Natural England Commissioned Report NECR136

Results of the 2012/13 visitor survey on the Thames Basin Heaths Special Protection Area (SPA)

First published 13 February 2014

www.naturalengland.org.uk

NATURAL ENGLAND

Foreword

Natural England commissions a range of reports from external contractors to provide evidence and advice to assist us in delivering our duties. The views in this report are those of the authors and do not necessarily represent those of Natural England.

Background

The Thames Basin Heaths (TBH) Special Protection Area (SPA) was classified under the EC Birds Directive (Council Directive 2009/147/EC on the conservation of wild birds) in March 2005. It covers 8,274 hectares of Sites of Special Scientific Interest (SSSI) within Berkshire, Hampshire and Surrey. The site supports important breeding populations of a number of birds of lowland heathland, especially nightjar *Caprimulgus europaeus*, woodlark *Lullula arborea*, and Dartford warbler *Sylvia undata*.

Housing growth is a key issue in this part of south-east England, and house building is expected to lead to a significant rise in population within the boroughs and districts around the SPA. Investigations of the visitor patterns of current residents around the SPA have shown that it is likely that this additional population will also use the SPA for recreation. There is now a growing body of evidence linking visitor access to the abundance, distribution and population size of the SPA's European protected heathland birds.

Natural England works closely with the TBH Joint Strategic Partnership Board (JSPB), a body comprising eleven local authorities and two county councils within the vicinity of the SPA. The joint aim of these organisations is to ensure that new residential development does not have an adverse impact on the SPA. On behalf of the JSPB, Natural England manages a Strategic Access Management and Monitoring (SAMM) project, the aims of which include commissioning monitoring research on issues affecting the Thames Basin Heaths.

In August 2005, a baseline visitor survey of the TBH SPA was undertaken on behalf of English Nature (a predecessor to Natural England) in order to provide basic information on visitor use and to help inform a strategic approach to access management across the SPA. This was published as English Nature Research Report 682. The 2012/13 survey detailed in this report assesses current visitor access patterns to the SPA, and provides a comparison of the findings with the 2005 survey. The 2012/13 survey aimed as far as possible to replicate the methodology of the 2005 survey, but was also extended across a greater part of the nesting season and included an increased number of visitor survey points and a more detailed questionnaire.

The results of this research will provide an essential contribution to the evidence base underpinning the strategic management and protection of the SPA. Its key importance will be in informing the assessment of the effectiveness of measures to protect the SPA from recreational pressures, and whether these measures are contributing towards the favourable status of the SPA. Natural England will continue to work closely with the JSPB and other stakeholders including the SPA landowners and managers to ensure that this report and future research underpins and strengthens our joint partnership working.

This report should be cited as:

FEARNLEY, H. & LILEY, D. 2013. *Results of the 2012/13 visitor survey on the Thames Basin Heaths Special Protection Area (SPA)*. Natural England Commissioned Reports, Number 136.

Natural England Project Manager - Patrick McKernan, Natural England, Guildbourne House, Chatsworth Road, Worthing, West Sussex, BN11 1LD **Patrick.McKernan@naturalengland.org.uk**

Contractor - Footprint Ecology, Forest Office, Cold Harbour, Bere Road, Cold Harbour, Wareham, BH20 7PA

Keywords - Thames Basin Heaths, Special Protection Area (SPA), visitor survey, visitor access

Further information
This report can be downloaded from the Natural England website: **www.naturalengland.org.uk**. For information on Natural England publications contact the Natural England Enquiry Service on 0845 600 3078 or e-mail **enquiries@naturalengland.org.uk**.

ISBN 978-1-78354-124-9

Acknowledgements

This report was commissioned by Natural England on behalf of the Thames Basin Heaths Joint Strategic Partnership Board. We are grateful to Patrick McKernan and David Pearce of Natural England for their advice, support and guidance through the project.

Our thanks to our field surveyors who worked long hours to collect the interview data and carefully entered all the questionnaire data. The surveyors for this project were Neil Gartshore, Doug Kite, Matthew Holden, Nick Hopper, Kevin Lane, Gemma Grant, Jill Titlestad, Chris Townsend, Adrian Hickman, Chris Sadler and Pete Akers. Zoe Chappell digitised all the mapped route data.

We are also very grateful to Professor Ralph Clark, an environmental statistician from Bournemouth University for his statistical advice, time and assistance with the analyses of visitor totals.

We would like to express our thanks to all the site owners, managers and rangers who granted access permissions to undertake the visitor survey work, and were on hand to give the field surveyors support and assistance if needed.

Summary

This report presents the finding of a large scale visitor survey undertaken across the Thames Basin Heaths Special Protection Area (SPA). The survey was commissioned to replicate and expand on the original visitor survey across the SPA in 2005. The work's aims were to improve our understanding of visitor access patterns and behaviour across the Thames Basin Heaths, and to consider what changes in access patterns may have occurred since the original study in 2005.

A total of 26 access points were surveyed in the original survey in August 2005. In the repeat survey, two sets of visitor survey fieldwork were undertaken during May/June and August 2012 (the latter specifically to allow direct comparison with the original study, undertaken in August 2005) across 30 different access points to the SPA. At each survey location face-to-face interviews were conducted with a random sample of visitors and surveyors also maintained a tally count of visitors through each location. The visitor questionnaire was tailored to capture visitor profile, behaviour, route, transport mode and distance travelled to the visit destination. The methodology for the visitor survey work was designed to allow comparisons with the original visitor survey across the Thames Basin Heaths in 2005.

At five busy locations during the 2012 fieldwork, surveyors ran into difficulty maintaining an accurate visitor tally while conducting face-to-face interviews. Tally counts at these five locations were therefore repeated in 2013 and these data substituted for the 2012 tally counts. No additional visitor interviews were undertaken in 2013.

2012 visitor interview information

In total, 2,483 visitor interviews were completed, representing the visitor information from 3,859 people and their 2,918 dogs. The majority (80%) of all interviewed groups were accompanied by a dog.

Almost all (98%) of interviewed visitors were making their trip from home and as such deemed as local residents. More than three quarters (83%) of all visitors made their visit at least once a week, and 38% visited daily.

A variety of activities were recorded, including dog walking, walking, cycling, jogging, horse riding, wildlife watching, family outings, and having a picnic. The most frequently cited activity (with 65% of visitor activity responses) was dog walking, followed by walking (20%), cycling (4%) and jogging (3%). The visit duration for just under two thirds (64%) of interviewed groups was less than an hour.

The majority (75%) of visitor groups arrived by car, with 22% arriving by foot, 2% by bicycle, 1% by horse and none by public transport. On average there were 1.6 visitors and 1.3 dogs per visitor groups arriving by car.

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). The majority (94%) of visitor postcodes fell within a 5km radius of the SPA boundary (a count of the visitor postcodes within a 5km buffer around the whole of the SPA) and 83% of visitors lived within 5km of the access point at which they were interviewed (straight line distance between a visitor postcode and the access point).

Visitor tally information (2012 and 2013 data)

A total of 5,452 adult visitors, 957 children and 4,314 dogs were recorded entering the survey locations through the surveyed accessed points in 2012/13. The number of visitors entering the SPA and the number of interviews undertaken varied with survey location. During the survey sessions a total of 45 professional dog walking vans were recorded parked at access points adjacent to the SPA.

Comparison between 2005 and 2012/13 visitor surveys

Of the resurveyed 24 locations from the original 2005 visitor survey, an increase in recorded visitor totals was recorded at 14 of the survey locations, and a reduction at ten. The total number of people (adults and children) counted entering the SPA was 10% higher than in 2005. These differences were not however significant and fall within the limits of what could be expected by chance.

There were significant differences between 2005 and 2012/13 visitor count data in the proportion of visitor groups undertaking different activities at different locations, and also a significant difference in the proportion of visitor groups who arrived at each location by different transport modes.

Direct comparison of the data between 2005 and 2012/13 across all survey locations provides no significant evidence that overall visitor numbers have increased or decreased at the surveyed sites. Two of the visitor survey weeks in August coincided with the London 2012 Olympics. This may have resulted in visitor numbers being reduced and is therefore important context. Also of consideration are the possible differences in visitor numbers between the 2012 and 2013 visitor counts; the possible implications of these sources of variation are discussed.

Contents

List of figures

List of tables

List of maps

1. Introduction

Overview

1.1 This report presents the results of a visitor survey conducted across the Thames Basin Heaths (Map 1) in 2012 and includes tally count data gathered in 2013 (see methods). The survey was commissioned by Natural England on behalf of the Thames Basin Heaths Joint Strategic Partnership Board in order to increase understanding of access patterns in this area and to enable comparison with the results of the visitor survey undertaken in 2005. The results of the visitor survey will be used to inform strategic management of access and mitigation measures relating to the impacts of residential development in the Thames Basin Heaths area.

Access to heaths, nature conservation and urban development

1.2 An issue for nature conservation in the UK is how to address an increasing demand for new homes and other development without compromising the integrity of protected sites. There is now a strong body of evidence showing how increasing levels of development, even when well outside the boundary of protected sites, can have negative impacts on the sites themselves. The issues are particularly acute in southern England, where work on heathlands (Mallord 2005; Underhill-Day 2005; Liley & Clarke 2006; Clarke, Sharp, & Liley 2008; Sharp *et al.* 2008) provides compelling links between housing, development and nature conservation impacts. The impacts are varied, but many relate to access and increased recreational use as a result of new housing.

1.3 The issues are not, however, straightforward. In the past, access and nature conservation have typically been viewed as opposing goals (Adams 1996; Bathe 2007) to the extent that nature reserves often restrict visitor numbers and access (e.g. through permits, fencing and restrictive routes). It is now increasingly recognised that access to the countryside is crucial to the long term success of nature conservation projects and has wider benefits such as increasing people's awareness of the natural world and health benefits (English Nature 2002; Alessa, Bennett, & Kliskey 2003; Morris 2003; Bird 2004; Pretty *et al.* 2005). Many organisations are increasingly interested in promoting people's connection with the natural world (e.g. Moss 2012).

1.4 Nevertheless, there is the potential for conflict where high human populations occur alongside areas of conservation importance, particularly where there are existing rights of access to those sites. It is likely that numbers of houses in an area will correlate with the number of people living in an area and that the number of local residents will be closely linked to the number of visitors at a site.

1.5 Targeted visitor work on heathland sites is now widely available and shows people use heaths near to their homes for activities such as dog walking, walking, cycling, jogging and family outings (Clarke *et al.* 2006; Liley, Jackson, & Underhill-Day 2006c; Clarke, Sharp, & Liley 2008a; Sharp, Lowen, & Liley 2008b; Liley, D *et al.* 2009; Clarke, Sharp, & Liley 2010; Cruickshanks, Liley, &

Hoskin 2010). Several Internationally important heathland sites such as the Thames Basin Heaths and Dorset Heaths are close to large urban conurbations, and will for many people in these areas be their nearest open space. In some locations such activities result in trampling of the habitat, nutrient enrichment (through dog fouling), creation of desire lines, erosion, and disturbance to protected species. Such activities are as a result of legitimate access which it may be difficult to restrict.

1.6 There is now a growing body of evidence linking visitor access to the abundance, distribution and breeding productivity of Annex 1 (European Protected) heathland birds. Research on the Dorset heathlands has shown the impact of disturbance on woodlark population size (Mallord et al. 2007a; Mallord et al. 2007d) principally through birds avoiding areas of high visitor pressure. For Dartford warblers, breeding success has been shown to relate to disturbance, with birds breeding less successfully in heather dominated territories with high levels of access (Murison *et al.* 2007). In such territories, birds nested later in the season and as a consequence raised fewer chicks. These impacts of disturbance were found but were not significant in gorse-dominated territories, suggesting that gorse may deter visitors (and their dogs) and/or act as a screen between the birds and people. Murison's work also showed impacts of fire for Dartford warblers and on one site recorded a very high incidence of cat predation of chicks. With respect to nightjars, there is a clear pattern in relation to urban development, with nightjar density lower (in both the Thames Basin Heaths and Dorset Heathlands) on heaths surrounded by high levels of housing (Liley & Clarke 2003; Liley *et al.* 2006a). Evidence suggests this pattern occurs as a result of disturbance, with more people visiting the heaths surrounded by high levels of housing (see Murison 2002; Liley *et al.* 2006b; Clarke, Liley, & Sharp 2008a). In the absence of development/visitors it has been estimated that the Dorset and Thames Basin Heaths could support around 14% more nightjars (Clarke, Liley, & Sharp 2008).

Implications for Protected Sites

1.7 These various studies provide a strong evidence base regarding the impacts of urban development. The Thames Basin Heaths are designated as a Special Protection Area (SPA) (and in part a Special Area of Conservation (SAC)). These designations - as 'European sites' - have particular implications regarding the long term management and protection of the sites. European sites are protected through the provisions of the Conservation of Natural Habitats and Species Regulations 2010 (SI no. 490), which transpose both the Habitats Directive (Council Directive 92/43/EEC) and the Wild Birds Directive (Council Directive 79/409/EEC) into UK law. Article 6(3) and (4) of the Habitats Directive, and Regulations 61 and 102 – 105 of the 2010 Regulations, impose duties on all public bodies to follow strict regulatory procedures in order to protect the European sites from the effects of plans or projects. In order for development to take place it is therefore necessary to find ways to avoid, or mitigate any adverse effects on the European sites.

1.8 There are a number of ways to reduce the impacts of access or avoid the problems, for example through the careful siting of new housing, through management of access on sites, or through the provision of alternative green space. Our understanding of the effectiveness and options for such measures has come a long way in recent years, but there are still gaps in our understanding (see Liley *et al.* 2006a; Liley, Underhill-Day, & Sharp 2009; Liley, D *et al.* 2011).

1.9 To effectively mitigate against any possible increase in access, the origin, patterns and behaviours of visitors must be understood. It is also important to understand visitor access in a regional context as simply restricting access to one sensitive location may inadvertently increase access to surrounding sites.

1.10 The first dedicated survey of visitors to a European site with the specific aims of linking to bird disturbance work, informing Habitat Regulations Assessments and providing evidence for mitigation strategies was conducted on the Dorset Heaths (Clarke *et al.* 2006). Similar work (at a larger scale) was conducted soon afterwards on the Thames Basin Heaths (Liley, Jackson, & Underhill-Day 2006). Since then, similar visitor studies have been commissioned at a range of sites, following the model used on the Thames Basin Heaths (eg. UE Associates 2009; Cruickshanks, Liley, & Hoskin 2010; Liley & Cruickshanks 2010; Fearnley, Liley, & Cruickshanks 2011; Fearnley & Liley 2011).

The Thames Basin Heaths SPA

1.11 The Thames Basin Heaths SPA is designated for the presence of nightjar, woodlark and Dartford warbler. The SPA covers 8,274.72 hectares of heathland and forestry, and includes 13 individual Sites of Special Scientific Interest (SSSI). SSSI's are areas that have been given legal protection for their wildlife or geological interest. The individual heaths are fragmented and surrounded by an existing high level of housing, and are subject to heavy visitor pressure. There are some 310,525 houses within 5km of the SPA boundary[1], and there is considerable pressure for new development.

The original visitor survey in 2005

1.12 The original visitor survey, in August 2005, was conducted at 26 access points (Liley, Jackson, & Underhill-Day 2006). In total 1,144 visitor groups were interviewed who were accompanied by 1,271 dogs. The majority of people (83%) visiting the heaths arrived by car and 13% by foot. Dog walking was by far the most common reason for visiting the heath given by 59% of groups. The median distance between a visitor's home postcode and the access point they visited was 3.1km for visitors arriving by car, with 70% living within a 5km radius of the site they visited. The median distance between a visitor's home postcode and access point they visited was 0.5km for those arriving by foot and 40% resided within 400m of the site where interviewed. This study provided a crude estimate of 5 million visits per year to the Thames Basin Heaths.

[1] Housing figure extracted from December 2011 postcode data – see para. 2.27.

Development of the Delivery Framework

1.13 Subsequent work undertaken by Footprint Ecology included analysis using the visitor data to derive spatial maps of visitor 'pressure' within the SPA and looked at nightjar numbers and distribution in relation to visitor pressure (Liley et al. 2006a). The visitor survey and various other pieces of evidence were used to develop the Thames Basin Heaths Draft Delivery Plan. This was a ground-breaking and innovative approach to addressing the impacts of development, whereby strategic mitigation measures were proposed across 13 local planning authorities. The plan was subjected to intense scrutiny, including the South East Plan Examination in Public (see Burley 2007) and coverage in the national newspapers. In 2009, the Thames Basin Heaths Delivery Framework (Thames Basin Heaths Joint Strategic Partnership Board 2009) was published which set out the recommendations on measures to enable development to take place without having a significant effect on the SPA as a whole. One of the key elements of the Delivery Framework was the introduction of 'zones'. Two zones were established; a 0-400m zone from the SPA in which no future residential development would be permitted, and a 400m-5km zone in which any future residential development would need to provide mitigation through developer contributions. Both zones were measured from the SPA as the crow flies. In addition, applications for large scale residential development between 5 and 7km from the edge of the SPA would need to be assessed on an individual basis.

Aims of the work

1.14 The aims of the 2012 visitor survey work were to provide a current assessment of visitor access patterns to the Thames Basin Heaths SPA, as well as enable a comparison with the previous survey in 2005. An exact repeat of the 2005 visitor survey will allow direct comparisons and therefore provides a robust test as to whether visitor numbers have increased. By directly comparing the tally data and questionnaire data it will be possible to identify where access has changed, which types of access have changed, and how the catchment of visitors has changed. The results will provide useful information to further refine and target future mitigation measures.

1.15 This repeat survey provides the opportunity to also expand the visitor work, allowing greater temporal coverage and wider spatial coverage. There is also the opportunity to bring in additional questions and techniques (such as the use of Global Positioning System (GPS) units) to improve and build on the quality of the evidence.

1.16 The results of this visitor survey will be used to assist in developing a longer term access management and monitoring strategy for the Thames Basin Heaths SPA as well as informing the approach to delivering Suitable Alternative Natural Greenspaces (SANGs).

2. Methods

Terminology within the report

2.1 This document makes a clear distinction between the term ‘visit’ (the event) and ‘visitor’ (a person who could be the interviewee, part of an interviewed group or a tally count) and the terms are not used interchangeably. This document also reports the number of visitors or people which will include the number of adults and children recorded on either the tally counts or the interviews. It is clearly stated within the report where we have distinguished between the two.

Survey locations

2.2 One of the aims of the 2012 survey work was to repeat the 2005 visitor survey at the same locations. Table 1 lists all the survey locations in the original survey and those where visitor work was undertaken in 2012 and 2013. In total four fully surveyed locations were in Berkshire, eight in Hampshire and 17 in Surrey.

2.3 A number of additional access points (numbered 33 to 40) were identified as suitable visitor survey locations, but due to resource constraints were not included in the 2012 survey work. The visitor survey work at location 26 in May/June was aborted during the first session due to the presence of anti-social behaviour. The surveyor then carried out the remaining three survey sessions at location 40 (due to its proximity to location 26). Two of these three sessions were completed here but the final evening session was aborted due to anti-social behaviour. Location 26 was fully surveyed during August 2012 enabling comparison with the August 2005 survey data.

2.4 The majority of the visitor survey locations corresponded with car parking areas that were included in SPA-wide car park counts undertaken in 2013 (Fearnley 2013).Table 32 in the Appendix cross-references the code of the visitor survey locations to the codes of the parking areas used in the counts (Fearnley 2013).

Differences between the 2005 and 2012/13 surveys and counts

Issues with 2005 survey locations

2.5 A total of 26 access points across the Thames Basin Heaths SPA were surveyed in 2005. Of these, 22 locations were fully resurveyed in May/June 2012 and 24 were fully resurveyed in August 2012. The 2012 field work extended the 2005 work to include an additional six access points across the SPA bringing the total number of fully surveyed access points to 29 in May/June 2012 and 30 in August 2012. The methodology in the 2012 survey work was designed to replicate the methodology used in 2005 to enable data comparison and collect additional visitor information. Map 1 shows the visitor survey locations which were monitored in 2005 and 2012 with further details of each survey location listed in Table 2.

2.6 Four access points from the original survey were not fully resurveyed in May/June 2012 (7- South entrance to Bramshill Plantation, 11- Black Bushes

Road, 26- Boldermere car park, and 40- Pond car park) and three of these were not resurveyed in August 2012 (7, 11 and 40).

2.7 Location 7 (South entrance to Bramshill plantation) with access to Bramshill SSSI (Map 1 and Table 2) was not included in the 2012 visitor survey work as the landowners advised there is no public access to this site. Signage had been placed at the access point advising 'no public access'. There was no signage in place at the parking lay-by where the original survey was conducted. It was agreed with Natural England that it was not appropriate to resurvey this location as access management had clearly changed the visitor flow through this access point.

2.8 Location 11 (Black Bushes Road) with access to Castle Bottom to Yateley and Hawley Common SSSI was only partly surveyed in May/June 2012. This location also had no public access onto the SPA. This access point was surveyed for eight hours (four survey sessions) in May/June and seven visitors were noted passing through the location, of whom three appeared to be commuters on bicycles using the area as a cut-through. Only one visitor agreed to an interview at this location. Given the very low levels of use, it was therefore agreed with Natural England to invest surveyor effort into capturing visitor data from access points covering previously unsurveyed areas of the SPA and no further surveys were conducted at this location. Data recorded from these locations were not included in any of the analyses within this report.

2.9 The survey at location 10 (Car park near Hayward Cottage, Yateley, just off the A30) could not be repeated at the exact location of the original survey as the car park had been closed. The visitor survey was undertaken at the adjacent car park approximately 150m south of the original car park and accessed by car via the same track from the A30 (Map 1).

2.10 Anti-social behaviour at location 26 (Boldermere car park) meant that the visitor surveyor in May/June encountered difficulties undertaking the interviews during the first survey session and relocated to survey the adjacent access point at the Pond car park, location 40 (Map 1). The survey was shifted to location 40 (which was identified as an additional potential survey location (see paragraph 2.3)) and the closest to location 26. Two full survey sessions were completed here but the evening session was abandoned. During August, location 26 was kindly surveyed by Surrey Wildlife Trust (SWT) rangers (Table 2).

2.11 The surveys undertaken at location 15 (Sandpit Hill) in 2005 were conducted in two different locations. Some sessions were undertaken exclusively in the car park, and the majority were conducted at the path intersection adjacent to the allotments to capture visitors using the area who may have arrived on foot from Donkeytown. In 2012/13 surveyors were asked to stand and conduct interviews and tally counts at the path intersection.

Additional survey locations in 2012

2.12 A total of six additional survey locations not used in 2005 were included in the 2012 visitor survey in both May/June and August (Table 2) and are numbered 27

to 32. Survey location 27 (Lay-by opposite Wyndrush House on Chapel Lane) was chosen as a survey point to cover an area of the SPA not included in the 2005 work (Map 1). Three of the additional locations were selected as they were areas of the SPA close to planned development and the survey hoped to establish a baseline number of visitors ahead of any new housing. These were location 29 (Car park 150m to the east of the Foresters Arms Pub GU52 9EP) close to the planned development at Queen Elizabeth's Barracks, location 30 (Car park off roundabout where B3348 meets A3095) close to the planned Transport Research Laboratory housing development and location 32 (Second lay-by on Old Guildford Rd, opposite a firebreak) – close to the planned Deepcut housing development.

2.13 Locations 28 (Path intersection just off Sandy Hill Road) and location 31 (Intersection of paths adjacent to large lay-by on south side of the A30) were added to provide improved visitor coverage of Bourley and Long Valley and Castle Bottom to Yateley and Hawley SSSI's.

2.14 Due to the quiet nature of location 8 (North entrance to Warren Hill) during the 2005 survey, the 2012 survey was extended to capture visitors accessing the SPA from the car park on the north side of the road into Bramshill plantation. A separate tally was kept for visitors heading north (into the Bramshill plantation) and south (the original survey focused on people travelling south, towards Warren Heath) and it was only these visitor data which were used for the comparison chapter.

Repeat tally counts in 2013

2.15 During 2012 fieldwork, visitor surveyors found it challenging to maintain an accurate tally of visitors while undertaking face-to-face interviews at five particularly busy survey locations: 3 (The Lookout), 15 (Sandpit Hill), 21 (Salt Box Road), 23 (Sandy Track car park) and 24 (Six Crossroads car park). It was impossible to keep an accurate record of the number of visitor groups, individuals and dogs entering and leaving the busy survey locations often by multiple paths and maintain a rapport with the interviewee through the survey questionnaire.

2.16 Repeat tally counts were undertaken at these locations in 2013 (Map 1) on the same dates that each location was originally surveyed in 2012 (or the nearest equivalent considering that each site was surveyed on a weekend and week day). The tally data presented within the main body of this report for these locations contains only information recorded from the repeat 2013 tally counts. Therefore the 2012 tally data for these five sites has been replaced in the analyses by the 2013 recount data.

2.17 The 'undercount' tally data recorded in 2012 are detailed in Table 33 and the 2013 recount data are presented in Table 34 (both in appendix). Both tables summarise the survey dates, the weather and other events which could have had an impact on the number of visitors recorded at each survey location. No interviews were undertaken in 2013 and all interview data from the five sites with repeat surveys was gathered during the 2012 fieldwork.

