all completed in 2018 but could be conducted early in 2018 (winter 2017/2018) or later in 2018 (winter 2018/2019). However, as noted already, each survey site was completed within the discrete early or late winter windows, such that they did not span almost a year (see dates in Table 2).
- 2.11 Surveys at the 14 locations were conducted on 70 separate dates across winter 2018. Dates ranged from early in the year, between 12/01/2018 to 19/04/2018 and again later in the year between 21/09/2018 to 21/12/2018.
- 2.12 For just one location (Hare Hill) each of the 9 surveying windows were conducted on a separate date, however most had one or two sessions completed on a surveying date. On average 6 separate dates were used.

Table 2: Summary of surveying dates.

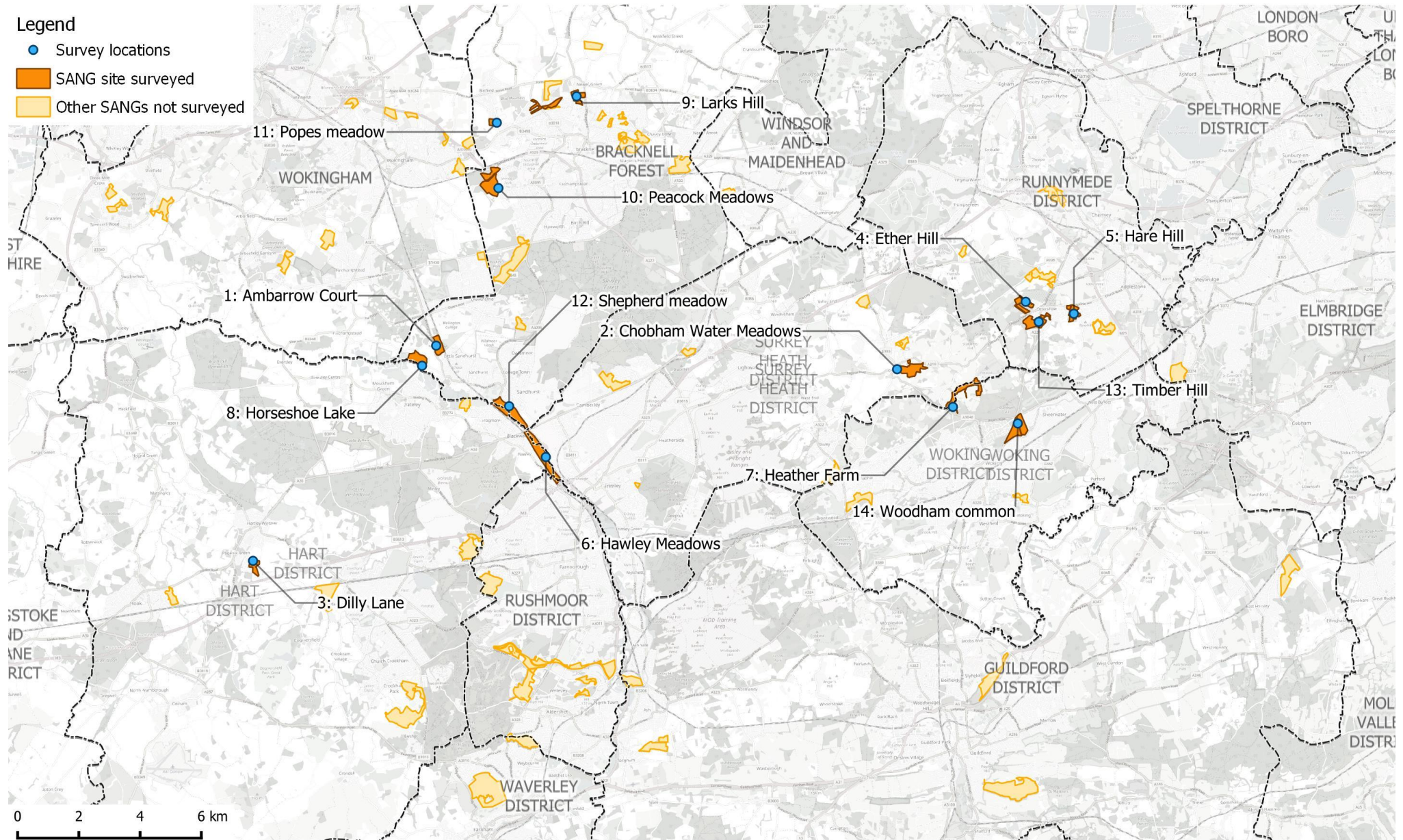
| SANG | First interviews | Last interviews | Number of individual dates |
|---------------------------|------------------|-----------------|----------------------------|
| Ambarrow Court | 22/01/2018 | 22/02/2018 | 6 |
| Chobham Water Meadows | 19/01/2018 | 19/04/2018 | 6 |
| Dilly Lane | 11/11/2018 | 21/12/2018 | 8 |
| Ether Hill and Queenswood | 26/01/2018 | 19/02/2018 | 6 |
| Hare Hill | 12/10/2018 | 17/11/2018 | 9 |
| Hawley Meadows | 08/10/2018 | 27/10/2018 | 4 |
| Heather Farm | 16/01/2018 | 24/02/2018 | 6 |
| Horseshoe Lake | 17/01/2018 | 19/02/2018 | 5 |
| Larks Hill | 27/09/2018 | 15/12/2018 | 7 |
| Peacock Meadows | 14/11/2018 | 15/12/2018 | 8 |
| Popes Meadow | 05/10/2018 | 16/11/2018 | 5 |
| Shepherds Meadows | 23/01/2018 | 11/03/2018 | 6 |
| Timber Hill | 21/09/2018 | 03/10/2018 | 6 |
| Woodham Common | 12/01/2018 | 01/02/2018 | 6 |

- 2.13 There were no data gaps in the final dataset. Unusual events during the surveying were limited to a Bracknell Forest Council event for families and a Yateley Walking group meet up occurring during a single session at Horseshoe Lake (14/02/2018, weekday session, 11:00-13:00). The exact numbers for these events were not known, could not be distinguished from other visitors and so could not be discounted from the count.

Weather

- 2.14 Surveyors had a large window for the winter and therefore a reasonable level of flexibility in surveying dates and windows. Most surveys were spread over several dates and therefore this minimised the effect of a whole day of rainfall. Surveyors were much more able to select fair weather conditions, or at least dry conditions, in which interviewees are more likely to stop to be interviewed.
- 2.15 Overall, there was no rainfall in 80% of the 2-hour surveying windows. However, cloud cover was more variable, with an average of half of the sessions overcast. Conditions were described as cold on around three fifths of sessions, mild on a third of sessions and just a few described as warm (surveying dates in late September/ early October).

Map 2: Location of the survey points used during the SANG visitor surveying.



3. Visitor survey tally results

Total footfall

3.1 In total, 2,737 people were recorded passing during the 252 hours of surveying. A summary of the total number of people passing at each survey site is given in Table 3, with values also presented as people per hour (pph). Data pooled across all survey locations provided an overall average of 10.9 people per hour passing surveyors. Values are expressed as people per hour to account for the greater surveying time on weekdays compared to weekends.

Table 3: Summary of the number of people recorded passing during tally counts, shown separately for weekdays and weekend and all values as adjusted people per hour (pph) counts. Top three and bottom three values of people per hour in each column are highlighted in red, highest, and blue, lowest.

| Location | Weekday | | Weekend | | Total | |
|-----------------------|------------|--------------------|-----------|--------------------|------------|--------------------|
| | Hours | Total people (pph) | Hours | Total people (pph) | Hours | Total people (pph) |
| Ambarrow Court | 12 | 142 (11.8) | 6 | 133 (22.2) | 18 | 275 (15.3) |
| Chobham Water Meadows | 12 | 126 (10.5) | 6 | 76 (12.7) | 18 | 202 (11.2) |
| Dilly Lane | 12 | 60 (5.0) | 6 | 39 (6.5) | 18 | 99 (5.5) |
| Ether Hill | 12 | 67 (5.6) | 6 | 50 (8.3) | 18 | 117 (6.5) |
| Hare Hill | 12 | 210 (17.5) | 6 | 65 (10.8) | 18 | 275 (15.3) |
| Hawley Meadows | 12 | 82 (6.8) | 6 | 40 (6.7) | 18 | 122 (6.8) |
| Heather Farm | 12 | 241 (20.1) | 6 | 260 (43.3) | 18 | 501 (27.8) |
| Horseshoe Lake | 12 | 134 (11.2) | 6 | 101 (16.8) | 18 | 235 (13.1) |
| Larks Hill | 12 | 73 (6.1) | 6 | 49 (8.2) | 18 | 122 (6.8) |
| Peacock Meadows | 12 | 64 (5.3) | 6 | 52 (8.7) | 18 | 116 (6.4) |
| Popes Meadow | 12 | 137 (11.4) | 6 | 140 (23.3) | 18 | 277 (15.4) |
| Shepherds Meadows | 12 | 172 (14.3) | 6 | 57 (9.5) | 18 | 229 (12.7) |
| Timber Hill | 12 | 24 (2.0) | 6 | 23 (3.8) | 18 | 47 (2.6) |
| Woodham Common | 12 | 62 (5.2) | 6 | 58 (9.7) | 18 | 120 (6.7) |
| Total | 168 | 1594 (9.5) | 84 | 1143 (13.6) | 252 | 2737 (10.9) |

- 3.2 There were marked differences between sites, with the total ranging from 501 people (27.8 people per hour) at Heather Farm, to 47 (2.6 pph) at Timber Hill. The simple totals are given in Table 3, with the overall sum and people per hour, and both shown separately for weekdays and weekend days.
- 3.3 Values for an “average day” are calculated by adjusting values to account for a weekly pattern (i.e. weekday pph is multiplied by 5, weekend pph is multiplied by 2, values summed and divided by 7 days in a week). These values are at a maximum only around 0.5 pph different from the unadjusted pph values in the final column of Table 3. The average day pph estimate is used in Figure 1. The value for the overall sum was very similar to an average day estimate.
- 3.4 Figure 2 is used to show the relationship between these average day people per hour counts and the size of the site. This did not appear to show any correlation.

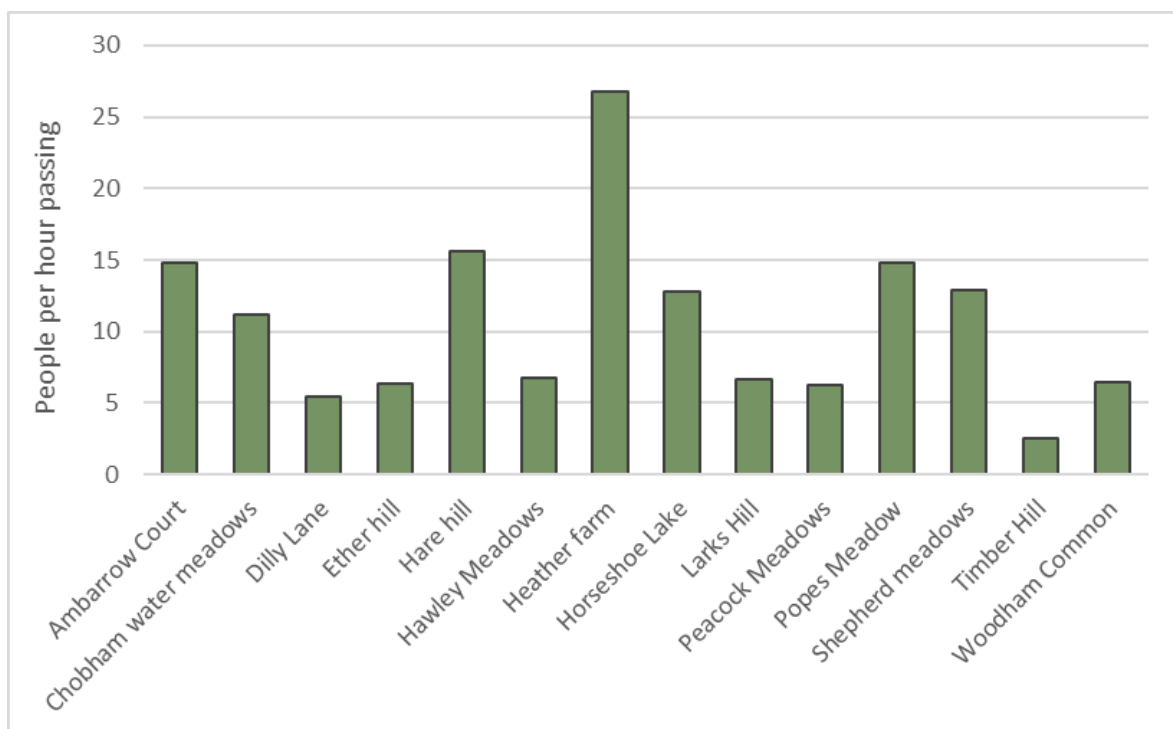


Figure 1: Number of people per hour passing at each location shown as value for an “average day”. Average day people per hour is calculated by adjusting raw values to account for a weekly pattern (weekday pph is multiplied by 5, weekend pph is multiplied by 2, values summed and divided by 7 days in a week).

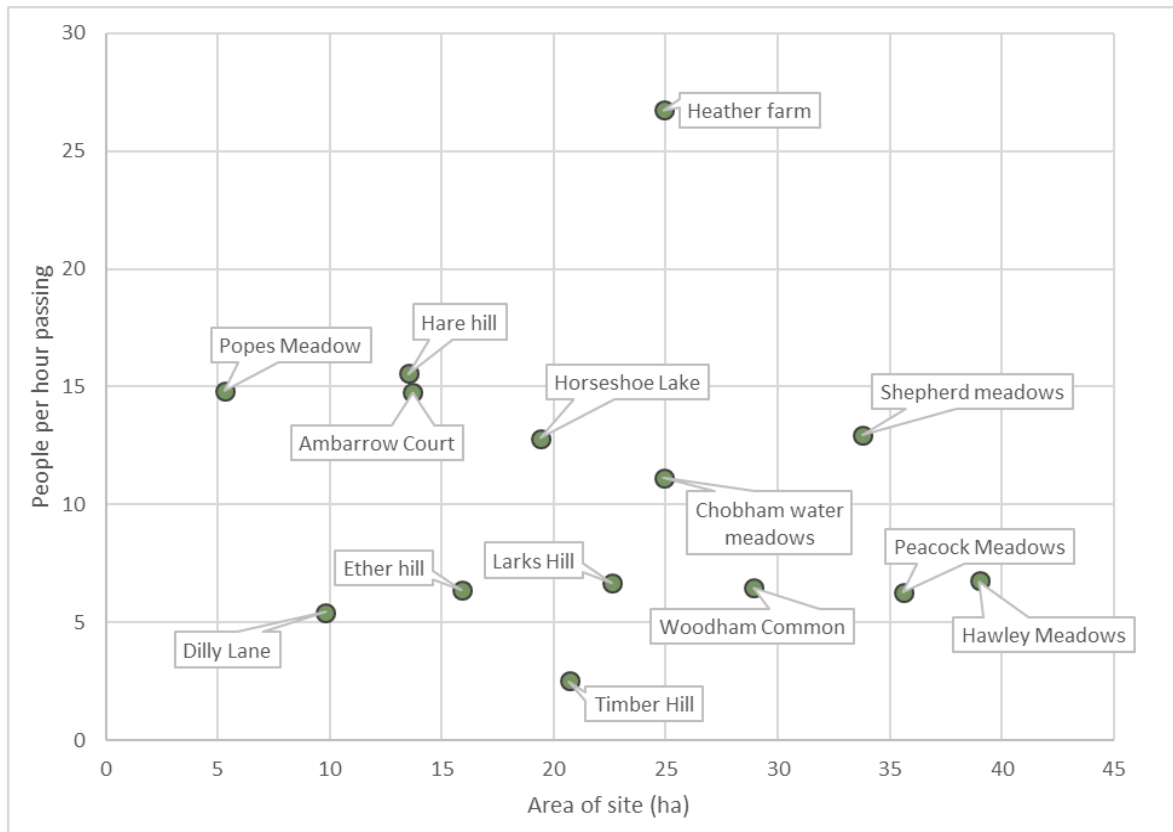


Figure 2: Scatterplot of the relationship between number of people per hour recorded in the tally count and the size of the site.

Weekday and weekend day

- 3.5 Overall, weekend values were greater than weekdays. Only three locations had visitor totals which were greater on weekdays than weekends: Hare Hill (6.7 pph less, 38% less), Shepherds Meadows (4.8 pph less, 34% less) and Hawley Meadows (0.1 pph less, 1% less). The average people per hour on weekdays and weekend days at each survey location is given in Table 3 and shown in Map 3.
- 3.6 Examination of the two hour totals for each location (9 values for each) using a statistical test for differences, a Kruskal-Wallis test, showed highly significant differences between survey locations ($H=67.87$, $df=13$, $p<0.001$), between weekdays and weekends ($H=4.58$, $df=1$, $p<0.032$), but not between the three different times of day ($H=2.67$, $df=2$, $p=0.264$).

TBH SANG Visitor Survey Analysis 2018

Map 3: Tally count data summarised as number of people per hour for each survey point and separately for weekdays and weekends.



4. Visitor survey interview results

Number of interviews

- 4.1 In total, surveyors conducted interviews with 706 people (or groups of people). Where groups of people were interviewed, only one person was targeted for interviewing. Hereafter all people or groups of people are referred to as interviewees. The group sizes are explored in a later section.

Site totals

- 4.2 Total number of interviews at each survey point ranged from 16 at Timber Hill to 112 at Heather Farm over the 18 hours of survey. The total number of people interviewed was 1,021 and this was 45% of the persons seen passing during tally counts.

Table 4: Summary of the interviewing at each location. Table shows the number of interviews conducted, total number of people in the interviews and the number of people interviewed as a percentage of all people recorded in tally counts.

| SANG | Number of interviews | Total people in interviews | % of people from tally count who were interviewed |
|-----------------------|----------------------|----------------------------|---------------------------------------------------|
| Ambarrow Court | 86 | 123 | 45 |
| Chobham water meadows | 49 | 70 | 35 |
| Dilly Lane | 39 | 51 | 52 |
| Ether hill | 32 | 44 | 38 |
| Hare hill | 42 | 59 | 21 |
| Hawley Meadows | 47 | 60 | 49 |
| Heather farm | 112 | 165 | 33 |
| Horseshoe Lake | 51 | 101 | 43 |
| Larks Hill | 44 | 60 | 49 |
| Peacock Meadows | 47 | 56 | 48 |
| Popes Meadow | 47 | 85 | 31 |
| Shepherd meadows | 56 | 86 | 38 |
| Timber Hill | 16 | 19 | 40 |
| Woodham Common | 38 | 42 | 35 |
| Total | 706 | 1021 | 45 |

Group composition

- 4.3 At the end of questionnaire, surveyors recorded a number of observations about the participating interviewees. From this data we can conclude interviewees were usually people on site on their own – 66% of interviewees were lone persons. The largest interviewed group size was 18 people, but overall the average group size of the interviewees was 1.5 people per group. On average the interviewed group consisted of 0.1 minors per group, 0.3 over 65s per group and 0.9 dogs per group.

