



Analysis of Thames Basin Heaths SANG visitor survey data: Winter2016/17

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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 11 local authorities. About half (ca 4000 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.
- 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 declined 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 the 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.

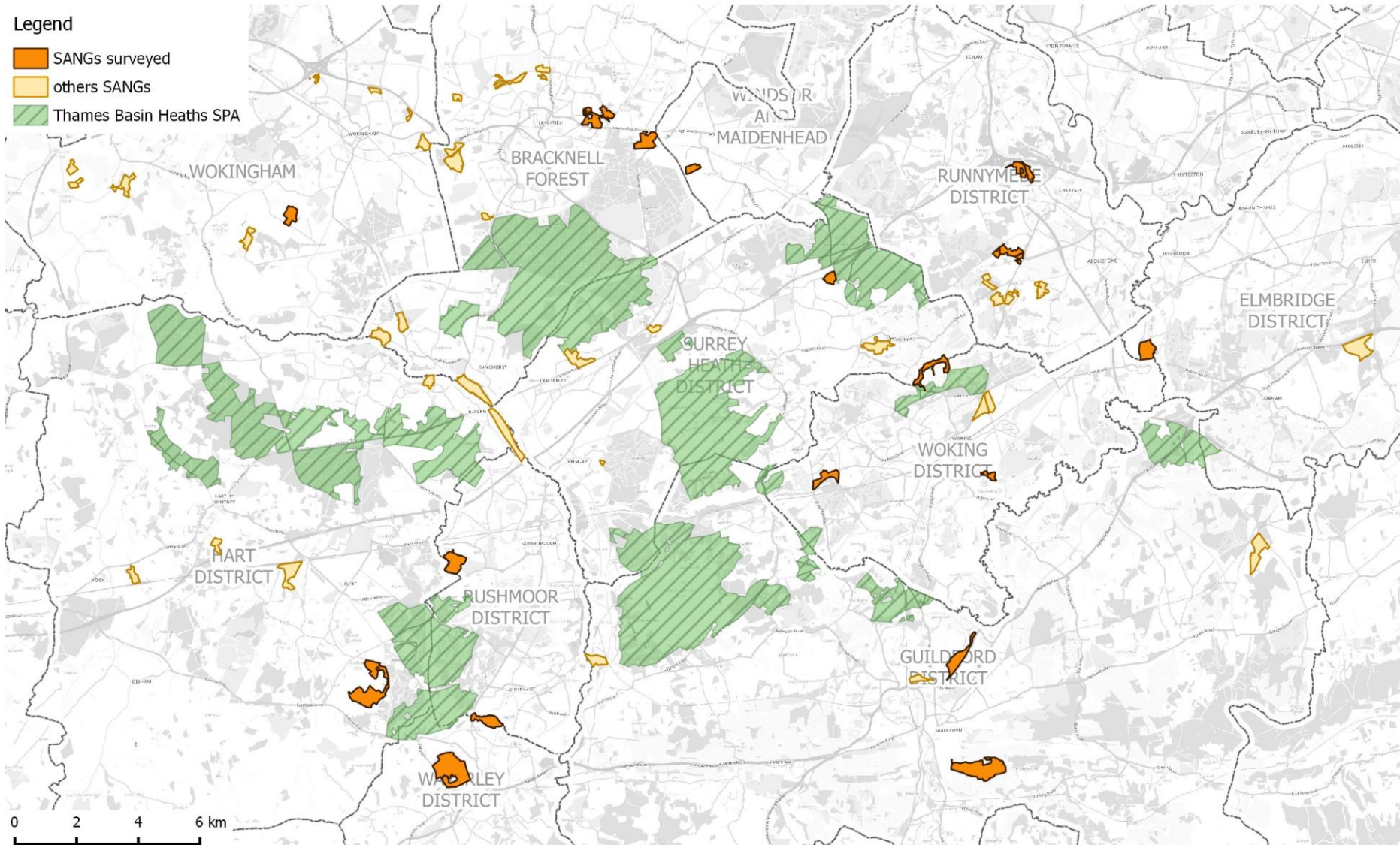
SANGs

- 1.10 Suitable Alternative Natural Greenspaces (SANGs) 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 as European wildlife sites. By providing an providing alternative greenspaces that is meets users' needs and provides

a similar recreation experience to the European site, some of the recreation pressure that would otherwise be inflicted on the European site can be diverted.

- 1.11 Sites which have many features to draw people in, creating easy to access sites, which are safe, large and interesting, are well maintained but also a 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 While also established in other areas, the approach has become strongly linked to the Thames Basin Heaths and there are now some 51 SANGs sites 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 European site, 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 European site, but that the 'net effect' of a SANG should prevent an increase in recreation pressure on the European 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 a suitable visitor destination of 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 considers visitor opinions is more likely to enhance the visitor experience; encouraging more frequent visits or a longer visits likely to result in reduced visitor pressure on the SPA. Monitoring across a number of sites, examined simultaneously 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 17 SANG surveys during the winter of 2016/7 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. SANGs are categorised by visitor surveying.



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2. Methods

Visitor surveying

- 2.1 Visitor surveys, in the form of face-to-face interviewees, were conducted with site users at 17 SANG sites (see Table 1). At each site a single survey point was used to intercept visitors; these points were at key access points onto sites, mostly main car parks.
- 2.2 These visitor surveys were undertaken by Thames Basin Heaths Partnership staff and resulting visitor data (questionnaire responses) were collated and provided to us. Data were in the form of questionnaire responses and data on the number of people seen (i.e. overall visitor numbers) were not collected.

Table 1: Summary of the 17 sites which were surveyed by TBHP staff. See also Map 2.

SANG	Local Authority	Size of site (ha)
Allens Field	Windsor and Maidenhead	9.2
Brooklands Community Park	Elmbridge	25.6
Brookwood Country Park	Woking	19.8
Chantry Wood	Guildford	77.1
Chobham Place Woods	Surrey Heath	11.1
Crookham Park	Hart	72.8
Engelmore Pond	Bracknell Forest	27.5
Farnham Park	Waverley	85.8
Heather Farm	Woking / Surrey Heath	24.8
Homewood Park	Runnymede	23.3
Lily Hill (<i>Long Hill Park Group</i>)	Bracknell Forest	33.3
Riverside	Guildford	29.5
Rook's Nest Wood	Wokingham	18.6
Rowhill	Waverley / Rushmoor	24.2
Southwood Woodland	Rushmoor	32.4
St Ann's Hill	Runnymede	21.1
White Rose Lane	Woking	7.4

- 2.3 At a single site, Homewood Park, the visitor surveying included the mapping of interviewees routes on the site. These were recorded on paper maps and provided by TBHP staff to Footprint Ecology; routes were digitised in GIS (using QGIS 2.18).
- 2.4 Surveys were conducted for 6 hours on two weekdays days and one weekend day (8:00-10:00, 11:00-13:00, 14:00-16:00), giving 18 hours of survey in total. In some cases the survey sessions were spread over different individual dates, which is potentially

ideal as it can minimise the effect of unusual visitor patterns on a single day (e.g. effects of bad weather).

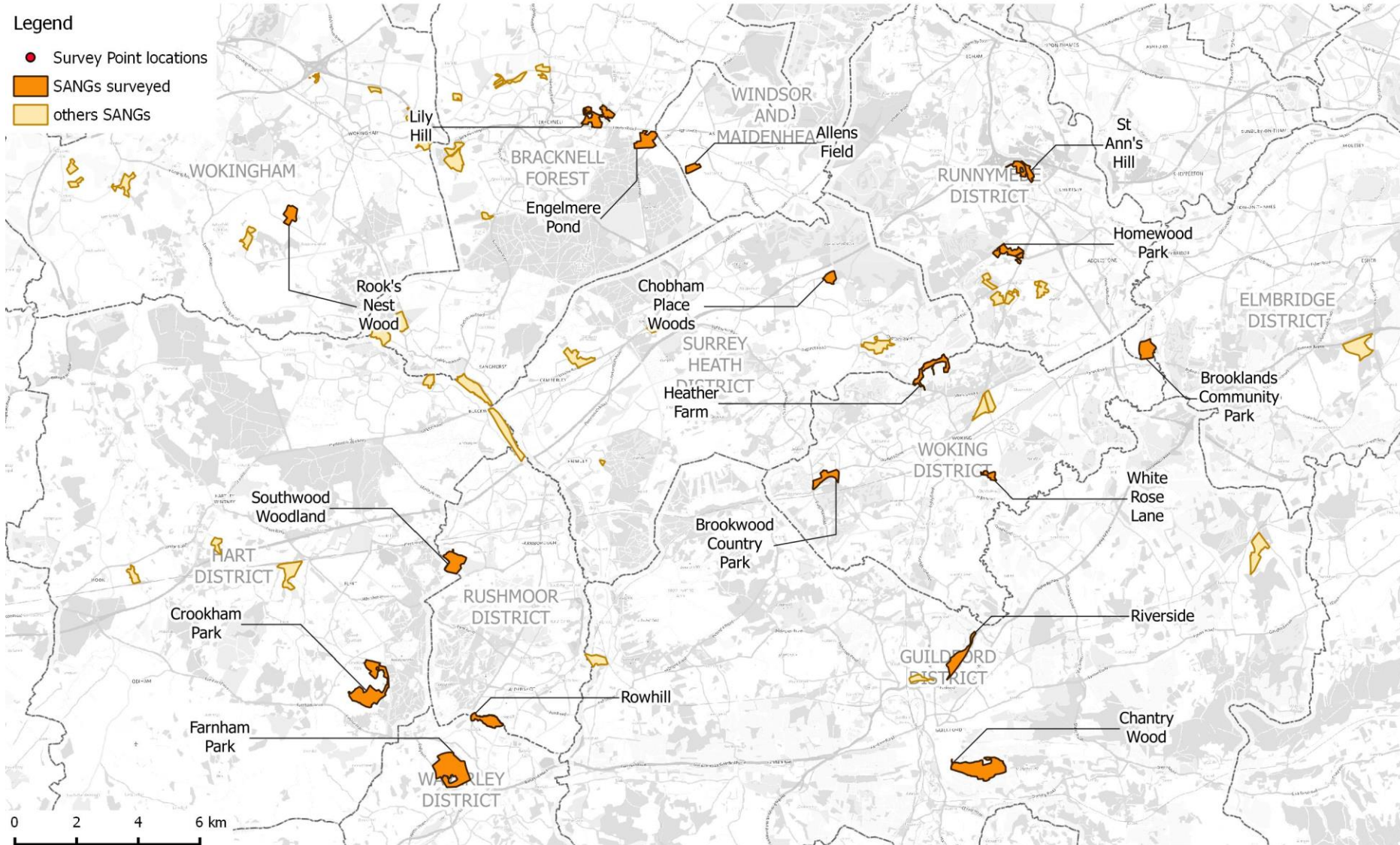
- 2.5 The full 18 hours of survey work were not completed at Chobham Place Woods and White Rose Lane, at least in part due to anti-social behaviour directed towards the surveyors. The results presented in this report have not been adjusted to account for the data gap, and while a limitation, it was not felt necessary to omit all the data for these sites or to scale the data in any way to account for survey effort.
- 2.6 Unusual events during the surveying included; antisocial behaviour at some sites, water works being undertaken close to Crookham Park, many school children (who were not interviewed) at Brookwood Country Park and snowfall.
- 2.7 It would have been interesting to examine the level of use recorded in relation to the size of SANGs or times of day. Using tally data, as an accurate measure of footfall, is most appropriate means to examine such relationships, however this data was not available. It is sometimes possible to infer such use in a less reliable manner by using the number of interviews conducted. Unfortunately, surveying gaps are present in the data and without consistent surveying effort this approach would be more unsuitable and therefore was not attempted

Data processing

- 2.8 Data were collected on paper questionnaires in the field and subsequently entered onto a spreadsheet by the Thames Basin Heaths Partnership (following advice from Footprint Ecology). Raw data provided totalled 1,003 data rows, however this was acknowledged to include some duplicate interviews from data entry. Duplicate interviews were noted from clearly identical data rows of the free text cells (e.g. reason for visiting, alternative sites and suggested improvements) in a single site and session. It is accepted that other duplicates may exist in the data where these free text entries were not given, but were likely to make up a very small percentage given the frequency of free text entries. This provided a total of 960 unique interviews for analysis.
- 2.9 Questions, such as what was liked about the current sites, named alternative sites visited, and features liked about alternative sites were logged as free text in a single field within the spreadsheet. Interpreting second hand the visitor's free text statements and attempting to categorise these for analysis added substantial extra time to data processing. Furthermore, the use of statements such as "convenient" or "handy" in liked features were hard to categorise, as it was hard to interpret what was explicitly meant by this.
- 2.10 While in alternative named sites, other comments e.g. "many other places", "convenient for dropping off kids at school", "will use when dry / more time" had to be manually removed prior to analysis. The entries could include a large number of responses (maximum of ten named sites). Where these were regularly separated this

was relatively easily processed and named sites were listed for each interview and checked against a master list to try and ensure consistent naming.