Surveyors

2.18 Four visitor surveyors undertook the face-to-face visitor survey work during the May and June period in 2012. Eight surveyors undertook the face-to-face visitor survey work during August (including the four surveyors who had completed the May/June visitor work) and two SWT rangers surveyed the access point 26 (Curries Clump car park).

2.19 The 2013 repeat tally counts were completed by three different surveyors, including one surveyor who undertook the tally counts and face-to-face interviews in the 2012 fieldwork.

Map 1: Visitor survey locations in 2005 and 2012/13

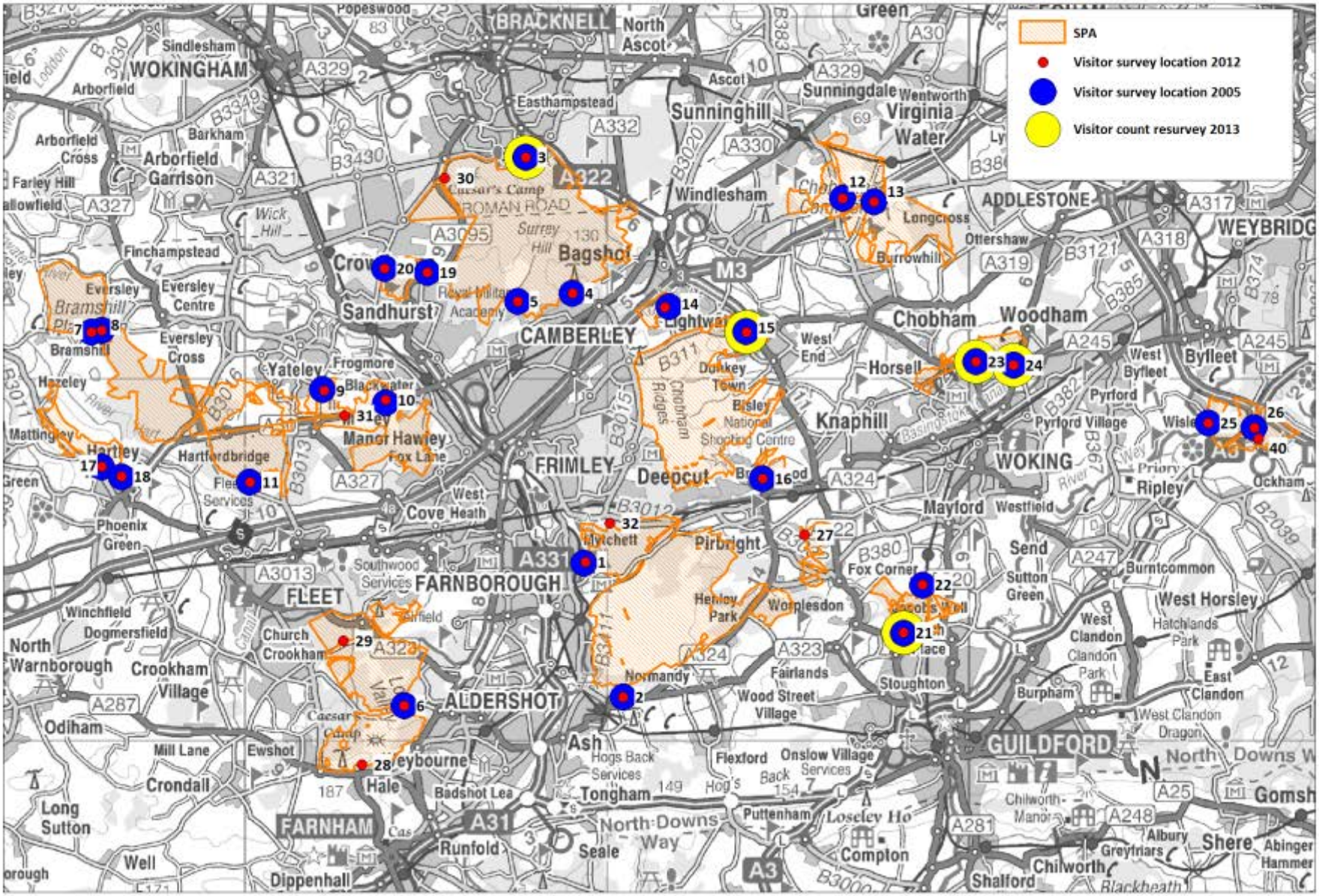


Table 1: Survey locations by local authority and county. * Denotes survey location was not fully surveyed in May/June due to a change in infrastructure since 2005. ** Denotes location was not fully surveyed in August 2012 due to anti-social behaviour. * Denotes tally counts were made in 2013.**

Survey location	Name	Survey years	Local authority	County
1	Mytchett Place Road, Ash to Brookwood Heaths	2005/2012	Surrey Heath District	Surrey
2	Nightingale Road/A323, Ash to Brookwood Heaths	2005/2012	Guildford District	Surrey
3***	The Lookout, Broadmoor to Bagshot Woods & Heaths SSSI	2005/2012/2013	Bracknell Forest	Berkshire
4	Top of Bracknell Road, Broadmoor to Bagshot Woods & Heaths SSSI	2005/2012	Surrey Heath District	Surrey
5	Top of Kings Ride, Broadmoor to Bagshot Woods & Heaths SSSI	2005/2012	Surrey Heath District	Surrey
6	Bourley Road, Bourley & Long Valley	2005/2012	Rushmoor District	Hampshire
7*	S entrance to Bramshill Plantation, Bramshill	2005	Hart District	Hampshire
8	N entrance to Warren Heath, Bramshill	2005/2012	Hart District	Hampshire
9	Car park off Cricket Hill Lane , Castle Bottom to Yateley & Hawley Common	2005/2012	Hart District	Hampshire
10	Car park off the A30, Castle Bottom to Yateley & Hawley Common	2005/2012	Hart District	Hampshire
11*	S entrance to Bramshill Plantation, Bramshill	2005/2012	Hart District	Hampshire
12	Chobham Road, Chobham Common, Horsell Common	2005/2012	Surrey Heath District	Surrey
13	Chobham Common (Staple Hill), Castle Bottom to Yateley & Hawley Common	2005/2012	Surrey Heath District	Surrey
14	Lightwater Country Park, Ockham & Wisley Commons	2005/2012	Surrey Heath District	Surrey
15***	Sandpit Hill, Colony Bog & Bagshot Heaths	2005/2012/2013	Surrey Heath District	Surrey
16	Queens Road, Cowshot Common, Colony Bog & Bagshot Heaths	2005/2012	Guildford District	Surrey
17	Off Crowthorne Road, Hazeley Heath	2005/2012	Hart District	Hampshire
18	Play area, Springfield Ave, Sandhurst to Owlsmoor Bogs and Heaths	2005/2012	Hart District	Hampshire
19	South Road, Sandhurst to Owlsmoor Bogs and Heaths	2005/2012	Bracknell Forest	Berkshire
20	Off Crowthorne Road, Sandhurst to Owlsmoor Bogs and Heaths	2005/2012	Bracknell Forest	Berkshire
21***	Salt Box Road, Whitmoor Common	2005/2012/2013	Guildford District	Surrey
22	Burdenshott Road, Whitmoor Common	2005/2012	Woking District	Surrey
23***	Sandy Track car park, Chobham Road, Horsell, Colony Bog & Bagshot Heaths	2005/2012/2013	Woking District	Surrey
24***	Six Crossroads car park, Shore's Road, Horsell Common	2005/2012/2013	Woking District	Surrey
25	E of Aberconway House (Wren's Nest car park), Ockham & Wisley Commons	2005/2012	Guildford District	Surrey
26**	Currie's Clump (Boldermere Car Park), Ockham & Wisley Commons	2005/2012	Guildford District	Surrey
27	Lay-by opp Wyndrush House on Chapel Lane , Ockham & Wisley Commons	2012	Guildford District	Surrey
28	Path intersection just off Sandy Hill Road, Sandhurst to Owlsmoor Bogs and Heaths	2012	Waverley District	Surrey
29	Car park 150m to the east of the Foresters Arms Pub GU52 9EP, Whitmoor Common	2012	Hart District	Hampshire
30	Car park off roundabout where B3348 meets A3095, Castle Bottom to Yateley & Hawley Common	2012	Bracknell Forest	Berkshire
31	Intersection of paths adjacent to large lay-by on south side of the A30, Ockham & Wisley Commons	2012	Hart District	Hampshire
32	Second lay-by on Old Guildford Rd, opp a firebreak, Colony Bog & Bagshot Heaths	2012	Surrey Heath District	Surrey
40**	Pond Car Park, Ockham & Wisley Commons	2012	Guildford District	Surrey

Table 2: Access points where face-to-face interviews and tally counts were undertaken during the 2005 and 2012/13 survey work.

Survey Code	Name	SSSI	Easting	Northing	Type of parking	No. of parking spaces (2012)	No. of two hour visitor survey sessions				2005 and 2012 survey locations
							August 2005	May/ June 2012	July/ August 2012	August 2013 (count only)	
1	Mytchett Place Road	Ash to Brookwood Heaths	489396	154934	Other	60	8	8	8		2005 – At gate up unsurfaced road 2012 – At gate up unsurfaced road
2	Nightingale Road/A323	Ash to Brookwood Heaths	490443	151203	Designated car park	12	8	8	8		2005 – In car park 2012 – In car park
3	The Lookout	Broadmoor to Bagshot Woods & Heaths	487755	166121	Designated car park	350	8	8	8	8	2005 – By gated entrance adjacent to Go Ape kiosk 2012 - By gated entrance adjacent to Go Ape kiosk
4	Top of Bracknell Road	Broadmoor to Bagshot Woods & Heaths	489038	162360	Other	3	8	8	8		2005 - Lay-by turning space adjacent to block of flats 2012- Lay-by turning space adjacent to block of flats
5	Top of Kings Ride	Broadmoor to Bagshot Woods & Heaths	487532	162139	Other	0	8	8	8		2005 – Track entrance from bend in road within housing estate 2012- Track entrance from bend in road within housing estate
6	Bourley Road	Bourley & Long Valley	484388	150964	Designated car park	24	8	8	8		2005 –Car parks either side of road 2012 – Car parks either side of the road
7*	S entrance to Bramshill Plantation	Bramshill	475756	161288	Designated car park	0	8	0	0		2005 – Bellmouth adjacent to track on 2012 - Not surveyed No public access signs and no parking signs present No public access to the area.
8	N entrance to Warren Heath	Bramshill	476033	161341	Other	12	8	8	8		2005-Track on south of road 2012 – Track on south of road and car park on north side (data were recorded separately to allow comparison)
9	Car park off Cricket Hill Lane	Castle Bottom to Yateley & Hawley Common	482187	159668	Designated car park	11	8	8	8		2005 – Car park adjacent to pond 2012 – Car park adjacent to pond

Survey Code	Name	SSSI	Easting	Northing	Type of parking	No. of parking spaces (2012)	No. of two hour visitor survey sessions				2005 and 2012 survey locations
							August 2005	May/ June 2012	July/ August 2012	August 2013 (count only)	
10	Car park off the A30 next to Haywards Cottage	Castle Bottom to Yateley & Hawley Common	483879	159417	Designated car park	15	8	8	8		2005 – North car park and roaming near pond 2012 – South car park with roaming surveyors around the pond as car park surveyed in 2005 now closed
11	Black Bushes Road	Castle Bottom to Yateley & Hawley Common	480125	157150	Other	9	8	4	0		2005 – Lay-by adjacent to track 2012 – Lay-by adjacent to track surveyed for 1 day only. No public access to site and signed.
12	Chobham Common (Roundabout car park)	Chobham Common	496507	164982	Designated car park	60	8	8	8		2005 – Car park 2012 – Car park
13	Chobham Common (Staple Hill car park)	Chobham Common	497365	164886	Designated car park	25	8	8	8		2005 – Car park 2012 – Car park
14	Lightwater Country Park	Colony Bog & Bagshot Heaths	491586	161972	Designated car park	172	8	8	8		2005 – Behind leisure centre at path intersection to heath and also adjacent to car park (barrier in place until 8.30am) 2012 – Behind leisure centre at path intersection to heath
15	Sandpit Hill	Colony Bog & Bagshot Heaths	493689	161292	Designated car park	7	8	8	8	8	2005 – Some interviews undertaken in car park and at path intersection 2012 – Interviews undertaken at path intersection
16	Queens Road, Cowshot Common	Colony Bog & Bagshot Heaths	494289	157236	Other	5	8	8	8		2005 – Gate at path intersection 2012 – Gate at path intersection
17	B3011 opposite Arrow Lane	Hazeley Heath	476037	157567	Other	6	8	8	8		2005 – Unsurfaced lay-by adjacent to road 2012 – Unsurfaced lay-by adjacent to road

Survey Code	Name	SSSI	Easting	Northing	Type of parking	No. of parking spaces (2012)	No. of two hour visitor survey sessions				2005 and 2012 survey locations
							August 2005	May/ June 2012	July/ August 2012	August 2013 (count only)	
18	Play area, Springfield Ave	Hazeley Heath	476577	157299	Other	0	8	8	8		2005 – Adjacent to play area Springfield Avenue 2012 – Adjacent to play area Springfield Avenue
19	South Road	Sandhurst to Owlsmoor Bogs and Heaths	485033	162936	Other	8	8	8	8		2005 – Path intersection at start of South road 2012 – Path intersection at start of South road
20	Off Crowthorne Road	Sandhurst to Owlsmoor Bogs and Heaths	483840	163049	Designated car park	15	8	8	8		2005 – Car park 2012 – Car park
21	Salt Box Road	Whitmoor Common	498186	152975	Designated car park	30	8	8	8	8	2005 – Car park 2012 – Car park
22	Burdenshott Road	Whitmoor Common	498716	154303	Designated car park	25	8	8	8		2005 – Car park 2012 – Car park
23	Sandy Track car park, Chobham Road, Horsell	Horsell Common	500182	160474	Designated car park	20	8	8	8	8	2005 – Car park 2012 – Car park
24	Six Crossroads car park, Shore's Road	Horsell Common	501221	160381	Designated car park	36	8	8	8	8	2005 – Car park 2012 – Car park
25	E of Aberconway House (Wren's Nest car park)	Ockham & Wisley Commons	506604	158774	Designated car park	20	8	8	8		2005 – Car park 2012 – Car park
26	Currie's Clump (Boldermere Car Park)	Ockham & Wisley Commons	507870	158647	Designated car park	80	8	0	8		2005 – Car park 2012 – Car park
27	Lay-by opp Wyndrush House on Chapel Lane	Ash to Brookwood Heaths	483223	149330	Other	6	-	8	8		2012 – Adjacent to car park at path intersection

Survey Code	Name	SSSI	Easting	Northing	Type of parking	No. of parking spaces (2012)	No. of two hour visitor survey sessions				2005 and 2012 survey locations
							August 2005	May/ June 2012	July/ August 2012	August 2013 (count only)	
28	Path intersection just off Sandy Hill Road	Bourley & Long Valley	482708	152761	Other	30	-	8	8		2012 – Just up from the gate at the end of the playing fields at path intersection
29	Car park 150m to the east of the Foresters Arms Pub GU52 9EP	Bourley & Long Valley	485507	165545	Designated car park	20	-	8	8		2012 - North side of car park between the 2 gated access points
30	Car park off roundabout where B3348 meets A3095	Broadmoor to Bagshot Woods & Heaths SSSI	482747	158985	Designated car park	11	-	8	8		2012 – At the gate at end of car park
31	Intersection of paths adjacent to large lay-by on south side of the A30	Castle Bottom to Yateley & Hawley Common	490064	156009	Other	26	-	8	8		2012 – Large Oak tree by track from lay-by to SPA ~15m south at path intersection
32	Second lay-by on Old Guildford Rd, opp a firebreak	Ash to Brookwood Heaths	495440	155686	Other	18	-	8	8		2012 – Stand at lay-by adjacent to access points either side of the road
40	Pond car park	Ockham & Wisley Commons	507983	158343	Designated car park	30	-	2	0		2012 – Car park adjacent to location 26.
Total						**1,146**	**208**	**238**	**240**		

Structure of visitor survey

2.20 The visitor surveys in 2012 were designed to replicate the methodology used in 2005 to enable data comparison and collect additional visitor information. The visitor surveys comprised counts of people plus interviews with a random sample of visitors. Counts and interviews were designed to capture the range of recreational use believed to occur within each part of the site and also to take note of the weather, the number of professional dog walking vans and any other factors which may have influenced visitor patterns over the survey sessions. Visitor surveys were conducted over two periods in 2012: spring/summer (12th May to the 25th June) and summer (4th August to the 26th August). Paragraphs 2.5 and Table 2 detail the level of survey effort at each of the locations.

2.21 At each location the surveyor undertook the counts and interviews in two-hour sessions, spread over a day. The counts reflected visitor flows at specific locations – for example, a particular gate. There were four survey sessions a day between 07:00-09:00, 10:00-12:00, 13:00-15:00 and 17:00-19:00. Each access point was surveyed for two full days on both a week and weekend day in May/June and August totalling 16 two hour visitor survey sessions except at locations 7, 11, 26 and 40. This methodology allowed direct comparisons between visitor patterns across survey locations, and with the 2005 survey, and also provided the surveyor with breaks between interview sessions. The same method was used to record the repeat tally counts in 2013.

2.22 During each two hour period the surveyor recorded the number of people and the number of groups entering and leaving via the access point. The number of dogs was also noted. As many people leaving the site as possible were interviewed. The sample of people interviewed within each group was randomised and the surveyor approached visitor groups for an interview as they were leaving the site (as long as they were not already interviewing others). Visitors who had already given an interview as part of the study were not re-interviewed and this was noted. Only one person (selected at random) from each group was interviewed. Surveyors were usually based at their car at an access point, and had a large poster with logos highlighting that they were undertaking a visitor survey. No unaccompanied minors were approached or interviewed. Surveyors were trained in the questionnaire and interview approach by Footprint Ecology, to ensure standard sampling.

Visitor survey questionnaire

2.23 The questionnaire extended the breadth and depth of information elicited from visitors in 2005. The 2012 questionnaire (Appendix - Figure 13) took a little longer to conduct than the 2005 questionnaire. A copy of the tally sheet used in the 2012 visitor work can also be found in the Appendix - Figure 14.

2.24 The questionnaire was designed to capture visitor information on:

- Visitor frequency
- Visit destinations

- Visit motivations
- Activities undertaken
- Transport used
- Visit duration and routes
- Visitor profile
- Home postcode location of the interviewee

Visitor routes and postcodes

2.25 Route information was collected using either maps or GPS units. The GPS units were small GPS tags attached to a lanyard. Such units can accurately record the route taken by a visitor and provide the potential to extract more data, such as the time spent by people in particular areas, the speed of walking, etc. However, the data can be unreliable in heavily wooded terrain and the recording of the route information is also reliant on the surveyor handing out the GPS unit as a visitor commences a walk. Where the interviewee was planning to leave at a different access point or was thought unlikely to return after the survey period, GPS units were not used. The alternative method to the GPS units was that used in the 2005 survey, a paper map in the field with a line drawn by the surveyor to capture the route taken by the interviewee. With this approach the interviewer asked the interviewee about their route and showed the interviewee a map of the site. Routes were drawn as lines, individually cross-referenced to each questionnaire. Both sets of route data were subsequently digitised as polylines using the Geographic Information System (GIS) software package MapInfo v10.0.1.

2.26 Using GIS, a grid consisting of 50m x 50m square cells (the same as used in the 2005 work) was placed over a digital SPA boundary and the number of visitor routes passing through each cell was calculated using GIS (MapInfo v10.0.1). These values (number of routes per cells) were linked to each cell producing a thematic map of visitor route distribution across the SPA from the survey work.

2.27 The home postcode data collected from interviewees were used to determine the distance between interviewees' homes and the location interviewed. Postcodes from the interview data were geocoded (using GIS) against a reference file which maps each postcode to the nearest postal address at the centroid of the postcode area (with 1m accuracy) using a point reference file that originated from Postzon[2] (which links postcodes to geographic and administrative data) and Code-Point[3] (produced by Ordnance Survey, it provides a precise geographic location for each postcode unit in the UK to a resolution of 1m). This data file also lists the number of residential delivery points per postcode which is summed to approximate the number of residential dwellings per postcode. This data reference file was supplied by BPH Postcodes[4] and contained geocoded postcode information available from both the December 2011 Royal Mail

[2] http://www.royalmail.com/marketing-services/address-management-unit/address-data-products/postzon-data/details. The file used was dated December 2011.
[3] http://www.ordnancesurvey.co.uk/oswebsite/products/code-point/index.html
[4] http://www.bph-postcodes.co.uk/

Postzon and Ordnance Survey Code-Point data files. The linear distance between a visitor's postcode and the survey location was extracted for all postcodes using MapInfo v10.0.1, and the number of delivery points per postcode and within buffer zones of the SPA were also extracted using advanced queries in MapInfo v10.0.1.

Data and analysis

2.28 Analyses were conducted using the statistical software package Minitab (v14). Where applicable, box plots are used to graphically present data for different groups. These plots show the median (i.e. the mid-point – represented by a horizontal line), and the interquartile range (i.e. 25 – 75% of the data – represented by a box), while the vertical lines show the upper and lower limits of the data, with outlying values represented by asterisks.

2.29 The axes of some graphical plots may be truncated to improve the presentation of the data. Where this occurs it has been noted in the figure legends.

2.30 Where data did not conform to a normal distribution the data were transformed using a $\log_{10}$ transformation to control for the variability within the data and statistical tests were performed on the transformed data.

Comparisons between 2005 and 2012/13 visitor counts

2.31 Two access points in the 2005 visitor survey were not resurveyed in 2012 (location 7 – South entrance to Bramshill plantation and location 11- Black Bushes Road). Hence, data from these sites has been excluded in the comparisons chapter and any discrepancies between tally totals (visitors entering or leaving the SPA) documented in 2005 report and this report can be attributed to this adjustment.

2.32 Tally comparisons are drawn between 2005 and 2012 count data for all survey locations with the exception of those that were recounted in 2013; locations: 3 (The Lookout), 15 (Sandpit Hill), 21 (Salt Box Road), 23 (Sandy Track car park) and 24 (Six Crossroads car park) (Map1). For these locations comparisons are drawn between the 2005 and 2013 recounts.

2.33 The number of commercial dog walking vans parked at each survey location and interview refusals referenced within this reports were taken from the 2012 fieldwork for all survey locations as the 2013 fieldwork only repeated the tally counts.

3. Results

Introduction

3.1 The tally count and face-to-face interview data are presented for all fully surveyed locations in May/June and August 2012/13 and location 26 (Curries Clump – Boldermere car park), which was only fully surveyed in August 2012.

3.2 There were some notable national events that occurred during the visitor survey periods which had the potential to influence visitor patterns. These included the Queen's Jubilee weekend and the Olympics (see para. 4.3 and Appendix -Table 35). Heavy rain coincided with three visitor survey days on the 14th May, 3rd June and 11th June (Table 35).

3.3 The results are presented in two sections; the results from the tally counts in 2012/13 and the results from the 2012 face-to-face visitor interviews. The results of the face-to-face interviews consider the data gathered from the fully surveyed locations in May/June and in August plus interview data from location 26 (Curries Clump – Boldermere car park, which was not fully surveyed in May/June period). The data are presented as the responses given from the May/June sessions, the August sessions and all responses in different rows or columns of tables. Caution should be used when drawing comparisons between the May/June and August visitor data as they are not directly comparable given that location 26 (Curries Clump – Boldermere car park) was only surveyed in August 2012.

3.4 The results section then only considers visitor information from those visitor groups who stated they were local, or were 'on a short visit and had travelled from home', as it is the visitor patterns of local residents, who we know visit the sites regularly which are of most interest to this study (Table 8).

Visitor information from the tally counts

Total number of visitors entering the SPA through survey locations

3.5 A total of 5,452 adult visitors and 957 children which totals 6,409 people were recorded entering the SPA via the surveyed access points (Map 1) in May/June 2012 and August 2012/13 during the visitor survey sessions (including substituted recount data in 2013 for the five resurveyed sites) (Table 3).

3.6 The highest number of visitors entering the SPA was recorded through location 3 (The Lookout) with a total of 801 visitors comprising 541 adults and 260 children. Location 24 (Six Crossroads car park) also had a high visitor total of 684, consisting of 585 adults and 99 children (Table 3).

3.7 By far the highest numbers of children were recorded entering the SPA at location 3 (The Lookout) suggesting this is a popular visit destination for family groups (Table 3).

3.8 The lowest number of visitors were recorded entering the SPA through location 28 (Path intersection just off Sandy Hill Road) where only 28 adults were noted.

These values are likely to be atypically low given there was rain on every single survey day (moderate rain on three and light rain on the one, Table 35). Location 27 (Lay-by opposite Wyndrush House on Chapel Lane) was also quiet, with only 59 adults recorded entering the SPA (Table 3 and Map 2).

Total number of dogs entering the SPA through survey locations

3.9 In total 4,314 dogs were recorded entering the SPA through the surveyed access points during the visitor survey sessions (Table 3). The highest number of dogs (501) was recorded at location 21 (Salt Box Road). Other popular locations for dogs were location 24 (Six Crossroads car park, Shore's Road) where 498 dogs were recorded and location 23 (Sandy Track, car park) where 452 dogs were noted (Table 3 and Map 3).