Table 5: Group composition of interviewees. Final three columns of averaged values are coloured from red (high) to blue (low) values.

| SANG | Number of interviewees | Number of people in groups | Number of dogs | Number of minors | Averaged people per group | Averaged dogs per group | Averaged minors per group |
|-----------------------|------------------------|----------------------------|----------------|------------------|---------------------------|-------------------------|---------------------------|
| Ambarrow Court | 86 | 123 | 67 | 3 | 1.43 | 0.78 | 0.02 |
| Chobham water meadows | 49 | 70 | 44 | 2 | 1.43 | 0.90 | 0.03 |
| Dilly Lane | 39 | 51 | 37 | 4 | 1.31 | 0.95 | 0.08 |
| Ether hill | 32 | 44 | 29 | 2 | 1.38 | 0.91 | 0.05 |
| Hare hill | 42 | 59 | 34 | 6 | 1.40 | 0.81 | 0.10 |
| Hawley Meadows | 47 | 60 | 47 | 3 | 1.28 | 1.00 | 0.05 |
| Heather farm | 112 | 165 | 95 | 10 | 1.47 | 0.85 | 0.06 |
| Horseshoe Lake | 51 | 101 | 50 | 14 | 1.98 | 0.98 | 0.14 |
| Larks Hill | 44 | 60 | 43 | 4 | 1.36 | 0.98 | 0.07 |
| Peacock Meadows | 47 | 56 | 47 | 3 | 1.19 | 1.00 | 0.05 |
| Popes Meadow | 47 | 85 | 35 | 26 | 1.81 | 0.74 | 0.31 |
| Shepherd meadows | 56 | 86 | 50 | 6 | 1.54 | 0.89 | 0.07 |
| Timber Hill | 16 | 19 | 8 | | 1.19 | 0.50 | 0.00 |
| Woodham Common | 38 | 42 | 38 | 1 | 1.11 | 1.00 | 0.02 |
| Total | 706 | 1021 | 624 | 84 | 1.45 | 0.88 | 0.08 |

- 4.4 The number of interviewees and constituting people in interviewed groups for each survey point are shown in Table 5. From Table 5 the largest average group size was at Horseshoe Lake, with 2.0 people per group, compared to 1.1 people per group at Woodham Common. The number of dogs per group was highest at Hawley Meadows, Peacock Meadows and Woodham Common with an average of 1 dog per group, compared to 0.5 dogs per group at

Timber Hill. The number of minors per group showed less variation but ranged from 0.3 per group (Popes Meadow) to 0 at Timber Hill.

- 4.5 From the interviews, it would appear group sizes were larger at weekends and with more minors, but fewer dogs in groups. On weekdays an average interviewed group consisted of 1.3 people per group, 0.9 dogs per group and 0.1 minors per group. On weekends this was 1.6 people per group, 0.8 dogs per group and 0.2 minors per group.
- 4.6 A summary of survey points group sizes for people, dogs and minors on weekdays and weekend days is given in Figure 3.

T B H S A N G Visitor Survey Analysis 2018

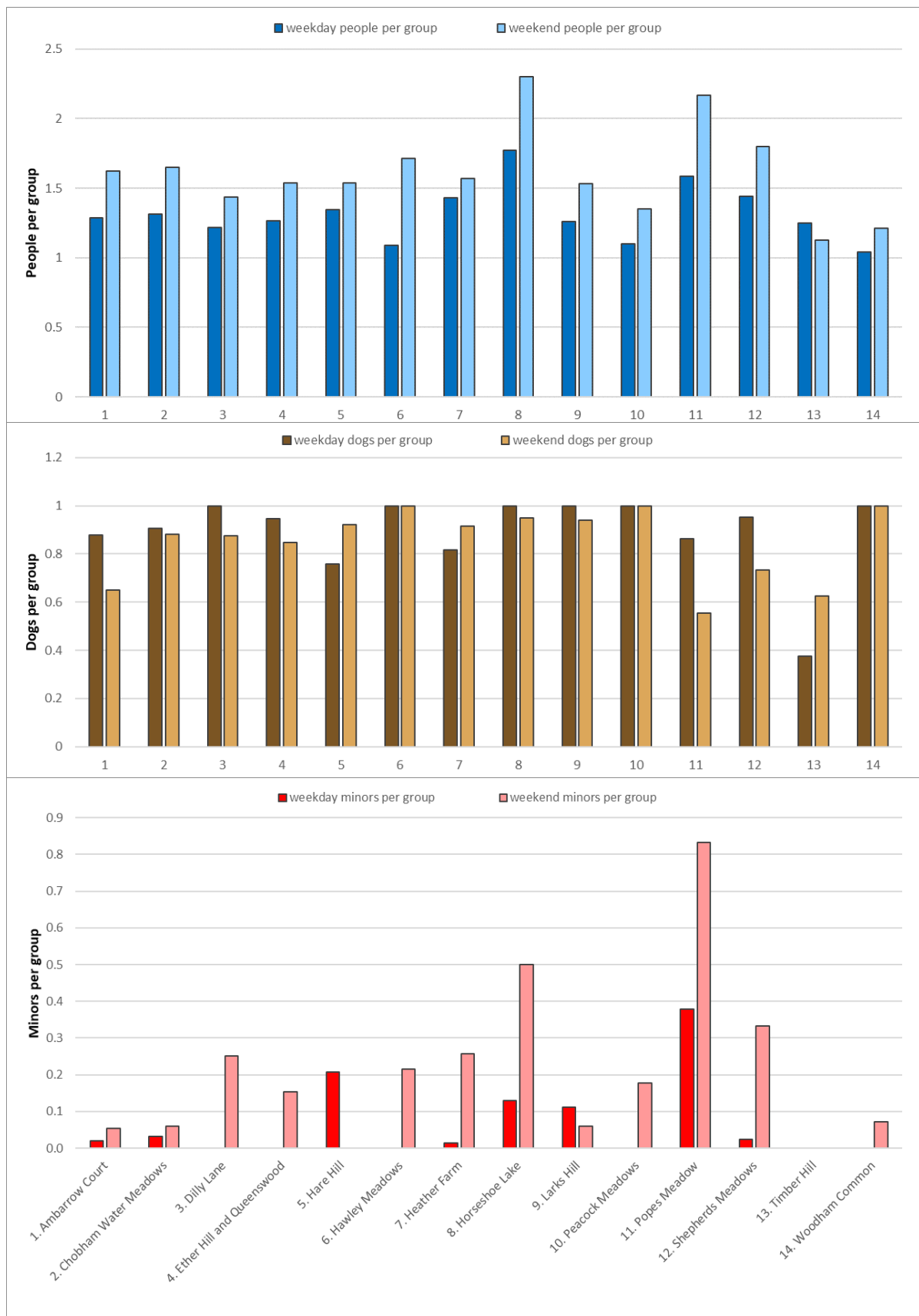


Figure 3: Summary of interviewee group composition; average people, dogs and minors per group at each survey site, shown separately for weekdays and weekends. Note differing scales.

Activity

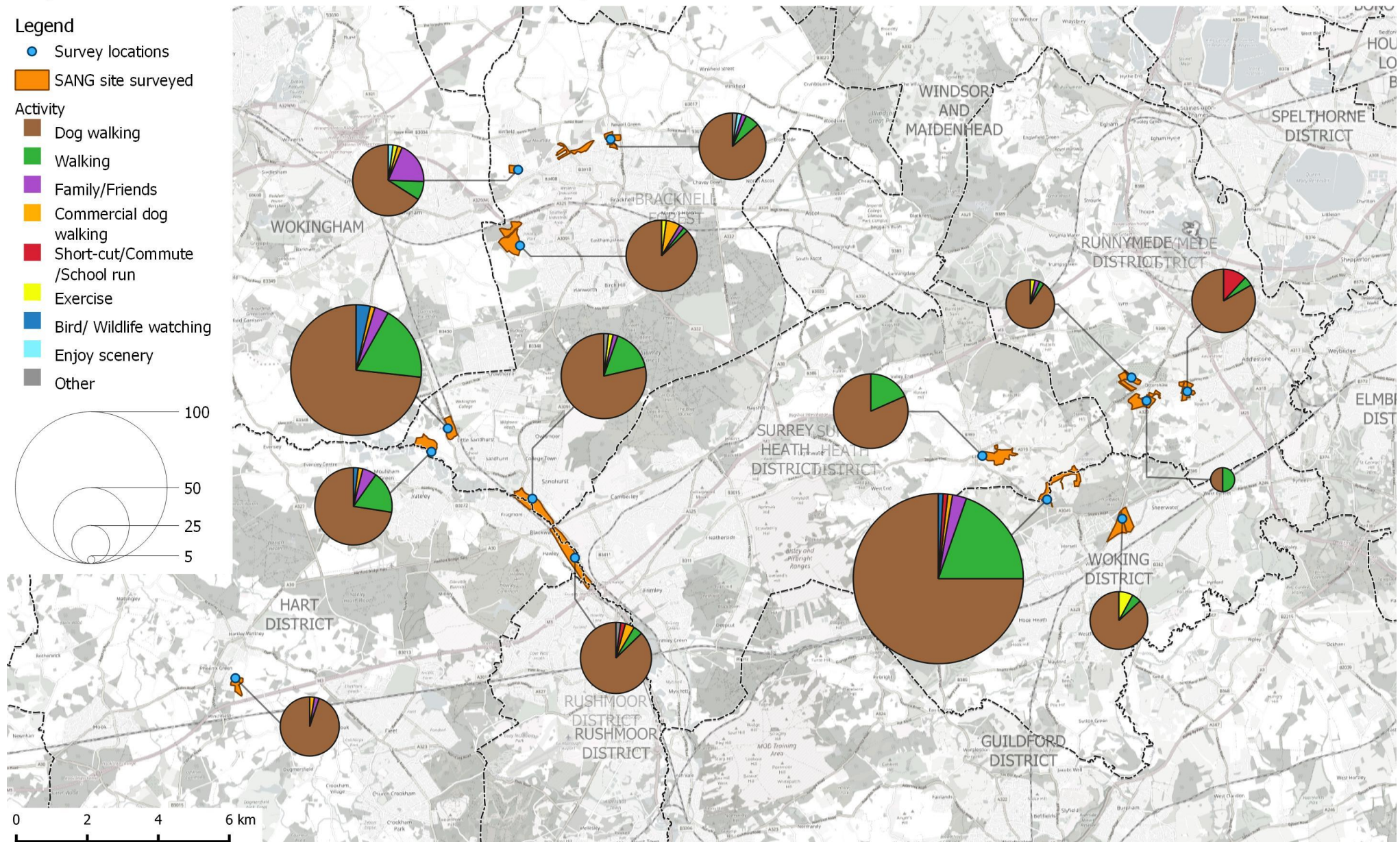
- 4.7 The first question interviewees were asked concerned their main activity on the site. The vast majority of interviewees were dog walkers (561 interviewees, 79%), followed by walkers (88, 12%) and outing with the family (21, 3%). All other activities were conducted by 36 interviewees, but each activity category amounted to less than 1% of interviewees overall. Other interesting groups were; commercial dog walkers (10 interviewees, 1%), short-cut/ commute/ school run (7, 1%) and cyclists who consisted of just 1 interviewee (0.1%).
- 4.8 There were clear differences between sites, which can be best examined using the percentage of interviewees, shown for each site in Table 6 (and Map 4). The main interviewee activity, dog walking, ranged from 50% (Timber Hill) to 95% (Dilly Lane). At Timber Hill the remaining 50% of interviewees were all walkers, which was the highest recorded percentage – however this site had the lowest overall number of interviewees. Other sites with more than 15% walkers were; Heather Farm (20%), Ambarrow Court (19%), Chobham water meadows (18%), Horseshoe Lake (18%) and Shepherd Meadows (16%).
- 4.9 Other important activities (those highlighted in bold in Table 6) were: 19% of interviewees at Popes Meadow on an outing with the family (9 interviewees), 12% of interviewees at Hare Hill on a short cut/ commute/ school run (5 interviewees) and 8% of interviewees at Woodham Common jogging/running (3 interviewees).
- 4.10 The activities are also presented in Map 4, although activity categories have been simplified. A new category for “exercise”, running/jogging and cycling are combined and a new category of “friends/family” pooled those on an outing with the family or meeting up with friends.

Table 6: Summary of the number of interviewees conducting each activity. Values in brackets show the percentage for each site (row). Values in bold indicate the activities for which largest values were recorded and amount to 90% of interviewees.

| | Dog walking | Walking | Outing with family | Commercial dog walking | Short-cut/Commute/School run | Jogging/ Running/ Power walking | Bird/ Wildlife watching | Other | Enjoy scenery | Meet up with friends | Cycling/ Mountain Biking |
|-----------------------|-----------------|----------------|--------------------|------------------------|------------------------------|---------------------------------|-------------------------|-------|---------------|----------------------|--------------------------|
| Ambarrow Court | 63 (73) | 16 (19) | 3 (3) | 1 (1) | | | 3 (3) | | | | |
| Chobham water meadows | 40 (82) | 9 (18) | | | | | | | | | |
| Dilly Lane | 37 (95) | | 1 (3) | 1 (3) | | | | | | | |
| Ether hill | 29 (91) | 1 (3) | 1 (3) | | | 1 (3) | | | | | |
| Hare hill | 35 (83) | 2 (5) | | | 5 (12) | | | | | | |
| Hawley Meadows | 41 (87) | 2 (4) | | 2 (4) | 1 (2) | | | 1 (2) | | | |
| Heather farm | 84 (75) | 22 (20) | 1 (1) | 1 (1) | 1 (1) | | 1 (1) | | | 2 (2) | |
| Horseshoe Lake | 37 (73) | 9 (18) | 3 (6) | 1 (2) | | | 1 (2) | | | | |
| Larks Hill | 38 (86) | 3 (7) | 1 (2) | | | | | 1 (2) | 1 (2) | | |
| Peacock Meadows | 41 (87) | 1 (2) | 1 (2) | 3 (6) | | 1 (2) | | | | | |
| Popes Meadow | 31 (66) | 4 (9) | 9 (19) | 1 (2) | | 1 (2) | | | 1 (2) | | |
| Shepherd meadows | 44 (79) | 9 (16) | 1 (2) | | | | | 1 (2) | | | 1 (2) |
| Timber Hill | 8 (50) | 8 (50) | | | | | | | | | |
| Woodham Common | 33 (87) | 2 (5) | | | | 3 (8) | | | | | |
| Total | 561 (79) | 88 (12) | 21 (3) | 10 (1) | 7 (1) | 6 (1) | 5 (1) | 3 (0) | 2 (0) | 2 (0) | 1 (0) |

TBH SANG Visitor Survey Analysis 2018

Map 4: Interviewee activities shown as pie charts sized by the number of interviewees at each location.



- 4.11 Interviewees who were on site for a specific activity often had a usual group profile. These group profiles are summarised in Table 7. The number of people per group was highest for those interviewees who were conducting family outings, with an average group size of 3 people per group, compared to just 1 for commercial dog walkers and cyclists (but the latter had only one interviewee). Dogs were present in most groups, 82% of interviewed groups (compared to the 79% who stated their main activity as dog walking), with an average of 1.2 dogs per group. For commercial dog walkers this was 3.9 dogs per group and dog walkers 1.3. Number of minors per group was highest for those on an outing with the family, with 1.2 minors per group.

Table 7: Summary of interviewee group profile for each activity. Data table sorted by the number of interviewees

| Activity | Total interviewees | Total people (average people per group) | Total dogs (average dogs per group) | Total minors (average minors per group) |
|---------------------------------|--------------------|-----------------------------------------|-------------------------------------|-----------------------------------------|
| Dog walking | 561 | 729 (1.3) | 751 (1.3) | 47 (0.1) |
| Walking | 88 | 180 (2.0) | 10 (0.1) | 8 (0.1) |
| Outing with family | 21 | 62 (3.0) | 6 (0.3) | 25 (1.2) |
| Commercial dog walking | 10 | 10 (1.0) | 39 (3.9) | |
| Short-cut/Commute/School run | 7 | 11 (1.6) | | 3 (0.4) |
| Jogging/ Running/ Power walking | 6 | 7 (1.2) | 1 (0.2) | |
| Bird/ Wildlife watching | 5 | 10 (2.0) | 1 (0.2) | 1 (0.2) |
| Other | 3 | 4 (1.3) | 1 (0.3) | |
| Enjoy scenery | 2 | 3 (1.5) | | |
| Meet up with friends | 2 | 4 (2.0) | 4 (2.0) | |
| Cycling/ Mountain Biking | 1 | 1 (1.0) | | |
| Total | 706 | 1021 (1.4) | 813 (1.2) | 84 (0.1) |

- 4.12 Differences between weekdays and weekends were very slight. Comparison of simple values in Table 8 shows the largest difference in the percentage of interviewees between weekdays and weekends was in the dog walking (1.5%), but this was relatively small as a proportion, changing from 81.0% to 79.5% of interviewees.
- 4.13 However, differences between these values could instead be examined as a relative percentage change. Key differences from this were: on weekends the percentage of interviewees bird watching was 3.2 times greater on weekends

than on weekdays and outing with the family 1.9 times greater and on weekdays, commercial dog walking, meeting up with friends and short cut/ commute/ school run were all roughly 1.6 times greater on weekdays than weekends.

Table 8: Number of interviewees and percentage on weekdays and weekend days. Note double the survey effort on weekdays compared to weekends. Data table sorted by the number of interviewees.

| Activity | Total interviewees | Total interviewees | | Percentage of interviewees | |
|---------------------------------|--------------------|--------------------|------------|----------------------------|------------|
| | | Weekday | Weekend | Weekday | Weekend |
| Dog walking | 561 | 366 | 195 | 81.0 | 79.5 |
| Walking | 88 | 54 | 34 | 11.9 | 12.5 |
| Outing with family | 21 | 7 | 14 | 1.5 | 3.0 |
| Commercial dog walking | 10 | 10 | | 2.2 | 1.4 |
| Short-cut/Commute/School run | 7 | 7 | | 1.5 | 1.0 |
| Jogging/ Running/ Power walking | 6 | 3 | 3 | 0.7 | 0.8 |
| Bird/ Wildlife watching | 5 | 1 | 4 | 0.2 | 0.7 |
| Other | 3 | 2 | 1 | 0.4 | 0.4 |
| Meet up with friends | 2 | 2 | | 0.4 | 0.3 |
| Enjoy scenery | 2 | | 2 | 0.0 | 0.3 |
| Cycling/ Mountain Biking | 1 | | 1 | 0.0 | 0.1 |
| Total | 706 | 452 | 254 | 100 | 100 |

Visit patterns

4.14 The surveyors also asked questions concerning the interviewees' visit patterns. Interviewees were asked to consider the duration of their visit and also the frequency of visits to the current site. Responses given in these two questions were categorised into classes by the surveyor (classes given in the questionnaire in the Appendices and used in Figure 4 and Figure 5).