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



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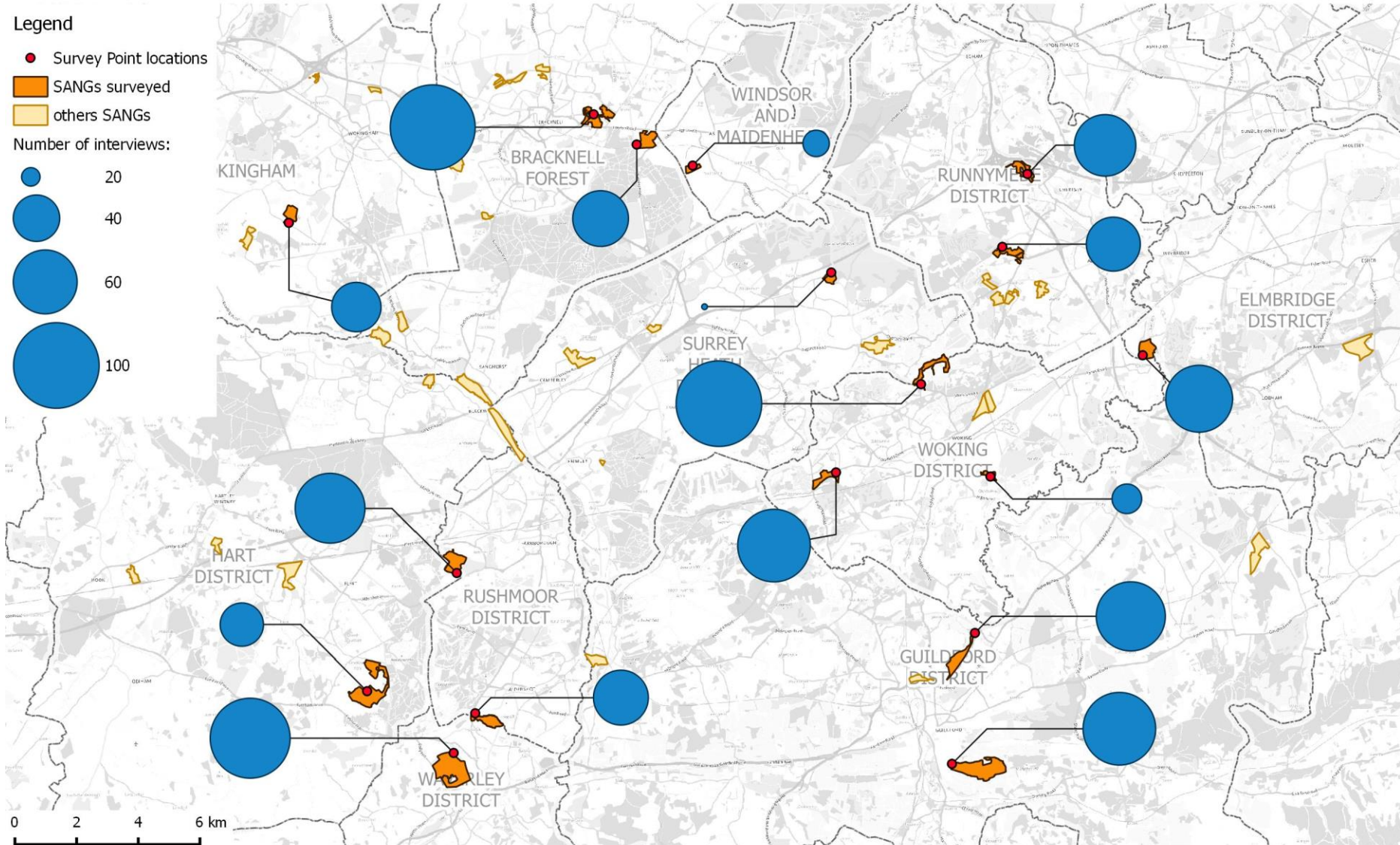
3. Results

- 3.1 Face-to-face visitor surveys were conducted at 17 locations, each of which was a single survey point at a unique site. Surveys took place between the 28th October 2016 and 18th March 2017 (Table 2) and are shown in Map 3. In total, 960 interviews were conducted (Table 2), with the fewest at Chobham Place Woods (17), the only site with less than 20 interviews – however, as noted in the methods there is known to be missing data for the site. In contrast, at the two busiest sites, Heather Farm and Lily Hill, more than 85 interviews were conducted.
- 3.2 The total number of interviews conducted is broadly likely to reflect levels of visitor use at each location, however numbers of interviews will not necessarily correlate well with the number of people using a site as at busy sites only a small proportion of people will be interviewed whereas at a quiet site it might be possible to interview virtually all the people visiting.

Table 2: Summary of the number of interviews conducted at each site and the first and last surveying dates for

SANG	Total interviews	First interviews	Last interviews
Allens Field	24	07/11/2016	11/03/2017
Brooklands Community Park	64	09/11/2016	29/01/2017
Brookwood Country Park	72	13/01/2017	10/02/2017
Chantry Wood	72	25/11/2016	11/02/2017
Chobham Place Woods	17	04/11/2016	09/12/2016
Crookham Park	37	10/11/2016	04/03/2017
Engelmere Pond	50	31/10/2016	05/02/2017
Farnham Park	83	23/11/2016	21/01/2017
Heather Farm	92	28/10/2016	26/11/2016
Homewood Park	48	04/01/2017	26/02/2017
Lily Hill	91	13/01/2017	18/03/2017
Riverside	67	17/11/2016	14/12/2016
Rook's Nest Wood	43	04/11/2016	09/01/2017
Rowhill	49	11/01/2017	18/02/2017
Southwood Woodland	68	10/11/2016	04/02/2017
St Ann's Hill	57	01/11/2016	29/11/2016
White Rose Lane	26	17/11/2016	06/01/2017
Total	960		

Map 3: Number of interviews conducted at each of the survey points used during the SANG visitor surveying.



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Activities

- 3.3 One of the first questions asked interviewees to state their “reason for visiting”. Responses to this question suggest that it was not always explicitly clear what was being asked. Responses were usually akin to the activity they were undertaking. However, they could often include a combination of a single activity or activities, and more general behaviours/uses of the site. For example, a family group “dog walking and playing with the family”, or a walker with a dog describing their activity as “exercising child and café”. This indicates the range of activities and multipurpose nature of these greenspaces, but does make it difficult to group respondents. Responses were therefore categorised into single activities or combinations of activities – a full list is given in Table 3.
- 3.4 Those whose activity was determined as solely dog walking accounted for 72.4% of interviewees (Table 3), increasing to over three quarters (76.9% of interviewees) when considering those conducting dog walking and other activities combined (e.g. dog walking/running, dog walking/family outing). Commercial dog walkers accounted for a further 1.0% of interviewees, but differentiating between commercial and private dog walkers could be hard to determine. The second most common single activity was solely walking undertaken by 11.0% of interviewees, increasing to 12.7% when considering all walking and other activities.

Table 3: Range and number of activities recorded from all interviewees.

Activity	Number of interviewees (%)	Activity	Number of interviewees (%)
Dog walking	695 (72)	Dog walking & wildlife watching	5 (1)
Walking	106 (11)	Family	4 (0)
Dog walking & family	34 (4)	Rugby	4 (0)
Walking & family	26 (3)	Running	4 (0)
Dog walking & run	12 (1)	Walking & café	4 (0)
Commercial dog walker	10 (1)	Other	3 (0)
Dog Walking & other	10 (1)	Walking & Photography	3 (0)
Dog walking & café	9 (1)	Hospital	2 (0)
Commute	7 (1)	Walking & other	2 (0)
Unknown	6 (1)	Walking & wildlife watching	2 (0)
Walking & shops	6 (1)	Cycle & café	1 (0)
Cycling	5 (1)	Total	960 (100)

- 3.5 Table 4 provides a summary of the activities by site, which focuses on the proportions of the two main activities of dog walking and walking (without a dog). At nine of the 17 sites (53% of sites) over 80% of interviewees were conducting dog walking of some kind. Farnham Park was the site with the lowest percentage of dog walking type

activities, with a relatively high proportion of walkers without dogs compared to other sites.

- 3.6 Considering all interviewed groups, the average number of dogs per group was 1.1 (Table 4). The highest recorded was at Allens Field and St Ann's Hill, with 1.25 dogs per group and lowest at Chobham Place Woods, with 0.94 dogs per group. Overall, this range was quite small, and it was fairly consistent that there was on average one dog per group (across all interviewees).
- 3.7 This activity data is also shown as proportions for each site, having grouped activities into broad types; dog walking, walking, family, run, cycle, café type and other. To calculate these as proportions when interviewees were conducting multiple types of activities, the number of interviewees was divided by the number of activities. As such interviewees who were undertaking multiple activities were not double counted and each interviewee was equally weighted.
- 3.8 These proportions are shown in Map 4 are largely reflect the data illustrated in Table 4. The percentage of dog type activities ranged from 87.3%, Riverside, to 69.5%, Farnham Park, where the highest proportion of walking type activities was recorded (20%). Family type activities ranged from 18.4% at Brooklands Community Park, with the next second highest value almost half this – 7.5% at Heather Farm. At Chantry Wood, Homewood Park, Riverside and Rowhill no family type activities were recorded. Other standout values include the high proportion of running type activities at Chantry Wood 8.5%, cycle type at Homewood Park, and café type at Heather Farm.

Table 4: Summary table of the activities recorded at each site. Table provides the percentage of interviewees solely dog walking or walking, and dog walking with another activity or walking with another activity. The table also then lists the next most common activity after solely dog walking or walking and the second most common after these. Number of dogs per group is also given here (calculated from the number of dogs recorded across all interviewees divided by the number of interviewees)

SANG	% interviewees solely dog walking	% interviewees dog walking and other	% interviewees solely walking	% interviewees walking and other	Most common after dog walking/ walking	Second most common after dog walking/ walking	Number of dogs per group
Allens Field	75	83.3	4.2	4.2	Commercial dog walker (13)	Dog walking & family (8)	1.25
Brooklands Community Park	62.5	79.7	7.8	15.6	Dog walking & family (16)	Walking & Family (8)	1.03
Brookwood Country Park	66.7	76.4	13.9	22.2	Walking & Family (8)	Dog walking & family (6)	0.97
Chantry Wood	68.1	79.2	16.7	16.7	Dog walking & run (11)	Running (3)	1.03
Chobham Place Woods	70.6	82.4	11.8	11.8	N/A		0.94
Crookham Park	75.7	75.7	18.9	21.6	Commute (2)	Walking & Family (2)	1.11
Engelmere Pond	82.0	82.0	12.0	14.0	Walking & Family/ Commute (2)/ Other (2)		1.12
Farnham Park	68.7	68.7	20.5	28.9	Walking & shops (5)	Walking & Family (2)	0.99
Heather Farm	64.1	80.4	7.6	15.2	Dog walking & café (10)	Dog walking & family (5)	1.08
Homewood Park	77.1	81.3	8.3	8.3	Hospital (4)	Dog Walking & other (4)	1.08
Lily Hill	69.2	78.0	11.0	16.5	Dog walking & family (5)	Rugby (4)	1.10
Riverside	85.1	89.6	6.0	9.0	Dog walking & run (3)		1.13
Rook's Nest Wood	69.8	76.7	11.6	16.2	Commercial dog walker (7)	Dog Walking & other (5)	1.4
Rowhill	83.7	85.7	4.1	6.1	Walking (4)	Dog walking & run/ Commute/ Walking & other (2)	1.31
Southwood Woodland	67.6	72.1	8.8	16.2	Walking & Family (6)	Commute (6)	1.01
St Ann's Hill	82.5	89.5	10.5	10.5	Dog walking & family (4)	Dog walking & run/ Dog walking & wildlife watching (2)	1.25
White Rose Lane	84.6	88.5	7.7	11.5	Walking & wildlife watching (4)	Dog walking & family (4)	1.12
Total	72.4	79.7	11	15.4	Walking & other (5)	Walking & Family (4)	1.10

Map 4: Pie chart of the adjusted proportion of interviewees conducting types of activities.

Legend

● Survey Point locations

■ SANGs surveyed

■ others SANGs

Activities:

(pie chart sized by the number of interviewees)