Total number of professional dog walking vans recorded at the survey locations adjacent to SPA

3.10 During the 2012 survey sessions, a total of 45 commerical dog walking vans were recorded parked at access points adjacent to the SPA (Table 3 and Map 4). A total of 12 vans were noted parked at location 23 (Sandy Track, car park, Horsell Common) and eight at location 19 (South Road) (Table 3 and Map 4).

Refusal rate

3.11 On average there was a 10% interview refusal rate from all approached visitors (Table 3). The refusal rate varied by site. At location 3 (The Lookout), 18% of approached visitor groups declined an interview. This may have been because there were a high number of visitor groups with children, and also visitors on bicycles (the site is promoted as a cycle destination) may have been less willing to stop and give an interview. Location 26 (Currie's Clump – Boldermere car park) had the highest refusal rate with 28% (Table 6) declining an interview invitation.

Number of interviews per location

3.12 Across all the fully surveyed locations and including location 26 (Curries Clump – Boldermere car park) a total of 2,483 face-to-face visitor interviews were completed (Table 3). The number of interviews completed and the number of visitors entering each location during 2012 correlated well (Spearman's rank correlation coefficent= 0.85, $p<0.001$), with more completed interviews at the busier locations (Maps 2 and 5).

3.13 The highest number of interviews were completed at Location 21 (Salt Box Road) where 179 interviews were conducted. The smallest number of interviews was undertaken at location 2 (Nightingale Road/A323) where 42 interviews were completed (Table 3 and Map 5).

Tally information per local authority

3.14 The number of visitor survey locations (from 30 fully surveyed) per local authority is summarised in Table 4 along with the tally totals for adults and dogs entering the SPA. Eight visitor survey locations lie within the Surrey Heath District and entering the SPA via these locations during the survey sessions were 28% of the total number of tallied dogs and 25% of the total number of adults (Table 4). Four

survey locations lie within Bracknell Forest District and counts through these locations accounted for 23% of the total number of adults and 15% of the dogs. Interestingly, three locations fell within Woking District and 21% of the total number of adults and 24% of the total number of dogs were counted entering the SPA through these locations.

Weekday and weekend visitor pressure

3.15 Survey effort at each site was split equally between weekdays and weekend days to consider whether the survey locations had similar levels of weekday and weekend visitor pressure. There was a statistically significant difference (Wilcoxon signed rank test, $Z=52.5$, $n=29$, $p<0.001$) in the number of adults entering the SPA via the interview locations with more adult visitors on weekend days than weekdays (Table 5).

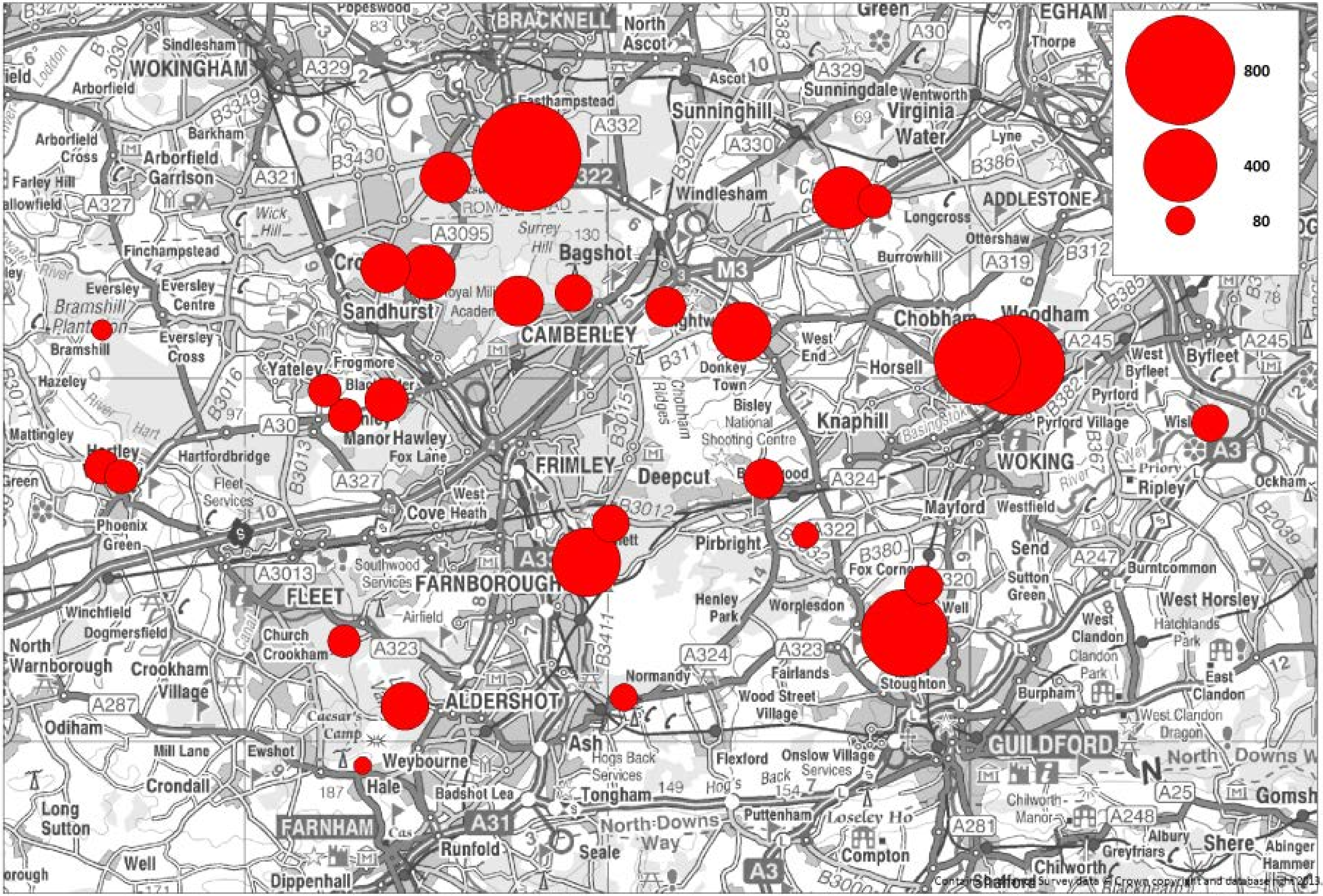
Table 3: Summary of the tally data from the visitor survey. Only data from fully surveyed locations is summarised. ** The tally of visitors entering and leaving these very busy access points were underestimates in the May/June 2012 tally counts.

Survey location	Total adults entering	Total children entering	Total dogs entering	Total adults leaving	Total children leaving	Total dogs leaving	Number of professional dog walking vehicles in 2012	Interview total	Visitor groups already interviewed	Interview refusals	Refusal rate (as % of visitors approached)
1 (Mytchett Place Road)	327	34	241	240	39	174	0	116	31	18	11
2 (Nightingale Road/A323)	63	10	45	49	5	44	1	42	7	5	9
3 (The Lookout)**	541	260	153	424	192	132	0	126	13	30	18
4 (Top of Bracknell Road)	84	37	61	72	36	77	0	80	21	11	12
5 (Top of Kings Ride)	182	22	166	180	17	162	1	116	26	19	13
6 (Bourley Road)	169	20	118	197	25	128	1	95	14	8	7
8 (N entrance to Warren Heath)	40	5	34	26	4	29	4	66	6	15	10
9 (Car park off Cricket Hill Lane)	76	21	37	54	10	33	0	52	11	1	1
10 (Car park off the A30)	140	14	87	70	12	50	0	87	13	11	10
12 (Chobham Common (Roundabout car park))	265	34	213	243	32	184	0	105	10	5	4
13 (Chobham Common (Staple Hill car park))	95	11	30	82	10	33	0	53	10	4	6
14 (Lightwater Country Park)	99	39	119	15	2	12	1	62	14	10	12
15 (Sandpit Hill)	238	39	238	142	20	147	6	104	15	12	9
16 (Queens Road, Cowshot Common)	95	41	73	79	17	64	0	66	7	7	9

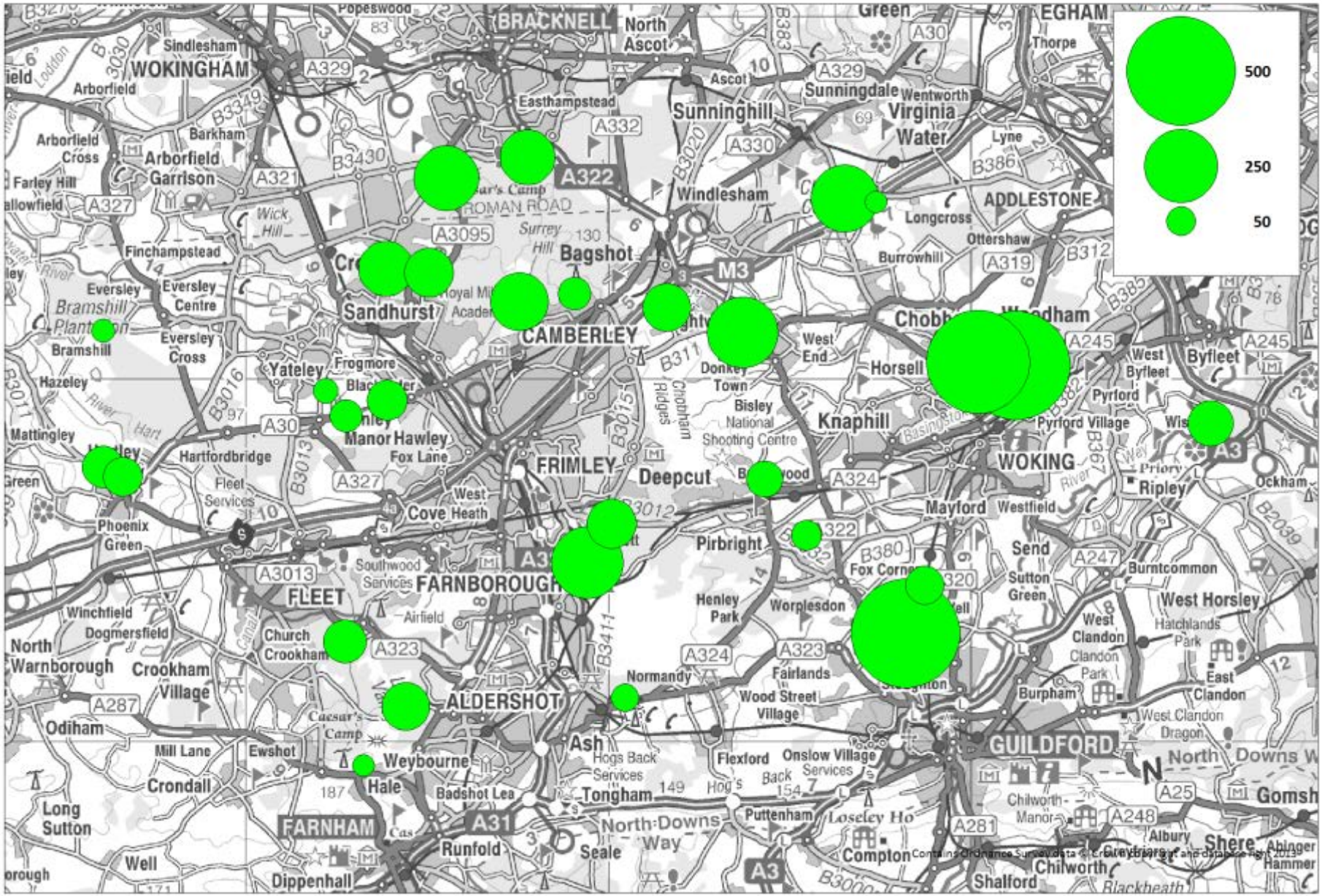
Survey location	Total adults entering	Total children entering	Total dogs entering	Total adults leaving	Total children leaving	Total dogs leaving	Number of professional dog walking vehicles in 2012	Interview total	Visitor groups already interviewed	Interview refusals	Refusal rate (as % of visitors approached)
17 (B3011 opposite Arrow Lane)	91	16	91	77	10	67	1	55	14	7	9
18 (Play area, Springfield Ave)	91	15	84	76	26	66	0	67	25	2	2
19 (South Road)	207	39	121	155	25	83	8	104	26	13	9
20 (Off Crowthorne Road)	178	20	152	155	8	152	1	97	28	8	6
21 (Salt Box Road)	504	38	501	481	47	501	3	179	42	17	7
22 (Burdenshott Road)	119	9	81	104	12	77	0	53	11	5	7
23 (Sandy Track car park, Chobham Road, Horsell)	465	63	452	440	62	430	12	155	17	15	8
24 (Six Crossroads car park, Shore's Road)	585	99	498	597	111	513	0	154	3	21	12
25 Wren's nest car park (E of Aberconway House)	117	3	109	76	6	59	0	50	2	7	12
26 Curries Clump (Boldermere car park)	92	19	47	84	15	37	1	43	1	17	28
27 (Lay-by opp Wyndrush House on Chapel Lane)	59	8	53	43	7	43	0	47	11	4	6
28 (Path intersection just off Sandy Hill Road)	28	5	29	58	10	54	0	55	12	13	16

Survey location	Total adults entering	Total children entering	Total dogs entering	Total adults leaving	Total children leaving	Total dogs leaving	Number of professional dog walking vehicles in 2012	Interview total	Visitor groups already interviewed	Interview refusals	Refusal rate (as % of visitors approached)
29 (Car park 150m to the east of the Foresters Arms Pub GU52 9EP)	91	7	97	106	14	135	2	57	13	10	13
30 (Car park off roundabout where B3348 meets A3095)	188	25	201	194	19	199	1	73	26	11	8
31 (Inter section of paths adjacent to large lay-by on south side of the A30)	102	1	58	20	0	17	0	56	3	5	8
32 (Second lay-by on Old Guildford Rd, opposite a firebreak)	121	3	125	108	8	119	2	68	21	8	8
Total	**5,452**	**957**	**4,314**	**4,647**	**801**	**3,821**	**45**	**2,483**	**453**	**319**	**10**

Map 2: Total number of adults entering each location during 2012/13 counts



Map 3: Total number of dogs entering each location during 2012/13 counts



Map 4: Total number of commercial dog walking vans per location in 2012

Map 5: Total number of interviews undertaken per location in 2012

Contains Ordnance Survey data © Crown copyright and database right 2012.

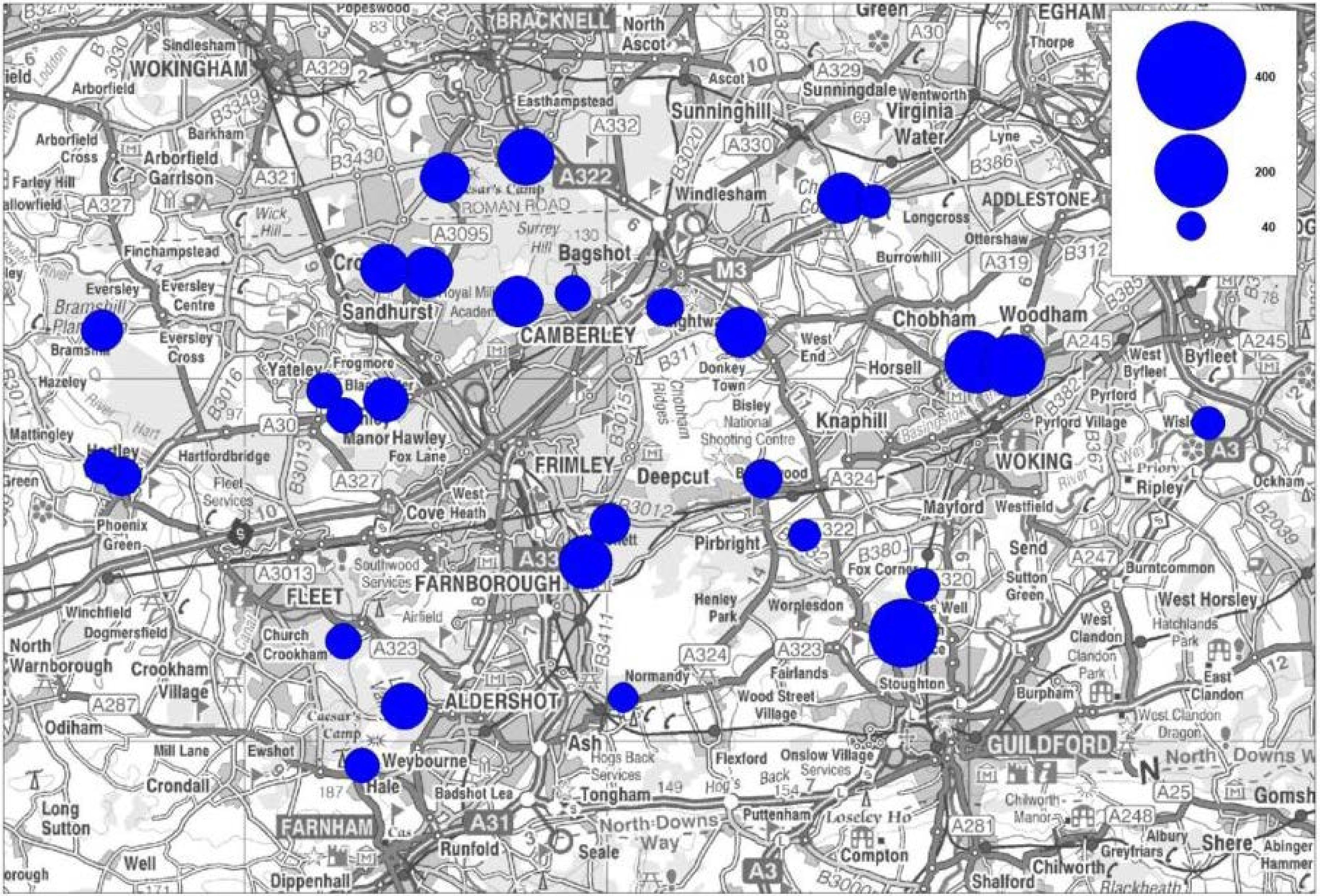


Table 4: Summary of the number of survey locations per local authority and the tally totals for total number of people and dogs entering each location (note these may be minimum values due to under recording). Values in () are expressed as percentages across each column.

Local authority	Number of survey points	Total number of people entering	Total number of dogs entering
Surrey Heath District	8 (27)	1,630 (25)	1,193 (28)
Bracknell Forest	4 (13)	1,458 (23)	627 (15)
Woking District	3 (10)	1,340 (21)	1,031 (24)
Guildford District	6 (20)	1,049 (16)	828 (19)
Hart District	7 (23)	710 (11)	488 (11)
Rushmoor District	1 (3)	189 (3)	118 (3)
Waverley District	1 (3)	33 (1)	29 (1)
Total	**30 (100)**	**6,409 (100)**	**4,314 (100)**

Table 5: The total number of adults entering the SPA on weekdays and weekend days via the survey locations during the visitor survey sessions. Values in () are expressed as percentages across each row.

Visitor survey sessions	Number of adults entering SPA on weekdays	Number of adults entering SPA on weekend days	Total number of adults entering the SPA over survey period
May/June	1,045 (41)	1,476 (59)	2,521 (100)
August	1,740 (45)	2,148 (55)	3,888 (100)
Total	**2,785 (43)**	**3,624 (56)**	**6,409 (100)**

Visitor information from face-to-face interviews

Interviews and interviewee demography

3.16 Across the two survey periods 2,483 visitor interviews were undertaken, representing visitor information from 3,859 visitors and their 2,921 dogs. Of the 2,483 interviewed visitor groups, 1,997 (80%) were accompanied by at least one dog (Table 6).

Table 6: Overview data from 2012 visitor survey work.

	Number of interviews	Total visitors (accounting for group size)	Total number of dogs recorded from interview data	Number of groups accompanied by at least one dog	% of groups accompanied by at least one dog
May/June	1,199	1,838	1,458	992	83
August	1,284	2,020	1,463	1,004	78
All responses	**2,483**	**3,859**	**2,921**	**1,997**	**80**

3.17 Over half (53%) of visitors in the interviewed groups fell within the 41-65 age category, with just over a fifth (22%) of visitors in the 18-40 category. Interestingly, in August (during the school holidays) there was not a higher percentage of under 18's recorded in the interviewed groups (Table 7).

Table 7: Age profile of all visitors from all interviewed groups. The total responses do not equal the total number of visitor recorded in Table 6 as some survey sheets did not contain these data.

Age category	Under 18	18-40	41-65	65+	Total responses
May/June	180 (10)	374 (20)	1,009 (55)	264 (14)	1,827 (100)
August	204 (10)	461 (23)	1,026 (51)	309 (15)	2,000 (100)
Total	**384 (10)**	**835 (22)**	**2,035 (53)**	**573 (15)**	**3,827 (100)**

All interviewed visitor groups

3.18 The vast majority of visitors interviewed at the survey sites were local residents. Of the 2,483 interviews, 98% of visitors stated they were on a daytrip / short visit and had travelled from home, 1% were on a daytrip and staying with friends or family. (Table 8).

Table 8: Response from all visitor groups when asked 'which of the following best describes your situation today?'. Expressed as total visitor responses (and as a percentage).

Visitor response	May/June 2012	August 2012	All responses (as %)
On a daytrip/short visit and travelled from home	1,174 (98)	1,249 (97)	2,423 (98)
On a daytrip/short visit and staying with friends or family	10 (1)	22 (2)	32 (1)
Other	12 (1)	3 (0)	22 (1)
On holiday in the area, staying away from home	2 (0)	10 (1)	5 (0)
No response	1 (0)	0 (0)	1 (0)
Total	**1,199 (100)**	**1,284 (100)**	**2,483 (100)**

Interviewed visitor groups who were on a short visit/day trip and visited from their home ('local visitors')

3.19 The rest of the analyses in this chapter considers a subset of the interview responses containing only the data from interviewees who cited that they made their visit from home and were on a daytrip/short visit. This is so we only consider the visit behaviour and patterns of 'local visitors' and thus can draw more accurate conclusions on the distance local visitors live from the sites they visit and the distance of their regular recreational routes. For the rest of this section we refer to this subset of visitors as 'local visitors'. In total of 1,174 visitor groups were classified as 'local visitors' from the May/June surveys, and 1,249 'local visitor' groups from the August surveys.

Visit frequency

3.20 Overall, 38% of interviewed 'local visitor' groups made a daily visit to the interview location and 34% made their visit more than once a week (Table 9). A high percentage of 'local visitor' groups made frequent regular visits to the SPA, with 83% making a visit to their interview location at least once a week (Table 9).

Table 9: The response of 'local visitors' from the May/June and August 2012 survey when asked 'How frequently do you tend to visit this site?'

Visit frequency	May/June 2012	August 2012	Response total (as percentage)
Daily (300+ visits a year)	478 (41)	451 (36)	929 (38)
More than once a week (75-300 visits a year)	383 (33)	450 (36)	833 (34)
Once a week (40-75 visits a year)	145 (12)	116 (9)	261 (11)
2 to 3 times per month (15-40 visits a year)	64 (5)	73 (6)	137 (6)
Once a month (6-15 visits a year)	26 (2)	44 (4)	70 (3)
Sporadically (varies through the year)	41 (3)	65 (5)	106 (4)
Don't know/first visit	37 (3)	49 (4)	86 (4)
Not completed		1 (0))	1 (0)
Total	**1,174 (100)**	**1,249 (100)**	**2,423 (100)**
Visit at least once a week	1,006 (86)	1,017 (81)	2,023 (83)

Timing of visit

3.21 Visitors were asked about the timing of their visits and whether they made their regular visit at a specific time of day. A total of 3,388 responses were given as visitors were able to select multiple categories. Almost a quarter (24%) of all 'local visitor' responses indicated there was no preferred time of day to visit. However the most specified (23%) time window to make a visit was before 9am. A further 17% of the responses preferred to make their trips between 9am and 12pm (Table 10).

Table 10: The response of 'local visitors' when asked 'Do you tend to visit this area at a certain time of day?'

Time of day	May / June	August	All responses
Varies/Don't know/First visit	386 (23)	416 (24)	802 (24)
Before 9am	379 (23)	393 (23)	772 (23)
After 4pm	298 (18)	347 (20)	645 (19)
Between 9am and 12pm	281 (17)	332 (19)	613 (18)
Between 2pm and 4pm	161 (10)	141 (8)	302 (9)
Between 12 and 2pm	143 (9)	111 (6)	254 (7)
Total	**1,648 (100)**	**1,740 (100)**	**3,388 (100)**

3.22 Visitors were also asked whether they had any seasonal visit preference to the site where they were interviewed. Interviewees were able to select more than one season, and 2,651 'local visitor' responses were given. Exactly three quarters (75%) of these responses stated they visit the interview location equally all year. Only 10% of responses indicated a preference for summer visits and only 1% of responses stated a preference for winter visits (Table 11).