Visit duration

4.15 Interviewees were asked to consider how long they had been (or were planning to be, if only just arrived) on the site for their visit. Categories of visit duration, with reference to the approximate time in minutes on site, were used to group the interviewees' responses. In addition, from the

frequencies reported by each respondent we calculated an approximate averaged visit duration. This was estimated using the number of interviewees in each category, multiplied by an approximate duration in terms of minutes⁵, summed for each category, and then divided by the overall number of interviewees. These simple, but highly approximate estimates, serve to give an indication of duration and allow comparisons to easily be made with a single value.

- 4.16 Overall interviewees mostly visited for between 30 minutes and 1 hour (404 interviewees, 57%), followed by less than 30 minutes (176, 25%) and 1 to 2 hours (112, 16%). An overall averaged estimate of time spend on site from these values was therefore around 50 minutes. There was very little difference between weekday and weekend, with an overall average estimate of 48 minutes on weekdays and 49 on weekends.
- 4.17 The proportion of interviewees for the visit duration categories at each site is shown in Figure 4. It was clear that visit duration was longest at Heather Farm and Horseshoe Lake. Horseshoe Lake had smallest proportion of interviewees visiting for less than 30 mins (just 2%) and Heather Farm the largest proportion of interviewees visiting for more than 1 hour (48%). Heather Farm and Horseshoe Lake had the longest estimates of around 60-70 minutes. This compared to 28 minutes at Timber Hill, where 81% were visiting for less than 30 minutes. All other estimates were between 34 and 54 minutes (see Figure 4).

⁵ 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, more than 3 hours = 210 minutes.

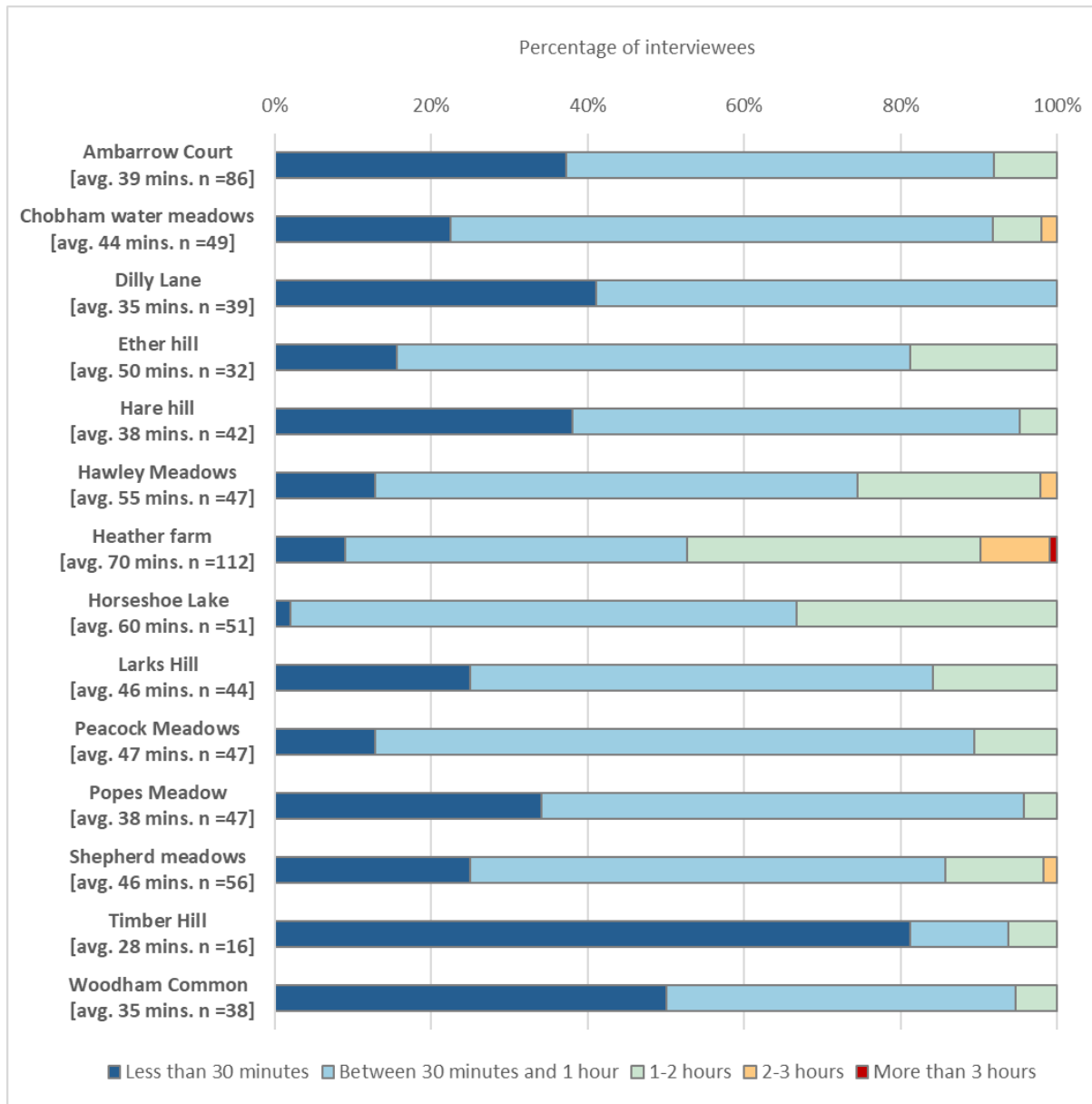


Figure 4: Summary of visit duration on site for each survey site. Values below site names give the estimate of visit duration and the sample size.

Visit frequency

4.18 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

averaging to indicate how often people visited, based on an annual number of visits⁶.

- 4.19 Across all sites the two most commonly given response by interviewees was 1 to 3 times a week (239 interviewees, 34%), followed by daily (145, 21%). A highly simplistic estimate for the number of visits per year by an average visitor was 189.
- 4.20 There were some clear differences between weekdays and weekends. On weekdays 34% of interviewees were daily or more than once a day visitors compared to 24% on weekends. At weekends roughly double the percentage of interviewees were first time visitors (8% compared to 4% on weekdays) and interviewees who came less than once a month (11% compared to 6%). The rough estimates of number of visits per year suggest around 202 visits per year by interviewees on weekdays, and 159 visits per year by interviewees on weekends.
- 4.21 There were some clear differences between sites, as shown in Map 5. Two stand out sites with very infrequent visitors were Heather Farm and Horseshoe Lake. At both locations there were no interviewees who visited more than once a day (present at all but Hawley Meadows too), and both had the highest percentage of interviewees who visited less than once a month. Overall, we would estimate around 100-115 visits per year for a typical visitor here. The two sites with the highest estimated number of visits per year were at Dilly Lane and Hare Hill (320-400 visits per year). These two locations had the highest percentage of interviewees visiting at least daily (daily or more than once a day pooled); 64% at Dilly Lane and 79% at Hare Hill. Other than these four sites, all other locations had an estimate of around 150 and 230 visits per year.
- 4.22 Figure 6 briefly examines the relationship between the average estimated number of visits per year and the approximate size of the site. This appears to show a negative relationship, with smaller sites visited more regularly, however this relationship was not significant (Pearson's $r = -0.302$, $p = 0.294$).

⁶ "More than once a day" = 550 visits per year, "Daily" = 350 visits per year, "Most days (180+ visits)" = 200 visits, "1 to 3 times a week (40-180 visits)" = 110 visits, "2 to 3 times per month (15-40 visits)" = 27.5 visits, "Once a month (6-15 visits)" = 10.5 visits, "Less than once a month (2-5 visits)" = 3 visits.

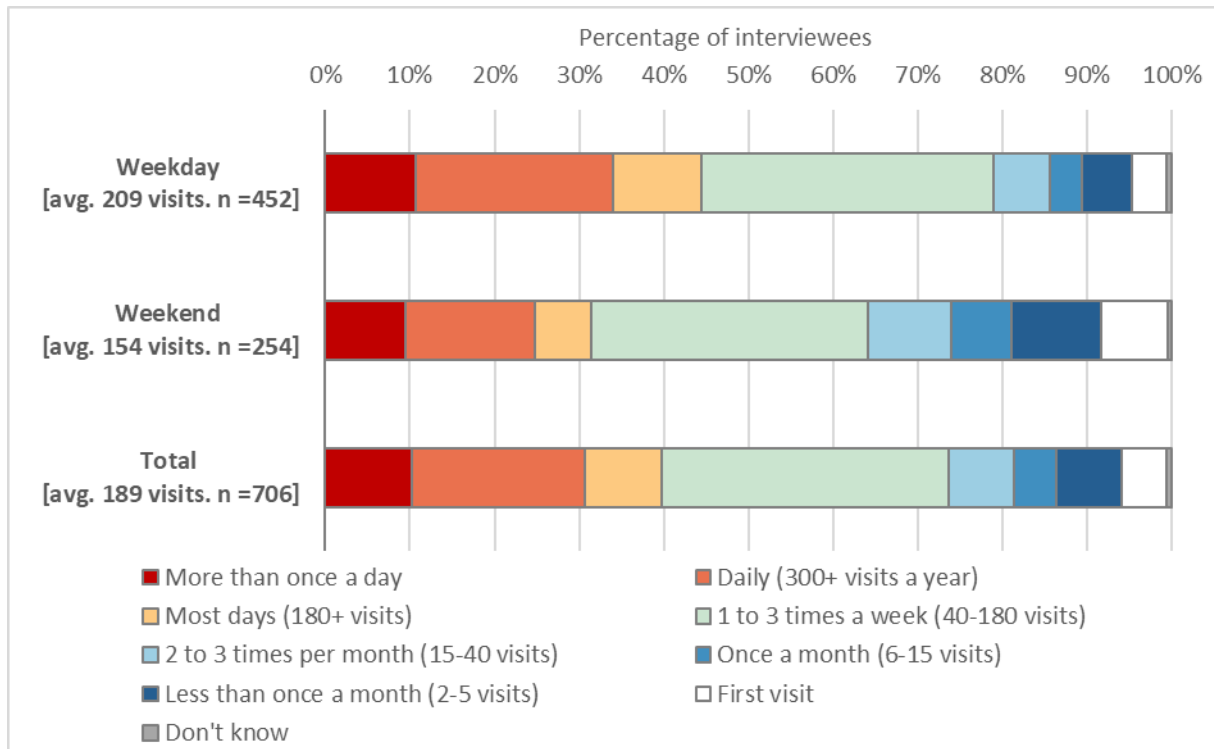


Figure 5: Summary of visit frequency from interviewees, shown separately for interviewees on weekdays, weekends and in total. Values below category names give the estimate of visit frequency (visits per year) and the sample size.

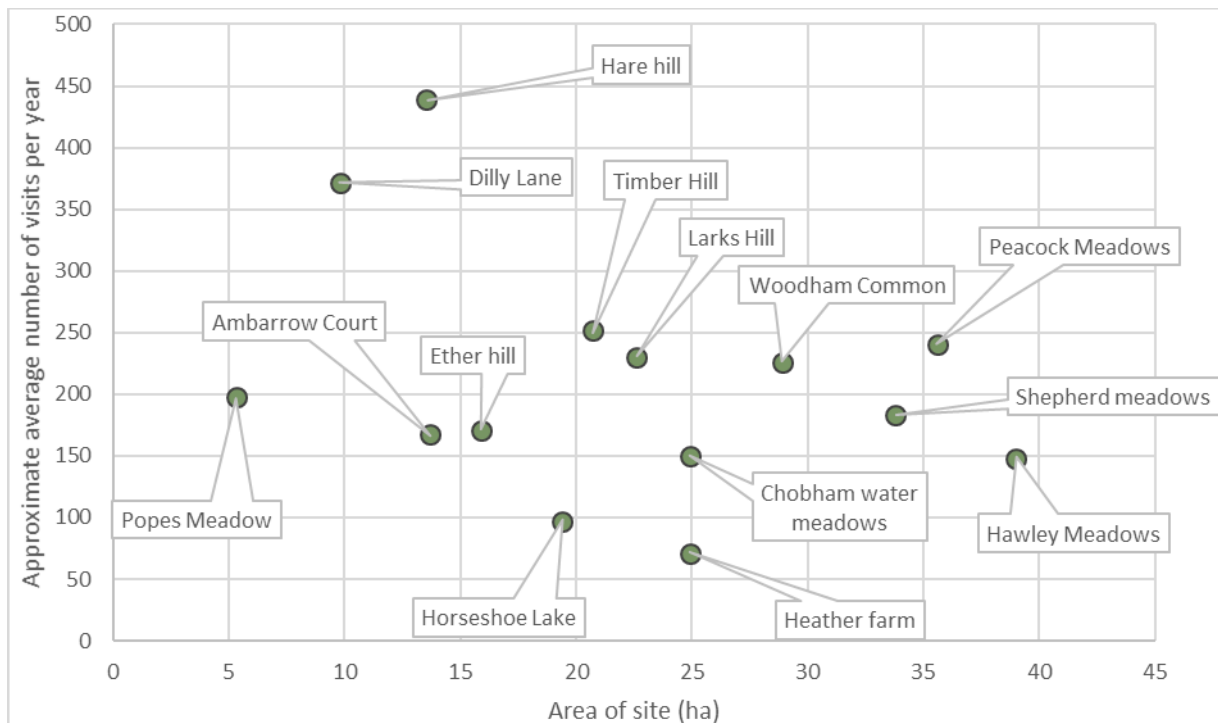


Figure 6: Scatterplot of the approximate average number of visits made per year for each site compared to the area of site (hectares).

Map 5: Interviewee visit frequency shown as pie charts sized by the number of interviewees at each location.



Length of visitation

- 4.23 Interviewees were asked to state how long they had been visiting the site where they were interviewed. Responses were categorised to set groupings and estimate values assigned for each category ⁷. Across all interviewees the largest category was between 1 and 5 years, which accounted for 38% of interviewees (270 interviewees). Other large categories were less than 1 year (15%, 109), and between 6 and 10 years (15%, 105), such that roughly 53% had been visiting for less than 5 years and 68% less than 10 years.
- 4.24 Differences were briefly examined between sites, as shown in Figure 7. The percentage visiting for less than 5 years was greatest at Dilly Lane (95%), Heather Farm (91%) and Peacock Meadows (83%), and lowest at Timber Hill (26%), Ambarrow Court (27%) and Hare Hill (28%). Those who had been visiting the SANG for less than a year was overall 15% of interviewees, but could vary from 6% at Horseshoe Lake, and 7% at Ambarrow Court, Hare Hill and Shepherds Meadow, to 33% at Heather Farm, 24% at Chobham Water Meadows and 21% at Hawley Meadows. Some very simplistic averaging produces estimates for an average visitor, shown in Figure 7, which are broadly in line with these and provide an indicative ranking.

⁷ Categories of; less than 1 year -0.5 years, between 1 and 5 years - 3 years, between 6 and 10 years -8 years, between 11 and 15 years - 13 years, between 16 and 20 years -18 years, 20 years and over -25 years and first visit - excluded.

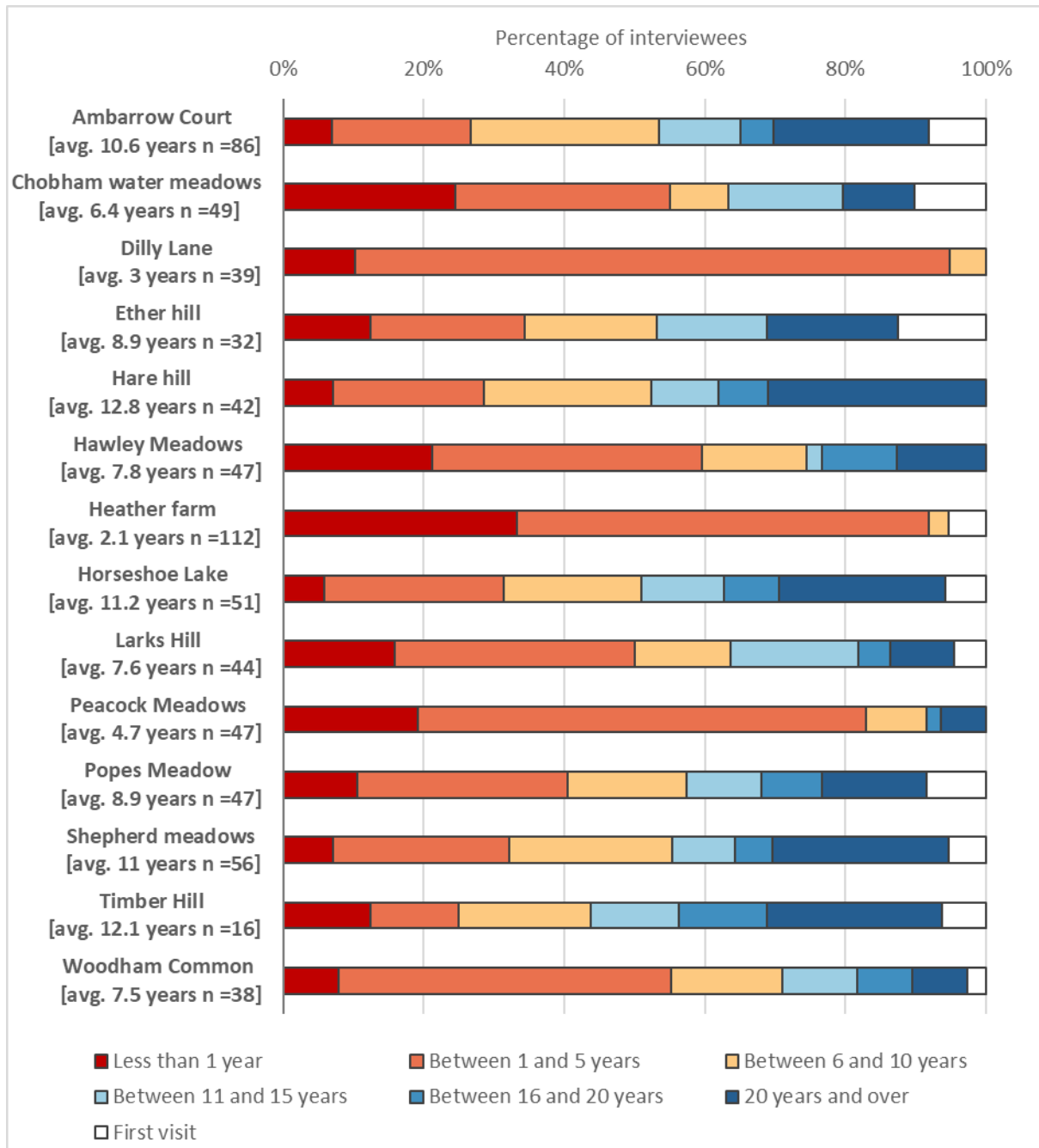


Figure 7: Summary of length of time visiting the site. Values below category names give the estimate of number of years visiting and the sample size.