■ dog type

■ walk type

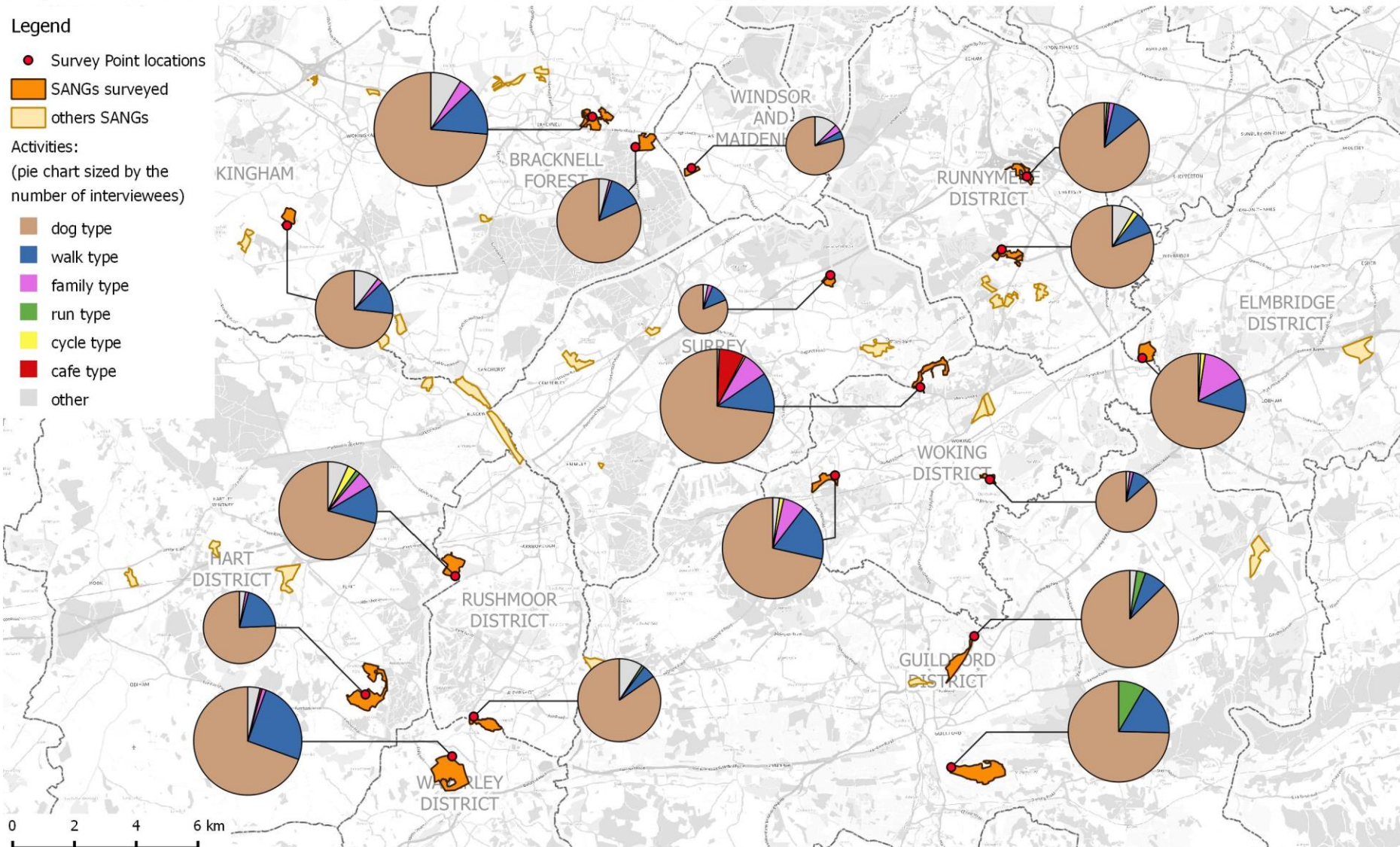
■ family type

■ run type

■ cycle type

■ cafe type

■ other



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Frequency and duration

- 3.9 Important questions were also asked regarding the duration and frequency of interviewees visits at sites. Interviewees were asked to state how long they usually spend at the site from the following categories; “less than 20 mins”, “20 to 40 mins”, “40 mins to 1 hr”, “more than 1 hour”.
- 3.10 Overall, the most common response was “40 minutes to 1 hour”, given by 45% of interviewees, compared to just 2% visiting for “less than 20 minutes”. However, there were clear differences in the relative proportion of these responses as shown in Figure 1.
- 3.11 Chantry Wood had the highest proportion of visits lasting “more than 1 hour”, with almost half of respondents stating this category (43%). At this site, only 3% of interviewees said they were visiting for “less than 40 minutes”. In contrast, at the three sites; White Rose Lane, Allen’s Field and Rook’s Nest Wood, half or more than half of interviewees were visiting “less than 40 minutes”.
- 3.12 Using the frequencies reported by each interviewee we calculated an approximate average visit duration. The number of interviewees in each category was multiplied by the approximate duration, the totals for each category summed and then divided by the number of interviewees. Approximate duration values used for each category were: “less than 20 mins” = 15 minutes, “20 to 40 mins” = 30 minutes, “40 mins to 1 hr” = 50 minutes, “More than 1 hour” = 90 minutes. Those assigned to other were unable to be included in this calculation. While this is highly simplistic, and values are considered very approximate, it serves well to give an indication, allow comparison and provide a ranking to the sites, as used in Figure 1.

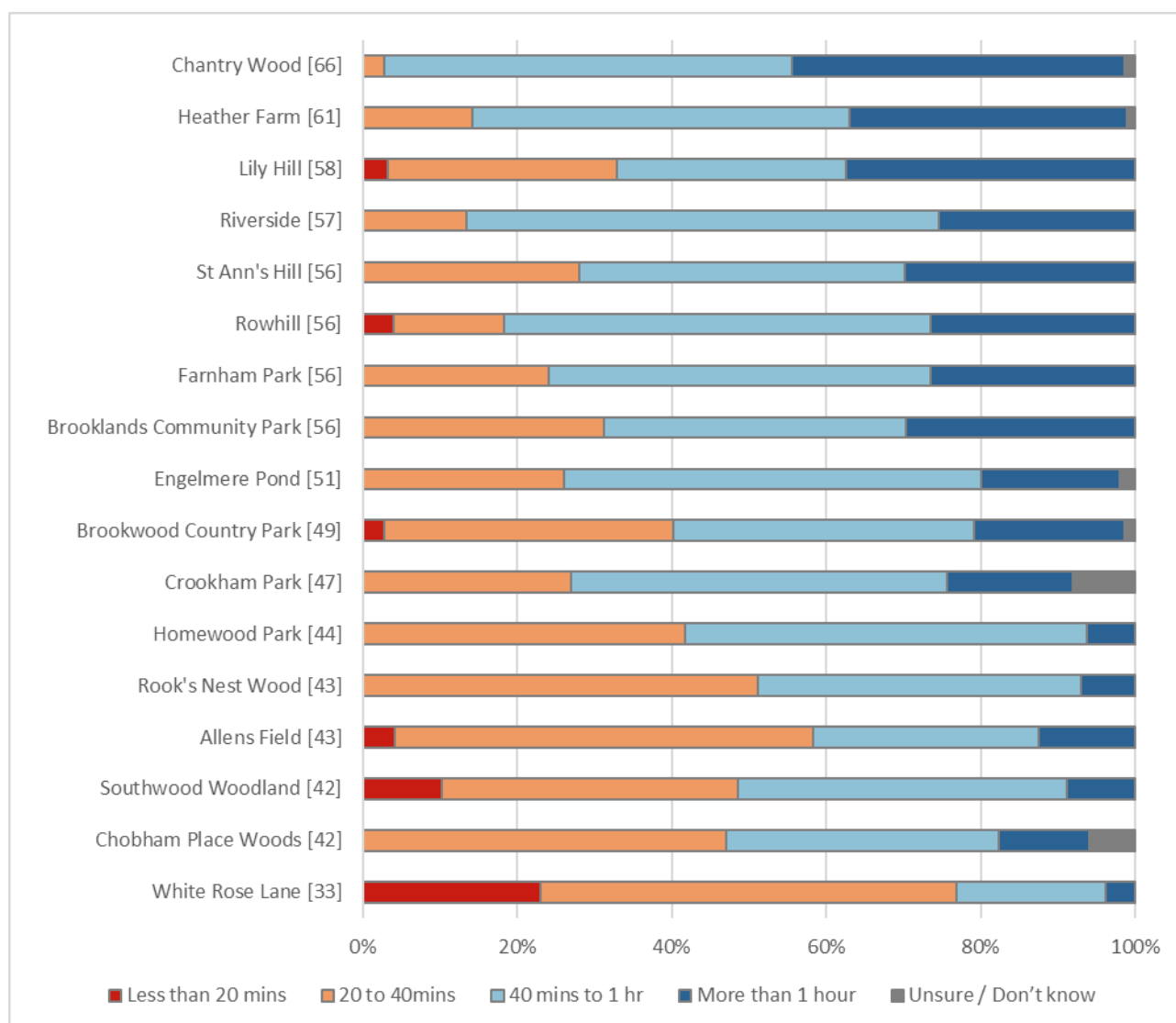


Figure 1: Visit duration of interviewees expressed as the percentage of interviewees in five categories for each site. Values in square brackets indicate an averaged approximate visit duration of at each site.

3.13 One of the factors affecting the visit duration will be the size of the site, and this relationship is shown in Figure 2 (Pearson's correlation, $t=2.159$, $df=15$, $p=0.047$). Overall there would appear an intuitive relationship between the size of the site and the time spent on site. The larger sites, such as Chantry Wood and Farnham Park can offer longer routes for people to walk and spend time here. While the smallest site, White Rose Lane (7.4 ha) was the only site where the average approximate visit duration was less than 40 minutes (estimated at 33 minutes), and had the highest proportion of visits which were less than 20 minutes (23%).

3.14 However, there are some sites which do not fit this trend and are of interest. Heather Farm and St Ann's Hill are sites where the visits are much longer than we would predict given the relatively small size of the site. While Crookham Park and Southwood

Woodland are sites which have shorter typical visit durations than we would expect given the size of the sites.

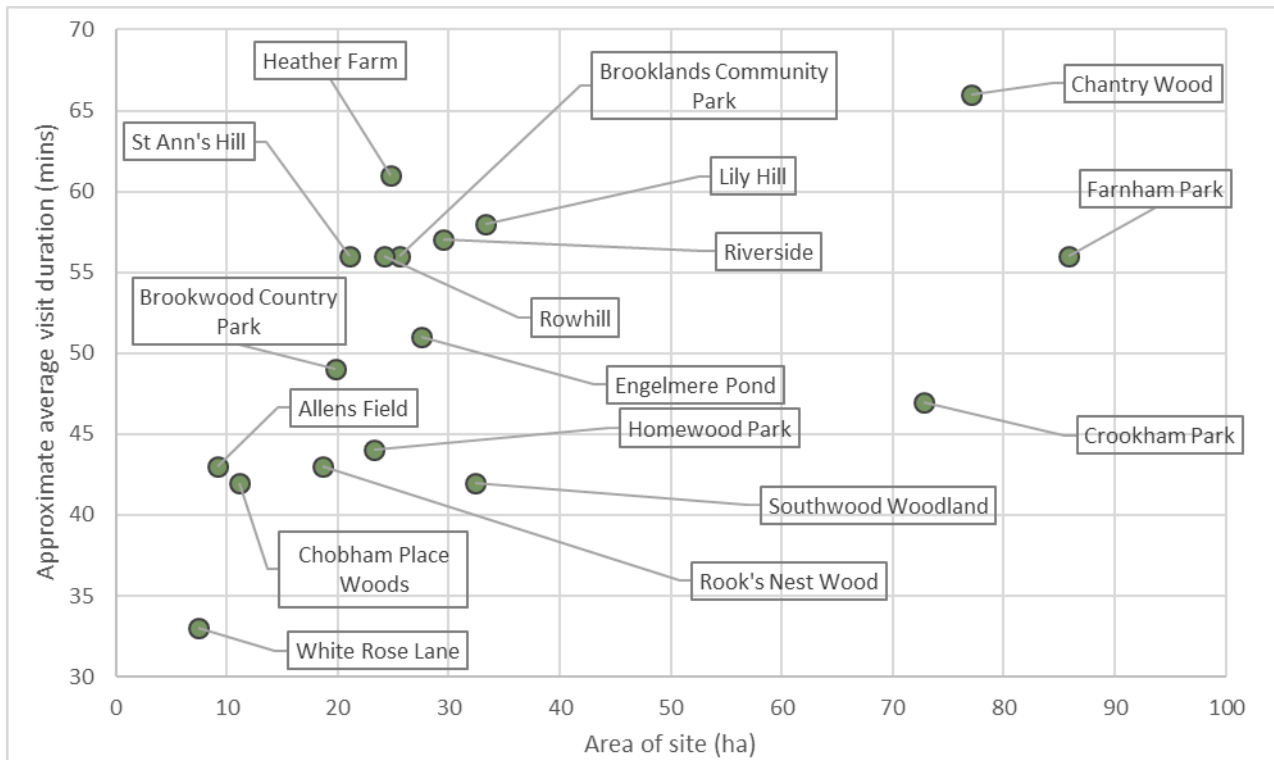


Figure 2 : Scatterplot of the approximate average visit duration (minutes) for each site compared to the area of site (hectares).

- 3.15 Interviewees were also asked how often they visit the site, with responses categorised as; "daily", "several times a week", "weekly", "monthly", "other" and "unsure/ don't know".
- 3.16 Across all sites, the most common response was "daily" (given by 39% of interviewees), followed by "weekly" (29%) and "several times a week" (13%). Approximately 10% of interviewees visit frequency was categorised as "other", which meant this was difficult to analyse.
- 3.17 At Rowhill, the highest percentage of interviewees reported that they visited the site "daily" (just under 60%), compared to 7% of all interviewees at Heather Farm (although 30% of interviewees at this site were categorised as "other").
- 3.18 As conducted for visit duration, we used the frequencies reported by each interviewee to calculate an approximate average number of visits per year. The number of interviewees in each category was multiplied by the approximate number of visits per year, the totals for each category summed and divided by the number of interviewees. Approximate number of visit values used for each category were: "Daily" = 350 visits a year, "Several times a week" = 130 visits a year, "Weekly" = 52 visits a year, "Monthly"

=12 visits a year. Any other categories (“Other” or “Unsure/ Don't know”) were unable to be included in this calculation.

- 3.19 As with the visit duration estimates, this approach has obvious limitations made by the simplistic assumptions used, but is useful to provide a ranking for the sites (as used in Figure 3) and allows comparison between sites. The estimated number of visits made per year was also plotted against the size of the site (Figure 4), but a relationship between these two was, unsurprisingly, not as clear as with visit duration.