Table 11: The response of 'local visitors' when asked 'Do you tend to visit this area more at a particular time of year for {insert visitor activity}'

Time of year	May/June	August	All responses
Equally all year	977 (74)	1,024 (77)	2,001 (75)
Summer (Jun - Aug)	133 (10)	132 (10)	265 (10)
Spring (Mar-May)	88 (7)	48 (4)	136 (5)
Autumn (Sep - Nov)	64 (5)	43 (3)	107 (4)
Don't know /first visit	47 (4)	70 (5)	117 (4)
Winter (Dec - Feb)	11 (1)	14 (1)	25 (1)
Total	**1,320 (100)**	**1,331 (100)**	**2,651 (100)**

Visit duration

3.23 Interviewees were asked how much time they had spent or would spend in the area during their visit. Nearly two thirds of 'local visitors' (64%) stated their visit lasted less than hour and just under a third (31%) of 'local visitor' groups stated between 1 and 2 hours (Table 12).

Table 12: The response of 'local visitors' when asked 'How long have you spent / will you spend in the area today?'

Visit duration	May/June	August	All responses
Less than an hour	749 (64)	799 (64)	1,548 (64)
1-2 hours	371 (32)	387 (31)	758 (31)
2-3 hours	44 (4)	52 (4)	96 (4)
More than 3 hours	9 (1)	10 (1)	19 (1)
Total	**1,173 (100)**	**1,248 (100)**	**2,421 (100)**

Activities

3.24 Interviewees were asked what activity or activities they were undertaking during their visit. Visitors were able to select multiple categories, so if a visitor was cycling and dog walking, both 'cycling' and 'dog walking' would be selected. A total of 2,955 activity responses were given by interviewed 'local visitors'.

3.25 By far the most popular activity undertaken across the survey locations was dog walking, with 66% of the 'local visitor' activity responses. Just over a fifth (21%) of these responses cited walking and a further 4% cited cycling (Table 13). Other activities included geocaching[5], being part of a guided walk, following a butterfly transect, exercise, watching model aircraft, a pub visit, and photography.

[5] http://www.geocaching.com/

Table 13: The response of 'local visitors' when asked 'What activity/activities are you undertaking today?'

Activity	May/June	August	All responses
Dog walking	961 (68)	978 (63)	1,939 (66)
Walking	286 (20)	328 (21)	614 (21)
Cycling	52 (4)	72 (5)	124 (4)
Jogging/running	30 (2)	57 (4)	87 (3)
Other	22 (2)	41 (3)	63 (2)
Family Outing	13 (1)	24 (2)	37 (1)
Horse Riding	14 (1)	10 (1)	24 (1)
Wildlife Watching	8 (1)	16 (1)	24 (1)
Meeting Up With Friends	8 (1)	9 (1)	17 (1)
Picnic	5 (0)	8 (1)	13 (0)
Spend Time Outdoors	4 (0)	8 (1)	12 (0)
Motor Cycling	0 (0)	1 (0)	1 (0)
Total	**1,403 (100)**	**1,552 (100)**	**2,955 (100)**

3.26 Map 6 shows the number of activity responses cited by interviewed 'local visitor' groups per survey location and illustrates the spread of activities across all the survey locations. Only activities which accounted for 2% or higher of all activity responses (Table 13) were mapped.

3.27 Cycling was most popular at location 3 (The Lookout) and walking was popular at locations 18 (Play area, Springfield Avenue) and 19 (South Road). Dog walking was popular at all locations. An especially high number of dog walking activity responses were cited by visitor groups at locations 9 (Car park of Cricket Hill) 15 (Sandpit Hill), 17 (B3011 opposite Arrow Lane), 24 (Six Crossroads car park), 27 (Lay-by opposite Wyndrush House) and 32 (Old Guildford Road, near Deepcut).

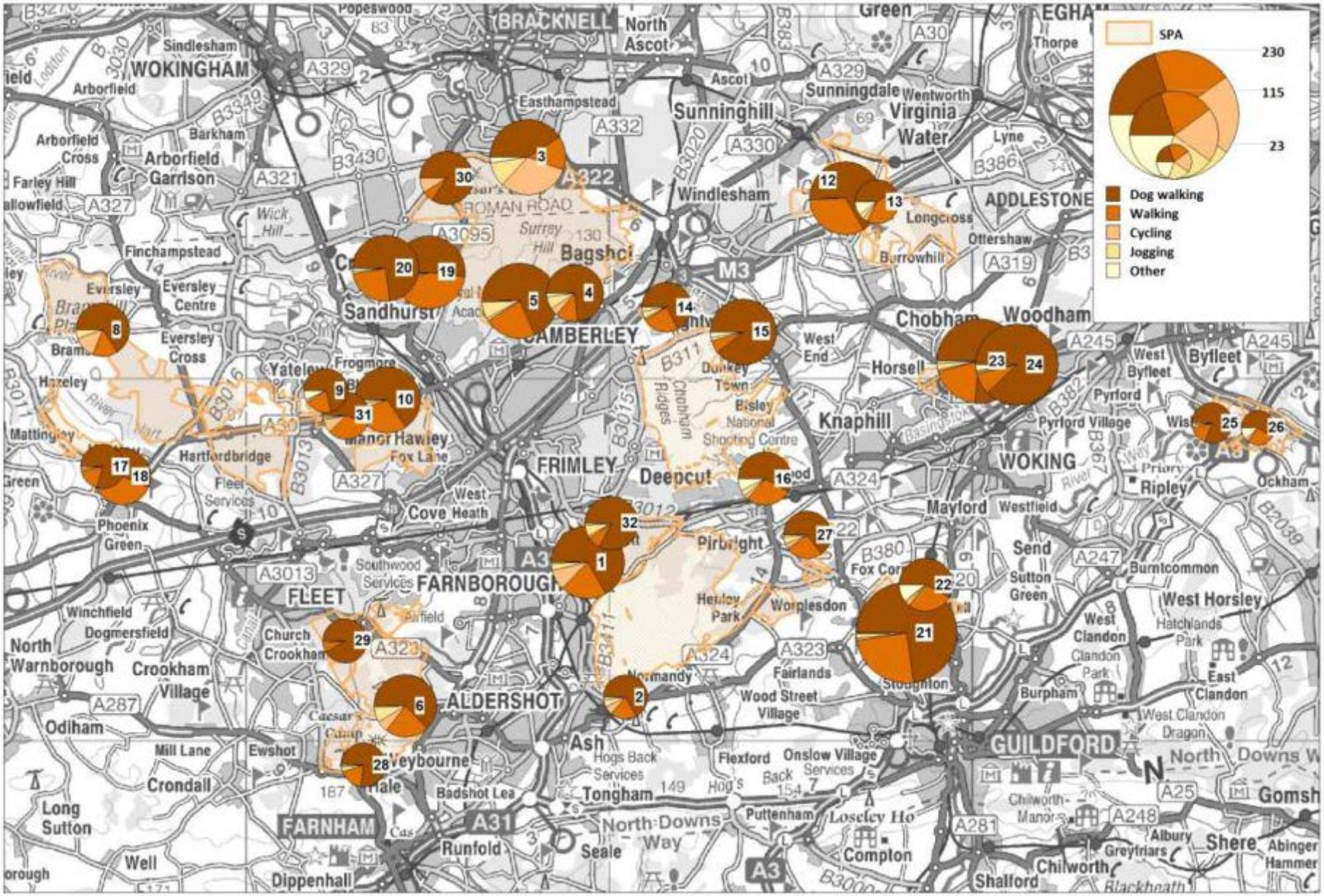
Dogs

3.28 In total 1,959 (81%) of interviewed 'local visitor' groups were accompanied by at least one dog, with a dog observed off the lead in 67% of these groups (Table 14). Interestingly, a higher percentage of 'local visitor' groups were recorded with a dog off lead in the May/June survey sessions in comparison to the August surveys (70% vs. 65%).

Table 14: The number of interviewed 'local visitor' groups with and without dogs and the number of groups with at least one dog observed off the lead.

Survey sessions	Total number of groups interviewed	Groups without dogs	Groups with Dogs	Groups with dogs observed off lead
May/June	1,174	199 (17)	975 (83)	680 (70)
August	1,249	265 (21)	984 (79)	641 (65)
All responses	**2,423**	**464 (19)**	**1,959 (81)**	**1,321 (67)**

Map 6: Activities of visitor groups



Length of time visitors have been coming to the interview site

3.29 Visitors were asked how long they had been making visits to the area where they were interviewed. A total of 2,422 responses were given by 'local visitors', and in total 38% of 'local visitor' groups stated they had been visiting the site for an 'other' amount of time. This category comprised responses ranging from over 10 years to 67 years.

3.30 Nearly equal proportion of 'local visitors' (26% and 25%) had been making their visits to the interview sites between 1 and 5 years and 5 to 10 years respectively. Only 10% of these had recently started making visits to the area.

Table 15: The response of 'local visitors' when asked 'How long have you been visiting this area?'

Length of time been using the area	May/June	August	Total responses
Other	397 (34)	527 (42)	924 (38)
Between 1 and 5 years	332 (28)	306 (24)	638 (26)
Between 5 and 10 years	330 (28)	276 (22)	606 (25)
Less than a year	114 (10)	140 (11)	254 (10)
Total	**1,173 (100)**	**1,249 (100)**	**2,422 (100)**

Transport

3.31 Three quarters (75%) of all interviewed 'local visitor' groups travelled to their visit destination by car/van. A further 22% arrived by foot, 2% by bicycle and 1% by horse. No interviewed groups arrived at any survey location by public transport (Table 15). Two visitors arrived by 'other' means of transport, one by motorbike and the other by electric scooter.

Table 16: The response of 'local visitors' when asked 'What form of transport did you use to get here?'

Transport	May/June	August	All responses
Car	879 (75)	936 (75)	1,815 (75)
Foot	260 (22)	268 (21)	528 (22)
Bicycle	22 (2)	35 (3)	57 (2)
Horse	13 (1)	8 (1)	21 (1)
Other	0 (0)	2 (0)	2 (0)
Total	**1,174 (100)**	**1,249 (100)**	**2,423 (100)**

Average number of visitors and dogs per group by transport mode

3.32 On average 1.6 'local visitors' arrived per vehicle (car/van) with 1.3 dogs. 'Local visitor' groups who arrived by foot on average contained 1.5 people and 1.0 dogs (Table 17).

Table 17: Number of 'local visitors' and dogs arriving per group by transport mode.

Group transport mode	Visitors			Dogs	
	Total groups	Total people	$\bar{x}$	Total dogs	$\bar{x}$
Car/van	1,815	2,878	1.6	2,321	1.3
Foot	528	771	1.5	538	1.0
Bicycle	57	92	1.6	8	0.1
Horse	21	32	1.5	0	0
Other	2	2	1	2	1
Total	**2,423**	**3,775**		**2,869**	

Main reason for visiting

3.33 Visitors were asked what made/motivated them to visit the specific location at which they were interviewed, rather than another local site. Interviewees were asked to list features which attracted them and then asked which had the most influence over their choice of visit location. Responses were received from 2,401 interviewed 'local visitor' groups, and 22 of these did not identify a main feature. The most frequently cited main feature specific to the location visited was 'close to home' which was given by 39% of interviewed 'local visitor' groups (Table 18).

3.34 Other popular responses included 'like the countryside/natural environment' (with 15% of all responses) and the location was 'good for dog/dog enjoys it' (with 8% of all responses). In total 5% of all 'local visitor' groups were drawn to their visit location because of the choice of routes and their ability to use different circuits (Table 18).

Table 18: The responses given by 'local visitors' when asked to identify the main feature of the site that had most influence over their choice of visit destination - 'What makes you come here specifically, rather than another local site?'

Main reason to visit site	May/June	August	All responses
Close to home	481 (42)	448 (36)	929 (39)
Like the countryside/natural environment	160 (14)	212 (17)	372 (15)
Good for dog/dog enjoys it	114 (10)	87 (7)	201 (8)
Choice of routes/ability to do different circuits	73 (6)	51 (4)	124 (5)
Other	71 (6)	72 (6)	143 (6)
Habit/familiarity	39 (3)	27 (2)	66 (3)
Ability to let dog off the lead	37 (3)	38 (3)	75 (3)
Right place for activity	31 (3)	88 (7)	119 (5)
Quick and easy travel route from home	20 (2)	47 (4)	67 (3)
Feel safe here	18 (2)	18 (1)	36 (1)
Particular facilities	18 (2)	3 (0)	21 (1)
Large area of open space	17 (1)	61 (5)	78 (3)
Don't know /others in party chose	16 (1)	11 (1)	27 (1)
Open feel of the place	15 (1)	8 (1)	23 (1)
Not many people	15 (1)	15 (1)	30 (1)
Good/easy parking	9 (1)	13 (1)	22 (1)
Suitability given weather conditions	9 (1)	6 (0)	15 (1)
Quiet with no traffic noise	8 (1)	17 (1)	25 (1)
Refreshments/café/pub nearby	3 (0)	5 (0)	7 (0)
Bird watching	2 (0)	4 (0)	7 (0)
General wildlife interest	1 (0)	9 (1)	10 (0)
Lots of other people	0 (0)	3 (0)	3 (0)
Rural feel	0 (0)	0 (0)	1 (0)
Total	**1,157 (100)**	**1,244 (100)**	**2,401 (100)**

Features to make another site attractive

3.35 Visitors were asked what features would be necessary to make another site attractive to them so that they would undertake their main activity there instead of the interview location. Interviewees were able to provide multiple responses and the most frequently cited responses (30%) from 'local visitors' stated that nothing could be done to attract them to another site (Table 19). This was mainly due to the proximity of the site to their home, the large size of their visit

destination or the suitability of the site to their main activity. A further 529 responses (14%) stated 'other' features (Table 19 and Table 36) and 13% a large area of open space - this was often cited at locations with a higher proportion of dog walkers and by those who were walking large, energetic dogs or several dogs during their visit. Several (12%) 'local visitor' groups commented that an alternative site would need to be closer to their home address than the site they were visiting to be an attractive visit destination.

Table 19: The response of 'local visitors' when asked 'For (insert visitor's main activity) what features would be necessary to make another site attractive for you instead of here?'

Features	May/June	August	Total responses
No features / nothing	505 (27)	605 (33)	1,110 (30)
Other features	188 (10)	341 (18)	529 (14)
Large open space	275 (15)	222 (12)	497 (13)
Close to home	259 (14)	186 (10)	445 (12)
Attractive scenery	190 (10)	122 (7)	312 (8)
Circular walks	193 (10)	118 (6)	311 (8)
More dog friendly	91 (5)	96 (5)	187 (5)
Better /easier parking	37 (2)	61 (3)	98 (3)
Better path surfacing /path network	49 (3)	45 (2)	94 (3)
Good views	61 (3)	37 (2)	98 (3)
Better information /maps/board	7 (0)	12 (1)	19 (1)
Total responses	**1,855 (100)**	**1,845 (100)**	**3,700 (100)**

Visitor routes

3.36 Visitor routes were either mapped on paper or collated using handheld GPS units and then digitised. In total the routes from 2,195 visitor groups were captured (Table 20). Map 7 shows the routes of interviewed 'local visitor' groups. The map only shows the routes of visitors interviewed and the areas of the SPA (where there is public access). Where no routes are visible it does not mean there is no visitor use - just the routes of interviewed groups (at the surveyed access points) did not pass through these areas. The other limitation of Map 7 is that it is not possible to identify the busiest routes as multiple groups of visitors will have followed the same route which on this map will only be represented by a single line.

3.37 Map 8 shows the number of routes passing through each 50m of the SPA which accounts for visitor groups taking the same routes (see paragraph 2.26, the routes on each SSSI can be seen in more details on Maps 12-20 in the Appendix)). This shows Horsell and Whitmoor Common as having the highest number of 'local visitor' routes passing through areas of the SPA. This is not surprising given that the highest number of visitor interviews were conducted at location 21 (Saltbox Road, adjacent to Whitmoor Common) and locations 23 and 24 (car parks adjacent to Horsell Common) and the route data confirms that certain parts of these areas are subject to a high level of recreational use.

3.38 On average the route length of a 'local visitor' who was dog walking was 2.63km, with 75% of dog walkers covering up to 3.23km. 'Local visitors' who were walking without a dog on average covered a slightly longer distance of 2.51km (Table 20 & Figure 1), with 75% covering up to 3.80km (Table 20 & Figure 1).

3.39 The mapped paper routes of 'local visitors' who were walking and dog walking and who arrived at the SPA on foot will include the distance they walked from home to the SPA as well as their route on site. When transport mode to site and route length are considered for local dog walking visitors the median mapped route length of visitor arriving by car (2.36km) is slightly higher than the mapped route length of those local visitors arriving by foot (2.06km). In addition, 75% of the 'local visitors' by car were found to cover 3.32km during their visit, and 75% of 'local visitors' who arrived by foot covered 2.97km Table 21).

Table 20: Length (km) of 'local visitor' routes by activity. Where n= sample size, $\bar{x}$=the mean value, S.E $\bar{x}$= the standard error of the mean and median = middle value of the data range sorted from smallest to largest.

Activity	n	$\bar{x}$	SE $\bar{x}$	Minimum	Lower quartile (25%)	Median	Upper quartile (75%)	Maximum
Dog walking	1,787	2.63	0.03	0.03	1.67	2.28	3.23	13.23
Walking	234	2.95	0.15	0.30	1.78	2.51	3.80	23.73
Jogging/running	50	4.33	0.34	1.25	2.54	3.76	5.58	11.75
Cycling	78	6.19	0.44	0.39	3.13	4.74	9.11	16.99
Horse riding	20	3.07	0.32	0.78	1.87	3.20	3.98	6.34
All other	26	2.23	0.37	0.08	0.94	1.60	3.12	8.40
Total	**2,195**	**2.83**	**0.04**	**0.03**	**1.71**	**2.38**	**3.42**	**23.73**

Table 21: Length (km) of routes collected from dog walking 'local visitors' who arrived by car and by foot.

Transport mode	n	$\bar{x}$	SE $\bar{x}$	Minimum	Lower quartile (25%)	Median	Upper quartile (75%)	Maximum
Car	1,397	2.69	0.04	0.03	1.73	2.36	3.32	13.23
Foot	379	2.37	0.07	0.29	1.52	2.06	2.97	13.16

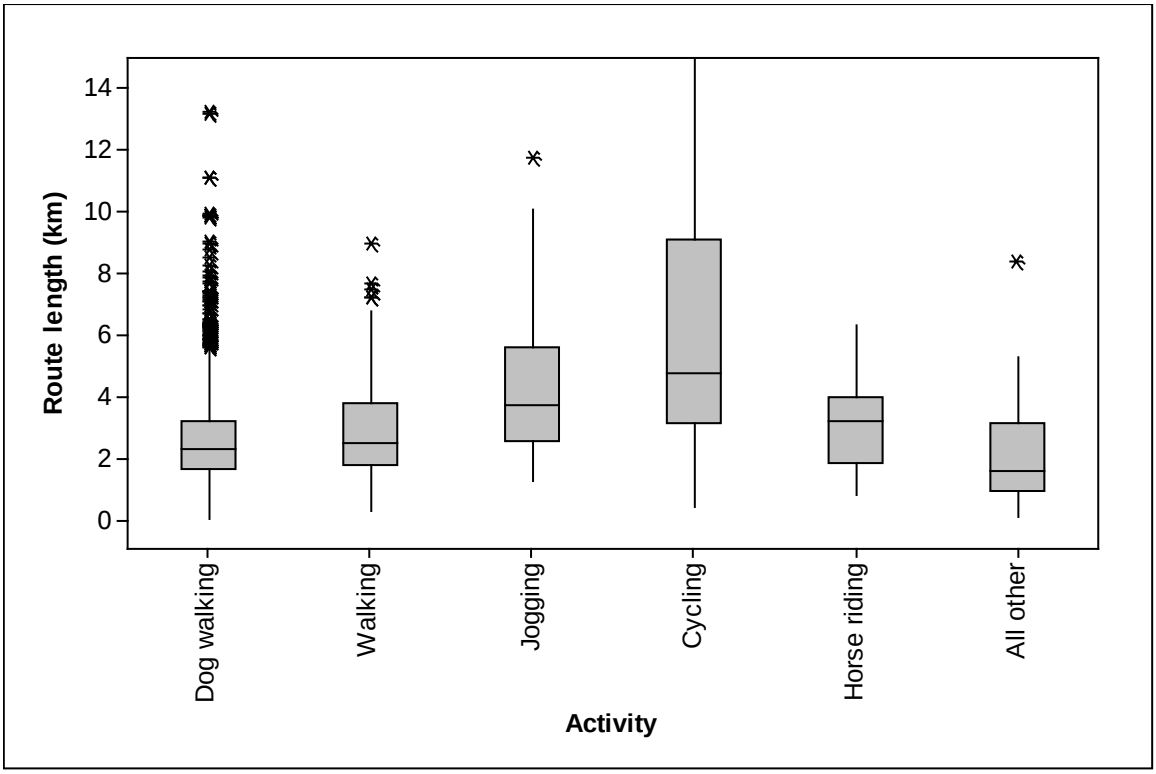
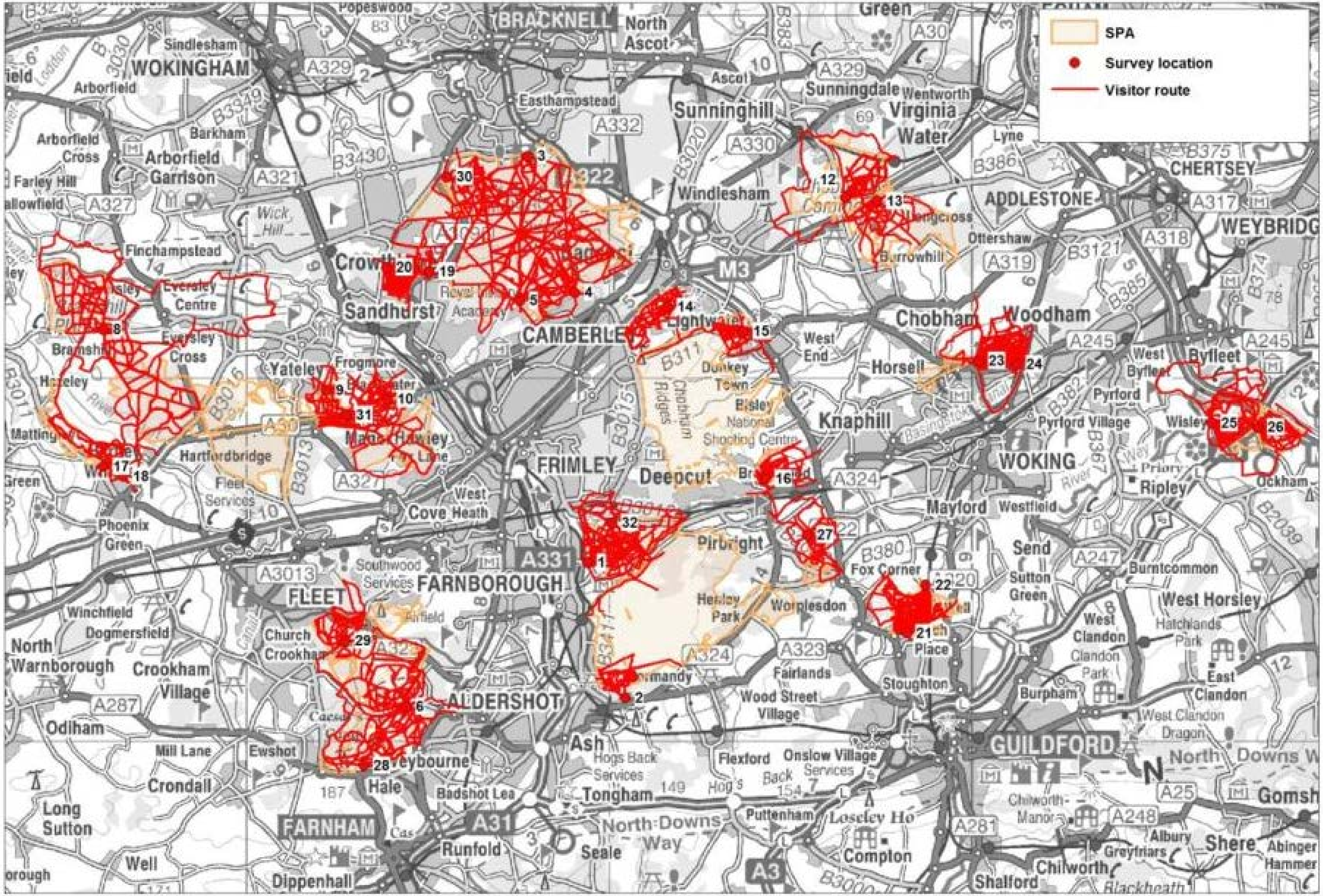
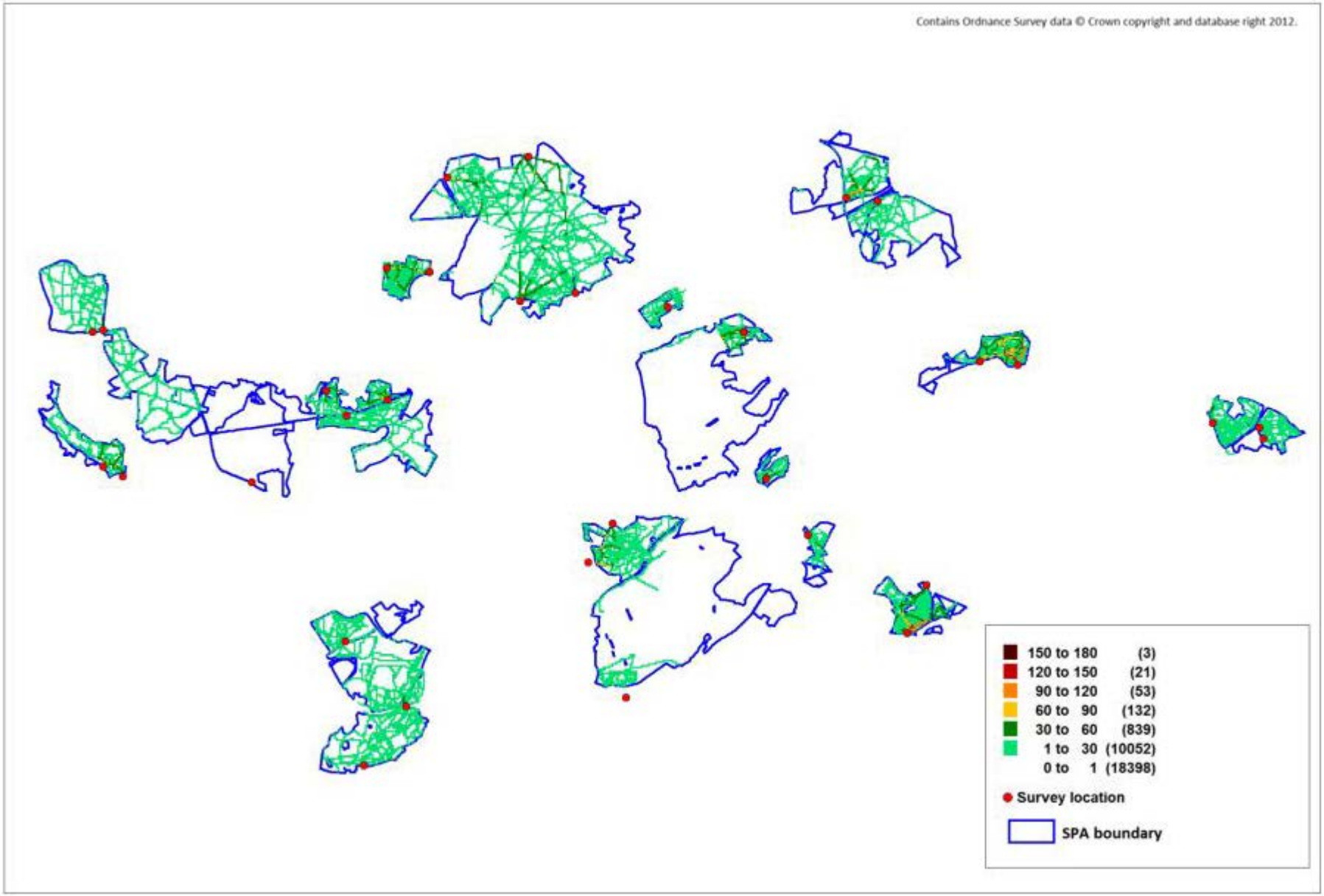


Figure 1: 'Local visitor' route length by activity. These plots shows the median (i.e. the mid-point – represented by a horizontal line), and the interquartile range (i.e. 25 – 75% of the data – represented by a box), while the vertical lines show the upper and lower limits of the data, with outlying values represented by asterisks. The graph has been truncated at 15km.