Time of visit

4.25 The questionnaire also sought to understand if people tended to visit more at any particular time of day, or time of year. Interviewees were asked if they visited more at weekends or weekdays. Roughly 5% of interviewees (33) stated they were on their first visit to the site, therefore unable to comment,

but the majority, 60%, suggested they visited equally all year round. For the remaining 35% of interviewees (245 interviewees), they showed a slightly greater preference for weekdays; 65% suggested they visit more on weekdays than weekends, compared to the 35% who visit more weekends (however these calculations have not accounted for the greater survey effort on weekdays).

- 4.26 Interviewees were then asked if they visited more at a particular time of year, with responses categorised to four seasons. The vast majority of the interviewees, 83% (584 interviewees), suggested they visited equally all year round. Forty-two interviewees (6%) suggested they were on a first visit or did not know. Of the remaining 80 interviewees who selected one, or more than one, seasons (average 1.4 seasons selected per interviewee), roughly half of the responses were for summer (51%), followed by spring and autumn (both 17%) and winter (14%).
- 4.27 The responses seemed fairly consistent across survey sites, although the percentage of interviewees who visited equally all year round could range from 69% (Chobham water meadows) to 94% (Peacock meadows). Some locations appeared more popular at particular times of year: at Hawley Meadows and Horseshoe Lake, 21% and 22% of interviewees selected summer as one of the seasons in which they visited more – both open sites with water.

Transport

- 4.28 Overall, three-quarters of interviewees (528, 75%) arrived on site by car and a quarter on foot (173, 25%), with remaining 5 interviewees (0.7%) arriving by bicycle or other (combinations of transport). The single interviewee arriving on site by bicycle was the one interviewee whose activity was cycling.
- 4.29 The mode of transport used by interviewees could vary markedly between site, with the percentage arriving by car ranging from 7% (Hare Hill) to 96% at Horseshoe Lake. The individual sites are examined in Map 6 and are also shown in Figure 7. Figure 7 examines the relationship between the size of the site and the level of access by car. It would appear that often more interviewees by car are present at larger sites, however this relationship was borderline not significant (Pearson's = 0.531, $p=0.050$).
- 4.30 The prevailing modes of transport used will influence the visitor origins, as discussed when examining postcode patterns.

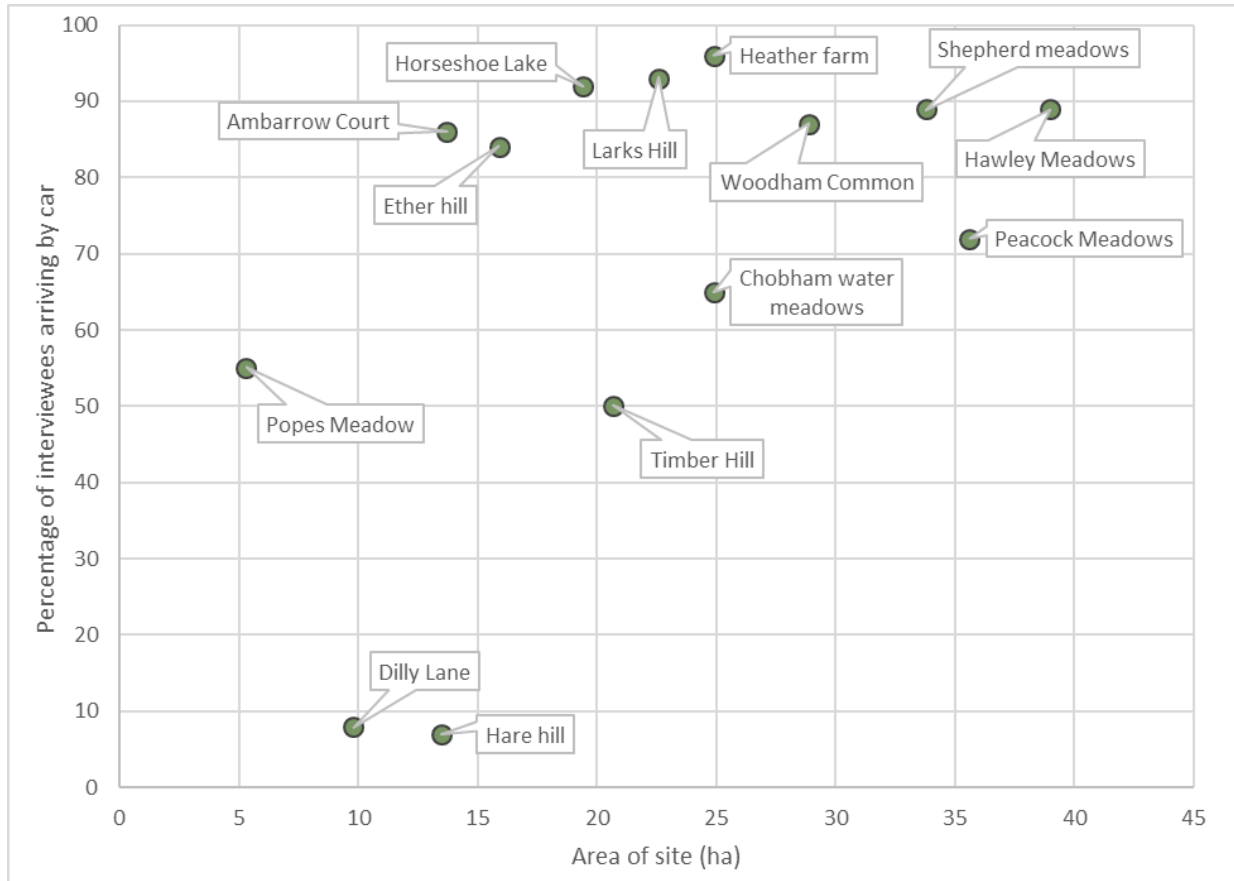


Figure 8: Scatterplot of the percentage of interviewees arriving by car compared to the area of the site (hectares).

Map 6: Interviewees mode of transport shown as pie charts sized by the number of interviewees at each location.



Postcodes

- 4.31 An important part of the interviewing process was obtaining a home postcode for each interviewee. However, four interviewees refused to give a postcode and a further 20 postcodes were incomplete (e.g. GU22) or could not be georeferenced (i.e. not matched to any in our database). This provided a total of 628 georeferenced interviewee postcodes for analysis, an overall return rate of 97%.
- 4.32 Postcodes were generally very localised, with only 14 of the 682 postcodes outside of the 11 local authorities which make up the TBHP. It was notable that no interviewees were recorded from Waverley Borough, but 3 interviewees from Spelthorne Borough. All 11 remaining interviewees were from 11 different other local authorities across the country. The percentage of interviewees for each site originating from the different local authorities is summarised in Table 9.
- 4.33 For each interviewee postcode a linear distance (Euclidean) back to the survey point was measured. Distances recorded ranged from 83 m (three interviewee postcodes from Popes Meadow) to 274 km (a single interviewee from Hebden Bridge) – see Map 7. An overall average distance across all sites was considered to be 1.7 km (using median) or 3.8 km (using mean). Averages from the median value were considered more robust, as the mean values are more influenced by outlier values, especially when examining individual sites (see mean and medians in Figure 9). The median is also interesting as it represents the distance of the nearest 50% of interviewees. Another useful statistic calculated was the third quartile (Q3 or 75th percentile), which accounts for the nearest 75% of interviewees. Overall this value was 3.7 km.

Map 7: Distribution of all postcodes (inset map) and locally around the Thames Basin Heaths with postcodes categorised by site.

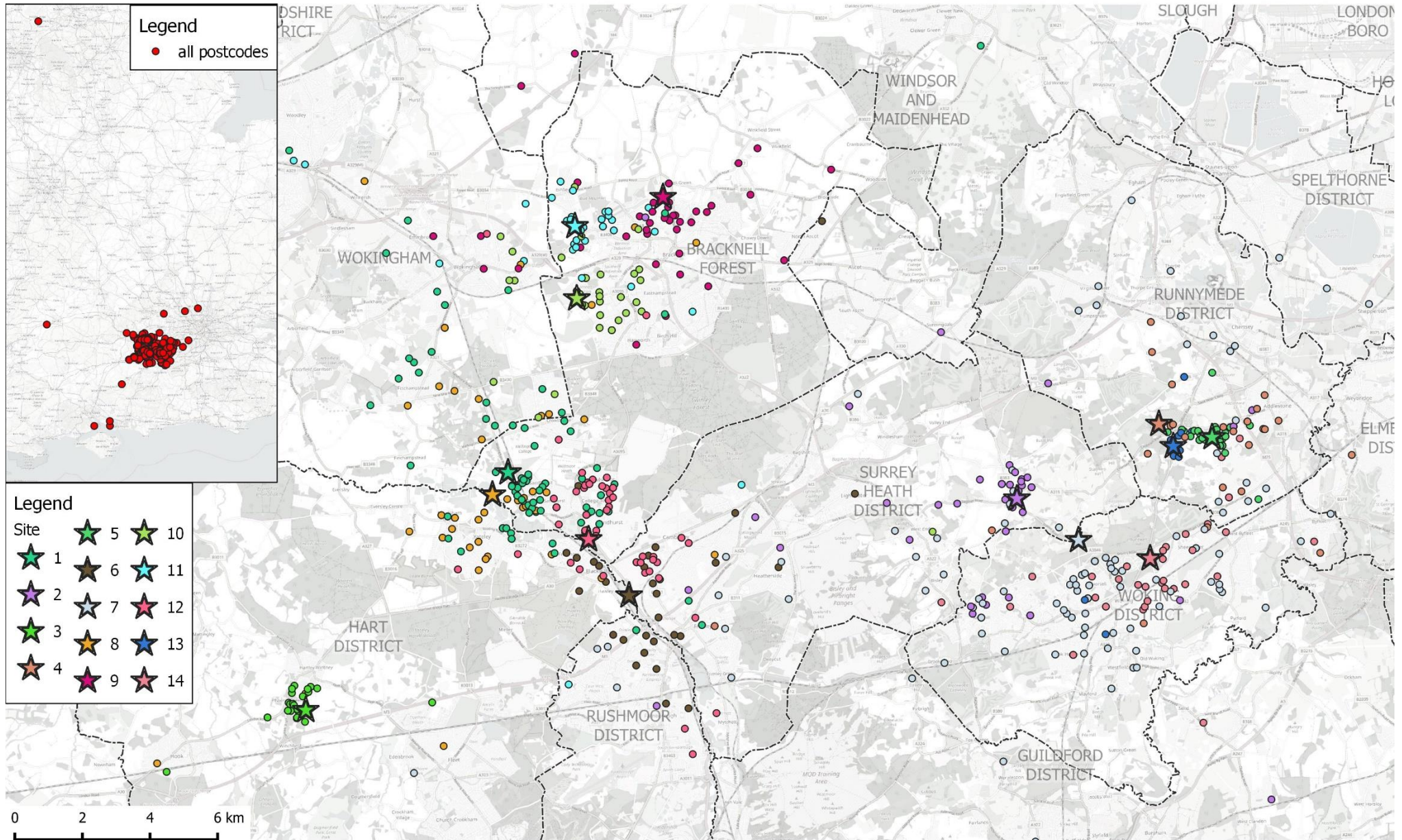


Table 9: Summary of interviewee postcodes for each local authority. Values first show the number of interviewees (n) and all subsequent values are percentages. Percentages in bold indicate local authorities which compose highest values up to 75% or more of all interviewees.

| Site | n | Bracknell Forest Borough | Woking District | Runnymede District | Hart District | Surrey Heath District | Wokingham Borough | Rushmoor District | Guildford District | Windsor and Maidenhead Borough | Elmbridge District | Spelthorne District | other |
|-----------------------|-----|--------------------------|-----------------|--------------------|---------------|-----------------------|-------------------|-------------------|--------------------|--------------------------------|--------------------|---------------------|-------|
| Ambarrow Court | 86 | 56 | | | 12 | 2 | 26 | 1 | | 1 | | | 2 |
| Chobham water meadows | 47 | 2 | 21 | 9 | | 55 | | 2 | 4 | 2 | | | 4 |
| Dilly Lane | 38 | | | | 100 | | | | | | | | |
| Ether hill | 29 | | 10 | 79 | | 7 | | | | | 3 | | |
| Hare hill | 40 | | | 100 | | | | | | | | | |
| Hawley Meadows | 46 | 20 | | | 15 | 33 | | 24 | 2 | 2 | | | 4 |
| Heather farm | 109 | | 54 | 17 | 1 | 17 | | 3 | 5 | | 2 | 3 | |
| Horseshoe Lake | 51 | 33 | | | 41 | 2 | 22 | | | | | | 2 |
| Larks Hill | 42 | 86 | | | | | 10 | | | 5 | | | |
| Peacock Meadows | 42 | 76 | | | 2 | 2 | 17 | | | | | | 2 |
| Popes Meadow | 46 | 83 | | | | 2 | 11 | 2 | | | | | 2 |
| Shepherd meadows | 56 | 61 | | | 9 | 23 | 2 | 5 | | | | | |
| Timber hill | 15 | | 13 | 73 | | | | | | | | | 13 |
| Woodham Common | 35 | | 80 | 11 | | 3 | | | 6 | | | | |
| Total | 682 | 32 | 15 | 15 | 12 | 12 | 7 | 3 | 1 | 1 | 0 | 0 | 2 |

4.35 One of the key factors affecting distance travelled was the mode of transport used, which has already been noted to vary considerably between sites. Of the interviewees arriving by car, half lived within a 2.4 km radius (median) and three-quarters within 4.4 km (Q3 value). For those who arrived on foot, half lived within a 0.4 km radius and three-quarters within 0.8 km.

4.36 For individual sites the distances are visualised in Figure 9, with supporting values in Table 10. The Q3 values examined for individual sites, suggest a largest draw or catchment for Heather Farm (75% of interviewees lived within 7.1 km) and Chobham water meadows (6.3 km). This compared to just 0.6 km at Hare Hill and 0.7 km at Dilly Lane.

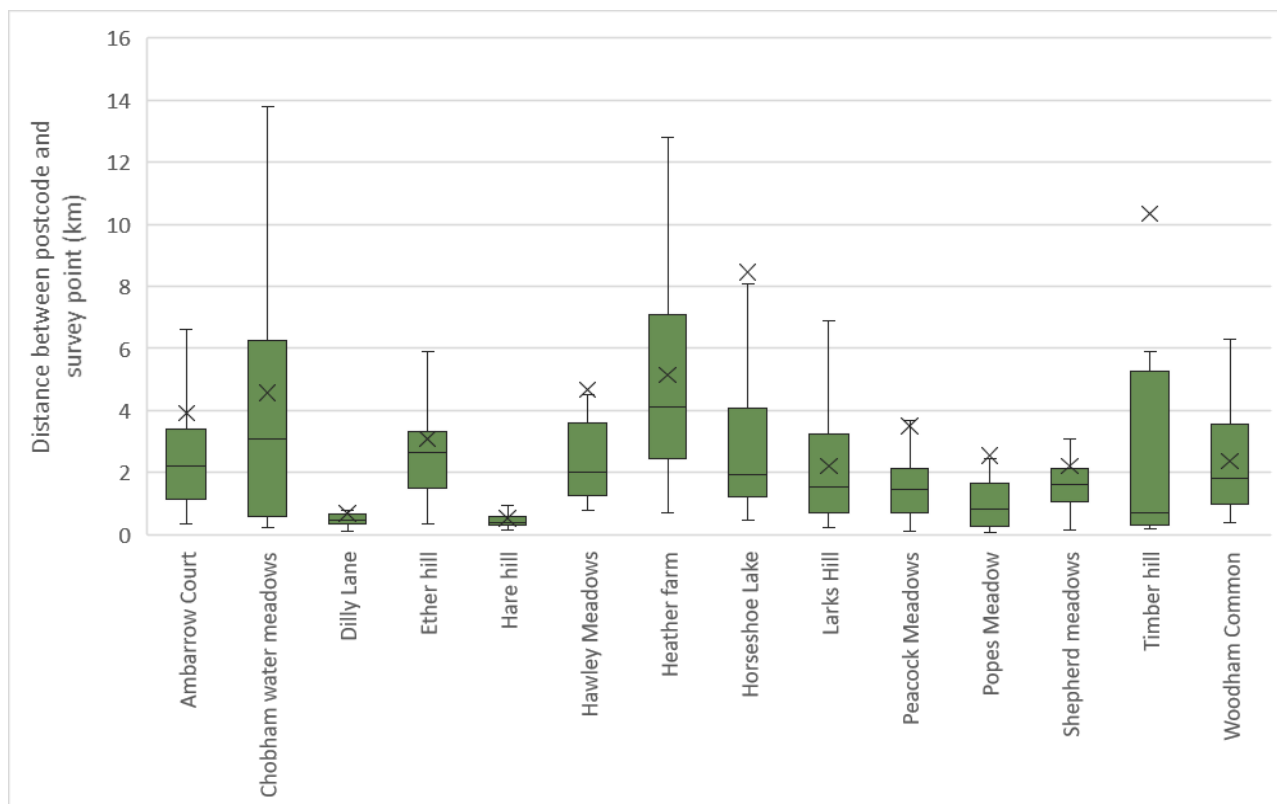


Figure 9: Boxplot of the range of distances between interviewee postcodes and survey points recorded at each survey site. Boxes show the range between Q1 (25%) and Q3 (75%), cross line within this indicates the median. Whiskers indicate the range of values, excluding outliers. The cross indicates the mean.

Table 10: Summary statistics for distance between interviewees home postcode and survey point.