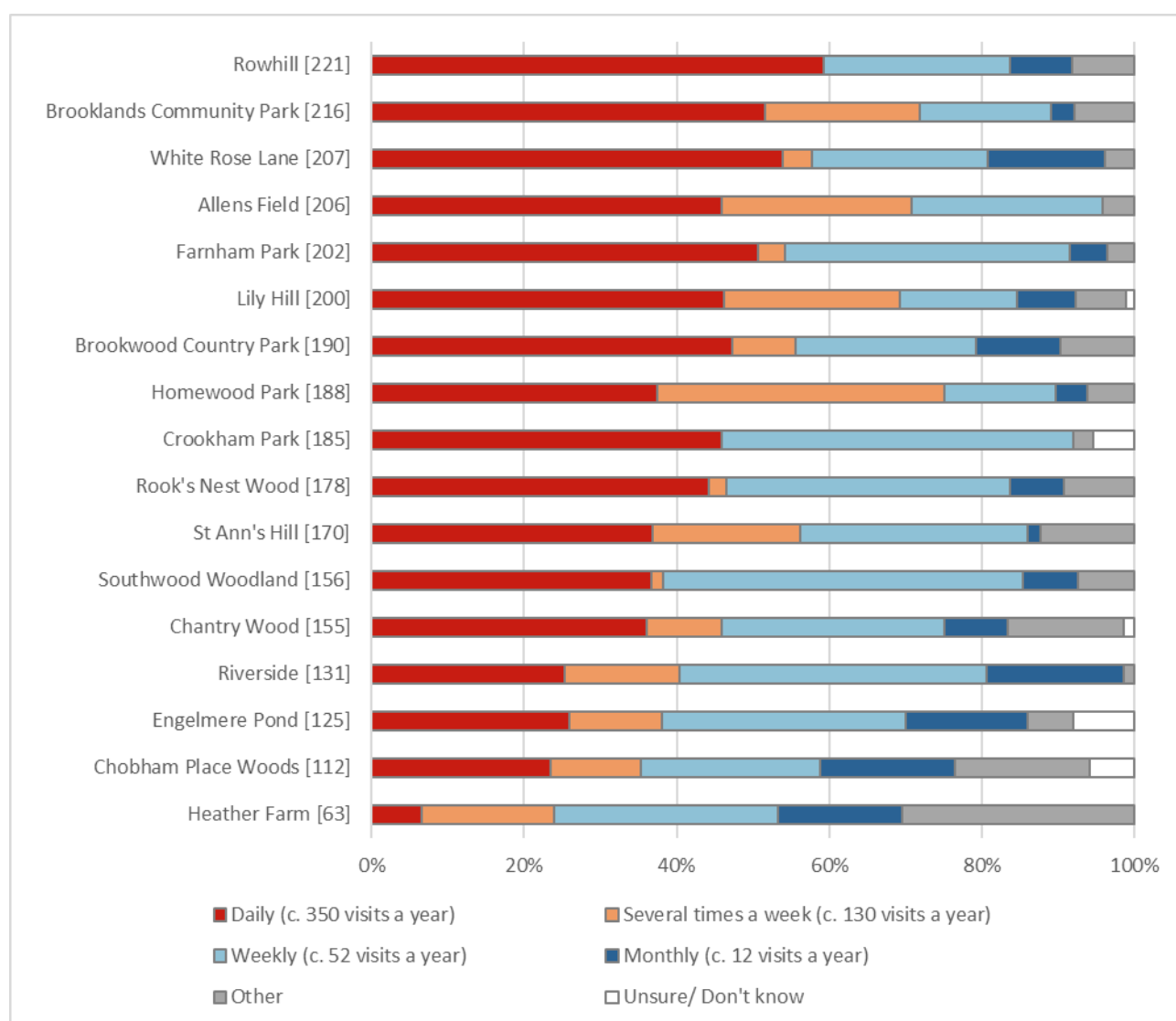


Figure 3: Frequency of visit of interviewees expressed as the percentage of interviewees in six categories for each site. Values in square brackets indicate an averaged approximate visit frequency (visits per year) of at each site.

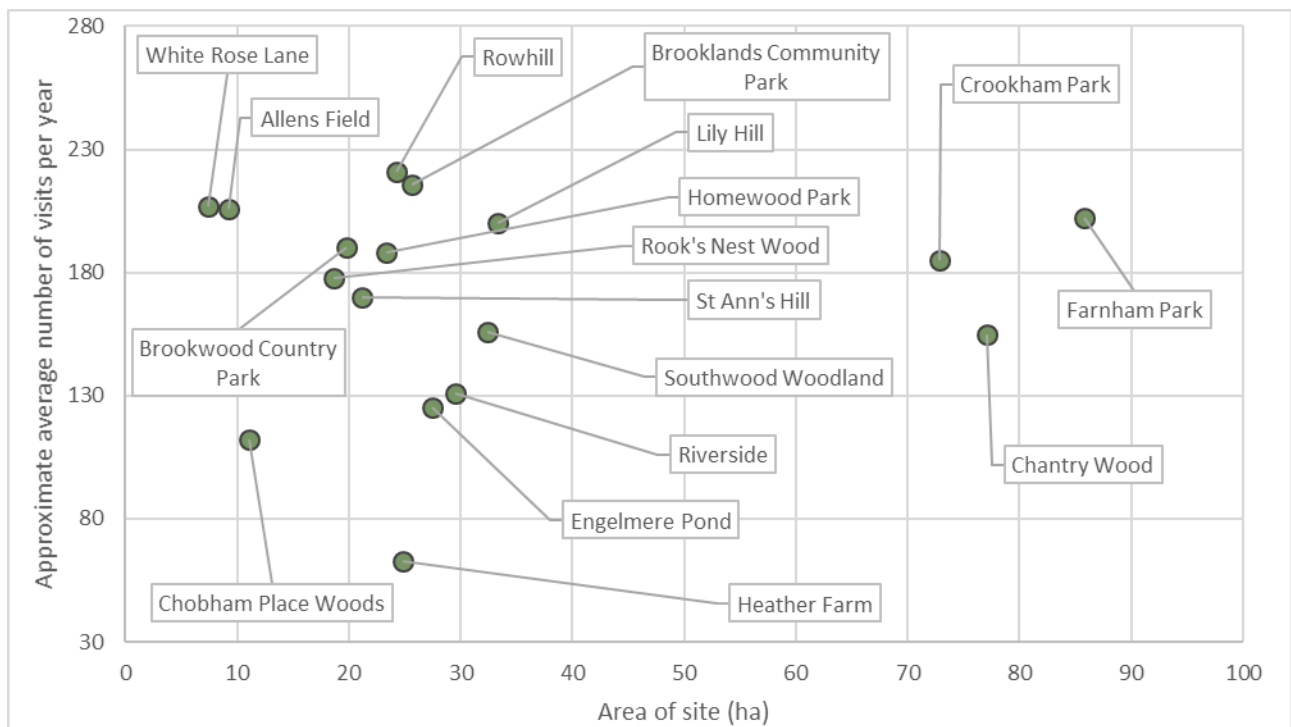


Figure 4: Scatterplot of the approximate average number of visits made per year for each site compared to the area of site (hectares).

Features liked about the SANG

- 3.20 Interviewees were asked what they liked about the site they were visiting. The responses were listed as free text, and these had to be categorised for analysis. We grouped responses into 29 categories and calculated the number of responses for category. This approach allows for a single interviewee to provide multiple responses. Features which were liked by more than an average of five percent of responses across the sites are shown in Figure 5 (19 categories).
- 3.21 From the overall survey data shown in Figure 5, it is apparent that sites being close to home was the most common reason interviewees liked the site; just over a fifth of all responses mentioned this (21.9%). This was followed by scenery or general comments regarding views, picturesque nature etc. (19.9%), the quality of paths/surfacing of paths (16.8%), sites being peaceful/quiet (15.6%) and well maintained/tidy sites (15.5%).

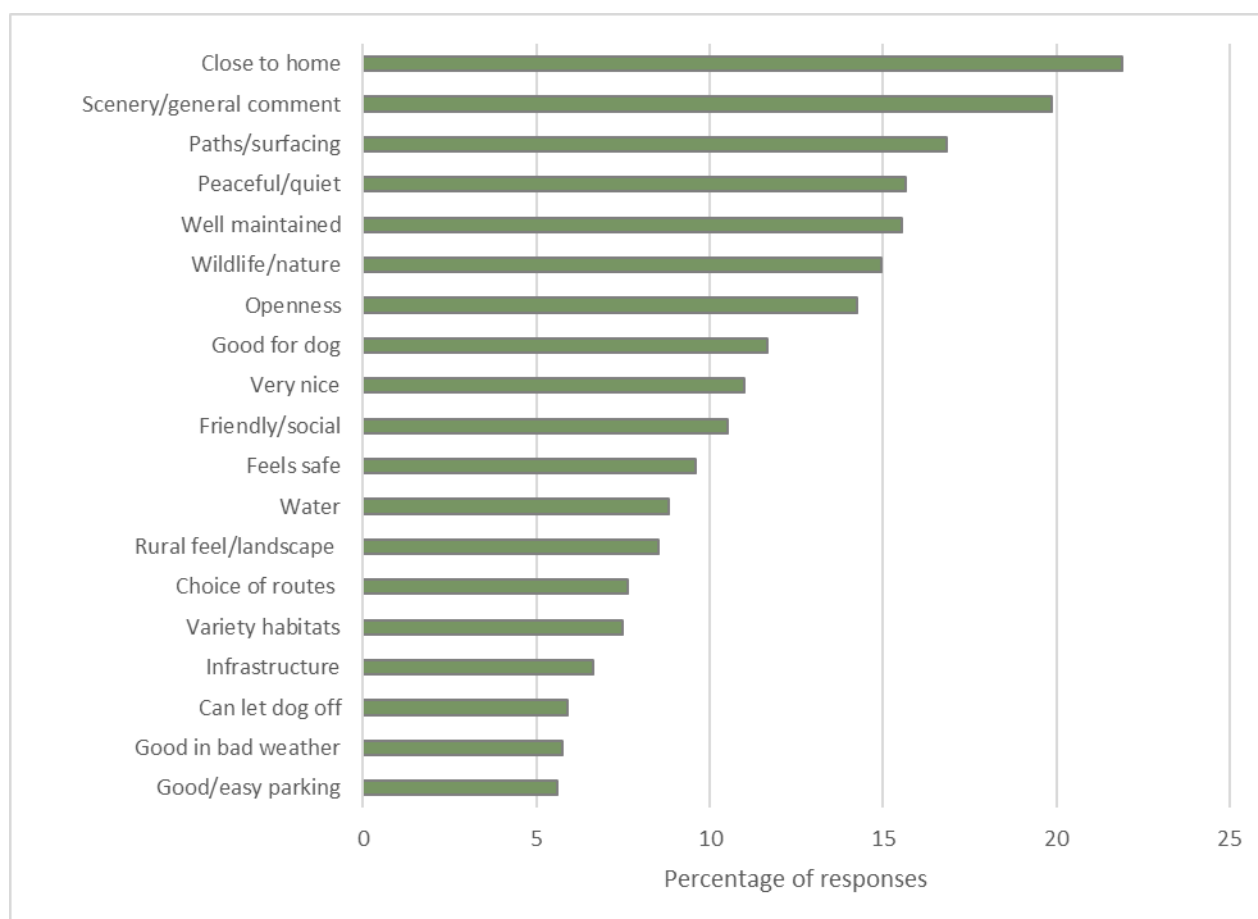


Figure 5: Percentage of responses selecting different features from all survey data .

3.22 The features liked about each site were examined by ranking the top four for each site, and these are listed in Table 5. 'Close to home' often featured within the top four reasons but there were seven exceptions: Chobham Place Woods, Engelmere Pond, Farnham Park, Heather Farm, Homewood Park, Lily Hill and Riverside.

3.23 Other top ranked factors were: the paths and surfacing (Rook's Nest Wood and Southwood Woodland); the general openness and ability to use large open spaces (Allens Field, Brooklands Community Park and Homewood Park); the presence of water (often for dogs) (Brookwood Country Park and Riverside); and the Infrastructure (usually referring to a café) at Heather Farm.

Table 5: Summary of the what features are liked about each site. Top four answers responses are shown for each site. Values in brackets indicate the percentage of responses for this feature (interviewees could give multiple responses). Features which are jointed ranked are separated with "&" and cells merged to cover these join ranks where applicable.

Site	Rank 1	Rank 2	Rank 3	Rank 4
Allens Field	Openness (50)	Close to home (38)	Infrastructure (21)	Peaceful/ quiet & scenery/ general comment (17)

Brooklands Community Park	Openness (30)	Close to home (20)	Well maintained (17)	Choice of routes & scenery/ general comment (14)
Brookwood Country Park	Water (29)	Close to home (26)	Paths/ surfacing (13)	Scenery/ general comment & variety habitats & wildlife/ nature & well maintained (11)
Chantry Wood	Scenery/ general comment (75)	Peaceful/ quiet & choice of routes (17)	Close to home & rural feel/ landscape (15)	
Chobham Place Woods	Scenery/ general comment (18)	Peaceful/ quiet & not many people (12)	Feels safe & rural feel/ landscape & wildlife/ nature & good for dog & good in bad weather & friendly/ social (6)	
Crookham Park	Close to home (46)	Paths/ surfacing (43)	Very nice & well maintained (22)	
Engelmore Pond	Paths/ surfacing (42)	Water (42)	Peaceful/ quiet (26)	Wildlife/ nature & good for dog (22)
Farnham Park	Scenery/ general comment (28)	Infrastructure (24)	Rural feel/ landscape & openness (23)	
Heather Farm	Infrastructure (23)	Openness (15)	Feels safe & good for dog & can let dog off (10)	
Homewood Park	Openness (31)	Good/ easy parking (33)	Peaceful/ quiet (19)	Scenery/ general comment (23)
Lily Hill	Well maintained (45)	Paths/ surfacing (29)	Friendly/ social (29)	Openness (22)
Riverside	Water (43)	Wildlife/ nature (24)	Good for dog (24)	Secure for dog (16) & paths/ surfacing (16)
Rook's Nest Wood	Paths/ surfacing (28)	Close to home & wildlife/ nature (23)		Variety habitats (21)
Rowhill	Close to home (53)	Well maintained (37)	Friendly/ social (29)	Wildlife/ nature (27)
Southwood Woodland	Paths/ surfacing (40)	Well maintained (35)	Close to home (31)	Feels safe & scenery/ general comment & good in bad weather (19)
St Ann's Hill	Scenery/ general comment (35)	Good for dog (19)	Very nice (19)	Close to home (18)
White Rose Lane	Peaceful/ quiet (42)	Close to home (31)	Wildlife/ nature (27)	Can let dog off & rural feel/ landscape (15)

Alternative sites and use of the TBH SPA

3.24 Interviewees were asked to consider what other sites they visited. Overall, 94% of interviewees (857) provided one or more named alternative sites/places (e.g. locations within "sites"). Interviewees were allowed to name multiple sites, with on average 2.5 sites listed, but a maximum of 10 was given by a single interviewee. To account for this, each interviewee's named choices were weighted by the number of locations given, so that results were not skewed by interviewees who gave lots of sites. The named sites/places were examined by TBHP staff to determine those which referred to sites/places within the SPA or were SANG sites.

- 3.25 Table 6 gives a summary of the top ten named sites from all interview data, ranked separately for SPA sites, SANG sites and other locations. This table provides an approximate percentage of interviewees calculated from the weighted values.
- 3.26 Heather Farm was the most commonly cited alternative SANG type, with 1.1% of the interviewees naming this site, followed by Farnham Park (1.0%). For sites which were part of the SPA, Horsell Common was named by 6.8% of interviewees, followed by Caesar's camp (5.5%) and Chobham Common (3.8%). The most popular other site was Virginia water (4.6%) – likely to be influenced by the fact this is both an area and a discrete site.