Map 7: Visitor routes



Map 8: Number of visitor routes per 50m grid cell across the SPA



Home postcodes of interviewed visitors

3.40 Of the interviewed visitors who were visiting from home ('local visitors'), 2,316 provided valid postcodes which could be mapped, a collection rate of 96%.

3.41 Map 9 shows the 'local visitor' postcodes in relation to the SPA and the 5km buffer. Of these 2,316 'local visitor' groups, 2,177 postcodes (94%) lie within the 5km SPA buffer[6] and 593 (25%) within a 400m buffer of the SPA (Table 22 and Map 9). In total approximately 6% of 'local visitors' lived over 5km from the SPA. Map 10 shows the postcodes of 'local visitor' groups who stated they were dog walking.

3.42 The 2005 visitor survey did not distinguish between local and non local visitors. To draw comparisons between the proportion of visitors who lived within 5km of the SPA between the two surveys, all visitor postcodes from 2012 survey were analysed. In 2005, 88% of visitor postcodes fell within the 5km buffer of the SPA and in 2012 this had increased slightly to 93%.

Table 22: The number of mapped 'local visitor' postcodes within 400m and 5km of the SPA

	Distance (linear) of home postcode from the SPA			
	Within 400m	**Within 5km**	**More than 5km**	**Total**
Number of postcodes	593 (25)	2,177 (94)	139 (6)	2,316 (100)

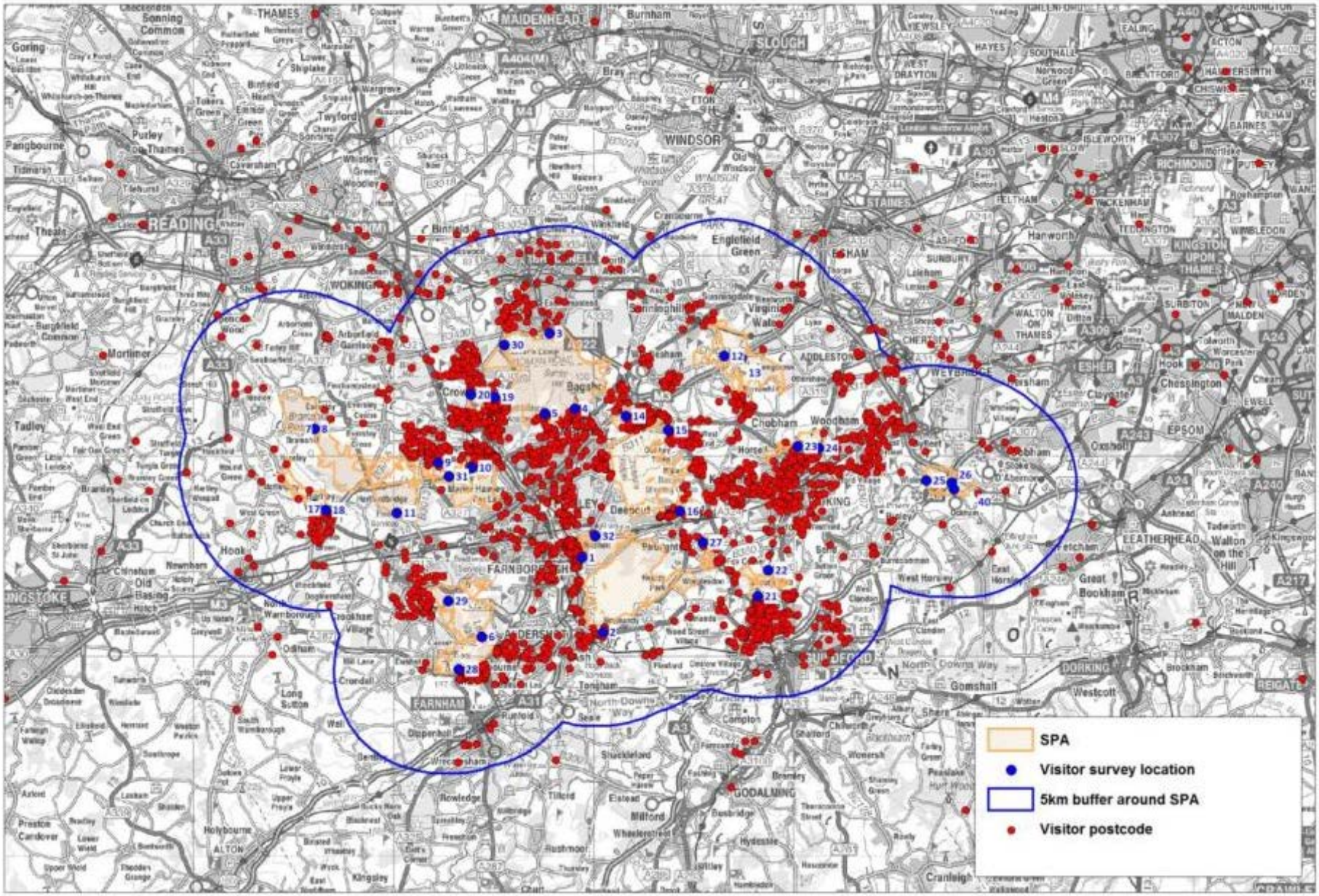
3.43 The highest number (23%) of 'local visitor' postcodes fell within the Surrey Heath District, 15% from both Woking District and Hart District and 14% from Guildford District (Table 23). 'Local visitor' groups who also stated they were on a short visit or day trip from home came from Greater London, Kent, Oxfordshire and Devon (Table 23).

Table 23: The number of 'local visitor' postcodes within different districts and counties

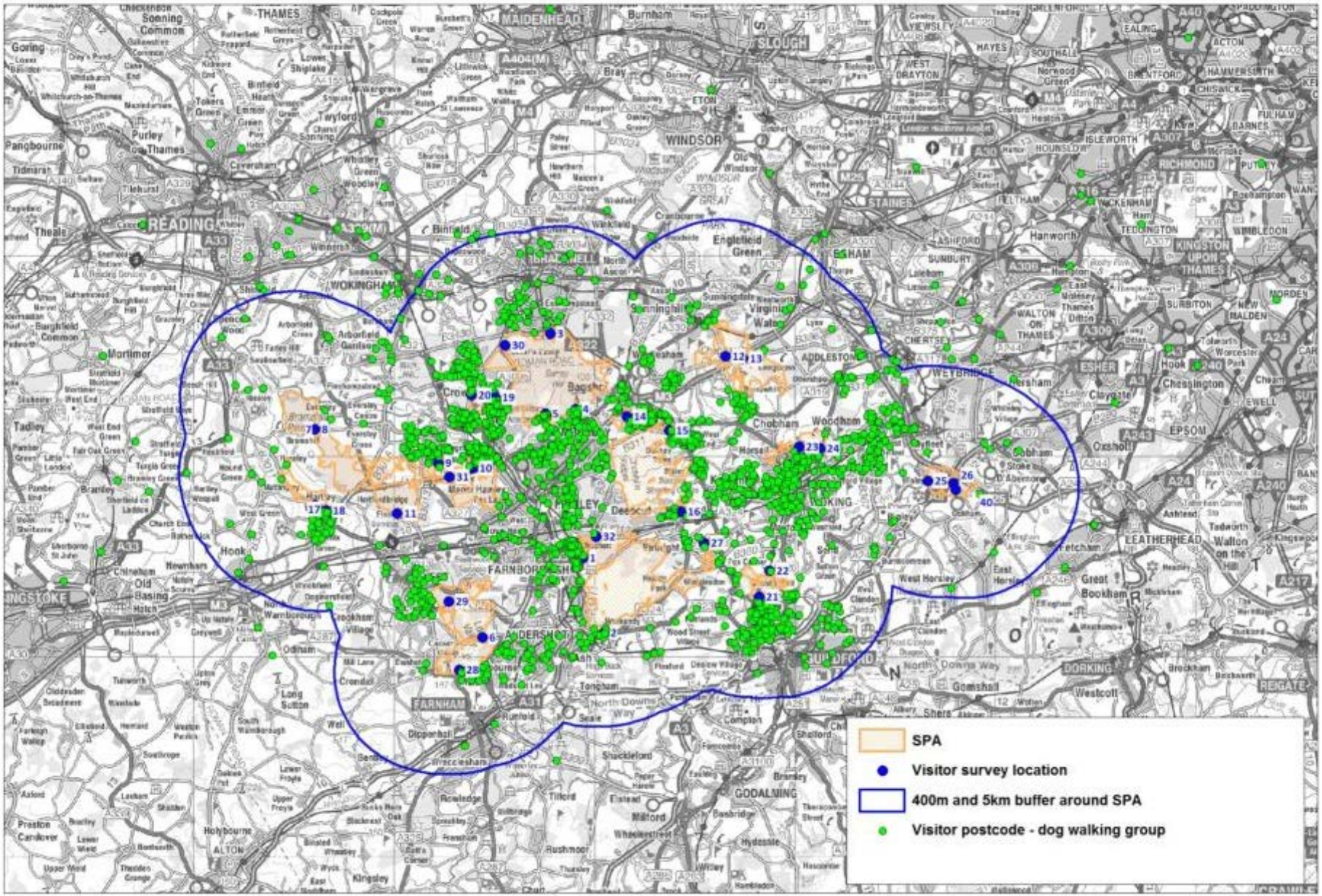
District	County	Number and (%) of postcodes
Surrey Heath District	Surrey	540 (23)
Woking District	Surrey	355 (15)
Hart District	Hampshire	341 (15)
Guildford District	Surrey	314 (14)
Bracknell Forest	Berkshire	270 (12)
Rushmoor District	Hampshire	121 (5)
Wokingham District	Berkshire	112 (5)
Runnymede District	Surrey	76 (3)
Waverley District	Surrey	70 (3)
Windsor and Maidenhead	Berkshire	26 (1)
Elmbridge District	Surrey	19 (1)
Other	Other	72 (3)
Total		**2,316 (100)**

[6] Note this 94% refers to how many of the postcodes fall within the 5km buffer around the whole of the SPA (Map 9). Note that this is a different statistic from the cumulative percentage of the distance from a visitor's home postcode to the visited SPA access point survey point (83% of visitors live within a 5km radius of the visited access point). It is this value which is comparable to 76% quoted in the original 2005 report.

Map 9: Visitor postcodes



Map 10: Visitor postcodes of dog walking groups



Distance travelled (linear distance between postcode and visited access point)

3.44 The linear distance between a 'local visitor's' home postcode and their interview location varied with transport mode (Figure 2, Figure 3 and Table 24).

3.45 'Local car visitors' lived on average 4.54km from their visit destination, with half living within 2.76km, and 75% living within 4.61km (Table 24 and Figure 3).The maximum distance (254km) between a postcode and a visit destination was from a group who had visited from home and decided to stop off en route to Legoland (Table 24).

3.46 'Local foot visitors' lived on average 0.8km from their visit destination with 50% living within 0.52km and 75% within 0.91km. The maximum distance between a foot visitor's home postcode and their visit destination was 12.29km, and the nearest foot visitor lived 0.06km from the interview site (Table 24 and Figure 3).

3.47 In total 56 'local visitor' groups arrived by bicycle and lived on average 3.45km from their interview location. In total, 50% of all visitors who cycled to their visit destination lived within 1.78km (Table 24).

3.48 Eighteen groups of 'local visitors' arrived by horse, and on average each group lived 3.78km from their visit destination, and 50% of all visitors arriving on horse lived within 2.85km (Table 24).

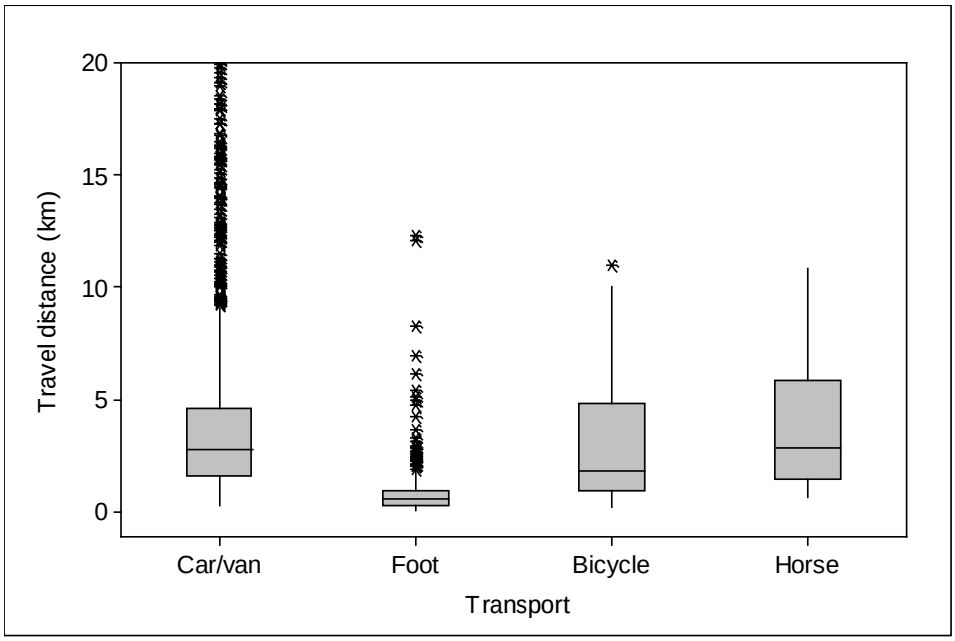


Figure 2: Distance between a 'local visitor's' home postcode and interview location categorised by transport mode used to reach each site, n(sample size)=2314. Graph truncated at 20km.

Table 24: Summary of linear distance (km) between 'local visitor's' home postcodes and survey location. Where n= sample size, $\bar{x}$=the mean value, S.E $\bar{x}$= the standard error of the mean, 25% = first quartile within which 25% of the data fall, the median = middle value of the data range sorted from smallest to largest and 75%=the third quartiles within which 75% of the data fall.

Transport	N	$\bar{x}$	s.e. $\bar{x}$	Minimum	25%	Median	75%	Maximum
Car/van	1,728	4.54	0.21	0.28	1.57	2.76	4.61	254.07
Foot	512	0.80	0.05	0.06	0.28	0.52	0.91	12.29
Bicycle	56	3.45	0.60	0.22	0.92	1.78	4.82	29.67
Horse	18	3.78	0.71	0.63	1.40	2.85	5.85	10.86

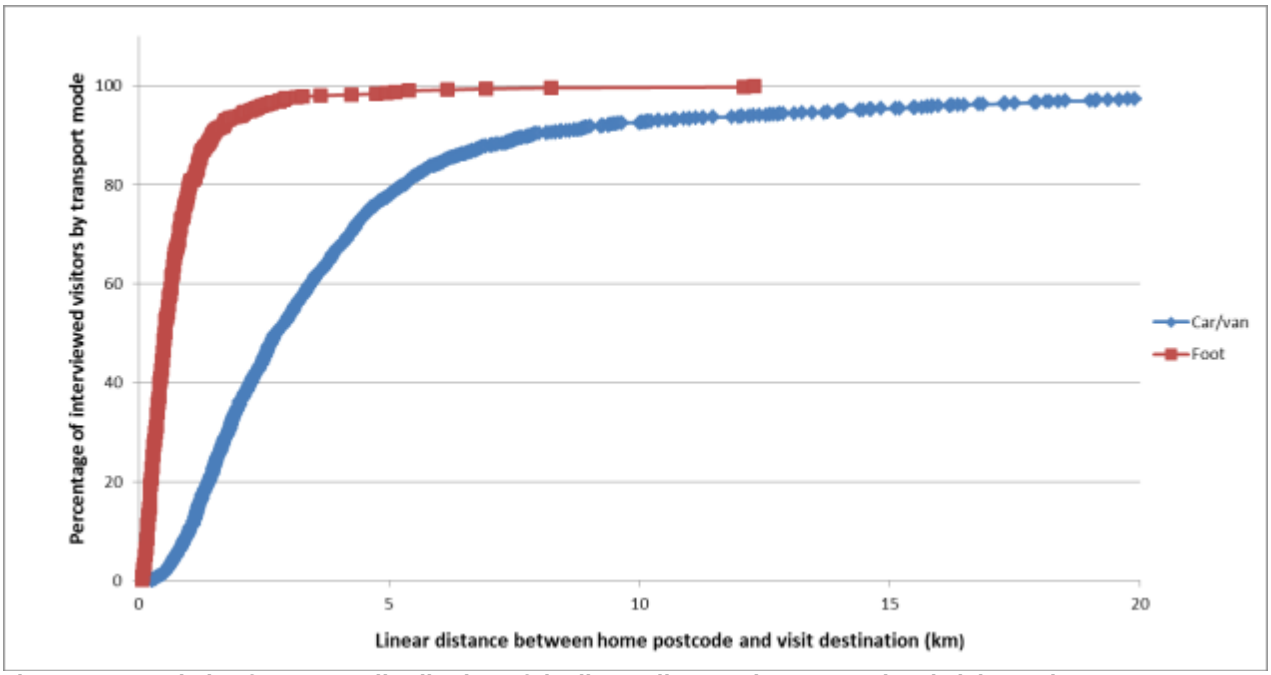


Figure 3: Cumulative frequency distribution of the linear distance between a 'local visitor's' home postcode and the survey location considered by transport mode. The figure has been truncated at 20km.

3.49 Table 25 details the linear distance between the home postcodes of 'local visitors' and the access point at which they were interviewed by mode of transport. There were three locations to which 'local visitors' travelled exclusively by car. These were locations 12 (Chobham Road, Chobham Common), 25 (Wren's Nest car park), and 29 (Car park adjacent to Whitmoor Common just to east of Public House).

3.50 Locations 18 (Play area, Springfield Avenue) and 2 (Nightingale Road A323) had the most localised catchment for those arriving by foot with three quarters of visitor groups living within 0.3km of the access point (Table 25).

3.51 Location 18 (Play area, Springfield Avenue) also had the most localised catchment in terms of 'local visitor' groups arriving by car with three quarters living within 1.1km of the access point. Location 17 (B3011 opposite Arrow Lane) had the second most localised catchment of 'local visitor' groups arriving by car with three quarters living within 1.8km (Table 25). Location 20 (off Crowthorne Road) and location 9 (car park off Cricket Hill Lane) also had a small catchment area of 'local visitor' groups arriving by car, with 75% living within 1.9km and 2.6km of each respective access point (Table 25).

3.52 Location 3 (The Lookout) and location 13 (Staple Hill car park) had by far the largest 'local visitor' catchment, with 75% of the home postcodes of 'local visitor' groups falling within 15.9km and 10.8km of each respective site (Table 25).

Table 25: Distances (km) from 'local visitor' groups' home postcode to their visit destination according to transport mode. The 1st quartile (25%), median 3rd, quartile (75%), minimum, mean (standard error of mean S.E $\bar{x}$) and maximum distance values between visitor's home postcodes and visited survey locations.

	Car								Foot							
Location	Count	$\bar{x}$	s.e. $\bar{x}$	Min	25%	Median (50%)	75%	Max	Count	$\bar{x}$	s.e $\bar{x}$	Min	25%	Median (50%)	75%	Max
1	76	1.9	0.2	0.3	0.7	1.2	2.6	8.3	22	0.6	0.1	0.1	0.4	0.5	0.6	2.5
2	18	3.6	1.6	0.5	0.7	1.8	2.8	30.5	20	0.3	0.1	0.1	0.2	0.2	0.3	1.0
3	106	11.3	1.2	0.4	4.1	6.3	15.9	67.7	3	2.4	1.0	0.8	0.8	2.2	4.2	4.2
4	41	5.4	0.7	0.6	1.6	5.1	6.1	23.4	31	0.4	0.1	0.1	0.2	0.2	0.5	1.4
5	78	3.2	0.6	0.6	1.8	2.2	2.7	36.4	26	0.6	0.1	0.1	0.2	0.4	0.8	2.7
6	82	3.9	0.3	1.0	2.4	3.5	4.6	12.2	5	5.7	2.7	1.2	1.2	1.7	12.2	12.3
8	57	8.1	0.9	2.3	4.6	6.3	8.8	38.3	2	4.6	3.7	0.9		4.6		8.2
9	28	2.3	0.3	0.3	1.3	1.8	2.6	6.3	15	0.6	0.1	0.2	0.5	0.6	0.8	1.2
10	44	3.2	0.5	0.7	1.1	2.3	4.2	22.3	33	0.6	0.1	0.2	0.3	0.5	0.8	2.1
12	97	5.7	0.5	1.7	2.8	4.1	6.6	33.0								
13	45	14.3	5.5	1.2	5.4	6.8	10.8	254.1	2	4.8	2.1	2.7		4.8		6.9
14	34	2.7	0.4	0.7	1.1	2.5	3.5	8.8	24	0.8	0.1	0.3	0.5	0.6	0.8	2.5
15	63	3.2	0.7	0.4	1.2	1.6	3.8	40.5	38	0.8	0.1	0.1	0.5	0.7	1.0	2.0
16	18	2.6	0.3	0.3	1.5	2.7	3.5	4.7	40	1.0	0.1	0.3	0.5	0.6	1.0	5.4
17	37	2.1	0.4	0.3	0.9	1.2	1.8	13.7	8	0.6	0.1	0.3	0.3	0.5	0.7	1.1
18	9	1.0	0.1	0.5	0.9	1.0	1.1	1.4	48	0.4	0.1	0.1	0.2	0.2	0.3	4.7
19	22	3.6	1.4	0.3	1.1	1.9	3.6	30.8	72	0.8	0.1	0.1	0.4	0.5	0.9	5.1
20	83	2.1	0.3	0.6	1.1	1.5	1.9	18.4	5	0.8	0.2	0.1	0.5	0.8	1.1	1.1
21	158	2.5	0.2	0.3	1.3	1.9	2.8	33.0	10	0.6	0.1	0.3	0.3	0.5	0.7	1.8
22	40	3.1	0.3	0.7	1.8	2.4	3.8	11.0	8	1.3	0.3	0.1	0.3	1.7	1.7	2.4
23	137	3.4	0.3	0.5	1.7	2.9	4.0	19.1	8	1.1	0.3	0.3	0.5	0.8	1.7	2.8
24	144	3.9	0.3	0.7	2.1	3.2	4.4	31.0	5	1.1	0.5	0.5	0.5	0.7	1.8	2.9
25	45	6.0	0.7	2.5	3.1	4.0	6.7	18.2								
26	33	16.9	4.2	2.1	5.7	10.1	16.2	106.1	1	1.4		1.4		1.4		1.4
27	20	2.9	0.4	0.9	1.2	2.9	4.1	6.6	22	1.0	0.3	0.2	0.4	0.9	1.2	6.2
28	7	2.4	0.8	0.5	0.8	1.3	4.3	6.4	45	0.6	0.1	0.2	0.3	0.5	0.8	2.1
29	52	2.4	0.2	0.9	1.3	1.8	3.1	6.2								
30	63	3.8	0.4	1.0	2.0	3.1	4.3	21.0	1	1.1		1.1		1.1		1.1
31	35	5.2	1.1	1.5	2.3	3.4	4.4	34.7	10	2.1	0.3	0.8	1.3	1.9	3.0	3.6
32	56	2.4	0.1	1.1	1.5	1.9	3.1	5.6	8	1.4	0.3	0.2	0.9	1.4	1.7	3.3

Comparison of the August 2005, and August 2012/13 surveys

Direct comparison of tally totals

3.53 In the 2005 survey, rain was recorded in 39 survey sessions and in 2012/13 rain was recorded over 36 survey sessions (Table 26).