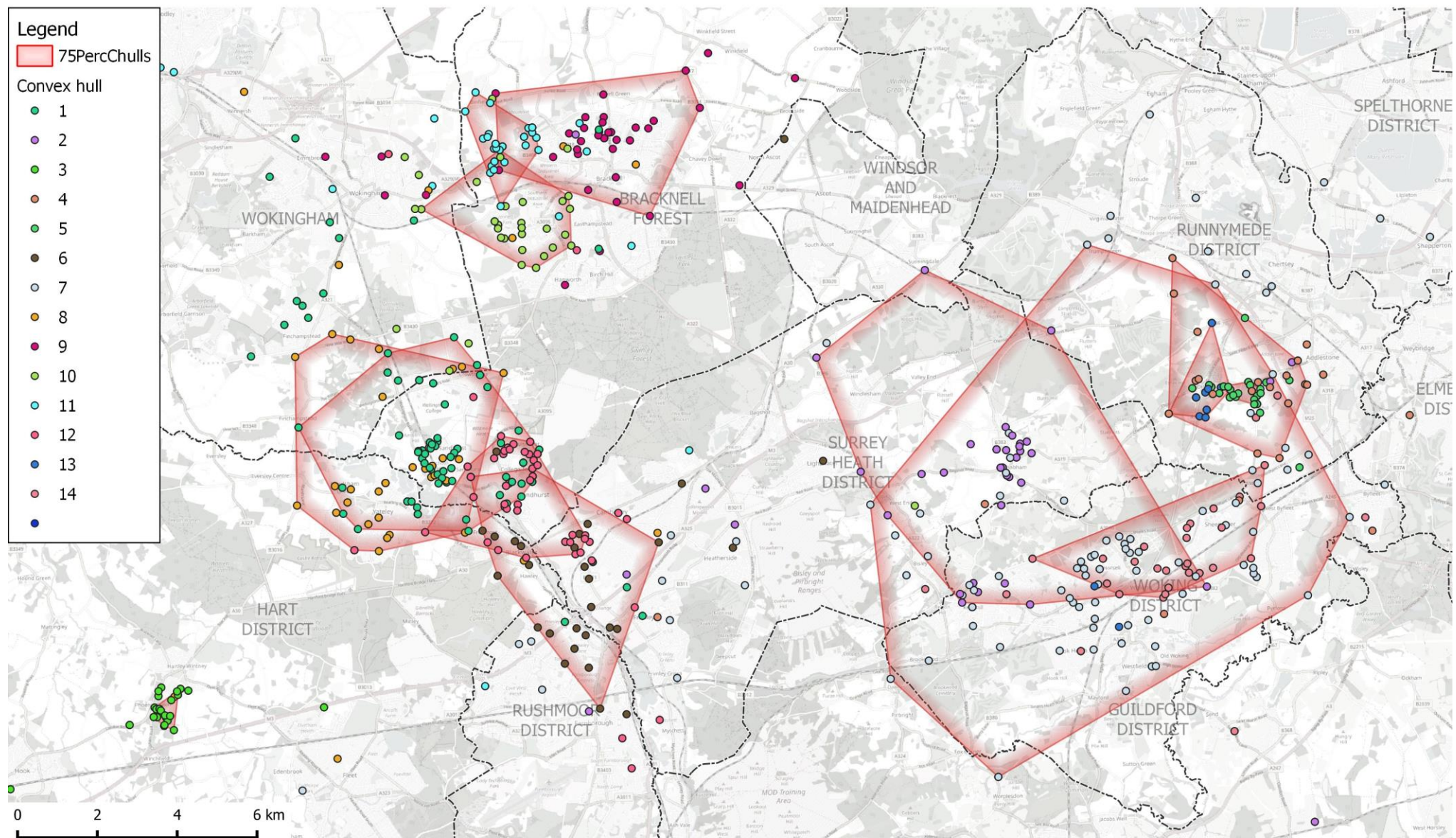
| Site | N | Mean \pm SE | Median | Q3 | Min - Max |
|-----------------------|------------|---------------------------------|------------|------------|--------------------|
| Ambarrow Court | 86 | 3.9 \pm 0.9 | 2.2 | 3.4 | 0.4 - 72.3 |
| Chobham water meadows | 47 | 4.6 \pm 0.9 | 3.1 | 6.3 | 0.2 - 28.8 |
| Dilly Lane | 38 | 0.7 \pm 0.1 | 0.5 | 0.7 | 0.1 - 4.5 |
| Ether hill | 29 | 3.1 \pm 0.5 | 2.7 | 3.3 | 0.4 - 14.4 |
| Hare hill | 40 | 0.5 \pm 0.1 | 0.4 | 0.6 | 0.2 - 2.3 |
| Hawley Meadows | 46 | 4.7 \pm 1.5 | 2.0 | 3.6 | 0.8 - 64.7 |
| Heather farm | 109 | 5.2 \pm 0.4 | 4.1 | 7.1 | 0.7 - 20.8 |
| Horseshoe Lake | 51 | 8.5 \pm 5.3 | 1.9 | 4.1 | 0.5 - 274.2 |
| Larks Hill | 42 | 2.2 \pm 0.3 | 1.5 | 3.2 | 0.2 - 6.9 |
| Peacock Meadows | 42 | 3.5 \pm 1.6 | 1.5 | 2.1 | 0.1 - 68.6 |
| Popes Meadow | 46 | 2.6 \pm 0.9 | 0.8 | 1.7 | 0.1 - 39.4 |
| Shepherd meadows | 56 | 2.2 \pm 0.3 | 1.6 | 2.1 | 0.2 - 10.2 |
| Timber hill | 15 | 10.3 \pm 6.7 | 0.7 | 5.2 | 0.2 - 97.3 |
| Woodham Common | 35 | 2.4 \pm 0.3 | 1.8 | 3.6 | 0.4 - 9.5 |
| Total | 682 | 3.8 \pm 0.5 | 1.7 | 3.7 | 0.1 - 274.2 |

- 4.37 The area covered by the 75% nearest postcodes at each survey site are shown in Map 8. The distance and overall area covered by these catchments varied markedly by site, as shown in Table 11. To help illustrate how different these are we have also calculated the 95% percentile radius and convex hull areas in Table 11. These become less robust at sites with small sample sizes – see Timber Hill – but help indicate the wide range of catchments observed.
- 4.38 The final column in Table 11 is a calculation informed by Voronoi cells which partitions the Thames Basin Heaths landscape into polygons based on their distance to the nearest point. Using the survey points we can divide the landscape into polygons based on the nearest survey point, on an assumption that visitors would visit their nearest site. For each site we calculated the number of interviewee postcodes which were located within their respective Voronoi and calculated this as a percentage of all interviewees. This gives an indication of the proportion of interviewees who were visiting their nearest site, out of those surveyed.
- 4.39 At sites such as Heather Farm, only 28% of interviewees were located within the Heather Farm Voronoi and therefore visiting their nearest site, followed by Ambarrow Court (42%) and Horseshoe Lake (43%). This calculation is an indication, although it is often clear that those on the edges perform better, where there is less choice (Dilly Lane and Hare Hill) compared to those in close proximity to others (e.g. Ether Hill and Heather Farm).

Table 11: Summary of the catchment radius (meters) for individual sites, calculated using the 75th and 90th percentile of linear postcodes distances from interviewee data. Catchment area is calculated from convex hulls around the 75 and 90 percent nearest postcodes (see map 8).

| Site | Size of site (ha) | Catchment radius (m) : | | Catchment convex hull area (km ²): | | Percentage in voronoi (within 15km) |
|-----------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------------|-----------------------------|-------------------------------------|
| | | 75 th percentile | 90 th percentile | 75 th percentile | 90 th percentile | |
| Ambarrow Court | 13.7 | 3.4 | 7.3 | 20.0 | 67.7 | 42 |
| Chobham water meadows | 24.9 | 6.3 | 12.4 | 47.9 | 143.4 | 64 |
| Dilly Lane | 9.8 | 0.7 | 1.2 | 0.3 | 0.6 | 100 |
| Ether hill | 15.9 | 3.3 | 5.9 | 10.5 | 34.4 | 17 |
| Hare hill | 13.5 | 0.6 | 1.1 | 0.3 | 0.7 | 90 |
| Hawley Meadows | 39.0 | 3.6 | 8.5 | 14.9 | 35.0 | 63 |
| Heather farm | 24.9 | 7.1 | 10.8 | 99.0 | 205.0 | 28 |
| Horseshoe Lake | 19.4 | 4.1 | 8.7 | 22.2 | 78.6 | 43 |
| Larks Hill | 22.6 | 3.2 | 5.2 | 13.1 | 41.9 | 74 |
| Peacock Meadows | 35.6 | 2.1 | 3.6 | 6.3 | 16.1 | 67 |
| Popes Meadow | 5.3 | 1.7 | 8.3 | 2.7 | 15.2 | 83 |
| Shepherd Meadows | 33.8 | 2.1 | 6.3 | 7.4 | 19.8 | 57 |
| Timber hill | 20.7 | 5.2 | 63.0 | 1.8 | 7.4 | 53 |
| Woodham Common | 28.9 | 3.6 | 5.0 | 9.5 | 22.9 | 63 |

Map 8: Distribution of postcodes around the Thames Basin Heaths, postcodes categorised by site and using convex hulls to indicate the area covered by the 75% nearest.



- 4.40 The distance interviewees have to travel to sites will have bearing on a range of other factors about their visit. One of the main factors will be how often they chose to visit to the site. Figure 10 shows how these two relate using the categories of visit frequency and distance between home postcode and the site. For daily visitors, around half lived within 1.0 km (median value), in comparison to who visited 1-3 times a week, for which the value was 2.0 km, and for those who visited once a month this was 3.5 km.

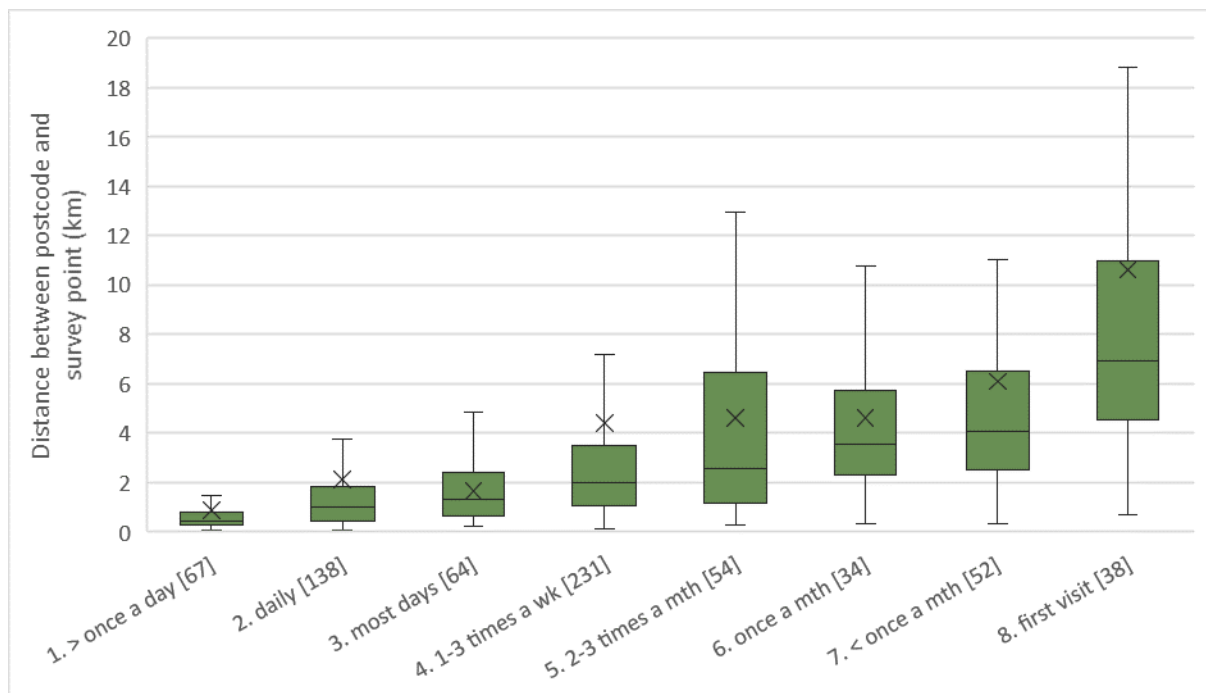


Figure 10: Boxplots to show the interviewee distances between home postcodes and sites for each category of visit frequency (as used in Figure 5). Values in brackets indicate the sample size for each group. Median values for these were; 1. More than daily visitors, 0.4 km; 2. Daily visitors, 1.0 km; 3. Most days, 1.3 km; 4. 1-3 times a week, 2.0 km; 5. 2-3 times a week, 2.5 km; 6. Once a month, 3.5 km; 7. Less than once a month, 4.1 km; 8. First visit, 6.9 km.

Reasons for visiting

- 4.41 Interviewees were asked why they chose to visit this site rather than another local site. Responses were categorised by surveyors into 28 set groups, with a category for "other" and a free text field to record these responses. The questionnaire allowed for multiple responses and interviewees gave on average 2.3 responses.

- 4.42 Across all survey sites, the most common reason for visiting was that the site was close to home, 245 responses, just 15% of all the multiple responses, but amounting to 35% of interviewees (see Figure 11). This was followed by two factors relating to dogs: the fact that visitors could let the dog off lead (133 interviewees, 19%) and the site being good for dogs (130, 18%). The next most common was well maintained paths (113, 16%) and the other category (99, 14%). The other category included a wide range of responses: with the two most common being for variety (9 interviewees) and circular walks (8 interviewees). The 6th and 7th highest ranked were for large open areas and water features, and all these factors mentioned are key elements in SANG design guidance.
- 4.43 The pattern observed could differ slightly between sites (see Table 12), although at eight of the fourteen sites, the fact the site was close to home was still the main reason. Those sites where close to home was less important, we would assume have larger draws. At Heather Farm, close to home ranked 5th and the 75th percentile distance to interviewees home was the largest 7.1 km (see Table 11). However, this was not always the case; Chobham water meadows, which had the next highest 75th percentile distance, had 33% of interviewees providing close to home as one of their reason, becoming the top ranked reason at this site.

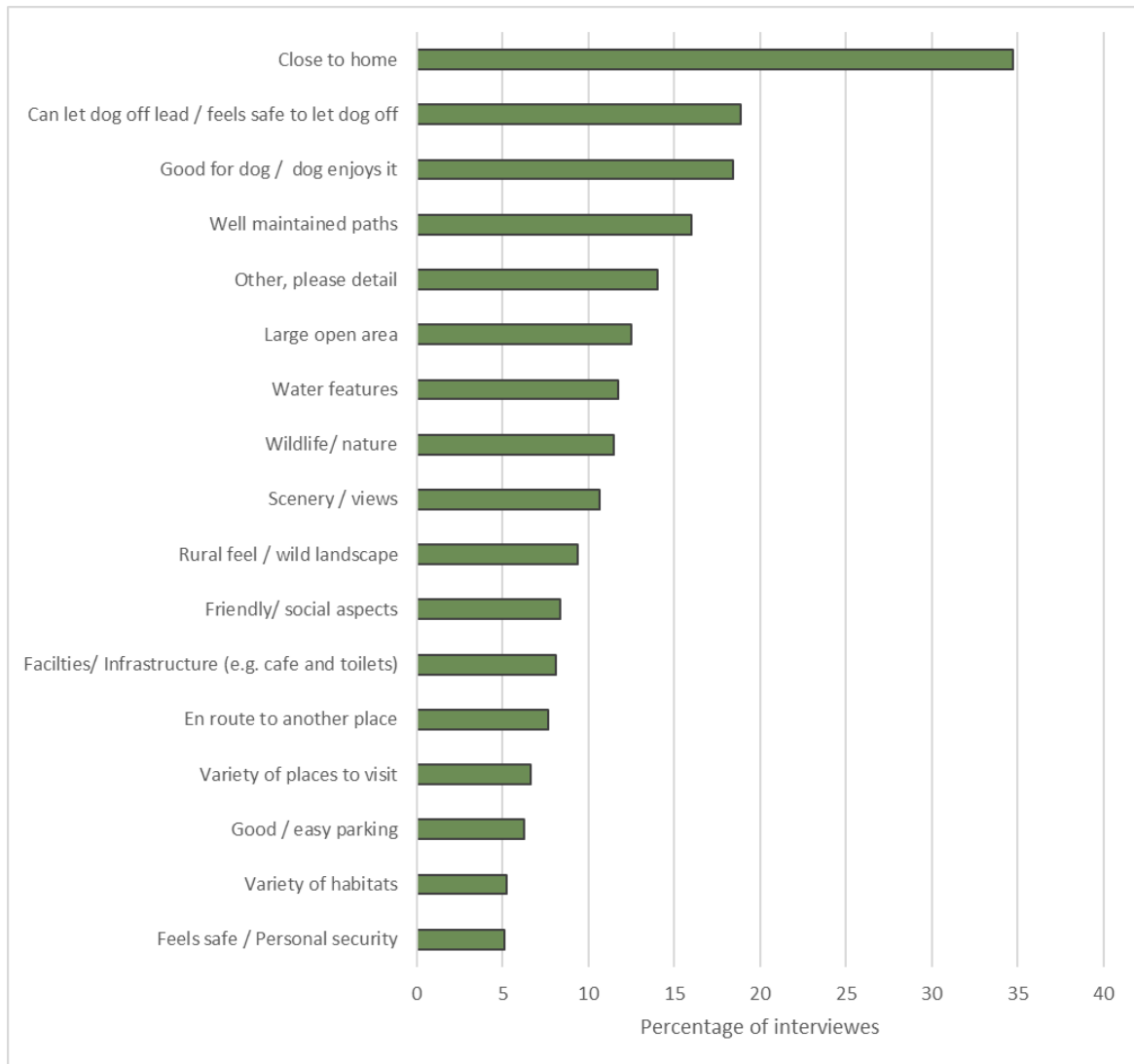


Figure 11: Summary of reasons why interviewees chose to visit this site. Note interviewees could give multiple reasons. Categories given by less than 5% of interviewees are not shown.