Table 6: Top ten named sites for SANG, SPA and other site types. Values in brackets indicate the adjusted percentage of interviewees selecting the site (interviewees single choice was divided by the number of sites selected in total, summed by site and a percentage of all interviewees calculated).

SANG	SPA	Other
Heather farm (1.1)	Horsell common (6.8)	Virginia water (4.6)
Farnham park (1)	Caesar's camp (5.5)	Newlands corner (2.4)
Longhill park (0.6)	Chobham common (3.8)	Windsor great park (2)
St. Ann's hill (0.6)	Swinley forest (2)	Fleet pond (1.9)
Longhill (0.5)	The lookout (1.6)	Ottershaw memorial park (1.2)
Englemere pond (0.5)	Whitmoor common (1.2)	Canal (1.2)
Brookwood country park (0.3)	Lightwater country park (1.1)	Chertsey meads (1.1)
Homewood park (0.3)	Tweseldown (0.8)	Goldsworth park lake (1)
Pope's meadow (0.3)	Ockham common (0.7)	Alice holt (0.9)
Lily hill park (0.3)	Wisley common (0.7)	Basingstoke canal (0.9)

- 3.27 The use of the SPA and SANG sites as a whole could also be examined. Across interviewees, 50% of interviewees included an SPA site in their alternative named sites (e.g. at least one named in the list of sites given), and 23% included a named SANG.
- 3.28 This was also examined on a site by site basis, as shown in Table 7. This shows that the highest proportion of interviewees mentioning one or more SPA sites was at Rowhill (87% of interviewees), followed by Chobham Place Woods, Allens Field and Heather Farm (all 75% or more). The site with the clear lowest percentage was Chantry Wood, just 7%. Sites with more than 25% of interviewees mentioning one or more SANG sites were; Allens Field, Englemere Pond, Homewood Park and Rowhill.
- 3.29 The overall proportions in each of the three classes for a single site could be calculated by weighting interviewees who gave multiple choices by the number of choices given. While this measure is related to the previous calculation these are useful to express as a single value. These percentages are shown in Table 7 and Map 5, to illustrate the important influence of proximity to the SPA and SANG sites in these percentages.

Table 7: Summary table of the use of SANG, SPA and other sites, shown as the percentage of interviewees which mentioned a SANG or SPA in their list of sites and shown as the percentage for each site, calculated using an adjustment for when multiple sites were given by each interviewees.

SANG interviewed at	% interviewees mentioning a SANG site	% interviewees mentioning a SPA site	% of sites named which were SANG/ SPA /other (adjusted for multiple choices)		
			SANG sites	SPA sites	other sites
Allens Field	25	75	12.5	45.8	41.7
Brooklands Community Park	18	39	9.6	25.2	65.2
Brookwood Country Park	17	63	7.2	44	48.8
Chantry Wood	3	7	0.9	2.9	96.2
Chobham Place Woods	23	77	10.8	60.8	28.5
Crookham Park	19	63	9.4	46.8	43.8
Engelmore Pond	43	55	20.8	26.5	52.7
Farnham Park	14	53	5	30.3	64.7
Heather Farm	11	76	5.5	56.6	37.9
Homewood Park	40	36	14.4	16.6	69
Lily Hill	50	36	26.8	16.7	56.4
Riverside	15	42	5.9	18.9	75.2
Rook's Nest Wood	17	22	4.3	9.6	86.1
Rowhill	44	87	17.4	46.4	36.2
Southwood Woodland	21	56	5.9	29	65
St Ann's Hill	15	38	7.5	19.5	73
White Rose Lane	12	46	3.5	25	71.5
Total	23	50	9.9	29.3	60.7

Map 5: Pie chart of the adjusted proportion of interviewees conducting visits at SPA, SANG or other sites.

Legend

● Survey Point locations

■ SANGs surveyed

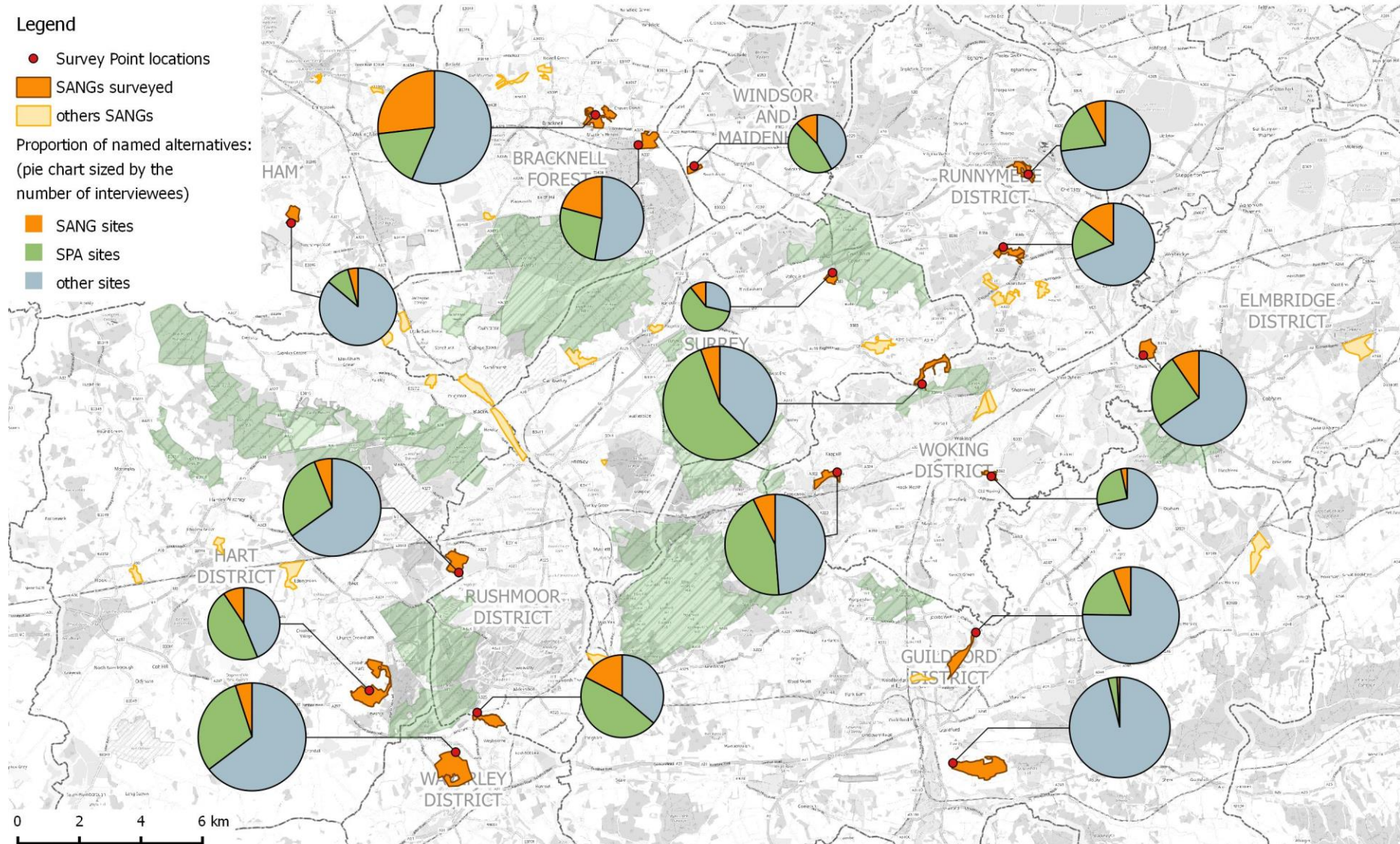
■ others SANGs

Proportion of named alternatives:
(pie chart sized by the
number of interviewees)

■ SANG sites

■ SPA sites

■ other sites



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Postcodes

- 3.30 Interviewees were asked to provide a home postcode, and in total 894 valid, georeferenced postcodes were obtained (93% return rate from interviews). For each interviewee's postcode the linear distance back to the survey point at which they were surveyed was calculated.
- 3.31 The typical radius for interviewees was quite small; on average 3.68 km (mean value), and half of all interviewees lived within 1.47 km of the survey point where they were interviewed (i.e. 1.47 was the median). However, this varied greatly between sites, as shown in Table 6. Seven interviewees had a recorded linear distance beyond 50 km, all interviewees were included, although clearly some were not local and visiting in the area/ on holiday.
- 3.32 Most interviewee postcodes were local, and these are summarised by the percentage of these occurring within each of the Local Authorities which surveyed SANG sites fell in, as shown in Table 8. Interviewees were often from the Local Authority which the site was located in. Some exceptions to this were Brooklands Community Park, where most interviewees were arriving from the neighbouring Local Authority, but the site is located beside the boundary of the Local Authorities and Chobham Place Woods which appeared to have reasonable numbers drawn from Woking District.
- 3.33 One of the easier ways to express distances is considering the catchment radius. Catchments are approximated using the 75% and 90% nearest postcodes to indicate the radius in which most of the interviewees were located within. These distances are given for each site in Table 9.
- 3.34 Table 9 as well as detailing the 75th and 90th percentile radius for each site, provides an estimate of the catchment area. These catchment areas are created using a convex hull which is formed around the points of either the 75th and 90th percent nearest postcodes. These areas are illustrated in Map 6 and the area of these convex hulls given in Table 9, and a comparison of convex hull area to the size of site made in Figure 7.
- 3.35 One of the key sites from this, with a consistently high estimated catchment radius and area was Heather Farm, followed closely by Chobham Place Woods (see Table 9). Chobham Place Woods had a greater catchment radius, but catchment area shows this to be a single point which was a long distance away and otherwise the catchment area was second place to Heather Farm. Consistently small catchment radius and catchment area was observed at Allens Field, Crookham Park, Farnham Park and White Rose Lane.
- 3.36 An important consideration for these distances is the use of different modes of transport by interviewees and the relative abundance of these transport means between sites. For example, Allens Field, Crookham Park and White Rose Lane had the

highest percentage of foot visitors and are noted above as some of the smallest radiuses and catchments. The two main modes of transport were car/van or foot, only 5 interviewees were recorded by bicycle and one by train. Across all sites, the mean linear distance between interviewees' home postcode and the site was 1.57 km and half of all interviewees on foot lived within 0.52 m (median value, n=270). For those arriving by car the mean value was 4.59km and the median 2.31 km (n=618).

- 3.37 The proportion of foot and car/van interviewees differed greatly between sites and therefore the catchment radiuses are also shown for the different sites in Table 10. The 75th percentile values for individual sites ranged from 1.83 km (Rowhill) to 5.19 km (Heather Farm) and for foot values from 0.36 km (Allens Field) to 1.48 km (Engelmere Pond).
- 3.38 We also made a brief comparison of catchment areas from convex hull areas to the number of web results as an approximation of how well known the site was in the public domain. The number of unique page results was obtained for each site using a well-known search engine using the site name (in quotation marks e.g. " ", to return only exact results to the site name) and the district name, with only results from the UK counted. In the case of sites which cover multiple districts, both were examined and only the highest result recorded. This included results specific to the site from official pages to forums (e.g. horse riders, parent groups), but may also come from a wide range of non-relevant results to the sites SANG use, including pages for; news, parking sites, football clubs, road names and property search sites. Clearly this has limitations, but was considered a novel way to attempt to record this information.
- 3.39 Figure 8 shows a comparison of the number of unique web page results to the convex hull area. We would perhaps expect some form of positive relationship between greater web presence and greater draw and therefore convex hull area. There is an indication of this, but no clear pattern is apparent.

Table 8: The percentage of postcodes recorded in each local authority for individual sites. Note the number of postcodes differs between sites and not all interviewees provided a full georeferenced postcode. Values in bold indicate the value for the district/s the site is located in.

	Bracknell Forest (B)	Elmbridge District (B)	Guildford District (B)	Hart District	Runnymede District (B)	Rushmoor District (B)	Surrey Heath District (B)	Waverley District (B)	Windsor and Maidenhead (B)	Woking District (B)	Wokingham (B)	Other Local Authority
Allens Field					4		4		91			
Brooklands Community Park		21	2		22					55		
Brookwood Country Park			3				6			90		1
Chantry Wood			80			1		14				4
Chobham Place Woods					7		40		13	27		13
Crookham Park				96				4				
Engelmore Pond	84				2				9		5	
Farnham Park			1	10		5		84				
Heather Farm			1		12		19	1	1	65		1
Homewood Park					88		2			7		2
Lily Hill	94								1		4	1
Riverside	2		88					2		8		2
Rook's Nest Wood	2										86	
Rowhill						73		25				2
Southwood Woodland			3	15		79		2				2
St Ann's Hill					82							18
White Rose Lane										100		
Total	13	1	14	5	12	10	3	11	3	22	5	0