3.54 A total of 3,295 people (which included both adults and children), were recorded entering the SPA from the surveyed access points in 2005 and 3,620 people in 2012/13 (Table 26). Figure 4 shows a box plot of the number of visitors recorded per year per survey location.

3.55 There was a significant correlation between the number of visitors recorded entering each survey location in 2005 and 2012/13 (Figure 5), (Spearman's Correlation Coefficient = 0.763, $p<0.001$, $n=24$).

3.56 At 14 different survey locations a higher number of visitors were recorded entering the survey locations in 2012/13 and conversely a decrease in the number of visitors entering was recorded 10 other locations (Table 26 and Map 11).

3.57 The total number of visitors recorded entering the 24 survey locations across the SPA in 2012/13 was 10% higher than the total number entering the same locations in 2005 (Table 26). Map 11 provides a summary of the recorded percentage change in visitor totals between the 2005 and 2013 count data. Map 11 also shows any changes in car parking capacity between the original and 2012/13 counts.

3.58 There was no significant difference in the number of visitors recorded entering all 24 survey locations between the 2005 and 2012/13 counts (Wilcoxon signed ranks $n=24$, $Z=188.5$, $p=0.278$). This means there is no average consistent increase or decrease in visitor numbers across all the survey locations and there is no evidence to suggest more than 50% of the survey locations show either a significant increase or decrease in visitor numbers. Statistically there is no evidence of a real change in visitor numbers, and the 10% increase in the total count of visitors between 2005 and 2012/13 (Table 26) should be attributed to either location specific factors or unquantifiable sampling variation.

3.59 Additional statistical analyses were undertaken on the 2005 & 2012/13 count data following a log10 transformation (to standardise the counts for more mathematically robust data set), and these results also found no evidence of a statistically significant increase or decrease in visitor numbers (Wilcoxon signed rank $n=24$, $Z=172$, $p=0.539$). In fact, the median (middle value when ranked) percentage change in visitor totals across the 24 locations was an increase of 6%. The confidence limits to this value are wide, with the true value lying somewhere between -17% and 27% (with a 95% confidence). This again provides further evidence of the variability within the count data between 2005 and 2012/13 and the absence of a significant increase or decrease in visitor totals between the survey periods.

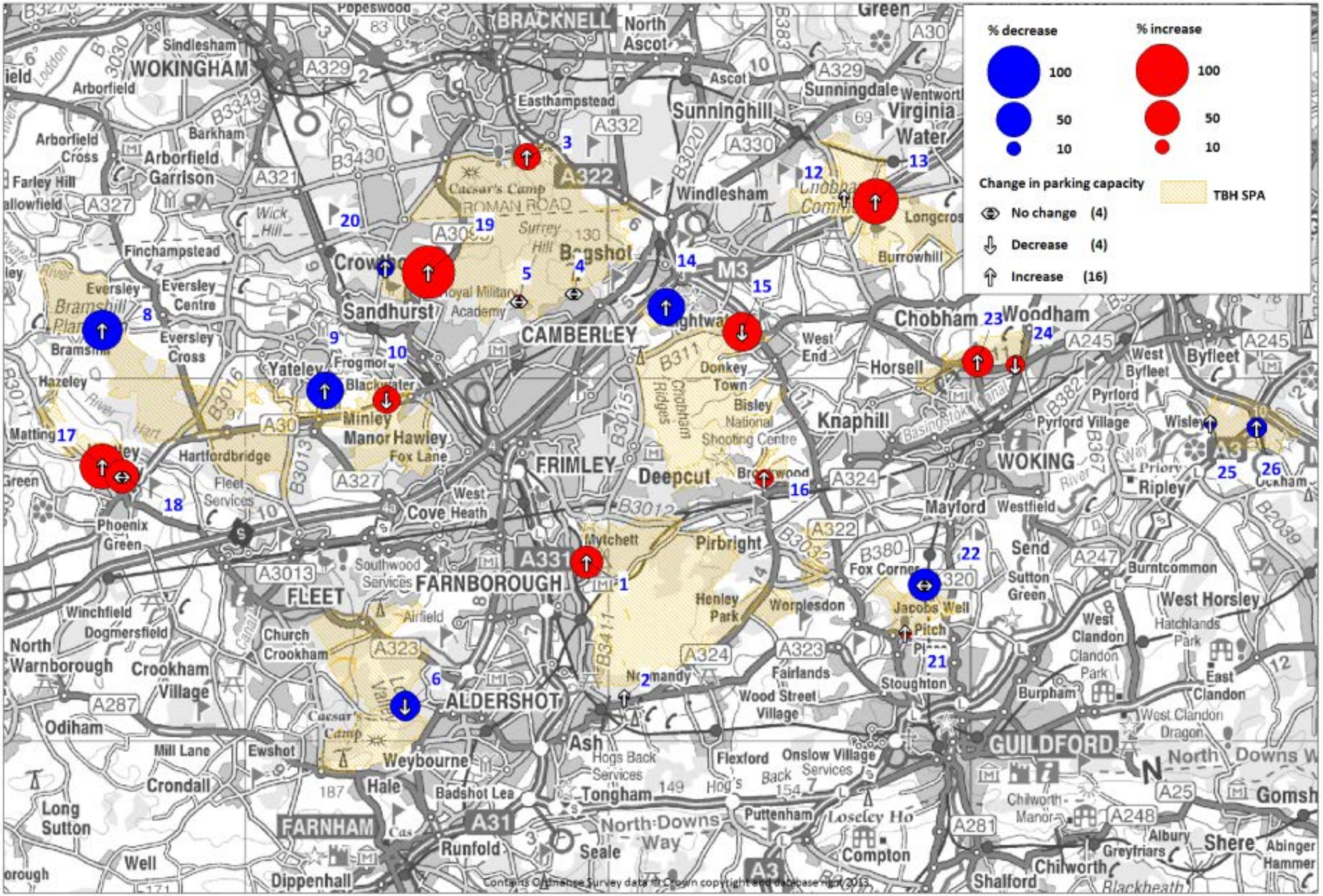
3.60 There is a clear correlation between the number of visitors recorded entering a survey location and the estimated parking capacity at the location (Figure 6). However, there is no obvious relationship between an increase in visitor numbers (since 2005) and locations with higher capacity car parking areas i.e. visitor totals have increased at sites with both low and high parking capacity (Figure 6).

Table 26: Tally totals for total number of people (adults + children) entering the survey locations in the 2005 and 2012/13 August surveys. The rows with grey shaded background are the locations which were surveyed in 2013 following tally undercounts in 2012. Notes column indicates particular differences between 2005 and the 2012/13 surveys which may have influenced the comparison. The number of two hour survey sessions in which rain was presented is detailed. The survey locations are ranked according to percentage change in visitor numbers. Those rows in bold are those with an estimated higher car parking capacity in 2012 than in 2005.

Location code	Location Name	2005 entering (August)	2012/13 entering (August)	% change	Sessions in 2005 with rain	Sessions in 2012 with rain	Session in 2013 with rain	Type of parking	Number of parking spaces estimate (2005)	Number of parking spaces (2012)	Notes
19	**South Road**	**60**	**136**	**127**		**1**		**Other**	**1**	**8**	**Number of parking spaces apparently higher in 2012.**
13	**Chobham Common (Staple Hill)**	**38**	**68**	**79**	**4**			**Designated car park**	**15**	**25**	**Number of parking spaces apparently higher in 2012.**
17	**B3011 opposite Arrow Lane**	**33**	**58**	**76**		**1**		**Other**	**4**	**6**	**Number of parking spaces apparently higher in 2012.**
15	Sandpit Hill	100	161	61	2		3	Designated car park	8	7	Since 2012 local residents have roped off some of the parking area reducing capacity and some visitors. commented that access at this site has increased since restrictive measures for access have been put in place at the nearby arboretum which was a popular dog walking site.
18	Play area, Springfield Ave	47	68	45				Other	0	0	
1	**Mytchett Place Road**	**112**	**159**	**42**	**3**			**Other**	**10**	**60**	**Number of parking spaces apparently higher in 2012.**
23	**Sandy Track car park, Chobham Road, Horsell**	**255**	**360**	**41**			**2**	**Designated car park**	**18**	**20**	**Access track to the car park has been resurfaced and the number of parking spaces apparently higher in 2012.**
10	Car Park off the A30	62	82	32	5			Designated car park	22	15	Number of parking spaces apparently lower in 2012.
3	**The Lookout**	**538**	**706**	**31**	**2**		**3**	**Designated car park**	**200**	**350**	**Some difficulty in separating users only visiting the 'Go Ape' attraction from those visiting the site. Number of parking spaces apparently higher in 2012.**
24	Six Crossroads car park, Shore's Road	400	470	18			1	Designated car park	40	36	
16	**Queens Road, Cowshot Common**	**68**	**79**	**16**	**3**	**2**		**Other**	**3**	**5**	**Number of parking spaces apparently higher in 2012.**
5	Top of Kings Ride	116	127	9		3		Other	0	0	Short but heavy downpour in 2012, after which surveyor noted site was quiet.
21	**Salt Box Road**	**299**	**322**	**8**			**5**	**Designated car park**	**18**	**30**	**Number of parking spaces apparently higher in 2012**
12	**Chobham Road, Chobham Common**	**124**	**128**	**3**	**4**			**Designated car park**	**35**	**60**	**Number of parking spaces apparently higher in 2012.**
2	**Nightingale Road/A323**	**39**	**38**	**-3**	**3**	**1**		**Designated car park**	**5**	**12**	**Number of parking spaces apparently higher in 2012.**

Location code	Location Name	2005 entering (August)	2012/13 entering (August)	% change	Sessions in 2005 with rain	Sessions in 2012 with rain	Session in 2013 with rain	Type of parking	Number of parking spaces estimate (2005)	Number of parking spaces (2012)	Notes
4	Top of Bracknell Road	84	80	-5		4		Other	3	3	
25	**E of Aberconway House (Wren's Nest car park)**	**70**	**64**	**-9**	**2**	**2**		**Designated car park**	**12**	**20**	**Number of parking spaces apparently higher in 2012.**
20	**Off Crowthorne Road**	**121**	**104**	**-14**		**1**		**Designated car park**	**12**	**15**	**Number of parking spaces apparently higher in 2012.**
26	**Currie's Clump (Boldermere Car Park)**	**137**	**111**	**-19**	**2**	**2**		**Designated car park**	**65**	**80**	Car park has developed a reputation for anti-social activities. **Number of parking spaces apparently higher in 2012.**
6	Bourley Road	143	90	-37	1			Designated car park	36	24	
22	Burdenshott Road	61	35	-43		2		Designated car park	25	25	
9	Car park off Cricket Hill Lane	85	39	-54	4			Designated car park	8	11	
14	**Lightwater Country Park**	**242**	**112**	**-54**	**2**	**2**		**Designated car park**	**120**	**172**	In 2005 an entrance gate was opened at 08:30. No gate was present in 2012. In 2005 surveyor stood by front gate until it opened. Park wardens have also been enforcing a 'dogs on leads' policy in the area of survey location for the past two years. Number of parking spaces in the Country Park apparently higher in 2012 and there are no barriers restricting access to the site, these were present in 2005. **Number of parking spaces apparently higher in 2012.**
8	**N entrance to Warren Heath**	**61**	**23**	**-62**	**2**	**1**		**Other**	**1**	**12**	New/freshly painted barriers are in place across entrance track, with signs asking people not to park/block gates. **Number of parking spaces apparently higher in 2012.**
Total		**3,295**	**3,620**	**10**	**39**	**22**	**14**		**661**	**996**	**% Change in visitor totals calculated from total 2005 and total 2012/13 entering values**

Map 11: Percentage change in recorded visitor numbers entering each survey location between 2005 and 2012/13 and level of change in car parking capacity



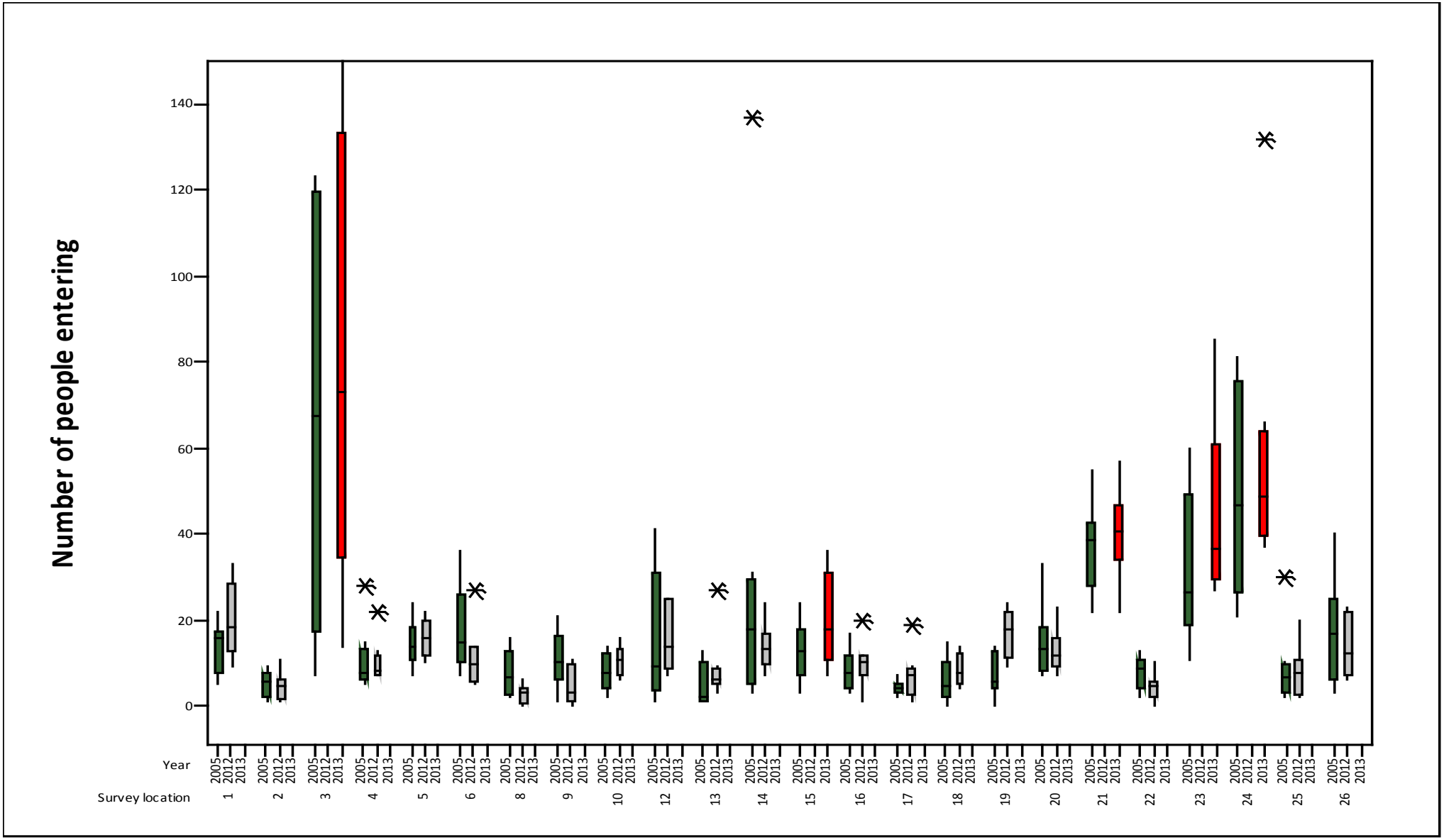


Figure 4: Boxplot showing tally data (comparable sessions only) by site and by year. These plots show the median (i.e. the mid-point – represented by a horizontal line), and the interquartile range (i.e. 25 – 75% of the data – represented by a box), while the vertical lines show the upper and lower limits of the data, with outlying values represented by asterisks. Y axis is truncated at 150 people. Green boxes represent the 2005 counts, grey the 2012 and the red the 2013 counts.

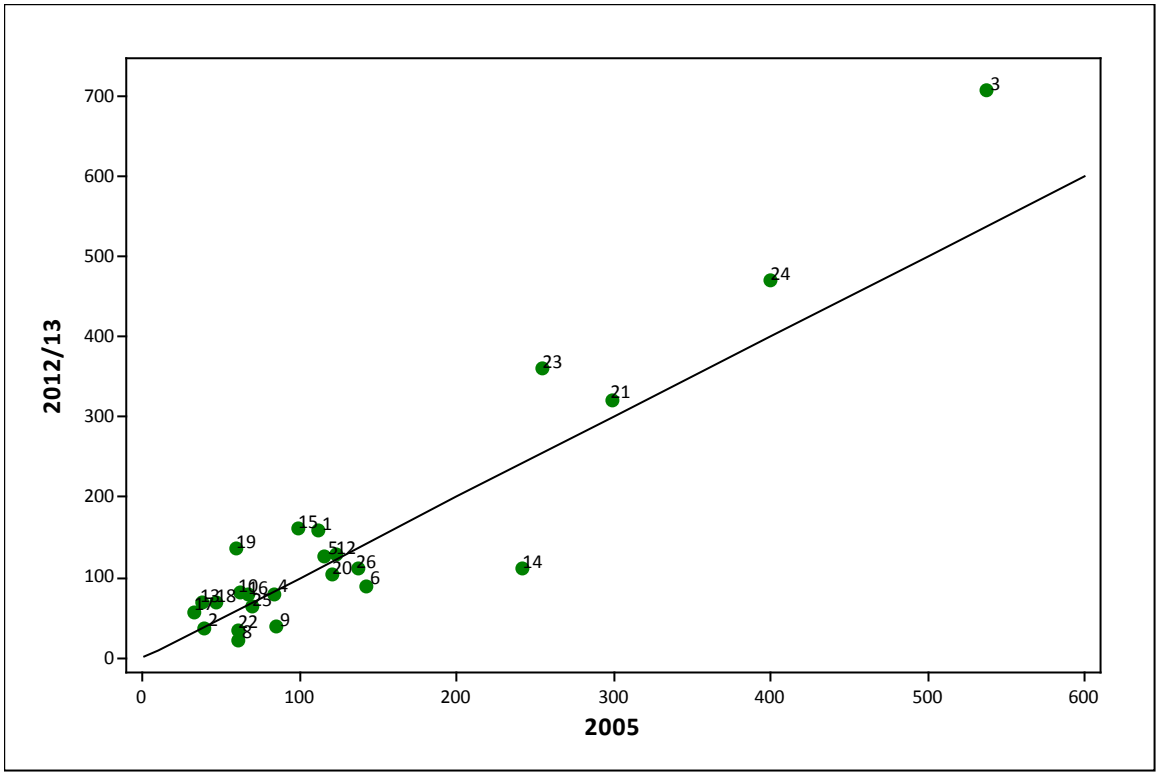


Figure 5: Tally data (as in Table 26), showing the number of people entering each survey location during 2005 and 2012/13. The diagonal line shows the 1:1 ratio. Points below the line represent counts where the totals were higher in 2005 and those above the line represent counts that were higher in 2012/13.

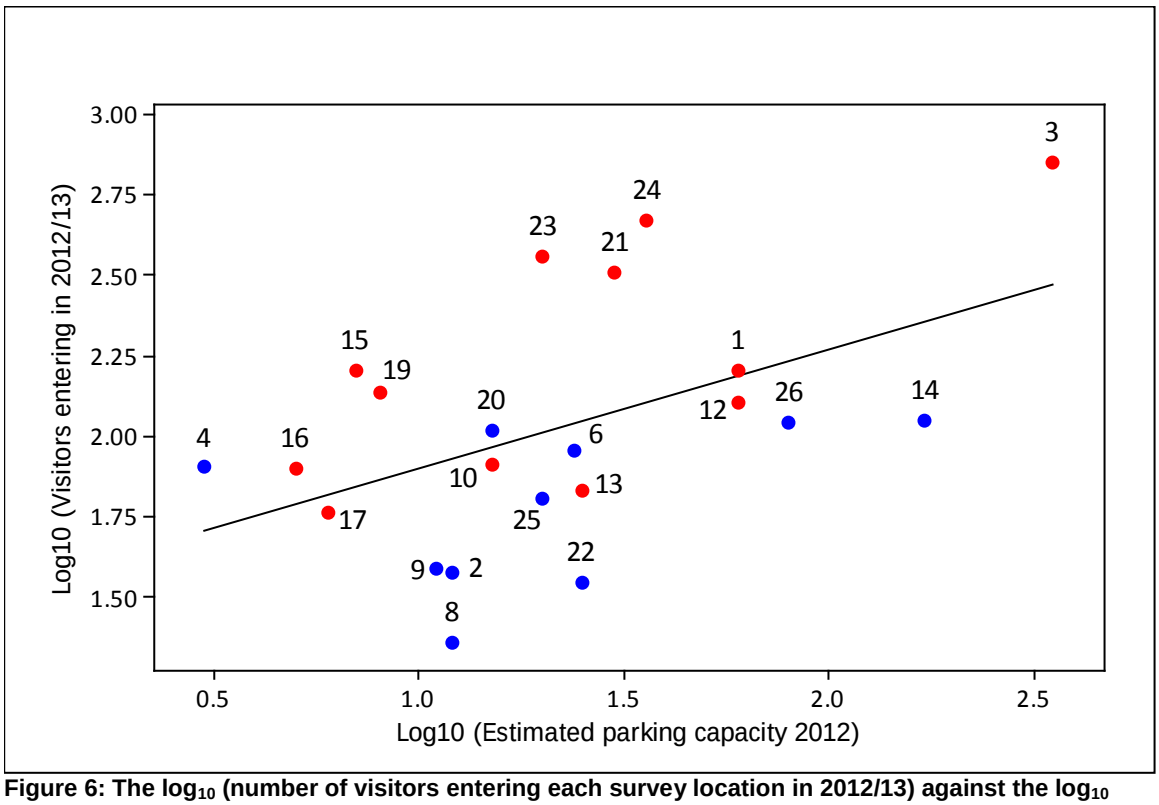


Figure 6: The log_{10} (number of visitors entering each survey location in 2012/13) against the log_{10} (estimated car parking capacity in 2012) across all survey locations with car park capacity. The locations highlighted in red are those where a higher number of visitors were recorded in 2012/13. Locations 5 and 8 are excluded from plot as the estimated parking capacity is zero. Regression equation is Log_{10} of visitor numbers in 2012/13 = 1.53 + 0.369 (log_{10} of car parking capacity estimate in 2012) where the equation accounts for 20% of the variation (r^2 adjusted=20% at p=0.021).

Interviews per location

3.61 There was a highly significant correlation between the number of visitors recorded entering each survey location and the number of interviews conducted at each access point both in 2005 (Spearman's rank correlation coefficient=0.922, $p<0.001$ and Figure 7) and 2012/13 (Spearman's rank correlation coefficient =0.881, $p<0.001$ and Figure 8). This means the number of completed interviews at a location is in itself a measure of visitor access.

3.62 Figure 9 shows the number of interviews conducted at each site during the 2005 and 2012 visitor surveys. In 2005, 1,120 visitor interviews were completed at locations which were resurveyed in 2012. In the repeat 2012 survey 1,122 interviews were conducted, a difference of just two interviews. At 14 locations more visitor interviews were conducted in 2012 (Figure 9). The 2012 visitor questionnaire was more comprehensive and took longer to complete than in 2005. Hence, the maximum number of interviews that could be undertaken in a day at a busy site was lower in 2012 than in 2005.