Table 12: Top 5 ranked reasons why interviewees chose to visit the current site interviewed at. Values in brackets indicate the percentage of interviewees (note interviewees could give multiple responses).

| | 1st | 2nd | 3rd | 4th | 5th |
|-----------------------|-------------------------------------------------|---------------------------------------------------------|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|
| Ambarrow Court | Close to home (40) | Well maintained paths (26) | Good for dog / dog enjoys it (23) | Wildlife/ nature (22) | Can let dog off lead / safe to let dog off (10) |
| Chobham water meadows | Close to home (33) | Other, please detail (22) | Can let dog off lead / safe to let dog off (16) | Not many people (14) | Well maintained paths (12) |
| Dilly Lane | Close to home (64) | Can let dog off lead / safe to let dog off (62) | Friendly/ social aspects (28) | Other (23) | Large open area (23) |
| Ether hill | Close to home (31) | Variety of habitats (31) | Good for dog / dog enjoys it (28) | Large open area (22) | Other (16) |
| Hare hill | Close to home (62) | En route to another place (17) | Other (12) | Limited time/ convenience (12) | Good for dog / dog enjoys it (10) |
| Hawley Meadows | Water features (47) | Can let dog off lead / safe to let dog off (40) | Other (34) | Close to home (28) | Wildlife/ nature (28) |
| Heather farm | Good for dog / dog enjoys it (32) | Facilities/ Infrastructure (e.g. cafe and toilets) (32) | Well maintained paths (24) | Can let dog off lead / safe to let dog off (21) | Close to home (17) |
| Horseshoe Lake | Water features (65) | Close to home (45) | Scenery / views (45) | Wildlife/ nature (39) | Good for dog / dog enjoys it (25) |
| Larks Hill | Can let dog off lead / safe to let dog off (30) | Close to home (23) | Good for dog / dog enjoys it (18) | Well maintained paths (16) | Good / easy parking (9) |
| Peacock Meadows | Large open area (55) | Can let dog off lead / safe to let dog off (36) | Close to home (21) | Good for dog / dog enjoys it (17) | Friendly/ social aspects (15) |
| Popes Meadow | Close to home (45) | Other (30) | Well maintained paths (21) | Water features (19) | Large open area (9) |
| Shepherd meadows | Close to home (36) | Good for dog / dog enjoys it (27) | Well maintained paths (20) | Scenery / views (14) | Water features (13) |
| Timber Hill | Close to home (38) | En route to another place (38) | Nearest greenspace (31) | Good for dog / dog enjoys it (13) | Rural feel / wild landscape (13) |
| Woodham Common | Well maintained paths (39) | Other (34) | Close to home (32) | Good for dog / dog enjoys it (18) | Good / easy parking (13) |

Awareness of site

- 4.44 It was interesting to understand how visitors had first become aware of the site. As with most questions in the interviewing process, the responses were categorised, but included the flexibility for free text. Interviewees could give multiple mechanisms by which visitors first became aware of the site; however, the vast majority (94%) of interviewees gave just a single reason. Categories are shown in Figure 12.
- 4.45 Overall, roughly two in five of the interviewees (41%) had become aware of the site through local knowledge, specifically word of mouth. Around a quarter of interviewees became aware by “other local knowledge” (26%); mostly from simply living in very close proximity (around 6% of these). A further fifth (20%) had become aware of the site simply from seeing a sign or driving past.
- 4.46 There were some subtle differences between sites (see Figure 12), possibly related to how well different sites are signposted – for example, 48% of interviewees at Woodham Common were aware of the site by signage. This compared to 79% of interviewees aware of the site by word of mouth at Peacocks Meadow and 66% by “other local knowledge” at Popes Meadow.

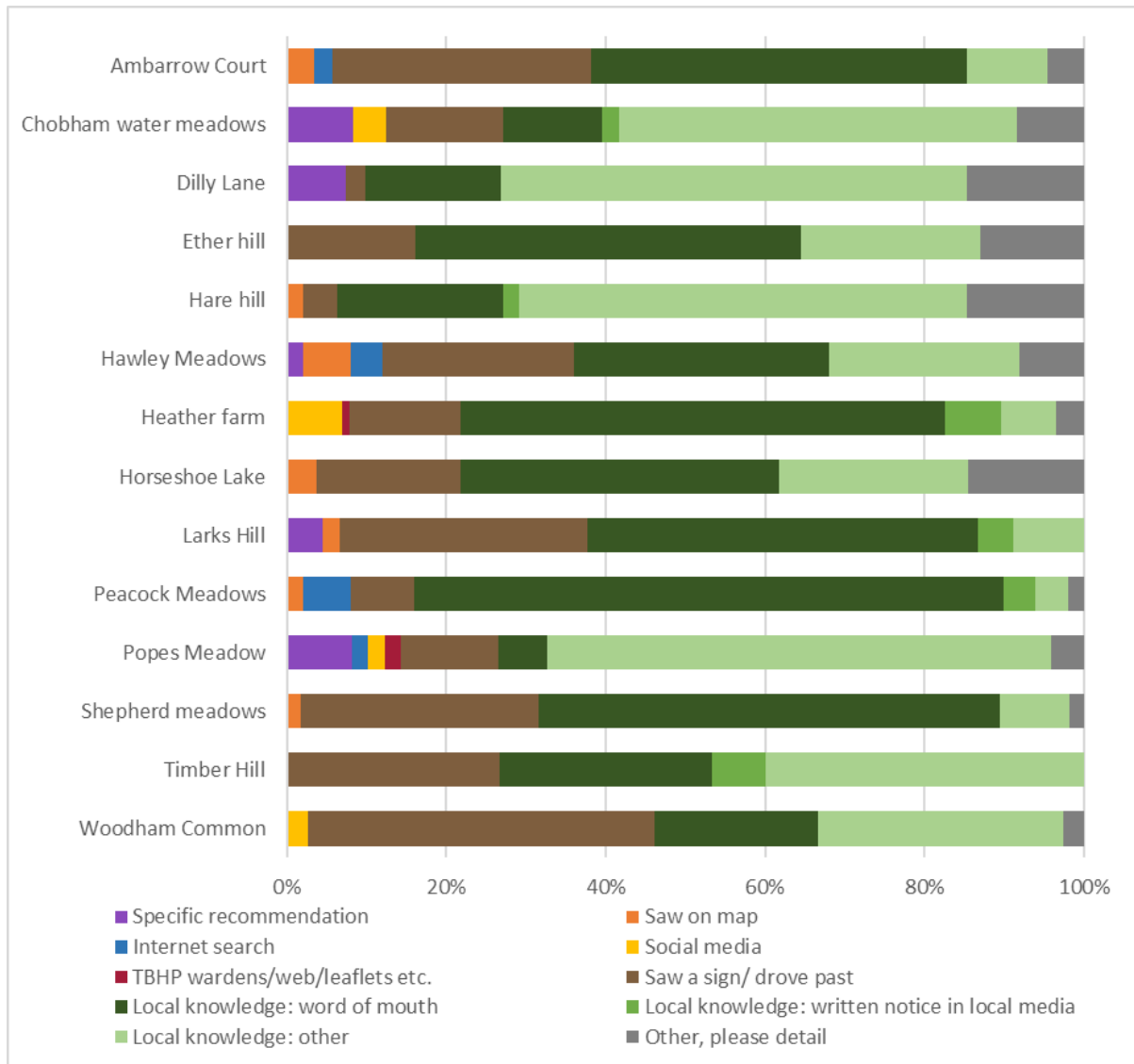


Figure 12: Summary of the ways in which interviewees became aware of the site.

Rating

4.47 Interviewees were asked to rate the sites for the quality of paths, quality of parking, the quality of the site for their dogs and finally as an overall rating. Ratings were asked for between 1 (very poor) and 10 (very good) for each of the four categories.

4.48 Using data pooled from all survey locations the overall average ratings were examined. Highest score across all locations was the rating of the sites for dogs: 8.9 (Standard Deviation ± 1.3), followed by 8.6 for the site overall ($SD \pm 1.1$), 8.1 for parking ($SD \pm 1.9$) and 7.4 for paths ($SD \pm 1.7$). The degree of variability in the ratings could be examined from the standard deviation

values (SD). Highest values and therefore variability in the individual interviewee's scores were observed for parking rating, followed closely by paths.

4.49 Ratings at individual sites for each of the three main aspects are shown in Figure 13. Ratings in Figure 13 have been simplified to a 0 to 5 star rating for easier visualisation. Notable poor scores for paths were recorded at Chobham water meadows (average score of 6.1), followed by Hare Hill (6.4) and Hawley Meadows (6.6). Scores for parking were worst at Dilly Lane (score of 1.3, 8% of interviewees arrived on foot), and at Timber Hill (4.8, 50% arrived on foot). It should be noted that at Hare Hill no respondents gave a parking score, rather than a 0 score. Timber Hill was the only site to score below 6.5 for dogs, with a rating of 4.6.



Figure 13: Ratings given to each site by interviewees for the quality of paths, quality of parking and quality of the site for dogs. Interviewee scores from 1 (very poor) to 10 (very good) were converted to 0 to 5 values for simplicity. Note Hare Hill was not scored for parking rather than being rated as 0.

- 4.50 Full details of the ratings given are presented in Table 13. However, it was unexpected that overall ratings were often poorly related to individual scores. We calculated an averaged rating using the mean of individual ratings for each of the three topics and this showed little relation to the interviewee's overall rating score. This averaged score showed greater variation and it was thought to be perhaps more interesting to highlight sites which have issues. These averaged scores are shown in Map 9.

Table 13: Details of interviewees ratings for paths, parking, dogs and overall. Final column is an average of the ratings for paths, parking and dogs.

| | Interviewee rating for paths | Interviewee rating for parking | Interviewee rating for dogs | Interviewee rating for site overall | Averaged path/ parking/ dog rating |
|-----------------------|------------------------------------|--------------------------------------|--------------------------------|-------------------------------------------|------------------------------------------|
| Ambarrow Court | 7.5 | 8.0 | 7.0 | 8.2 | 7.5 |
| Chobham water meadows | 6.1 | 7.5 | 8.0 | 8.1 | 7.2 |
| Dilly Lane | 7.0 | 1.3 | 8.7 | 8.7 | 5.6 |
| Ether hill | 6.9 | 8.2 | 8.1 | 8.5 | 7.7 |
| Hare hill | 6.4 | - | 8.1 | 8.1 | 7.3 |
| Hawley Meadows | 6.6 | 7.1 | 8.9 | 8.7 | 7.5 |
| Heather farm | 8.1 | 6.3 | 8.0 | 8.5 | 7.5 |
| Horseshoe Lake | 6.7 | 8.2 | 8.7 | 8.9 | 7.9 |
| Larks Hill | 8.1 | 8.3 | 7.8 | 8.7 | 8.0 |
| Peacock Meadows | 8.7 | 8.9 | 9.2 | 9.2 | 8.9 |
| Popes Meadow | 8.1 | 6.0 | 6.6 | 8.6 | 6.9 |
| Shepherd meadows | 7.2 | 7.9 | 6.9 | 7.9 | 7.3 |
| Timber hill | 7.1 | 4.8 | 4.6 | 8.5 | 5.5 |
| Woodham Common | 8.5 | 8.5 | 8.3 | 8.8 | 8.4 |

Map 9: The overall averaged rating of each surveyed SANG.



- 4.51 There was a suggestion that there may be some correlation between the averaged rating and site size, as visualised in Figure 14. However, the relationship between these two factors was not statistically significant (Pearson's $r=0.492$, $p=0.074$), and this relationship was worse when considering interviewee's overall rating (Pearson's $r=0.139$, $p=0.635$).
- 4.52 There also appeared, at a glance, to be a relationship between rating and the Q3 distance of interviewees – i.e. the distance they were willing to travel. However, this was also not a statistically significant relationship (Pearson's $r=-0.083$, $p=0.777$).

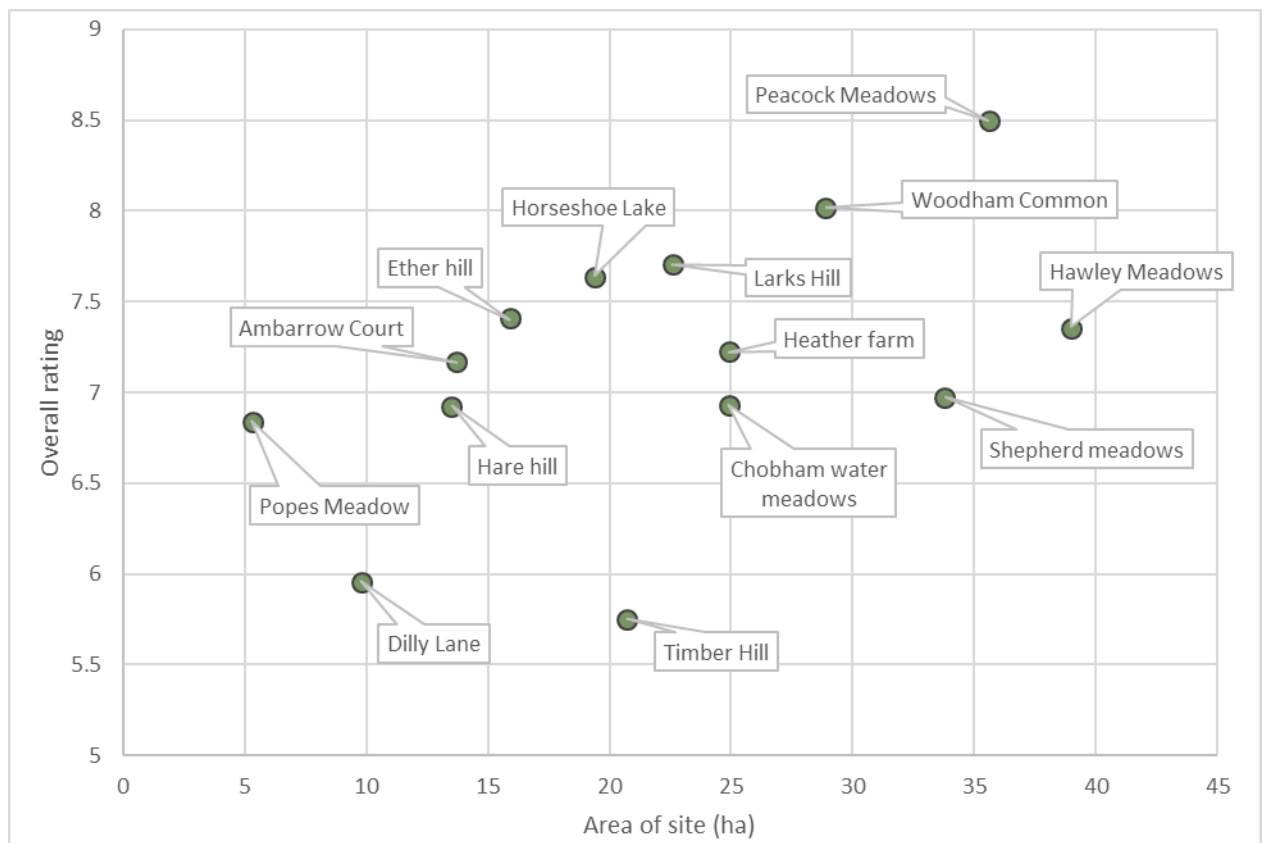


Figure 14: Scatterplot to show the relationship between the averaged rating and the area of the site.

Suggested improvements

- 4.53 Surveyors asked interviewees to suggest what improvements, if any, they would like to see for the site where they were interviewed. Responses were categorised using pre-set, expected answers, but a free text box was used to record other suggestions. These free text answers were examined, and frequent themes extracted to be used in conjunction with the pre-set categories.
- 4.54 Across all surveys, just under a third of the interviewees (219 interviewees, 31%) suggested that no improvements were necessary. Overall, key improvements shown in Figure 15 were a need for better paths (170, 24%), more dog poo bins/ dog fouling issues (85, 12%), more car parking (43, 6%), new or better/safer fencing (36, 5%), better paths/more choice (33, 5%) and general maintenance, repairs etc. (29, 4%).

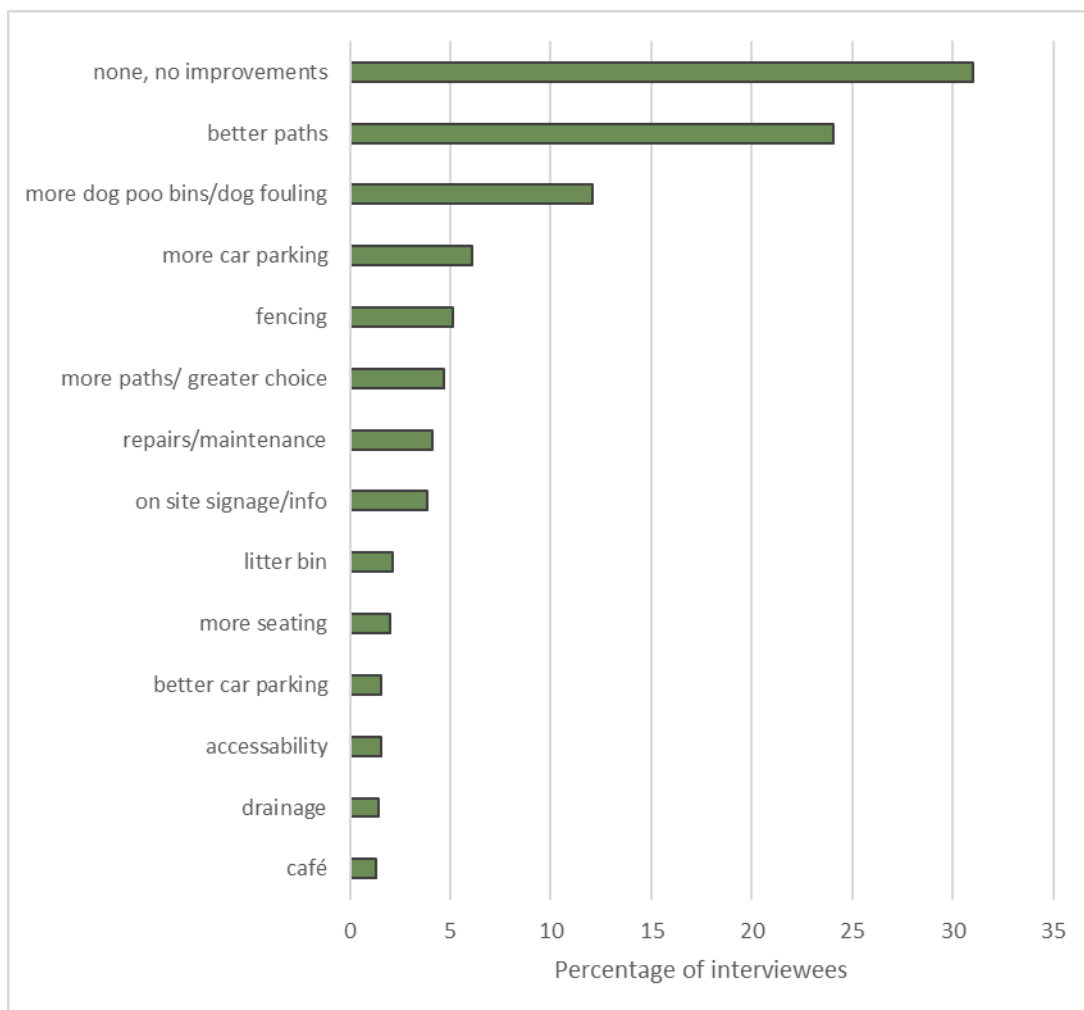


Figure 15: Summary of interviewees suggested improvements. Improvements stated by less than 1% of interviewees are not shown

- 4.55 Other less frequently given suggestions were: more on-site information and signage, litter bins, more seating, better car parking and better accessibility. It was notable that features for dogs (e.g. water features, dog agility; both just 3 interviewees) were rarely mentioned; other than new fencing or improvements to poor existing fencing.
- 4.56 There were clearly particular suggestions at individual sites where issues exist and therefore the top five suggestions at each location is provided in Table 14. The relative percentage of interviewees who stated no improvements were necessary was a useful indicator for sites with issues, and the ranking of this is highlighted in bold in Table 14.
- 4.57 One of the main suggestions at sites appeared to be for improvements to paths, (which includes a greater choice of paths). The locations where these ranked highest (either ranked 1st or 2nd after no improvements) were: Ambarrow Court, Chobham water meadows, Ether Hill, Hare Hill, Hawley Meadows Horseshoe Lake, Shepherd Meadows and Timber Hill. Better signage or general information appears to be another important suggestion at Chobham water meadows. The other remaining highest ranked suggestions were for new fencing or improvements to existing fencing at Dilly Lane and Larks Hill, more dog poo bins/dog fouling issues at Hare Hill and Peacock Meadows, and finally litter bins at Woodham Common.