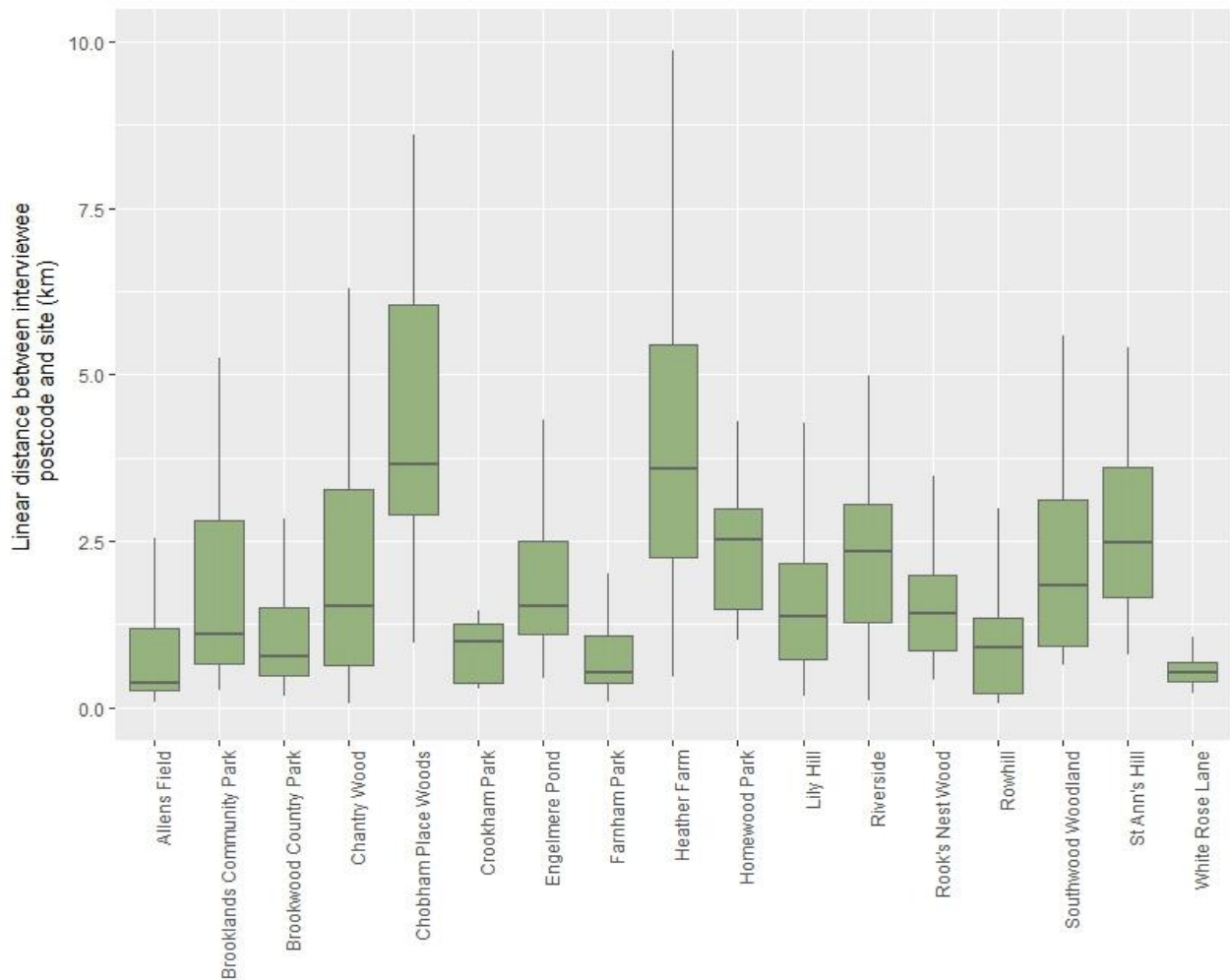


Figure 6: Boxplots of the range linear distances between the site survey point and interviewees home postcode. Outlier points not shown.

Table 9: 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 6).

SANG	Size of site	Catchment radius (m) : 75 th percentile	Catchment area (km ²) : 75 th percentile convex hull	Catchment radius (m) : 90 th percentile	Catchment area (km ²) : 90 th percentile convex hull
Allens Field	9.2	729	0.35	2547	2.44
Brooklands Community Park	25.6	2803	9.83	4805	23.69
Brookwood Country Park	19.8	1470	3.3	3548	13.31
Chantry Wood	77.1	3227	15.37	6289	33.14

SANG	Size of site	Catchment radius (m) : 75 th percentile	Catchment area (km ²) : 75 th percentile convex hull	Catchment radius (m) : 90 th percentile	Catchment area (km ²) : 90 th percentile convex hull
Chobham Place Woods	11.1	5804	21.42	8609	64.92
Crookham Park	72.8	1184	1.47	1458	2.39
Engelmer Pond	27.5	2412	4.81	4273	15.17
Farnham Park	85.8	997	1.18	3065	10.06
Heather Farm	24.8	5442	49.8	8142	105.95
Homewood Park	23.3	2977	9.14	4310	18.52
Lily Hill (Long Hill Park Group)	33.3	2168	9.5	3650	16.24
Riverside	29.5	3049	14.84	4990	32.33
Rook's Nest Wood	18.6	1956	5.61	3111	13.76
Rowhill	24.2	1272	1.5	2910	3.25
Southwood Woodland	32.4	3122	17	3847	21.32
St Ann's Hill	21.1	3574	12.6	5413	26.76
White Rose Lane	7.4	688	0.7	942	0.93

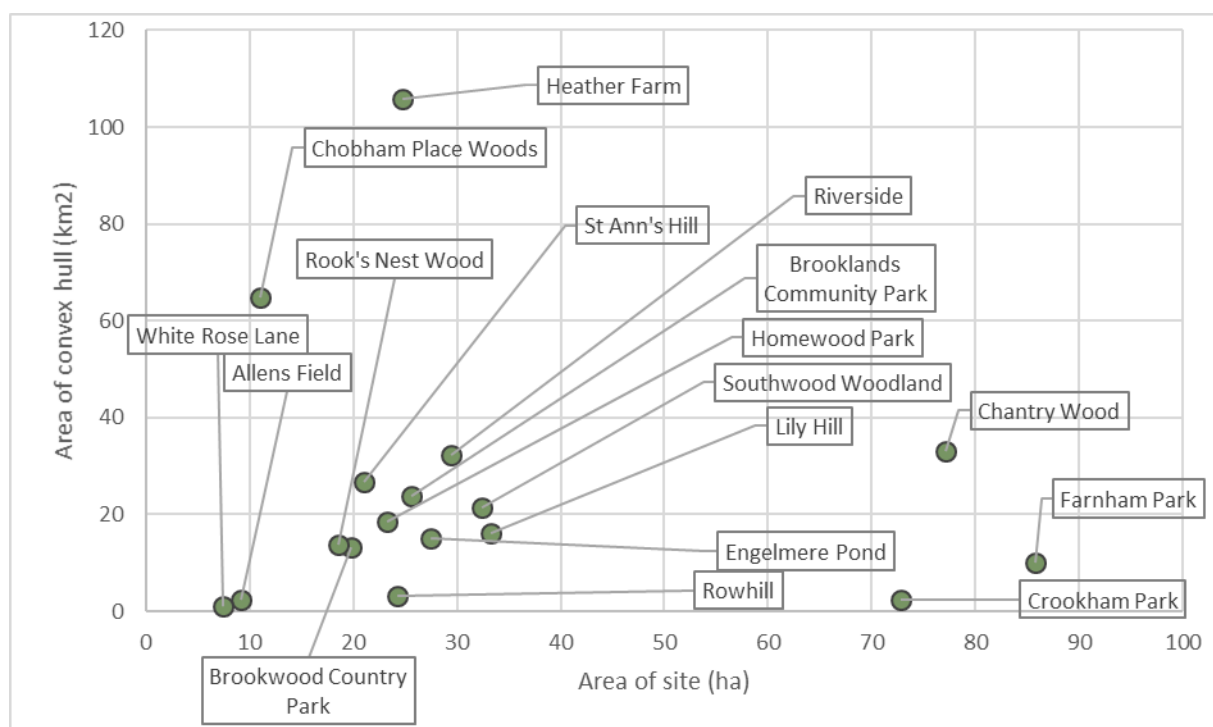


Figure 7: Scatterplot of the area of the 90th percentile convex hull (km²) compared to the size of the site.

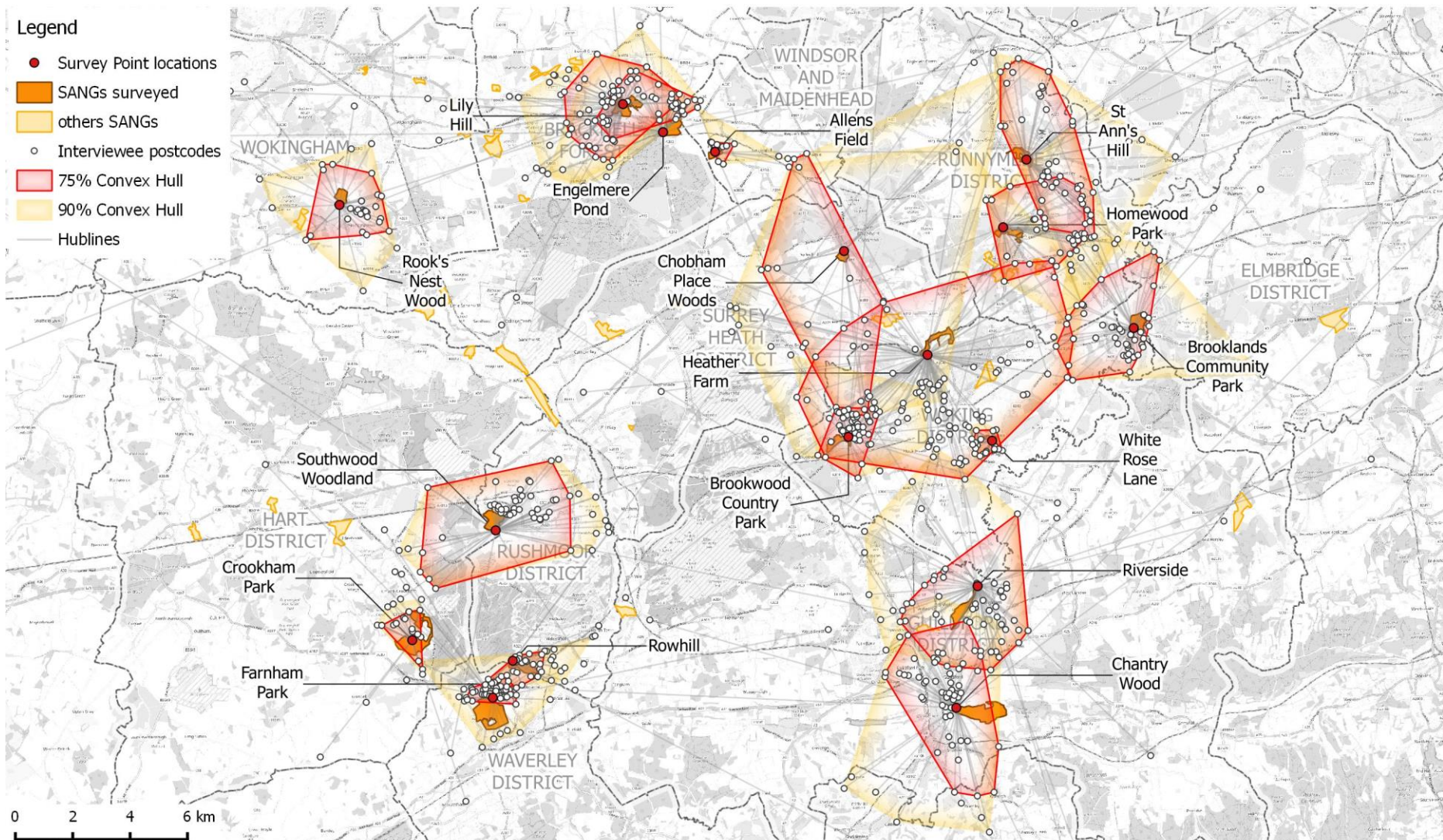
Table 10: Summary of the percentage of interviewees arriving by foot or by car/van from all interviewees (other classes included in calculation, but not shown). catchment radius (meters) for individual sites, calculated using the 75th percentile of linear postcodes distances from interviewee data. Number of postcodes used in this calculation is also shown.

SANG	Foot			Car/Van		
	% of all interviewees	Number of postcodes	Catchment radius (m): 75 th percentile	% of all interviewees	Number of postcodes	Catchment radius (m): 75 th percentile
Allens Field	71	11	363	29	5	2974
Brooklands Community Park	6	3	581	94	39	2803
Brookwood Country Park	46	24	685	54	28	2159
Chantry Wood	31	15	778	68	37	3933
Chobham Place Woods	0	-	-	94	11	5804
Crookham Park	81	17	1082	19	3	5185
Engelmere Pond	16	6	1483	84	26	2511
Farnham Park	67	41	655	33	18	4466
Heather Farm	5	3	985	95	62	5192
Homewood Park	2			96	28	2961
Lily Hill	24	15	817	75	46	2245
Riverside	10	5	959	90	44	3244
Rook's Nest Wood	14	4	832	86	24	2350
Rowhill	61	22	902	37	13	1830
Southwood Woodland	26	11	906	69	32	3429
St Ann's Hill	2	-		98	37	3574
White Rose Lane	96	18	679	4	-	-



Figure 8: Scatterplot of the convex hull area compared to unique web results for the sites.

Map 6: Distribution of interviewee postcodes in the area around TBH. Convex hulls are used to indicate the area covered by the 75% and 95% nearest postcodes at each site.



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Suggested improvements

3.40 The questionnaire also asked interviewees to suggest any improvements they would like to see at the current SANG. Responses were provided as free text which were then categorised as part of analysis. Responses were categorised as a single main improvement for each interviewee and then a number of other suggested improvements. Overall 801 interviewees provided a single main improvement, and a relatively small number (303) any other improvements (mean 1.47 improvements per interviewee).

3.41 The most common improvement, both according to main choices only and main and other choices pooled was for more bins or more regular emptying of bins (mostly for dog waste). Approximately one fifth of all interviewees mentioned this in their suggested improvements. The second highest ranked suggestion was for better path quality (although the quality of paths was mentioned as one of the key things liked about the site).