3.63 The maximum number of interviews conducted at any one site in 2012 was 96 at location 23 (Sandy Track car park) compared to a maximum of 126 at location 24 (Six Crossroads car park) in 2005.

3.64 Figure 9 also shows a correlation between the number of interviews completed per location in 2005 and 2012 (Spearman's rank correlation coefficient, $rs=0.67$, $P<0.001$). As with the tally data, the number of interviews per site reveals a pattern of increase at some sites and a decrease at others.

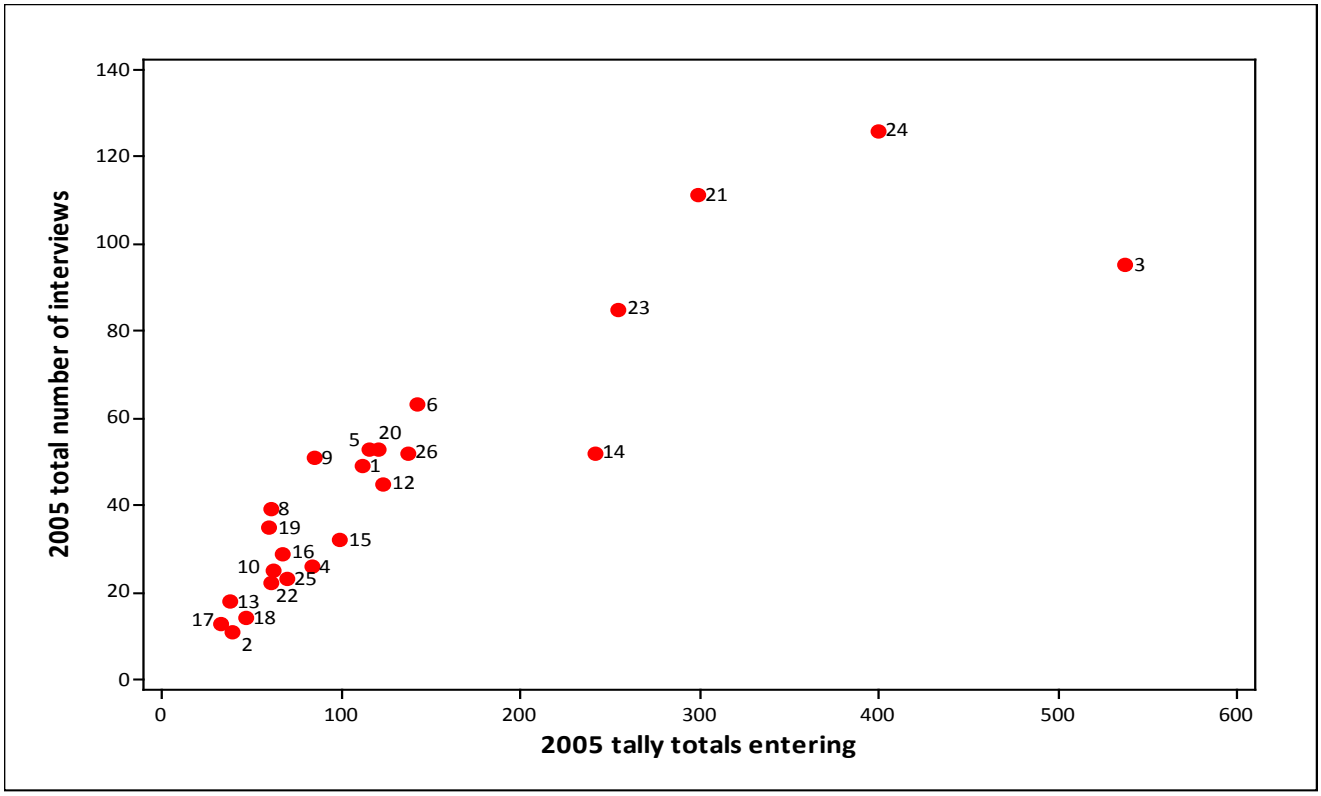


Figure 7: The number of visitors recorded entering the SPA against the number of visitor interviews undertaken at each survey location for the 2005 visitor survey.

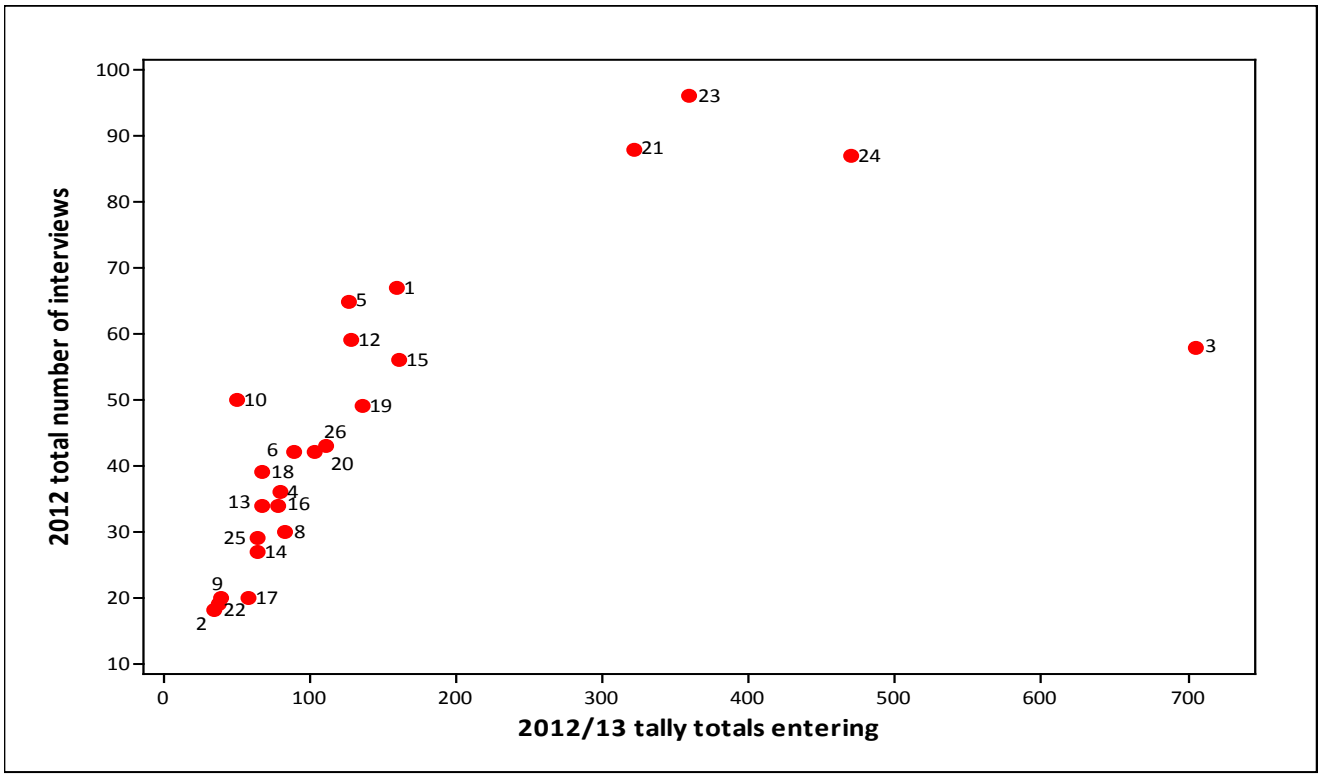


Figure 8: The number of visitors recorded entering the SPA against the number of visitor interviews undertaken at each survey location for the 2012/13 visitor survey.

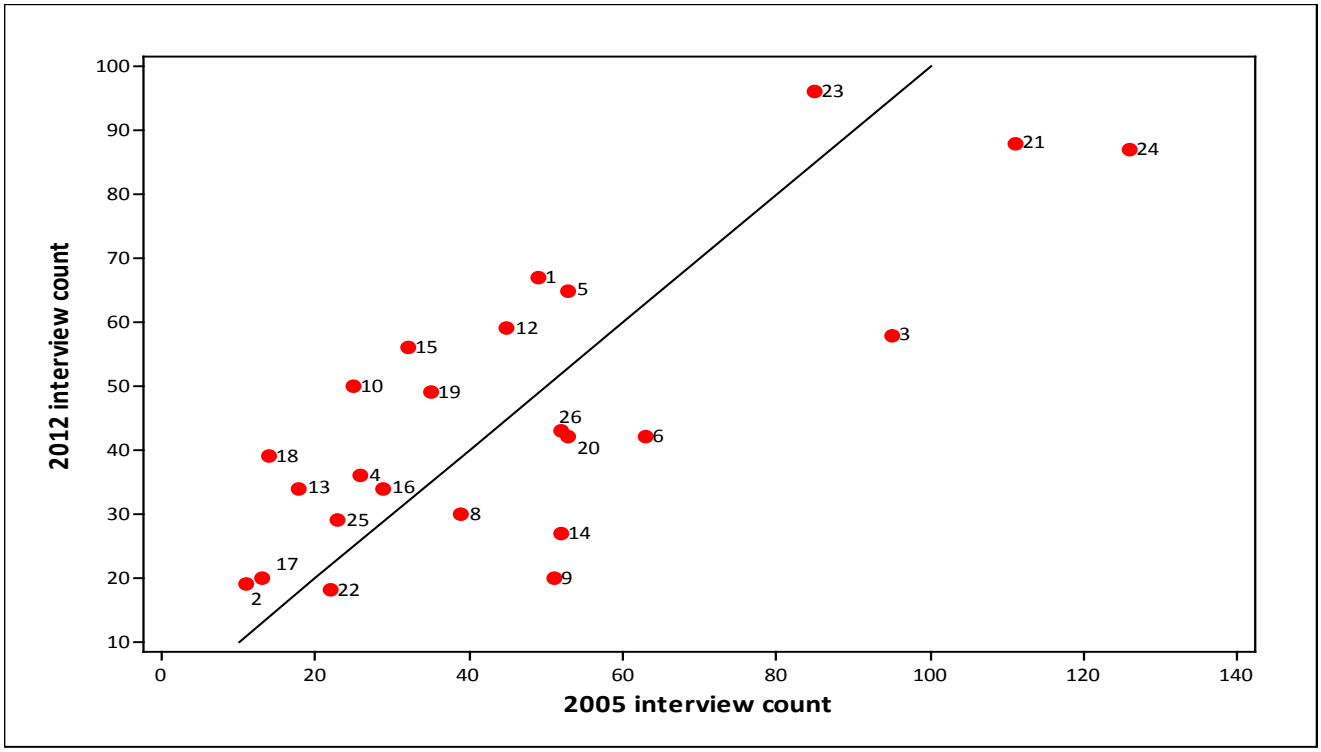


Figure 9: The number of interviews conducted at each survey location in 2005 and 2012. The figure includes a one-to-one line. For points that lie below this line more interviews were undertaken in 2005. For points above this line more interviews were undertaken in 2012.

Activities per location

3.65 Visitors were asked in 2005 'what is the main purpose of your visit', and 2012 visitors were asked 'what activities are you undertaking'. Both questionnaires allowed multiple answers. The statistical analyses' focus on dog walking and walking as the sample sizes for all other activities across all locations were low (Table 27).

3.66 There was a significant difference in the 2005 and 2012 visitor data between the proportion of interviewed visitors who were dog walking at each survey location (χ^2_{23}=83.7, p<0.001; points with less than 5 people undertaking activity excluded), but overall the proportion of dog walkers in both surveys was around 60%. There was also a significant difference in the 2005 and 2012 visitor data between the proportion of interviewed visitors who were walking at each survey location (χ^2_{17}=92.7, p<0.001; points with less than 5 people undertaking activity excluded), and overall the proportion of people visiting to walk was higher in 2012.

Table 27: Activity response totals given from interviewed visitor groups in 2005 and 2012 when asked what activities they were undertaking in their visit. Grey shading indicates locations where there appears to have been a notable change in access levels, with changes of at least 25% (see Table 30), and either a decrease since 2005 (pale grey rows) or an increase (dark grey rows).

Location code	2005			2012		
	Dog walking	Walking	All other	Dog walking	Walking	All other
1	40 (73)	7 (13)	8 (15)	53 (59)	25 (28)	12 (13)
2	7 (47)	4 (27)	4 (27)	13 (48)	7 (26)	7 (26)
3	31 (30)	14 (14)	58 (56)	24 (32)	9 (12)	43 (57)
4	18 (55)	3 (9)	12 (36)	29 (62)	6 (13)	12 (26)
5	27 (45)	6 (10)	27 (45)	51 (55)	26 (28)	15 (16)
6	40 (49)	11 (13)	31 (38)	29 (66)	5 (11)	10 (23)
8	29 (63)	1 (2)	16 (35)	22 (58)	3 (8)	13 (34)
9	30 (53)	10 (18)	17 (30)	17 (77)	2 (9)	3 (14)
10	15 (58)	5 (19)	6 (23)	41 (60)	19 (28)	8 (12)
12	34 (61)	7 (13)	15 (27)	49 (56)	38 (43)	1 (1)
13	8 (42)	6 (32)	5 (26)	12 (29)	19 (45)	11 (26)
14	38 (60)	8 (13)	17 (27)	22 (71)	6 (19)	3 (10)
15	27 (63)	3 (7)	13 (30)	51 (85)	4 (7)	5 (8)
16	20 (65)	3 (10)	8 (26)	28 (62)	9 (20)	8 (18)
17	10 (77)	2 (15)	1 (8)	17 (77)	2 (9)	3 (14)
18	8 (50)	2 (13)	6 (38)	29 (48)	20 (33)	12 (20)
19	13 (36)	1 (3)	22 (61)	35 (55)	22 (34)	7 (11)
20	48 (83)	3 (5)	7 (12)	35 (73)	6 (13)	7 (15)
21	101 (84)	5 (4)	14 (12)	81 (76)	22 (21)	4 (4)
22	17 (74)	4 (17)	2 (9)	13 (57)	6 (26)	4 (17)
23	59 (60)	7 (7)	32 (33)	79 (65)	28 (23)	15 (12)
24	112 (76)	12 (8)	24 (16)	81 (86)	6 (6)	7 (7)
25	19 (59)	3 (9)	10 (31)	25 (74)	3 (9)	6 (18)
26	28 (47)	19 (32)	13 (22)	22 (45)	10 (20)	17 (35)
Totals	**779 (60)**	**146 (11)**	**368 (28)**	**858 (62)**	**303 (21)**	**233 (17)**

Transport to site

3.67 Visitors were asked which transport mode they used to travel to the interview location in both 2005 and 2012. There was a significant difference between the 2005 and 2012 data in the proportion of visitors who arrived at each survey location by car /van (χ^2=90.8, df=23, p<0.001) and by foot (χ^2=28.2, df=15, p=0.02, - excluding data for locations 3, 6, 8, 12, 13, 24, 25 and 26 as values <5) (Table 28 and Figure 10).

3.68 Notable changes in transport mode to each survey location are an increase in the proportion of visitors arriving by foot at locations 16 (Queens Road, Cowshot Common) and 19 (South Road). There was also a decrease in the percentage of visitors arriving by foot at location 2 (Nightingale Road/A323) and a decrease in the percentage of visitors arriving by car at location 4 (Top of Bracknell Road).

Table 28: Number of visitors groups as response total (and as a percentage) who arrived at each location by car or foot during 2005 and 2012. Activity response totals given from interviewed visitor groups in 2005 and 2012. Grey shading indicates locations where there appears to have been a notable change in access levels, with changes of at least 25% (see Table 26), and either a decrease since 2005 (pale grey rows) or an increase (dark grey rows).

	2005			2012		
Location code	**Visitors groups by car/van**	**Visitor groups by foot**	**Visitor groups all other**	**Visitor groups by car**	**Visitor groups by foot**	**Visitor groups all other**
1	42 (86)	7 (14)	0 (0)	45 (67)	17 (25)	5 (7)
2	3 (27)	8 (73)	0 (0)	7 (37)	8 (42)	4 (21)
3	93 (98)	1 (1)	1 (1)	54 (93)	2 (3)	2 (3)
4	2 (8)	20 (77)	4 (15)	10 (28)	26 (72)	0 (0)
5	33 (62)	15 (28)	5 (9)	50 (77)	13 (20)	2 (3)
6	55 (87)	1 (2)	7 (11)	42 (100)	(0)	0 (0)
8	32 (82)	1 (3)	6 (15)	26 (87)	1 (3)	3 (10)
9	35 (69)	11 (22)	5 (10)	15 (75)	3 (15)	2 (10)
10	8 (32)	13 (52)	4 (16)	23 (46)	23 (46)	4 (8)
12	44 (98)	1 (2)	0 (0)	59 (100)	(0)	0 (0)
13	18 (100)	(0)	0 (0)	30 (88)	1 (3)	3 (9)
14	42 (81)	10 (19)	0 (0)	13 (48)	14 (52)	0 (0)
15	21 (66)	10 (31)	1 (3)	34 (61)	21 (38)	1 (2)
16	14 (48)	13 (45)	2 (7)	8 (24)	26 (76)	0 (0)
17	8 (62)	5 (38)	0 (0)	18 (90)	2 (10)	0 (0)
18	0 (0)	13 (93)	1 (7)	5 (13)	33 (85)	1 (3)
19	2 (6)	17 (49)	16 (46)	8 (16)	36 (73)	5 (10)
20	47 (89)	5 (9)	1 (2)	41 (98)	1 (2)	0 (0)
21	108 (97)	1 (1)	2 (2)	82 (93)	4 (5)	2 (2)
22	20 (91)	2 (9)	0 (0)	14 (78)	4 (22)	0 (0)
23	71 (84)	6 (7)	8 (9)	89 (93)	5 (5)	2 (2)
24	125 (99)	1 (1)	0 (0)	86 (99)	1 (1)	0 (0)
25	20 (87)	3 (13)	0 (0)	28 (97)	(0)	1 (3)
26	50 (96)	1 (2)	1 (2)	38 (88)	1 (2)	4 (9)
Totals	**893**	**165**	**64**	**825**	**242**	**41**

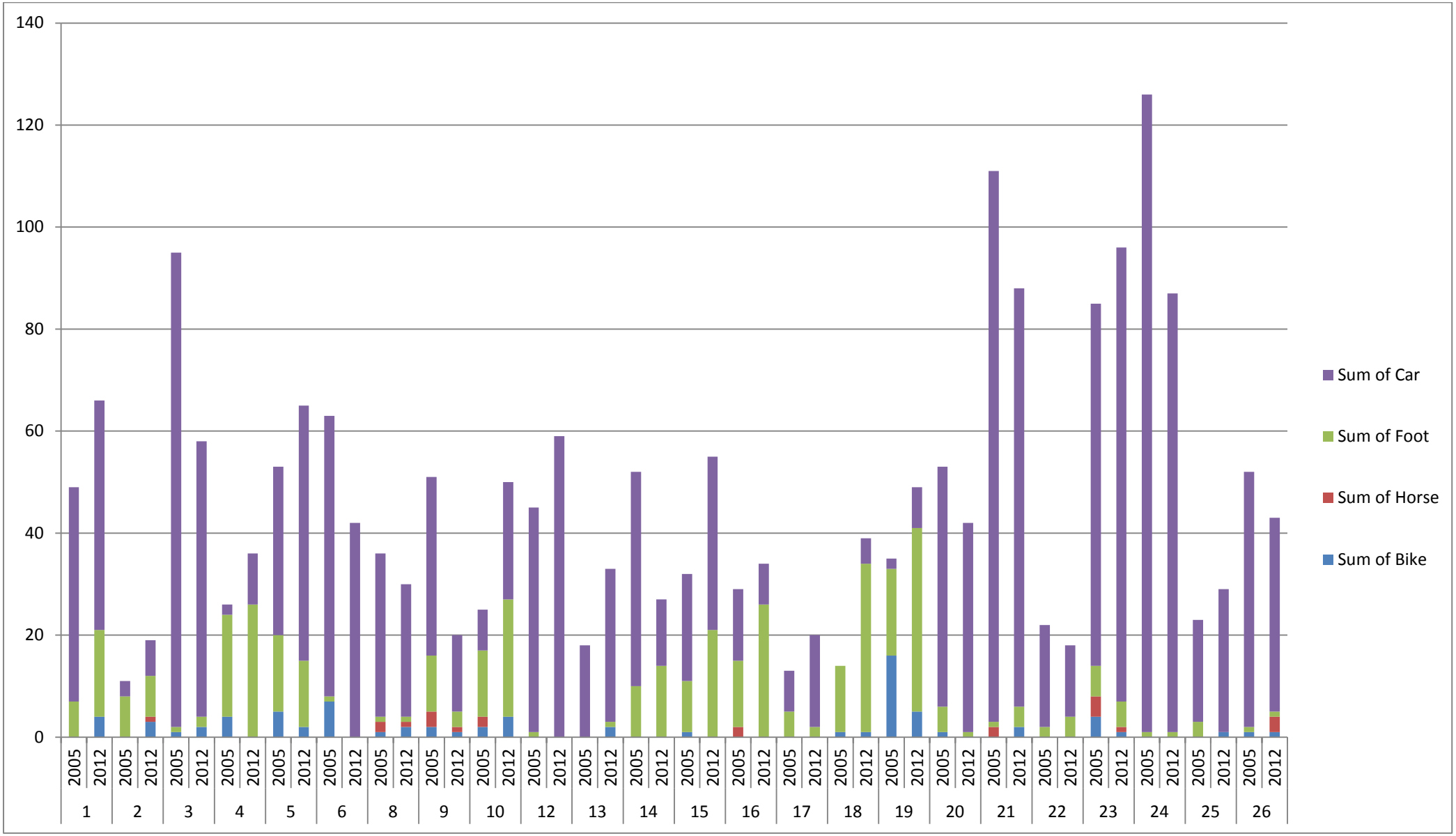


Figure 10: The number of interviewed visitors arriving at survey locations by transport mode during 2005 and 2012.

Catchment area of survey locations

3.69 The straight line distances between the home postcode and the access point where the interviews were conducted were compared by site and by transport mode for the 2005 and 2012 visitor data. Pooling the data across all sites, there were no significant differences in the median distance from the survey point to the home postcode of car drivers (Mann Whitney U = 506,882; p=0.286).

3.70 Data are summarised by location in Table 29, Figure 11 and Figure 12. There was a significant difference in the distance between a car visitor's home postcode and their visit destination for location 15 (Sandpit Hill) and location 26 (Currie's Clump). For visitors arriving by foot the only significant difference in distance from a home postcode location to visit destination was at location 18 (Play area, Springfield Road) where the median distance between home postcodes decreased between 2005 and 2012 from 270m to 190m.

Table 29: Median distances between interviewees' home postcodes and the survey point for August 2005 and August 2012 data only. Grey shading indicates locations where there is a significant difference between 2005 and 2012 (Mann Whitney, p<0.05).