Table 14: Top 5 suggested improvements at sites. Values in brackets indicate the percentage of interviewees (note interviewees could give multiple responses). No improvements are highlighted in bold to indicate the relative ranking of this at the different sites.

| | 1st | 2nd | 3rd | 4th | 5th |
|-----------------------|-----------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|------------------------------------------|
| Ambarrow Court | none, no improvements (47) | better paths (21) | more dog poo bins/dog fouling (12) | on site signage/info (6) | more paths/ greater choice (3) |
| Chobham water meadows | better paths (51) | on site signage/info (27) | more dog poo bins/dog fouling (16) | none, no improvements (12) | more paths/ greater choice (12) |
| Dilly Lane | none, no improvements (36) | fencing (21) | better paths (10) | more dog poo bins/dog fouling (5) | repairs/maintenance (5) |
| Ether hill | none, no improvements (38) | better paths (25) | more dog poo bins/dog fouling (6) | more paths/ greater choice (6) | drainage (6) |
| Hare hill | better paths (43) | more dog poo bins/dog fouling issues (26) | none, no improvements (19) | repairs/maintenance (10) | more paths/ greater choice (5) |
| Hawley Meadows | better paths (53) | none, no improvements (23) | more dog poo bins/dog fouling issues (19) | better car parking (19) | repairs/maintenance (9) |
| Heather farm | more car parking (29) | none, no improvements (27) | better paths (21) | more paths/ greater choice (11) | more dog poo bins/dog fouling issues (9) |
| Horseshoe Lake | better paths (41) | none, no improvements (24) | more dog poo bins/dog fouling issues (18) | more car parking (10) | café (8) |
| Larks Hill | none, no improvements (34) | fencing (7) | more dog poo bins/dog fouling issues (5) | more car parking (5) | better paths (2) |
| Peacock Meadows | none, no improvements (28) | more dog poo bins/dog fouling issues (28) | on site signage/info (4) | more seating (4) | better paths (2) |
| Popes Meadow | fencing (21) | none, no improvements (19) | more dog poo bins/dog fouling issues (11) | more seating (11) | repairs/maintenance (9) |
| Shepherd meadows | none, no improvements (34) | better paths (32) | repairs/maintenance (23) | more dog poo bins/dog fouling issues (16) | litter bin (7) |
| Timber Hill | none, no improvements (75) | better paths (13) | more seating (6) | n/a | n/a |
| Woodham Common | none, no improvements (47) | litter bin (18) | better paths (11) | fencing (8) | more dog poo bins/dog fouling issues (8) |

Alternative locations visited

- 4.59 The surveyors asked interviewees to state one location they would have visited, had they not been able to visit the interview site on that day. Overall, just 5% of interviewees (33 interviewees) suggested there was nowhere else they would have visited and a further 1% (7) were not sure or did not know.
- 4.60 Of the remaining 94% (604) who named a site this first alternative site choice was recorded and the surveyor asked for a two further sites which they also visited for their current activity. This provided 1,438 responses, with 642 unique site names in total, though many were variants which referred to the same sites.
- 4.61 Across all survey locations, the top sites were; Horsell common (8%, 117 responses), Chobham common (6%, 82), Virginia water (5%, 66) and Cabbage Hill (3%, 44). Figure 16 uses a word cloud to visualise the names given by more than 5 interviewees (the 28 most common). Top five named sites at each survey location are given in Table 15.



Figure 16: Word cloud of all first named alternative locations. The size of each word reflects the number of interviewees naming a site. Words given by fewer than 5 interviewees are not shown.

SPA and SANG sites

- 4.62 The names were examined by TBHP staff who have a better understanding of local or alternative names and parts of sites to categorise these into three groups; SPA, SANG and other.
- 4.63 The top five named SANG sites across all interviewees were Cabbage Hill (3%, 44 responses), Horseshoe Lake (2.5%, 37), Ottershaw Memorial Park (1.7%, 25), Lilly Hill park (1.5%, 22) and Homewood park (1.3%, 19). While the top five named SPA sites were: Horsell common (8%, 117 responses), Chobham common (6%, 82), Swinley forest (3%, 39), Wildmoor Heath (2%, 30) and Crowthorne woods (1.3%, 20).
- 4.64 However, there were very clear differences in the top five alternatives between individual survey locations, as shown in Table 15. SANG and SPA often ranked differently, usually informed by their proximity.

Table 15: Top 4 alternative named sites at each survey location. Values in brackets indicate the percentage of responses (note interviewees could give multiple responses). Names in green bold text indicate SPA sites, those in orange bold text indicate SANG sites.

| Site | 1st | 2nd | 3rd | 4th |
|-----------------------|-------------------------------------|-----------------------------|----------------------------|----------------------------------|
| Ambarrow Court | Horseshoe lake (16) | Simon's wood (9) | Wildmoor Heath (8) | Crowthorne woods (4) |
| Chobham water meadows | Chobham common (25) | Horsell common (10) | Virginia water (8) | Heather farm wetlands (4) |
| Dilly Lane | Hazeley heath (27) | footpaths (5) | Fleet pond (3) | Basingstoke canal (3) |
| Ether hill | Horsell common (18) | Chobham common (12) | Virginia water (12) | Homewood park (11) |
| Hare hill | Ottershaw Memorial Park (19) | Horsell common (18) | Chobham common (8) | Strawberry fields (8) |
| Hawley Meadows | Barossa (9) | Swinley forest (6) | Hawley lake (6) | Shepherd meadows (5) |
| Heather farm | Horsell common (17) | Chobham common (12) | Virginia water (7) | Basingstoke canal (5) |
| Horseshoe Lake | Ambarrow Court (8) | Wildmoor Heath (7) | Yateley common (6) | Virginia water (5) |
| Larks Hill | Cabbage Hill (20) | Lilly Hill park (14) | Swinley forest (10) | Frost folly (6) |
| Peacock Meadows | Cabbage Hill (15) | Swinley forest (12) | Lilly Hill park (5) | Virginia water (3) |
| Popes Meadow | Cabbage Hill (23) | Lilly Hill park (7) | Jocks lane (7) | Dinton pastures (4) |

| Site | 1st | 2nd | 3rd | 4th |
|------------------|-----------------------------|---------------------------|---------------------------|------------------------------------|
| Shepherd meadows | Horseshoe lake (8) | Hawley meadow (8) | Barossa (6) | Wildmoor Heath (6) |
| Timber Hill | Ottershaw Chase (15) | Horsell common (9) | Chobham common (9) | Ottershaw Memorial Park (9) |
| Woodham Common | Horsell common (26) | Basingstoke canal (8) | Heather farm (7) | Pyrford Common (7) |

- 4.65 Across all sites, using first named alternatives, 29% of interviewees (184 interviewees) named SANG sites, 34% (217) named SPA sites and 38% (243) named other sites. Considering all alternative sites named, including the second and third choices which were provided by roughly 67% and 44% of interviewees respectively, the proportions were very similar. Across all site choices 26% of responses (370 responses) related to SANG sites, 32% (466) to SPA sites and 42% (602) to named other sites.
- 4.66 When considering variation between different activities, this is highly influenced by group sample size. The high proportion of dog walkers in interviewees, mean the percentages discussed above are extremely similar - across all site choices, 27% of responses from dog walkers related to SANGs, 33% to SPA and 40% to other sites. For comparison, the second largest activity group, walkers, showed a similar level of responses naming SPA sites, but a greater preference for other sites than SANGs – 18% of responses related to SANGs, 30% to SPA and 52% to other suggests.
- 4.67 This proportion varied by survey location and is shown in Map 10. There were four sites where the percentage of named alternative sites were 50% or more SANGs. These were Larks Hill (54% of responses were SANGs), Popes Meadow (53%), Hare Hill (50%) and Timber Hill (50%). The lowest levels were recorded at Dilly Lane (8%) and Heather Farm (10%). The percentage of responses which related to SPA sites was greatest at Chobham water meadows (48%), Hawley Meadows (41%) and Heather Farm (40%).

Map 10: The proportion of SANG, SPA and other named sites in the list of alternative locations given by interviewees at each site.



Proportion of visits

4.68 Because the current site is often one of several which is utilised by the interviewee, we wished to understand the relative proportion of visits interviewees undertook at these sites. The interviewees were asked to state roughly what percentage of their visits, for the activity they were currently undertaking, take place at the current site and responses assigned to quarters.

4.69 Overall, it was suggested that very few interviewees, around 8% of interviewees, undertook all their visits at the current site. Just under a quarter (162 interviewees, 23%) suggested that most of their visits took place here (around 75% or more of visits) and just over a quarter (194, 27%) suggested that over half of their visits took place here (50% to 75% of visits). However, there was still around a quarter of interviewees (159, 23%) who used the site for less than 25% of their visits for the current activity.

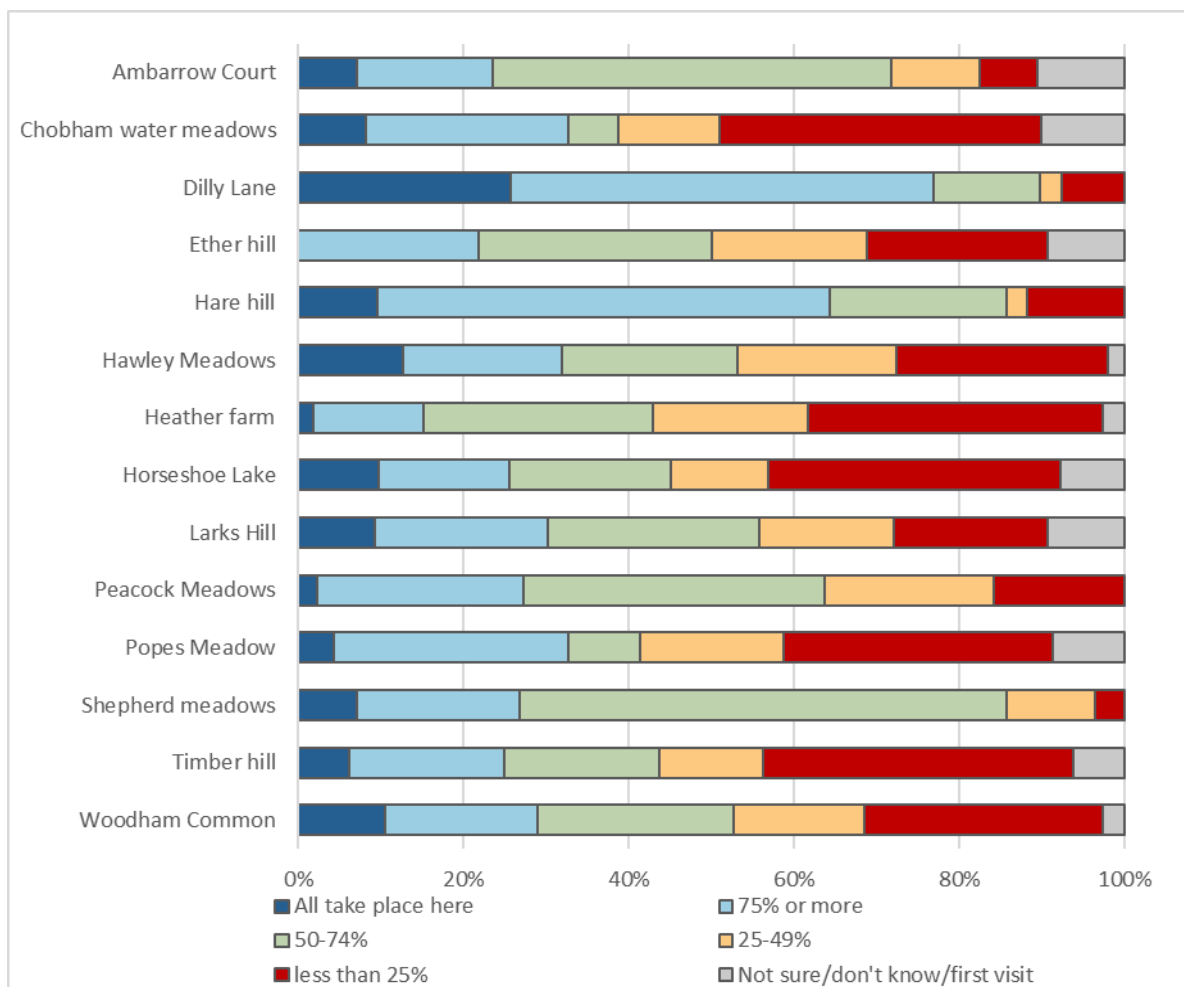


Figure 17: Summary of interviewees' proportion of visits which take place on site.

- 4.70 There were some slight differences between sites, as seen in Figure 17, with some of the most consistent and site faithful visitors at Dilly Lane, Hare Hill and Shepherds Meadows. Conversely at sites such as Horseshoe Lake, Chobham water meadows, Popes meadow and Timber Hill most interviewees suggested they visited their other alternative sites more often than the current site.

Reasons for visiting alternative visits

- 4.71 In a similar method to the reasons why interviewees chose to visit their current site, interviewees were asked to give the reasons why they chose these alternative sites. In the same way as for reasons on the current site, responses were recorded to pre-set categories and any reason which did not fit recorded in free text. Interviewees could give multiple responses as to why they visited their alternative sites.
- 4.72 Across all data, the main reason why interviewees chose to visit an alternative site was to have variety of places to visit, as given by 145 interviewees, 21% of interviewees. This was followed closely the fact sites are close to home (128, 18%) and because they offer large open areas (115, 16%).
- 4.73 The reasons given were examined separately for those who gave a SANG site as their first named alternative and for those who gave a SPA site. The percentage of interviewees for each reason in these categories are presented in Figure 18. For those gave a SANG as their first alternative the key factors were:
- a variety of places to visit (46, 7%)
 - large open area (35, 5%)
 - close to home (31, 4%)
 - can let dog off lead/ feels safe to let dog off (30, 4%)
 - and variety of habitats (22, 3%).
- 4.74 While for those who gave a SPA location as their first choice these were:
- a variety of places to visit (56, 8%),
 - large open area (42, 6%),
 - close to home (41, 6%),
 - bigger/ longer walks (35, 5%)
 - and can let dog off lead/ feels safe to let dog off (25, 4%).

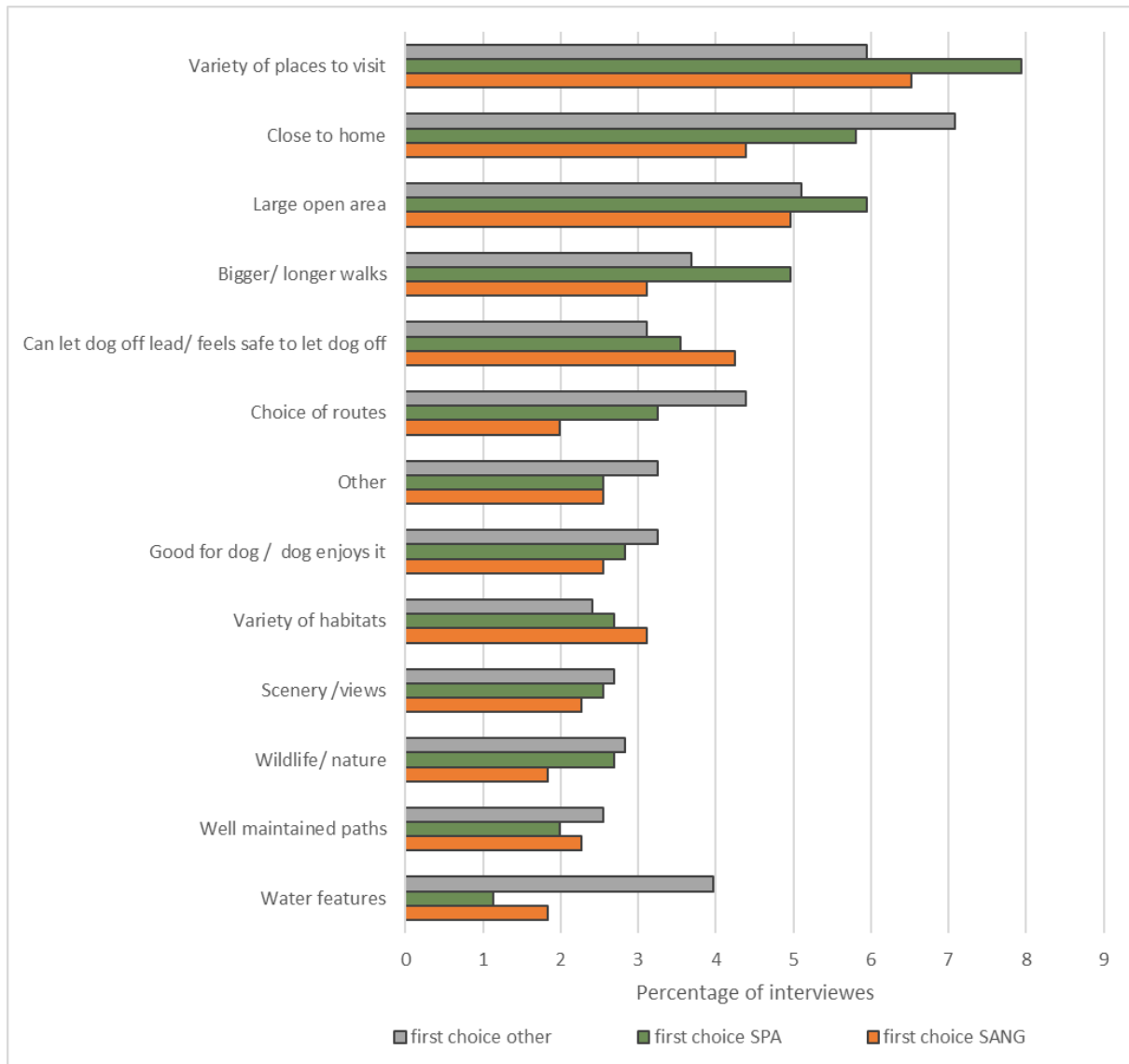


Figure 18: Summary of reasons why interviewees chose to visit their alternative sites, shown separately for interviewees whose first named site was a SANG, SPA or other site. Note interviewees could give multiple reasons. Categories given by less than 7% of interviewees overall are not shown. Reasons are sorted by the total percentage of interviewees across all types.