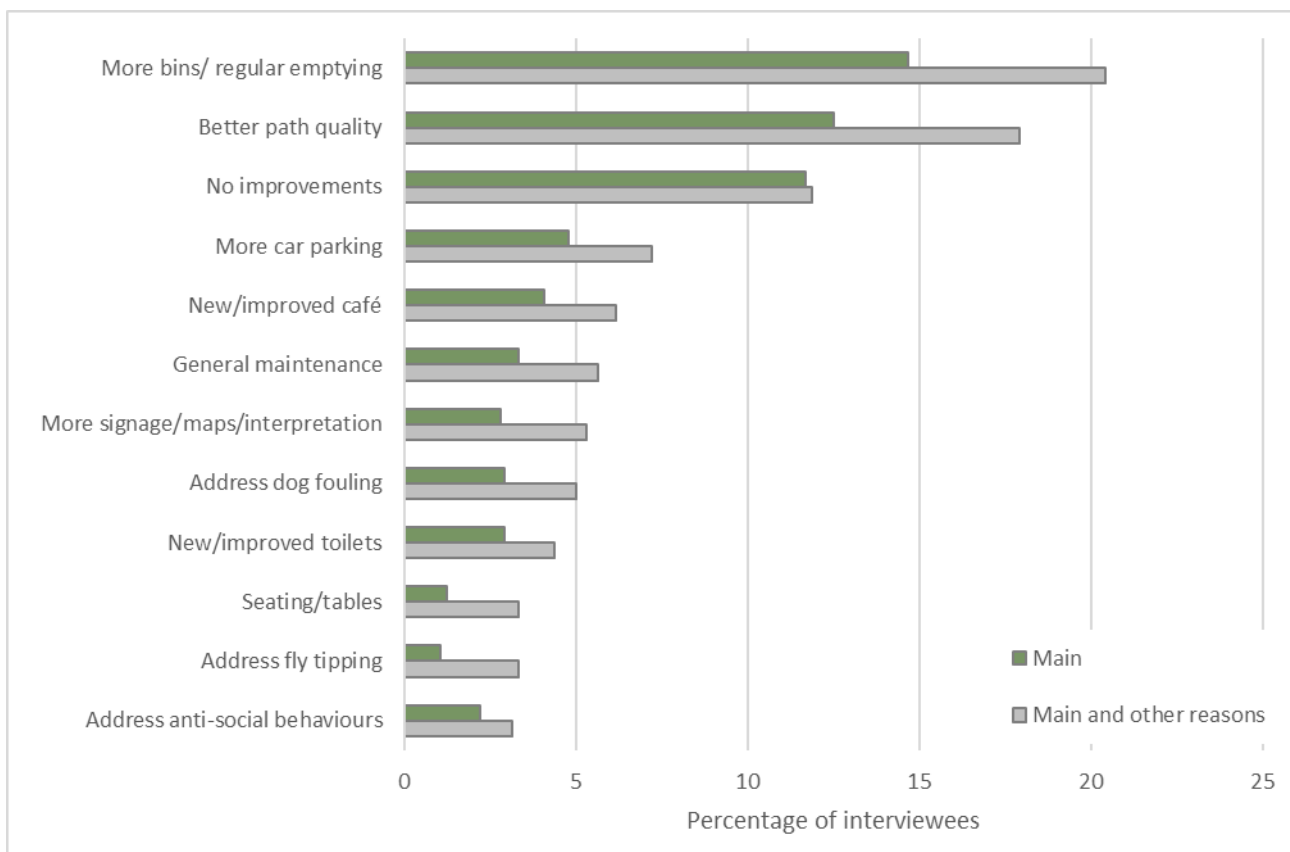


Figure 9: Percentage of interviewees recorded suggesting each of the top twelve ranked improvements. Each improvement is shown as the percentage of interviewees who selected the improvement as a main reason and as any reason (main or other).

3.42 At the three sites of Chantry Wood, Farnham Park and Southwood Woodland the top ranked main suggestion was for no improvements.

Table 11: Top four ranked main suggested improvements for the SANG. Values in brackets indicate percentage of all interviewees.

Site	Rank 1	Rank 2	Rank 3	Rank 4
Allens Field	Address anti-social behaviours (21)	Address site drainage (17)	Better path quality (13)	Better opening times (8)
Brooklands Community Park	New/improved toilets (14)	More bins/ regular emptying (11)	New/improved café (8) & Address dog fouling (8)	
Brookwood Country Park	More bins/ regular emptying (32)	No improvements (17)	Better path quality (13)	Address dog fouling (7)
Chantry Wood	No improvements (17)	More car parking (14)	More bins/ regular emptying (10)	Better car parking & General maintenance (7)
Chobham Place Woods	Address anti-social behaviours (18)	No improvements & More car parking & More bins/ regular emptying & Better path quality & Address user group conflicts (12)		
Crookham Park	More bins/ regular emptying (30)	No improvements (16)	More signage/maps/interpretation & Better path quality (11)	
Engelmer Pond	More bins/ regular emptying (22)	Address anti-social behaviours (12)	More signage/maps/interpretation & Better path quality (6)	
Farnham Park	No improvements (30)	More bins/ regular emptying (16)	Better path quality (12)	Address user group conflicts & More car parking (6)
Heather Farm	Better path quality (24)	More car parking (22)	More bins/ regular emptying (10)	No improvements (9)
Homewood Park	Better path quality (15)	More bins/ regular emptying (13)	New/improved café (6)	Address fly tipping & Safer for dogs & More paths & Address site drainage (4)
Lily Hill	New/improved café (19)	New/improved toilets (13)	More bins/ regular emptying (9)	No improvements & Address dog fouling (4)
Riverside	Address road noise (33)	No improvements (16)	More bins/ regular emptying (13)	Better path quality (9)
Rook's Nest Wood	Better path quality (35)	More bins/ regular emptying (12)	Bigger site (9)	Address site drainage & No improvements (7)
Rowhill	More bins/ regular emptying (22)	No improvements (20)	Better path quality (10)	New/improved café & Address dog fouling & General maintenance & Address site drainage (4)
Southwood Woodland	No improvements (22)	More bins/ regular emptying (18)	Better path quality & Activity areas (9)	
St Ann's Hill	General maintenance (14)	Better path quality (12)	Better car parking (12)	More bins/ regular emptying (11)
White Rose Lane	Better path quality (54)	General maintenance (15)	No improvements (8)	Address anti-social behaviours & More bins/ regular emptying & Address fly tipping & More signage/ maps/ interpretation & Safer for dogs & Address site drainage (4)

Knowledge of TBHP

- 3.43 One of the final questions in the survey asked if the interviewee had heard of the Thames Basin Heaths Partnership. Interviewees were only asked this if they reported that they had also visited the SPA, in the alternative sites question. Therefore, approximately 75% of interviewees were not asked this question. As such, overall only 7% of all interviewees had heard of the TBHP, however this increased to 29% when considering only those interviews where the question was asked (238 interviews).
- 3.44 Table 12 provides a summary of the responses by individual sites. From this table it is apparent that sites such as: Brooklands Community Park, Chobham Place Woods, Riverside, and Rook's Nest Wood, rank high with over 40% of interviewees who answered the question having heard of the TBHP. Considering all interviewees this would decrease to 9 - 24%, with the other sites of Brookwood Country Park, Engelmere Pond, Heather Farm, White Rose Lane, ranking higher. Sites with no recorded awareness were Crookham Park, Lily Hill and Rowhill, but at these sites the proportion of interviewees who were asked the question was small (see Table 12).

Table 12: Summary of knowledge of the TBHP (yes or no response) from the interviews shown by survey site.

Local authority of interviewee's home address	Total interviewees	Number of interviewees not heard of TBHP	Number of interviewees heard of TBHP	Percent of interviewees heard of TBHP from those giving Y or N	Percent of interviewees heard of TBHP from all interviewees
Allens Field	24	2	4	33	8
Brooklands Community Park	64	10	15	40	16
Brookwood Country Park	72	7	26	21	10
Chantry Wood	72	1	2	33	1
Chobham Place Woods	17	4	5	44	24
Crookham Park	37		9	0	0
Engelmere Pond	50	5	9	36	10
Farnham Park	83	1	2	33	1
Heather Farm	92	12	32	27	13
Homewood Park	48	4	11	27	8
Lily Hill	91		7	0	0
Riverside	67	10	15	40	15
Rook's Nest Wood	43	4	5	44	9
Rowhill	49		1	0	0
Southwood Woodland	68	1	6	14	1
St Ann's Hill	57	5	12	29	9
White Rose Lane	26	3	8	27	12
Total	960	69	169	29	7

3.45 The awareness of TBHP was also summarised by local authorities, as shown in Table 13. The selected local authorities are all those which include one or more sites. Those local authorities where awareness was more than 30% were; Guildford, Runnymede, Windsor and Maidenhead, Woking and Wokingham. However, the number of sites, relative geographic position of the sites, density of people, postcodes and overall effort in raising awareness may all vary between local authorities.

Table 13: Summary of knowledge of the TBHP (yes or no response) from the interviews shown by the local authority of the home postcode.

Local authority of interviewee's home address	Total interviewees	Number of interviewees not heard of TBHP	Number of interviewees heard of TBHP	Percent of interviewees heard of TBHP from those giving Y or N	Percent of interviewees heard of TBHP from all interviewees
Bracknell Forest (B)	117	12	3	20	3
Elmbridge District (B)	12	3		0	0
Guildford District (B)	121	18	9	33	7
Hart District	44	8		0	0
Runnymede District (B)	105	27	12	31	11
Surrey Heath District (B)	29	13	4	24	14
Waverley District (B)	93	3		0	0
Windsor and Maidenhead (B)	29	5	3	38	10
Woking District (B)	192	61	29	32	15
Wokingham (B)	42	4	4	50	10
Other Local Authority	110	5	2	29	2
No valid postcode given	66	10	4	23	5
Total	960	169	70	29	7

Route data

3.46 For a single site, Homewood Park SANG, the visitor survey involved capturing route data. A total of 46 route lines were digitised into GIS as polylines, and route length calculated.

3.47 Summary statistics of the route lengths are given in Table 14 and the density of these across the site shown in Map 7. Typically route length on the site was around 1.6-1.8km (Mean value =1, 845m. Median value =1,636m). The heatmap of route density shows highest use is along the formal paths along the northern edge of the site. However, only 28% of routes (13) were restricted to these two hard surfaced paths which are along the northern edge. Many routes are a circuit of the site, following its

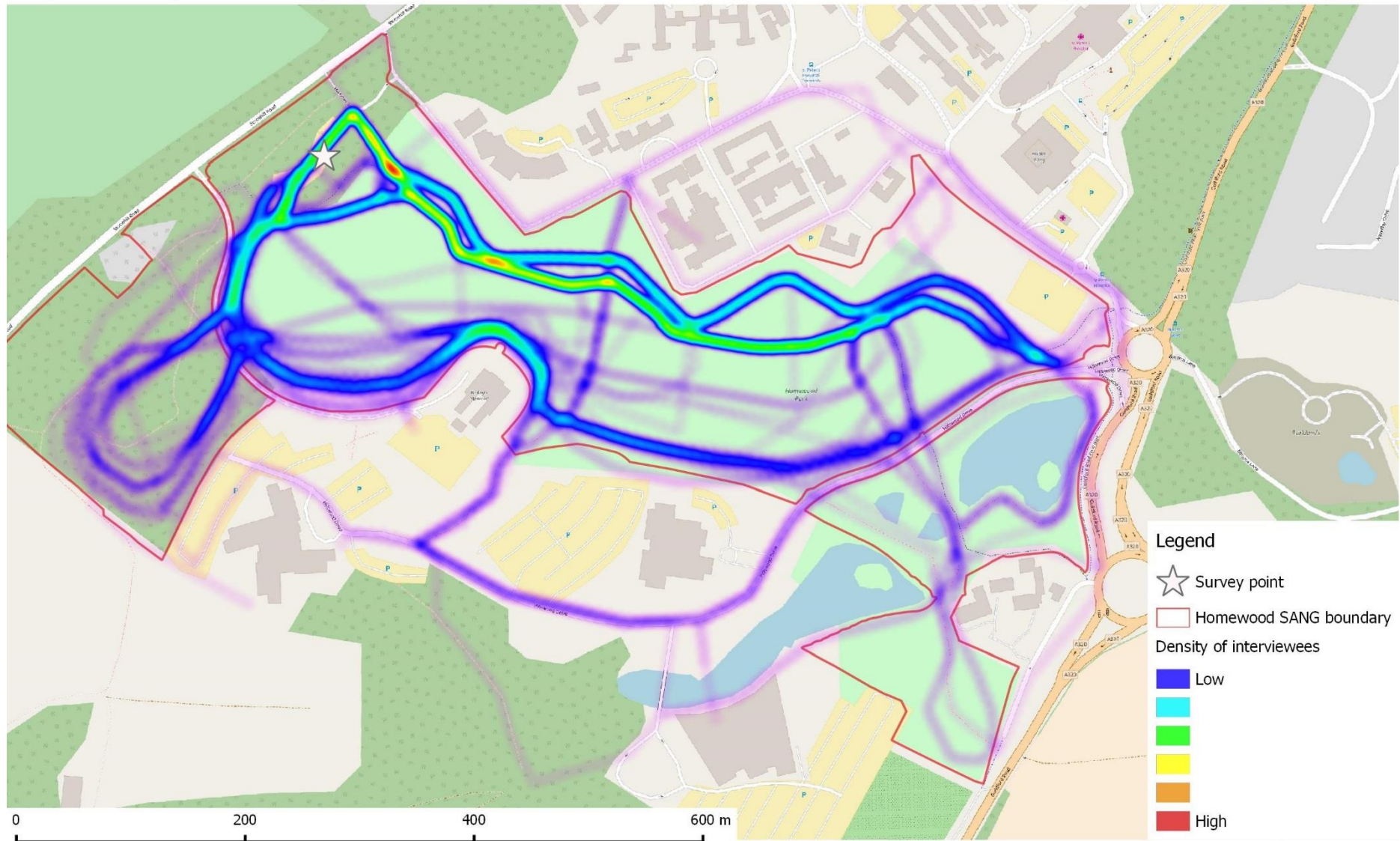
southern edge, but are more dispersed and therefore density of footfall lower than on the hard paths.

- 3.48 Routes are not restricted to the site, with 28% of paths occurring outside of the site boundary. While a typical route was a circuit around the open areas of the main central part of the site; 34% occurred in the woods which run alongside Stonehill Road, and 19% in/around the lakes (at the western edge of the site). The shortest route length recorded was 389 m, from the car park to the nearby buildings to the north of the site. The longest route 4,397 m recorded a second loop of the site, and use of the woods along Stonehill Road.
- 3.49 The density of routes is also expressed using a grid based approach to allow examination of the numbers of interviewees recorded in different parts of the site, shown in Map 8. Highest use in the grid cells was recorded along routes from the car park heading east. A single grid cell which covers both paths recorded the highest cell value of 39 interviewees, suggesting a high proportion, in the region of 80% of the interviewees accessing from the car park use these paths.