Time at current address

- 4.75 Interviewees were finally asked to state how long they had lived at their current address. The responses were given in years, but where rough values, i.e. months or starting years given (e.g. "since 1965"), these were converted into a number of years or a decimal number of years for months.
- 4.76 On average an interviewee had lived within the area for roughly 19 years. But there were clear differences between sites, as shown in Figure 19. At

Peacock Meadow, Popes Meadow and Dilly Lane, the average time at current address was 14 years or less (mean), which appears related to the recent housing growth immediately adjacent to sites.

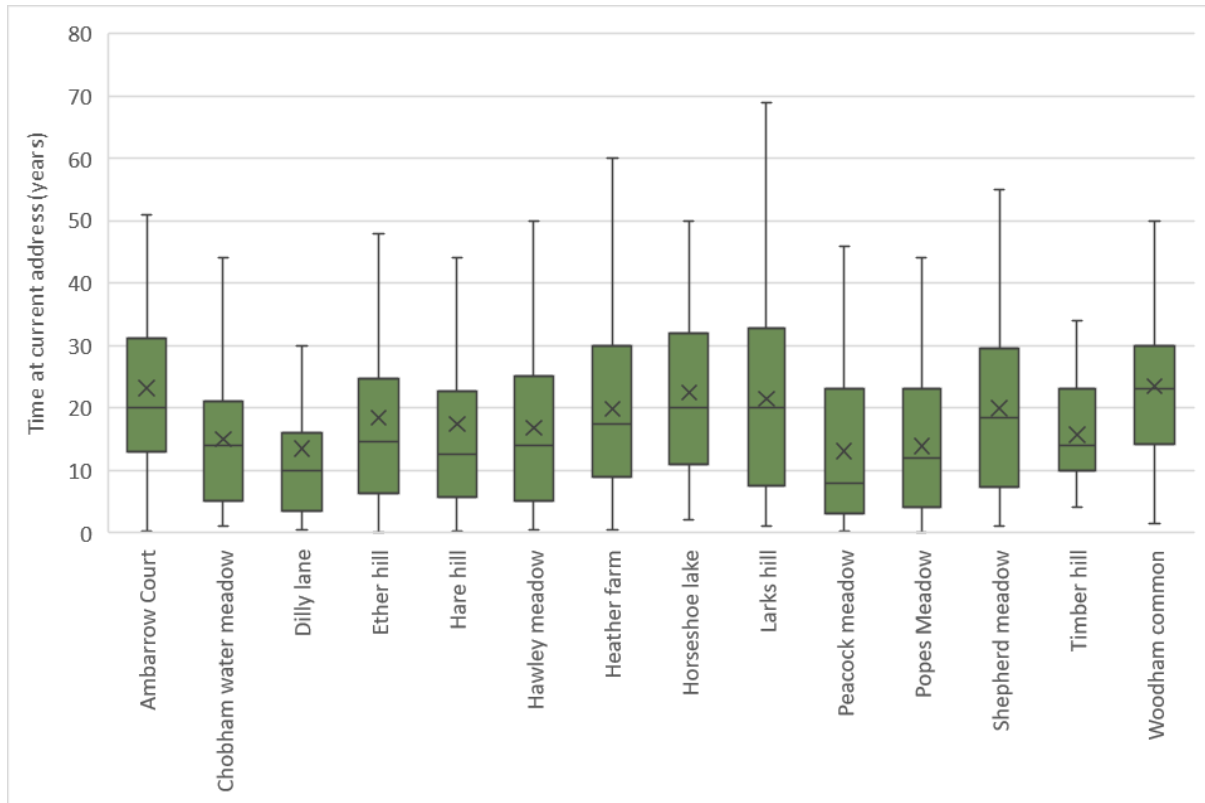


Figure 19: Boxplots to show the range of values recorded for the interviewee's time at their current address. Boxes show the range between Q1 (25%) and Q3 (75%), cross line within this indicates the median. Whiskers indicate the range of values, excluding outliers. The cross indicates the mean.

5. Discussion and recommendations

Surveying methodology and data collected

- 5.1 The methodology used appears robust. Interviewees are those people who were using the site on that day and were unaware surveys were due to take place, therefore the pool of interviewees was unlikely to be biased. The tally counts used to record visitor flows are a useful snapshot of the access which can easily be recorded while on site alongside the interviewing. A wide range of questions were asked in a relatively short interview, resulting in a good amount of data collected and the questions appear robust.
- 5.2 The surveys were conducted during core winter visiting hours and cover both weekdays and weekend days. There was greater surveying effort on weekdays, which has to be accounted for in some analysis, but simple analysis of visitor numbers suggests this may work well to represent the weekly pattern of use.
- 5.3 Examination of the data collected suggests these surveys provide a good baseline of data.

Recommendations

- 5.4 There are no critical recommendations in relation to the methodology and data collected. However, one suggestion could be to add simple categories to record the different types of people in the tally counts. In our surveys we count the numbers of people, dogs and minors in tally counts and sometimes even count the number of runners or cyclists. These counts help assess the typical site users and examine the site users who may be underrepresented in the interviewees, such as lone minors for example at sites where there is a shortcut to a school (as these are not interviewed) or runners and cyclists who are often hard to stop during interviews.
- 5.5 In addition, we always record the number of people who refused to take part in interviewees and any notes on who these people were. There will have been a number of people who were approached and refused to take part. There is usually a bias in the visitors who may refuse to take part in interviews, for example cyclists, runners, commuters or shoppers. As such based on the interview data alone this group may be under-represented.
- 5.6 In Footprint surveys we also record the number of people who were approached but had already been interviewed in an earlier session. These

visitors are not interviewed again, but are noted and indicate the sites which are used very regularly by a small group of people, and the metric can be compared between sites.

- 5.7 Finally, it was suggested that some of the survey sessions were drifting out of the core winter months. The first survey was conducted on the 21st September and the last survey on the 19th of April. Visitor patterns and daylight patterns are becoming very different in the first and last few months of these periods. Surveys are often spread over a wide range of dates minimising the influence of this, but the dates could still be truncated to a shorter window.

Visitor survey conclusions

- 5.8 The data collected is highly informative and can be used to assess the levels of use on SANG sites, the visitor patterns, draw of the site, factors liked, opinions on quality of the site, and the alternative sites visited. This information can be examined, and the conclusions drawn use to information visitor management.
- 5.9 The individual visitor metrics are often interlinked, but some clear patterns are able to be drawn and can be used to monitor visitor patterns and comment on SANG functioning. As an example, Chobham water meadows has a reasonable level of visitors using the site, including dog walkers (82% of interviewees). These people are often regular visitors (24% on site daily or more frequently), and visit because the site is close to home, but are coming from quite a large area (three quarters within 6.3 km). However, many of these visitors use other sites, around two fifths conduct less than a quarter of their visits to this site. The other sites used frequently include SPA sites (48% of named alternative sites were to the SPA), such as Chobham and Horsell common. One of the reasons other sites are used is highlighted through the poor rating interviewees gave the site for the quality of paths (6 out of 10), and many interviewees suggesting improvements such as better path surfacing (51%), more paths/choice of paths (16%) and more dog poo bins (14%).
- 5.10 From such baseline descriptive information on sites some clear immediate actions with regards to access management can be undertaken. With more future data long-term patterns will become apparent and provide greater monitoring and management conclusions drawn.

References

- Burley, P. (2007). Report to the panel for the draft south east plan examination in public on the Thames Basin Heaths Special Protection Area and Natural England's Draft Delivery Plan. Inspectorate, Planning. Retrieved from <http://www.eipsoutheast.co.uk/downloads/documents/20070220094334.doc>
- Haskins, L. (2000). Heathlands in an urban setting - effects of urban development on heathlands of south-east Dorset. *British Wildlife*, 11(4), 229–237.
- Liley, D., & Clarke, R. T. (2003). The impact of urban development and human disturbance on the numbers of nightjar *Caprimulgus europaeus* on heathlands in Dorset, England. *Biological Conservation*, 114, 219–230.
- Liley, D., Clarke, R. T., Mallord, J. W., & Bullock, J. M. (2006). The effect of urban development and human disturbance on the distribution and abundance of nightjars on the Thames Basin and Dorset Heaths. *Natural England/Footprint Ecology*.
- Mallord, J. W., Dolman, P. M., Brown, A. F., & Sutherland, W. J. (2007). Linking recreational disturbance to population size in a ground-nesting passerine. *Journal of Applied Ecology*, 44, 185–195. doi:doi:10.1111/j.1365-2664.2006.01242.x
- Murison, G. (2002). The impact of human disturbance on the breeding success of nightjar *Caprimulgus europaeus* on heathlands in south Dorset, England. Peterborough: English Nature.
- Thames Basin Heaths Joint Strategic Partnership Board. (2009). Thames Basin Heaths Special Protection Area Delivery Framework. Retrieved from http://www.southeast-ra.gov.uk/documents/sustainability/thames_basin_heaths/delivery_framework_march2009.pdf
- Underhill-Day, J. C. (2005). A literature review of urban effects on lowland heaths and their wildlife. Peterborough: English Nature. Retrieved from [internal-pdf://EN RR 623, John Day literature review of urban effects-3794804480/EN RR 623, John Day literature review of urban effects.pdf](http://internal-pdf://EN%20RR%20623,%20John%20Day%20literature%20review%20of%20urban%20effects-3794804480/EN%20RR%20623,%20John%20Day%20literature%20review%20of%20urban%20effects.pdf)

Appendix 1:



Good am/pm. Please could you spare me a few minutes to answer some questions regarding your visit today. This is part of a study of visitor access patterns in this area for the TBHP.

Q1 What is the main activity you are undertaking today? *Tick closest answer. Do not prompt. Single response only.*

- ☐ Dog walking
- ☐ Commercial dog walking
- ☐ Walking
- ☐ Jogging/ Running/ Power walking
- ☐ Outing with family
- ☐ Cycling/ Mountain Biking
- ☐ Bird/ Wildlife watching
- ☐ Enjoy scenery
- ☐ Photography
- ☐ Meet up with friends
- ☐ Horse riding
- ☐ Short-cut through site
- ☐ Other, please detail:

Further details/ Other free text:

Q2 How long have you been visiting this SANG? *Tick closest answer, single response only. Only prompt if interviewee struggles.*

- ☐ First visit
- ☐ Less than 1 year
- ☐ Between 1 and 5 years
- ☐ Between 6 and 10 years
- ☐ Between 11 and 15 years
- ☐ Between 16 and 20 years
- ☐ 20 years and over
- ☐ Unsure / Don't know

Q3 How long have you spent / will you spend at here today? *Single response only.*

- ☐ Less than 30 minutes
- ☐ Between 30 minutes and 1 hour
- ☐ 1-2 hours
- ☐ 2-3 hours
- ☐ More than 3 hours

Q4 How frequently do you visit this site? *Tick closest answer, single response only. Only prompt if interviewee struggles.*

- ☐ More than once a day
- ☐ Daily (300+ visits a year)
- ☐ 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:

Q5 **Which days of the week do you tend to visit this site?** *Tick only one, tick closest answers, do not prompt*

- ☐ Weekdays
- ☐ Weekends
- ☐ Equally over weekends and weekdays
- ☐ First visit
- ☐ Other, please detail:

Further details:

Q6 **Do you tend to visit this place 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 **What form of transport did you use to get here today?** *What form of transport did you use? Single response only.*

- ☐ Car / van
- ☐ On foot
- ☐ Public transport
- ☐ Bicycle
- ☐ Other, please detail

Further details:

Q8 Why did you choose to visit here, rather than another local site? *Tick all responses given by visitor in the 'other' column. Do not prompt, tick closest answers. Where possible categorise, otherwise use text box and for further information.*

| | Choice |
|----------------------------------------------------|-----------------------|
| Don't know / others in party chose | <input type="radio"/> |
| Close to home | <input type="radio"/> |
| En route to another place | <input type="radio"/> |
| Nearest greenspace | <input type="radio"/> |
| No need to use car | <input type="radio"/> |
| Good / easy parking | <input type="radio"/> |
| Limited time/ convenience | <input type="radio"/> |
| Quick & easy travel route | <input type="radio"/> |
| Choice of routes | <input type="radio"/> |
| Variety of places to visit | <input type="radio"/> |
| Feels safe / Personal security | <input type="radio"/> |
| No traffic noise | <input type="radio"/> |
| Not many people | <input type="radio"/> |
| Facilities/ Infrastructure (e.g. cafe and toilets) | <input type="radio"/> |
| Well maintained paths | <input type="radio"/> |
| Good for families | <input type="radio"/> |
| Friendly/ social aspects | <input type="radio"/> |
| Bigger/ longer walks | <input type="radio"/> |
| Large open area | <input type="radio"/> |
| Good for dog / dog enjoys it | <input type="radio"/> |
| Can let dog off lead / feels safe to let dog off | <input type="radio"/> |
| Rural feel / wild landscape | <input type="radio"/> |
| Scenery / views | <input type="radio"/> |
| Wildlife/ nature | <input type="radio"/> |
| Variety of habitats | <input type="radio"/> |
| Water features | <input type="radio"/> |
| Habit/familiarity | <input type="radio"/> |
| Suitability of area in given weather conditions | <input type="radio"/> |

Other, please detail



Further details:

Q9 **What, if any improvements would you like to see on the site?** *Tick all that apply. Do not prompt. Use free text box for additional influences and / or detail*

- ☐ None, no improvements
- ☐ More dog poo bins
- ☐ Better dog fencing
- ☐ Access to water for dogs
- ☐ Dog agility/ training areas
- ☐ Better paths (including surfacing)
- ☐ More paths/ greater choice of paths
- ☐ Better signage
- ☐ More on- site information
- ☐ Better access to the site
- ☐ More seating
- ☐ More car parking (e.g. more spaces)
- ☐ Better car parking (e.g. surfacing)
- ☐ Other (give details)

Other/further details:

Q10 How would you rate the paths of this site, from 1 to 10 where 1 is very poor and 10 is excellent?

| | | | | | | | | | | |
|--------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 1: Very Poor | 2 | 3 | 4 | 5: Ave rage | 6 | 7 | 8 | 9 | 10: Ex cellent |
| Rating | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Q11 **How would you rate the parking at this site, from 1 to 10 where 1 is very poor and 10 is excellent?**

| | | | | | | | | | | |
|--------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 1: Very Poor | 2 | 3 | 4 | 5: Ave rage | 6 | 7 | 8 | 9 | 10: Ex cellent |
| Rating | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Q12 How would you rate this site for dogs, from 1 to 10 where 1 is very poor and 10 is excellent?

| | | | | | | | | | | |
|--------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 1: Very Poor | 2 | 3 | 4 | 5: Ave rage | 6 | 7 | 8 | 9 | 10: Ex cellent |
| Rating | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Q13 How would you rate this site overall, from 1 to 10 where 1 is very poor and 10 is excellent?

| | | | | | | | | | | |
|--------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 1: Very Poor | 2 | 3 | 4 | 5: Ave rage | 6 | 7 | 8 | 9 | 10: Ex cellent |
| Rating | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Q14 **What proportion of your weekly visits for [given activity] take place here 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

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

Q15 Which one location would you have visited today if you could not visit here? Do not prompt, tick closest answer.

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

Record single site name:

Could you name two further sites which you also visit for your current activity?

Record second single site name:

Record third single site name:

Q16 What factors draw you to these other places Tick all that apply, do not prompt.

| | Choice |
|------------------------------------|-----------------------|
| Don't know / others in party chose | <input type="radio"/> |
| Close to home | <input type="radio"/> |
| En route to another place | <input type="radio"/> |
| Nearest greenspace | <input type="radio"/> |
| No need to use car | <input type="radio"/> |
| Good / easy parking | <input type="radio"/> |
| Limited time/ convenience | <input type="radio"/> |
| Quick & easy travel route | <input type="radio"/> |
| Choice of routes | <input type="radio"/> |
| Variety of places to visit | <input type="radio"/> |
| Feels safe / Personal security | <input type="radio"/> |
| No traffic noise | <input type="radio"/> |

| | |
|----------------------------------------------------|-----------------------|
| Not many people | <input type="radio"/> |
| Facilities/ Infrastructure (e.g. cafe and toilets) | <input type="radio"/> |
| Well maintained paths | <input type="radio"/> |
| Good for families | <input type="radio"/> |
| Large open area | <input type="radio"/> |
| Bigger/ longer walks | <input type="radio"/> |
| Can let dog off lead/ feels safe to let dog off | <input type="radio"/> |
| Good for dog / dog enjoys it | <input type="radio"/> |
| Rural feel / wild landscape | <input type="radio"/> |
| Scenery /views | <input type="radio"/> |
| Wildlife/ nature | <input type="radio"/> |
| Variety of habitats | <input type="radio"/> |
| Presence of water | <input type="radio"/> |
| Habit/familiarity | <input type="radio"/> |
| Suitability of area in given weather conditions | <input type="radio"/> |
| Other, please detail | <input type="radio"/> |
| Further details: | |
| <div></div> | |

Q17 How did you first find out about the site? *Tick all that apply. Do not prompt. Use free text box for additional influences and / or detail.*

- ☐ Specific recommendation
- ☐ Saw on map
- ☐ Internet search
- ☐ Social media
- ☐ Thames Basin Heaths Partnership wardens/ website/ leaflets etc.
- ☐ Saw a sign/ drove past
- ☐ Local knowledge: word of mouth
- ☐ Local knowledge: written notice in local media
- ☐ Local knowledge: other
- ☐ Other, please detail

Further details:

Q18 **What is your full home postcode?** *This is an important piece of information, please make every effort to record correctly.*

Q19 **What is the name of the town or village where you live?**

Q20 **Approximately how many years have you lived there?** *Enter a number of years (approximate single values, averaged if needed, rather than ranges)*

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

Q21 TO BE COMPLETED AFTER INTERVIEW FINISHED.

| | |
|-----------------------------------|----------------------|
| Surveyor initials | <input type="text"/> |
| Survey location | <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 over 65 | <input type="text"/> |
| Total 41 - 65 | <input type="text"/> |
| Total 18 - 40 | <input type="text"/> |
| Total minors (under 18) | <input type="text"/> |
| Total number of dogs | <input type="text"/> |

Q22 **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.*