Table 14: Summary table of the route length measurements.

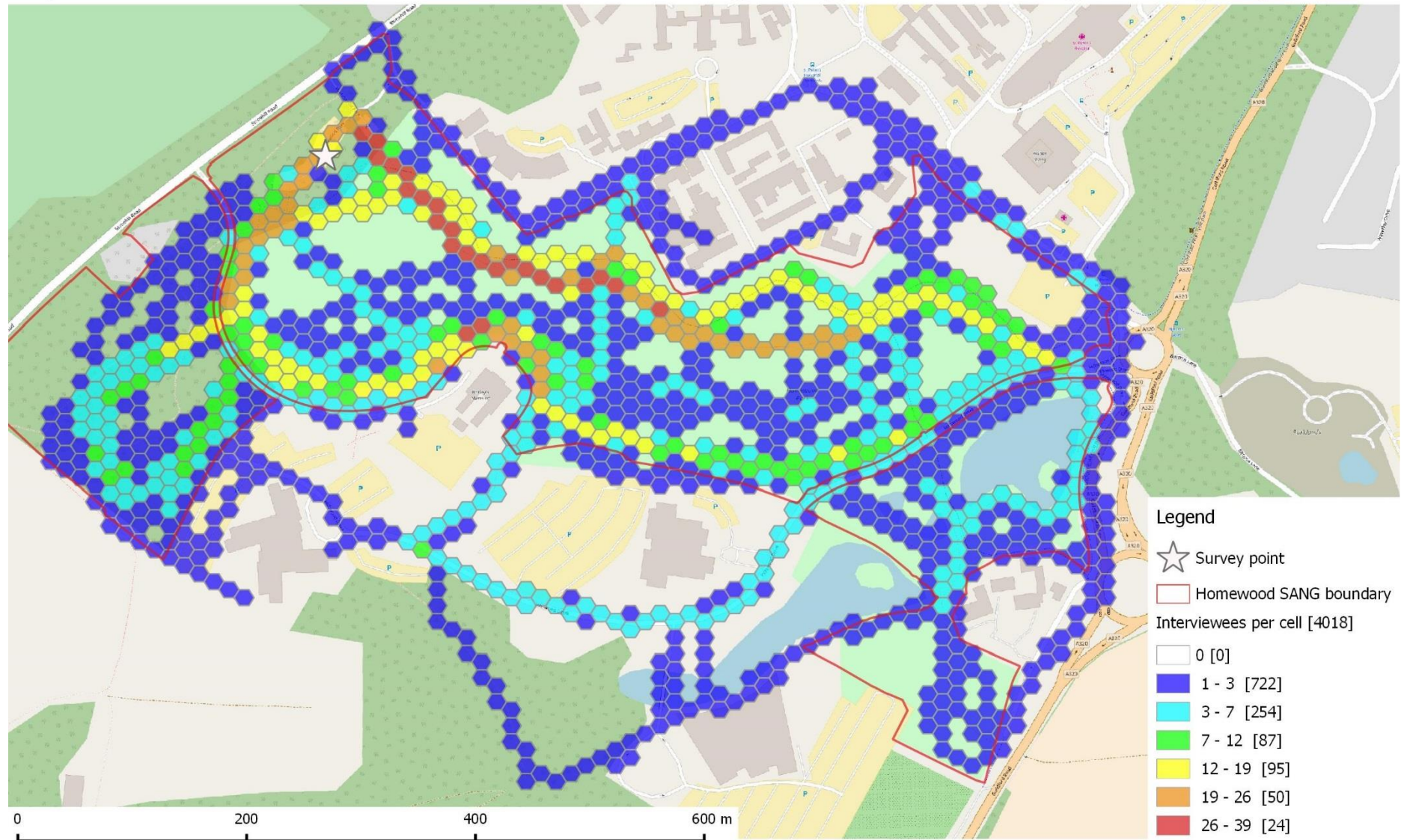
Measure	Result
n	46
Minimum	389 m
1st Quartile	1,438 m
Median	1,636 m
Mean (\pm SE)	1,845 m (\pm 103)
3rd Quartile	2,111 m
Maximum	4,397 m

Map 7: Heatmap of the density of interviewees routes from face-to-face interviewees at the single survey point.



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Map 8: Routes of interviewees from face-to-face interviewees at the single survey point summarised using a 15m hexagonal grid.



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4. Conclusion and Discussion

- 4.1 In this discussion we make cross-reference to the TBH SPA visitor surveys undertaken by ourselves in 2012/13, (Fearnley & Liley 2013). This was the most recent face to face visitor surveys which cover the whole area and are used to make useful comparison back to visitor patterns on the SPA.
- 4.2 Results of interviews show sites are primarily being used for dog walking with 72% dog walking, increasing to 77% dog walking and any other activities. This is comparable to the visitor data from the TBH SPA, which showed 65% of interviewees were dog walking, but 80% of groups accompanied by dogs (Fearnley & Liley 2013). Clearly there is some variation at individual access points, but the SANG sites would appear to be providing for a similar set of user groups. In addition, the range of activities is due to the variation in the features and environment of individual SANGs which should be unique to sites to create discrete identities and therefore senses of destination.
- 4.3 On average 39% of interviewees used sites daily, which was good to report high use of sites by regular visitors. For visitor duration on site, 75% of interviewees visited for less than 1 hour, compared to 64% on the SPA (Fearnley & Liley 2013). No category above "more than 1 hour" was used in the SANG survey, however we would suspect that the longer visits which are sometimes seen on the SPA were not present at many of the smaller SANGs.
- 4.4 Alternative named sites were also very interesting. While half of the interviewees named SPA sites, it was good to see that just under a quarter of interviewees named SANG sites. We used the web presence of a site in an approximation of its standing in public knowledge, but could not see an obvious relationship between this and a sites catchment. It is likely the interviewee's distance to SPA and alternative SANG sites are likely to be important factors determining this. The SANG with the clear lowest percentage of sites including one or more SPA sites was Chantry Wood, just 7%, unsurprising given its relatively large distance from the SPA.
- 4.5 From the SPA surveys (Fearnley & Liley 2013) the median straight line distance from the home postcode of the interviewee to the access point where interviewed was 2.65km (for those travelling by car) and 0.52km (for those walking from home). From these results the exact same median distance is reported for foot visitors and a slightly shorter distance for those arriving by car/van 2.31km. However, the draw at two well known points on the SPA (The Lookout and Staple Hill car park) was much greater with 75% of the home postcodes of 'local visitor' groups within a 15.9 km and 10.8 km radius of each site respectively.

- 4.6 Sites being close to home was a key driver in the interviewees liked features about the SANG. In the 2012/13 survey the third most common suggested feature desired at an alternative site (after nothing, or “other”) was large open space by 12% of interviewees (Fearnley & Liley 2013). This ranked seventh overall, but ranked top at three of the SANGs; Allens Field, Brooklands Community Park and Homewood Park.

Recommendations

- 4.1 Current data is generally useable, except for an issue regarding tally data which meant it could not be used in the analysis. However, improvements in data collection methodologies could have greater added value in the future and data recording, processing and analysis could be streamlined.
- 4.2 After reviewing the methodology used, there are a number of key recommendations for future improvements:
- Avoid surveying close to festive break
 - Formal tally recording (count of people entering/leaving) linked to each of the surveying sessions.
 - Revise wording of questions
 - Increase the number of questions asked
 - Use survey recording software on electronic tablets (SNAP)

Surveying around festive break

- 4.3 Surveys were conducted on 20th and 23th December 2016 and resumed 4th January 2017. We typically advise against undertaking surveys this close to the Christmas/New Year period, as visitor patterns become irregular in the lead up to Christmas as people start to take leave from work and school holidays commence. Regular users may spend time away from home, and visitors to the area may be quite specific to the Christmas period.

Recording form for Tally and session details

- 4.4 Data for tally counts was unclear and could not be used in this report. Tally data provides a value for overall use and it is possible to count people, groups, dogs etc. separately. These are key data and we suggest tally counts are included in the future to ensure clarity.
- 4.5 Our current standard methodology involves using a paper forms for each survey session. These tally sheets record the number of people, groups, dogs and minors recorded entering or leaving, they also act to formally record the session.
- 4.6 The tally forms are also used for recording further details, such as weather, unusual events which may alter tally counts (e.g. local road closure, event being held nearby etc. or surveyor's comments). This allows consistent recording on comments relating

to the session as a whole. Currently these have been recorded in the individual interviewees comments. However, it would be better if these were recorded for the session. Tally data should be specific and clearly defined, people passing through ('in' and 'out') of a gateway or crossing a particular point on a path is ideal. Clear definitions of how the counts are conducted ensures they can be repeated in the future by different surveyors.

Revise wording of some questions

- 4.7 Revision to the wording of questions is suggested in order to improve the quality of data collected. Questions on the activities being undertaken are a clear example of the issue. Currently, the question wording asks for interviewees' "reason for visiting"; this is vague and attempts to encompass both the activities undertaken and the reason (e.g. for exercise). This leads to both being poorly categorised and multiple activities can be given. Analysis of the data collected then becomes difficult and the value of the data therefore reduced. A question which explicitly asks what the single main activity being undertaken is would be more suitable, and provides better results for the analysis. Ideally responses would be categorised by the surveyor during the survey, reducing the need for manual checking and categorising (see suggestions below for more detail).
- 4.8 Furthermore, use of activity in the wording of other questions could help clarify other questions. For example the question on other sites could be worded: "what other sites do you visit for[insert named activity]", and such wording would ensure responses relate to the type of visit being undertaken at the time of the interview. This same point could also apply to questions relating to frequency of visit.
- 4.9 The questionnaire wording could also be tightened-up in relation to the route taken. Asking for a typical route is challenging as interviewees may use a range of routes or not have a typical route (especially if they visit only very rarely). This can cause confusion or lengthier responses (e.g. "I often go here..., but then I sometimes walk here...in the summer I walk this... and the winter here..."). Our experience has shown that asking for the route they are undertaking on the day is a much easier way to gain this information, and the responses given cannot be confused.
- 4.10 Clarity of interviewee response is essential for data analysis. Rephrasing of questions will improve this in the responses given by interviewees. We advise that the responses regarding interviewees current reasons for visiting are also vague. Comments such as "very nice", "convenient" are not explicit and are consequently difficult to analyse. When we conduct surveys that include these types of questions, our surveyors are given a long list of possible responses. This makes responses much easier to analyse and greatly reduces the time surveyors have to spend typing or writing comments.

Increased length of survey

- 4.11 The current survey is considered quite short; it includes 18 questions to be completed with the interviewee and six to be completed by the surveyor without the interviewee needing to present (e.g. time, date, number of people, gender of respondent). While a short survey is useful to encourage completion (particularly in unfavourable winter weather conditions), we think there is scope for the survey length to be increased slightly.
- 4.12 Our typical surveys are longer and consist of around 30-40 distinct questions. While the survey in question is expected to be a brief survey, and doesn't need too much detail, we still advise that more questions could be added to improve the value of the data obtained
- 4.13 For example, the most recent SANG questionnaire produced by Footprint Ecology for the Urban Heaths Partnership consisted of 29 questions to be completed with the interviewee (this does not include automated questions, such as survey date and time), and 11 questions to be completed afterwards, such as categorising age, number of minors, dogs on lead and off lead in the interviewed group.
- 4.14 Whilst increasing the number of questions could result in an increased time for surveys to be completed, this could be greatly reduced by the ease of recording responses electronically. Furthermore, our recommendations for clarity would streamline the interview to reduce time.

SNAP recording software

- 4.15 A key recommendation is the use of SNAP surveying software¹ to make surveying easier, increase the amount of data obtained, improve data quality, reduce subsequent data processing and improve ease of analysis.
- 4.16 SNAP is a market leading surveying software company, which we have used for several years. This includes the last TBH surveys undertaken by Footprint Ecology at Allen's Field and Bassett's Mead. We also sublicense to Dorset's Urban Heaths Partnership for their visitor surveying.
- 4.17 The "SNAP Mobile Anywhere" software can be installed on tablets, smartphones or used in remote kiosks (although it should be noted on small tablets and smartphones that long questions can be difficult to see). The software can be installed on apple or android devices, with software installed from the app stores.
- 4.18 A created questionnaire can be downloaded to a tablet over a wi-fi connection, so that this can be accessed whilst in the field, with no internet/mobile phone data connection

¹ <https://www.snapsurveys.com>

required during the survey (although as a backup, we always provide a paper copy of the questionnaire to the surveyors, should there be any problems). When the surveyor is interviewing in the field the responses are stored on the tablet. But as soon as the surveyor is back on a wi-fi connection the tablet can be synchronised, and completed surveys are sent to the SNAP server where they are securely stored. We are then able to download this data remotely back in the Footprint Ecology office.

- 4.19 The use of SNAP software has many advantages over paper questionnaires. The use of the questionnaire on tablets means that responses to questions can be recorded quickly by using long lists of check boxes to record frequent responses, rather than free text.
- 4.20 Using SNAP also removes the need to manually enter paper responses, and the stored data is sorted in a way which makes it easy for analysis. Responses are also stored on the SNAP server and are therefore secure and backed up. Other useful features include automatic recording of survey date, time, duration and location, routing of questions (e.g. asking a question regarding dogs off lead can be directed only to interviewees who selected their activity as “dog walking”) and randomising the order of questions where necessary (e.g. questions where the order presented may influence the answers) to improve the robustness of results.
- 4.21 One of the hardest challenges and longest parts of the data processing in this survey was examining free text statements. This required examination of each statement for it to be categorised into a number of multiple choice variables. Furthermore, some information recorded such as the site is “very nice” do not explain what is explicitly liked about the site and could not be used. This second-hand approach was considered suitable, but categorising first hand using a series of common multiple choices, still with an option to record additional free text, would have been more appropriate, reduced time for data entry, data processing and improved the quality of results.

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