Survey Location	Car				Foot			
	2012 median	2012 n	2005 median	2005 n	2012 median	2012 n	2005 Median	2005 n
1	1.51	43	0.66	1	0.49	15		
2	1.28	7	0.47	1	0.17	8	0.12	2
3	8.16	52	5.86	63	3.24	2	0.8	1
4	1.39	10	1.51	2	0.22	21	0.23	19
5	2.11	45	1.83	29	0.21	12	0.23	10
6	3.45	38	3.08	41			4.11	1
8	5.7	25	5.49	29	0.94	1	1.03	1
9	1.68	15	1.89	32	0.74	3	0.39	8
10	2.49	21	1.71	7	0.58	21	0.49	11
12	4.96	55	5.24	30				
13	7.24	28	6.64	13	6.94	1		
14	2.59	13	3.47	19	0.64	13	0.6	2
15	1.64	33	4.37	12	0.71	21	0.88	7
16	3.11	7	1.48	12	0.59	24	0.49	8
17	1.49	15	1.77	7	0.44	2	0.95	4
18	0.95	4	0		0.19	30	0.27	10
19	1.94	8	0.54	1	0.51	34	0.53	15
20	1.52	37	1.5	43	0.99	1	0.66	5
21	1.82	80	1.71	54	0.3	4		
22	3.37	13	2.63	11	1.71	4		
23	2.81	84	3.34	31	1.46	5	0.74	3
24	3.2	83	3.38	62	2.89	1	0.59	3
25	4.14	26	4.1	18				
26	10.07	33	14.07	33	1.45	1	1.52	1
Overall	**2.989**	**775**	**3.14**	**551**	**0.48**	**224**	**111**	**0.49**

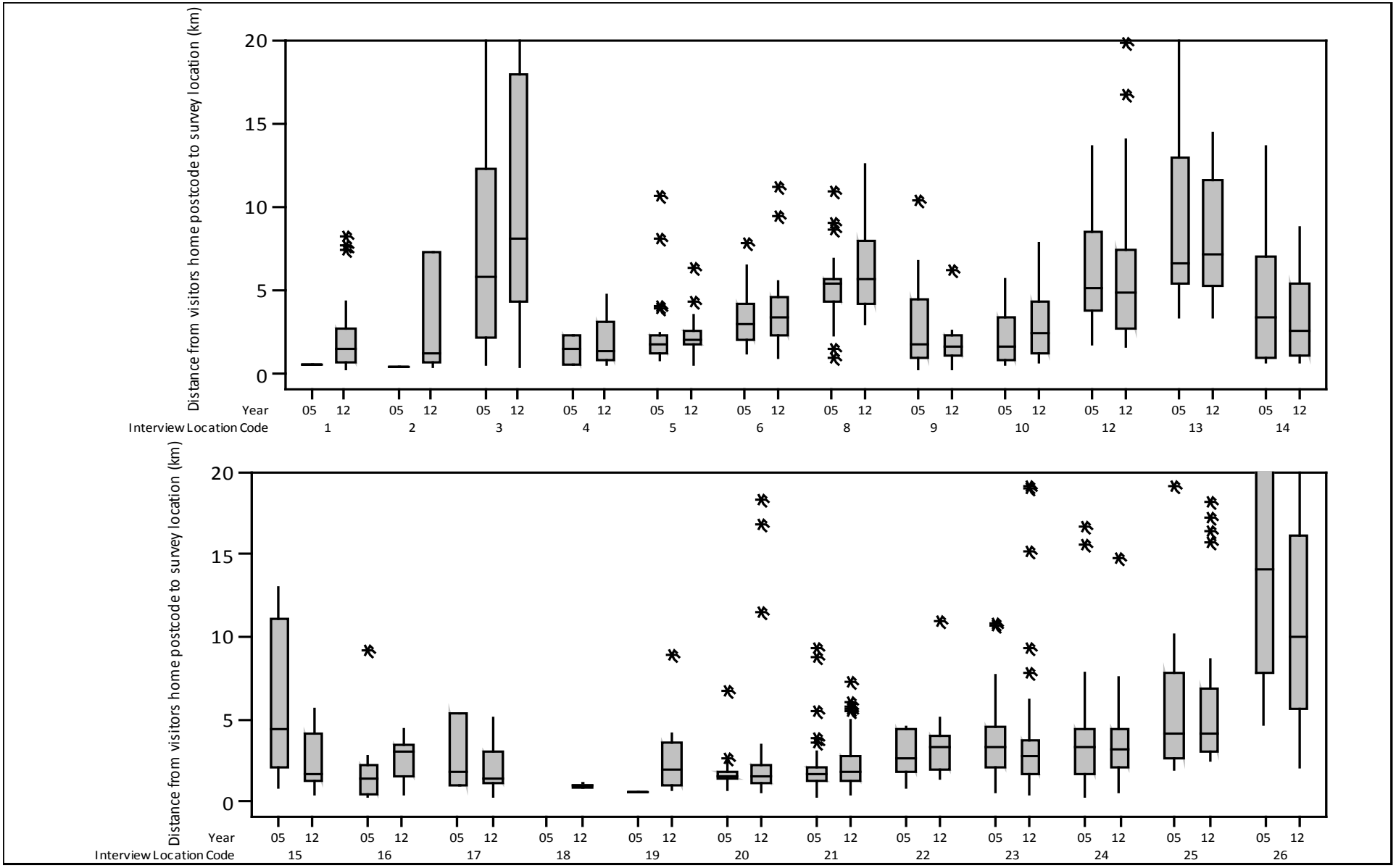


Figure 11: Plots of straight line distance between a visitor's home postcode and the interview location for the 2005 and 2012 data for visitors arriving by car. These plots show the median (i.e. the mid-point – represented by a horizontal line), and the interquartile range (i.e. 25 – 75% of the data – represented by a box), while the vertical lines show the upper and lower limits of the data, with outlying values represented by asterisks. The distances for locations 15 and 26 are statistically significantly different between 2005 and 2012.

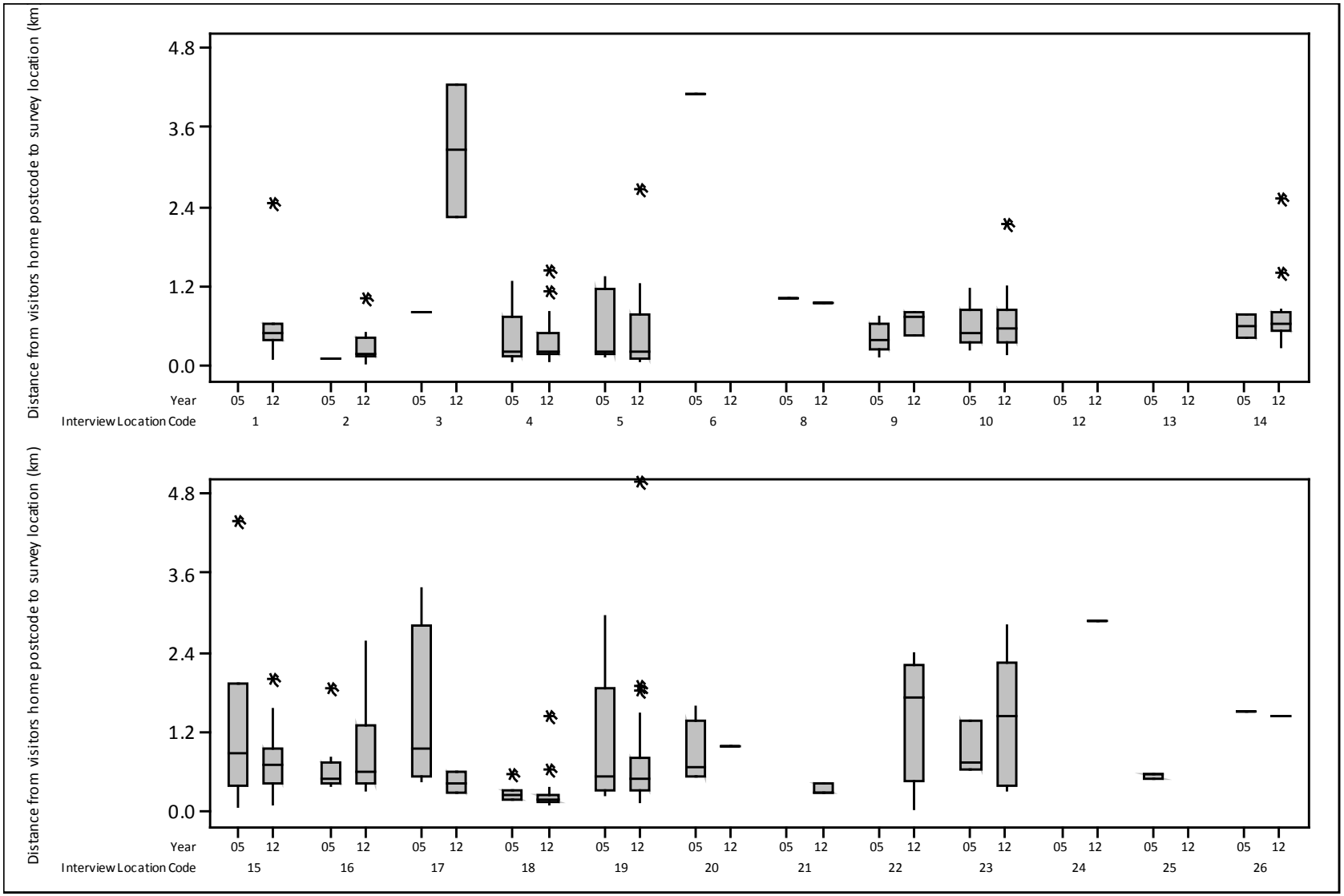


Figure 12: Plots of straight line distance between a visitor's home postcode and the interview location for the 2005 and 2012 data for visitors arriving by foot. These plots show the median (i.e. the mid-point – represented by a horizontal line), and the interquartile range (i.e. 25 – 75% of the data – represented by a box), while the vertical lines show the upper and lower limits of the data, with outlying values represented by asterisks. The distances for location 18 are statistically significantly different between 2005 and 2012.

Summary of differences between sites

3.71 In this section we have considered how visitor numbers have changed since the original survey in August 2005, and provided a summary of the percentage change in recorded visitor totals for each survey location (Table 26). These data are repeated in Table 30, selecting only those sites where the change is greater than 25% (either up or down). Drawing on the other analyses in this report and referring back to the raw data, it is possible to identify where the changes have occurred.

Table 30: Tally totals for 2005 and 2012/13. Totals give the number of people (i.e. adults and children) for 2005 and 2012/13. Survey locations are ranked according to the level of change and those in bold represent the locations with an estimated increase in parking capacity and those in grey contain data gathered in 2013. The notes column indicates where particular differences between the two years may have influenced the comparison. Columns relating to rain give the number of survey sessions in each when it rained.

Location code	Location Name	% change	Session in 2005 with rain	2012 & 2013 sessions with rain	Notes
19	**South Road**	**127**	**0**	**1**	**Increase in the number of people arriving on foot and on weekdays.**
13	**Chobham Common (Staple Hill)**	**79**	**4**	**0**	**Increase in people walking and in people doing 'other activities' (i.e. not dog walking). Increase most marked in the weekday sessions.**
17	**B3011 opposite Arrow Lane**	**76**	**0**	**1**	**Increase in dog walkers.**
15	Sandpit Hill	61	2	3	Difference in distances people are travelling.
18	Play area, Springfield Ave	45	0	0	Increase appears to be particularly people arriving by car and for weekday sessions.
1	**Mytchett Place Road**	**42**	**3**	**0**	**Increase in people walking.**
23	**Sandy Track car park, Chobham Road, Horsell**	**41**	**0**	**2**	**Increase in visitors dog walking and walking but a decrease in visitors undertaking 'other activities'. Increase in the proportion of visitors arriving by car.**
10	Car Park off the A30	32	5	0	Increase appears to be people arriving by car and dog walkers.
3	**The Lookout**	**31**	**2**	**3**	**Increase in the proportion of visitors arriving by foot and 'other' transport modes.**
6	Bourley Road	-37	1	0	No cyclists interviewed in 2012.
22	Burdenshott Road	-43	0	2	Difference apparent in weekday counts.
9	Car park off Cricket Hill Lane	-54	4	0	Difference in weekday counts in particular, in people undertaking 'other activities' and in people travelling by car.
14	**Lightwater Country Park**	**-54**	**2**	**2**	**Difference apparent in the number of dog walkers, number of people undertaking 'other activities' (i.e. not dog walking or walking) and in people travelling by car.**
8	**N entrance to Warren Heath**	**-62**	**2**	**1**	**Difference is in the number of people travelling by car and in 2005 the majority of people were counted during the weekend afternoon sessions.**

4. Discussion

4.1 Data from 2,483 interviews with visitors in 2012 to the Thames Basin Heaths SPA have been presented. This builds on the 2005 data (where 1,144 interviews were conducted), and provides up-to-date visitor data across a greater part of the bird nesting season than was covered in 2005. The 2012/13 work was designed to draw direct comparisons with the August 2005 data by repeating the surveys in August 2012/13 - survey locations which had a visitor undercount in 2012 were recounted in August 2013. Looking across the data (Table 31) it can be seen that there are relatively few differences between the interview data from the different survey periods. A clear pattern of regular local use, predominantly for dog walking is apparent.

Table 31: Overview across each of the three data sets

Visitor factors	August 2005	Spring 2012	August 2012/13
Number of survey locations[7]	26	29	30
Number of survey hours[8] (number count hours in 2013)	416	464	464 (80)
TALLY DATA			
People entering	3,331	2,521	3,888
Number dogs entering	Not counted	1,963	2,351
% of visitor total at weekends	59%	60%	57%
INTERVIEW DATA			
Number of interviews	1,144	1,199[9]	1,284[10]
Number of people in interviewed groups	2,062	1,838	2,020
Mean group size	1.8	1.53	1.57
Number of groups already interviewed	180	101	181
Refusal rate (across all locations)	9%	9%	11%
Number of dogs with interviewees	1,271	1,458	1,479
Mean no dogs per interviewed group	1.11	1.21	1.15
% on day trip/short visit from home	Not asked	98	97
% of people in groups over 65	Not asked	14	15
% of visits less than an hour	Not asked		74
% visiting more than once per week	77	74	72
% visits tending to be before 9am	19	23	23
% visiting equally all year, across all seasons	Not asked	74	77
% dog walking	59	68	63
% walking	32	20	21
% of groups accompanied by 1+ dogs	72	83	83
% visiting less than a year	Not asked	10	11
% travelling by car	83	75	75
% travelling on foot	13	22	21

[7] Full surveys only.
[8] Undertaking interviews and counts.
[9] Note that the questionnaire used in 2012 was longer and took longer to complete, therefore the number of interviews is not a robust measure with which to compare visitor levels between 2005 and 2012.
[10] Note that the questionnaire used in 2012 was longer and took longer to complete, therefore the number of interviews is not a robust measure with which to compare visitor levels between 2005 and 2012.

Visitor factors	August 2005	Spring 2012	August 2012/13
% where close to home main reason for visiting site where interviewed		42	36
Mean (± SE) route length of dog walkers	2.5 (±0.05)	2.5 (± 0.0)	2.7 (± 0.1)
Mean (± SE) route length of walkers	2.3 (± 0.1)	3.0 (± 0.3)	2.9 (± 0.1)
% of all visitors from within 5km	76	83[11]	82[12]
% of all visitors from within 400m	7	8[13]	10[14]

Approach and Limitations

4.2 This study has replicated and expanded on the original 2005 Thames Basin Heaths SPA visitor survey work. The number of access points surveyed was increased and a repeat visitor survey was also undertaken earlier in the year (May/June) in addition to the August visitor work.

4.3 There were two major events during the visitor survey periods which may have had the potential to affect visitor numbers. The first, in June, was the Queen's Diamond Jubilee celebrations over the weekend 02/06/2012 until 04/06/2012 (Table 35). The second, during August, was the London 2012 Olympics which took place between 27/07/2012 and 12/08/2012. However, dog walking is clearly a popular activity and those needing to exercise dogs regularly may not have altered their pattern of visits to the SPA during these events. There were comments from some interviewed visitors during the August surveys that sites were unusually quiet for the time of year and speculation that other visitors were probably at home watching the Olympics. Whilst this is anecdotal information, and dog walking is a popular activity, nevertheless for these periods visitor numbers to sites should be interpreted and used with caution as they may be underestimates.

4.4 The weather between May 2012 and September 2012 was atypical. June 2012 was the coolest June since 1991 and the wettest since 1910[15]. July and August 2012 were also very wet, experiencing twice the monthly average rainfall[16]. However despite these wet and cool conditions there were only ten access points surveyed in wet conditions in June, and six in August (Table 35). Again, use and extrapolation of visitor totals from these locations should be interpreted with caution.

4.5 An important point that only came to light during the analyses was questionnaire length. The initial 2005 visitor survey questionnaire comprised 12 questions and took less than 2 minutes to capture visitor information. The 2012 questionnaire was more comprehensive and could take up to five minutes to capture visitor information, especially if the interviewee had several comments. This longer questionnaire meant that at busy sites it was very difficult to interview visitors

[11] Values are taken from those visitors who responded they were on a short visit from home
[12] Values are taken from those visitors who responded they were on a short visit from home
[13] Values are taken from those visitors who responded they were on a short visit from home
[14] Values are taken from those visitors who responded they were on a short visit from home
[15] http://www.metoffice.gov.uk/climate/uk/2012/
[16] http://www.metoffice.gov.uk/climate/uk/2012/

whilst keeping an accurate tally of visitors and dogs entering and leaving the SPA. Hence the comparison of visitor totals between 2005 and 2012 does not include complete data for these sites. Also, the length of the revised questionnaire also meant fewer interviews could be undertaken in survey sessions at busy sites as each interview took longer. Hence caution is required in directly comparing the number of interviews undertaken at each site between 2005 and 2012.

4.6 In response to the tally undercount in 2012 at five sites, recounts were completed at these locations during 2013 to gather accurate tally information to supplement the incomplete 2012 data. These counts were taken on the equivalent dates of the 2012 surveys and inevitably the counts will be subject to some variation in comparison to the 2012 values.

4.7 Route data were collected using paper maps and sometimes GPS units. Some visitors were not clear about the route they took or were unable to identify on a map where they had walked. At some locations the paper maps did not detail all the paths present on a site, which made it difficult for the surveyors to elicit accurate route information from the interviewee. In these circumstances the surveyors captured the information as best they could. These problems were also encountered during the original survey in 2005. The route information was digitised as accurately as possible and where it was not possible to record accurate information, the routes for these interviews were left blank. The route information does need to be interpreted with some caution as it is likely that some degrees of accuracy could have been lost in eliciting the information from the visitor, noting it on a map and digitising the route from an annotated map. Some visitor routes were collected by GPS units and these worked well at open sites.

4.8 In Table 21 we consider the distance of visitor routes for groups who arrive by foot and by car. Of note, the 369 routes recorded using paper maps by visitors arriving on foot will include distance walked to the site from their home address (hence include the distance from their home). However, the 10 routes collected by GPS units will only take into account the actual distance walked from the survey location (where the GPS unit was handed out and collected).

4.9 The percentages of interviewees undertaking different activities give an indication of the breakdown of different activities. A random sample of people were interviewed, but there was a limit to how many people could be interviewed by a single surveyor within a two hour survey period. Activities that were evenly distributed over time are therefore more likely to be picked up compared to activities focussed in a very small time window (after work cycle, run, walk, or an after school family outing). In addition, the visitor surveyors found it challenging on occasions to interview cyclists, those on horseback, joggers, and visitors using their mobile phones. Cyclists and joggers at times were hard to approach because they were travelling at speed or listening to music on headphones, either commuting or exercising and not in a position or willing to stop for an interview. Some of those on horseback (visitors) felt stopping for an interview would intimidate the horse, and approaching visitors talking on a mobile phone

was avoided as it was not polite or appropriate. It is likely that visitor information from horse riders, joggers and cyclists are all under-represented in this visitor survey.

4.10 The face-to-face visitor interviews were confined to daylight hours only and so did not capture information about night time use of the heath. At some locations across the SPA interviewed visitors mentioned that some night time cycling/mountain biking (or night riding) is occurring in some areas. This study would not have captured visitor information on the use of the SPA by these users or user groups. Night riding was not mentioned by interviewees during the 2005 survey.

4.11 The 2012 visitor survey work had a very high postcode capture from the interviews. The postcode capture rate of the 2005 survey was 63% (Liley, Jackson, & Underhill-Day 2006). In 2012 the May/June postcode capture rate was 95% and in August 2012 it was 96%. This improved capture rate means that many more postcodes were recorded during the 2012 survey. It is not clear why the capture rates were so different, but it may be that people are now more accustomed to using and citing postcodes, especially as they are widely used in satellite navigation systems and smart phones.

4.12 The car parking estimates should be interpreted with some caution as these are visual estimates only. Different surveyors estimated the parking capacities at the sites between 2005 and 2012 and the values in this report have been taken from estimated car park capacities in Fearnley (2013), many of which were ground-truthed by Natural England in early 2012. Table 32 in the Appendix links the visitor survey locations to their equivalent car park reference in the Fearnley (2013) report.

Comparisons between 2005 and 2012

4.13 Access to the countryside is increasing and national survey data suggest that the population are choosing to spend more of their leisure time in areas of greenspace (TNS Research International 2011). There are also a range of organisations and government initiatives that currently promote and encourage access in general to the countryside[17]. In addition, housing numbers have also increased around the Thames Basin Heaths SPA since the previous visitor survey in 2005. An indication of the scale of change can be drawn from comparing postcode data. The original 2005 visitor survey report referred to around 288,000 within 5km of the SPA. On further inspection of the postcode data used in the 2005 report (itself from 2003), the exact number was 288,109[18]. More recent postcode data (from December 2011, see paragraph 2.27) gives 310,525 residential properties within the same area. This would suggest an increase in residential properties of 7.2% within 5 kilometres of the SPA. In this

[17] For example Walking for Health http://www.walkingforhealth.org.uk/ and the National Trust's Wild at Heart https://www.50things.org.uk/

[18] Sourced from Post Office Delivery Points Database dated 2003 and analysed within MapInfo version 6.

context it might be expected, in the absence of the measures designed to protect the SPA, that visitor levels on the SPA would be likely to have increased.

4.14 Although the comparison (in the tally data) shows the number of people counted entering the SPA was 10% more in 2012/13 data than that collected in 2005, the differences are not statistically significant (Table 26 and paragraphs 3.53 & 3.54). There is therefore no evidence of an increase in visitor numbers despite an apparent increase in housing. There are a number of potential explanations as to why no significant change has occurred.

4.15 Another consideration when looking to interpret these data at an SPA-wide level is that the survey points do not represent a random sample of access points onto the SPA, but were locations specifically identified for survey by English Nature (a predecessor to Natural England) in 2005. There is discussion on this point in section 3.16 in the 2005 report, but as a consequence we cannot be confident that the same result would be found across the SPA as a whole.

4.16 The 2012 August survey sessions coincided with the London 2012 Olympics (Table 35 and paragraph 4.3). There was an unprecedented level of interest in the Olympics and it is possible that access patterns would have been affected if people chose to either watch the games in person or on the television rather than visiting the SPA. However, those needing to exercise dogs regularly may not have altered their pattern of visits to the SPA during the Olympics.

4.17 A further consideration is the mitigation measures undertaken since 2005 to address the impacts of recreation. These survey results in no way test whether Suitable Alternative Natural Greenspace (SANG) provision or other measures may have been successful, and detailed monitoring of SANGs themselves is necessary to show their effectiveness.

4.18 There were differences in the proportion of visitors who used different modes of transport to access survey locations and differences in the proportion of visitors who were undertaking different activities between 2005 and 2012. It would be worthwhile investigating these further as the changes may be a visitor response to access management measures such as a shift in car parking provision, or a natural shift in visitor behaviour.

4.19 The data do show some specific survey locations where access has increased or decreased and at some sites with an increase in visitors there appears to be an increase in parking capacity or improvements to vehicular access tracks (Table 26). Visitor totals in 2012 for location 4 (Top of Bracknell Road) and 5 (Top of Kings Ride) (Table 32) and in 2013 for location 21 (Salt Box Road) (Table 33) are likely to be lower than the totals recorded in 2005 as there were prolonged periods of rain and heavy showers on the 2012/13 survey days. No rain was noted at these survey locations during the 2005 visitor surveys.

General visitor behaviour

4.20 The 2012 visitor survey confirmed the use of the SPA by professional dog walkers and several provided interviews. These were hardly recorded in 2005. There appeared to be two distinct types of professional dog walkers, those who

had branded customised vehicles and advertised their business and services, and others who used their own vehicles to transport (at times, several) dogs and who were hesitant to admit to their profession. Professional dog walking vehicles (those branded and customised) were recorded across 15 survey locations. Although recording the number of professional dog walking vans was not part of the methods in the original survey, no professional dog walkers were interviewed and in 2012 seven interviews were given by professional dog walkers

4.21 Some interviewed visitors expressed concern about the level of control some professional dog walkers had over the animals they were walking, especially when walking large numbers (over three) of different dogs during the same visit. Concern was also expressed at the ability of some professional dog walkers to pick up after their animals, again especially when walking large numbers of animals. This raised concerns that dog owners who walk their own animal(s) may be subject to access restrictions introduced to tackle these issues which are mainly perceived to arise from arise from commercial enterprises.

4.22 Some longer term visitors to the SPA also advised their visiting patterns had changed slightly and that they now favoured visiting sites which they know will always be open and accessible to the public. Some visitors felt that the MoD activity on the ranges had increased of late so rather than making a chance visit to one of the ranges the visitors preferred to make their regular visits to locations that were always 'open' and accessible.

Estimation of total visitor numbers

4.23 The initial 2005 visitor survey was not designed to provide an informed estimate of visitor or visit numbers to and across the entirety of the Thames Basin Heaths. The 2005 survey was part of the evidence base that triggered concern regarding the impacts of recreation and the links between recreation and housing. The survey methods focused on gathering data on visitor patterns and behaviours on the SPA to understand the type of visitor and visit patterns, establish the catchment areas and travel distance of visitors to the heaths and quantify visitor routes on the heaths. This repeat survey was designed to do the same and allow comparisons to be made between the two surveys.

4.24 We have therefore refrained from making any extrapolations as to total visitor numbers or annual visitor totals across the SPA. In order to derive a reliable estimate of visitor numbers to the Thames Basin Heaths as a whole, the ideal approach would be to randomly sample access points and gain count data from these access points over an extended period of time.

Monitoring strategy recommendations

4.25 A monitoring strategy for the Thames Basin Heaths was produced in 2008 (Underhill-Day *et al.* 2008). The strategy was commissioned by Natural England in order to address one of the requirements in the then Draft Interim Strategic Delivery Plan (ISDP) prepared by the TBH Joint Strategic Partnership Board. The ISDP noted that the measures proposed need to be monitored via visitor surveys to determine the effectiveness of SANGs in diverting visitors away from SPAs; the ability of SANGs to deliver the necessary capacity and a programme

of habitat and species surveys to monitor the effectiveness of the measures taken in maintaining or enhancing the populations of Annex I birds. The Thames Basin Heaths SPA Delivery Framework (Thames Basin Heaths Joint Strategic Partnership Board 2009) stated that the framework would be accompanied by a clear strategy for monitoring the SPA.

4.26 The 2008 monitoring strategy set out a range of different monitoring approaches that were felt necessary. Monitoring is clearly important to ensure there is a suitable evidence base to demonstrate the effectiveness of different measures being used to manage visitor pressure.

4.27 The visitor survey results described in this report correspond to the baseline visitor survey. It is useful to consider the implications of the results of this work and the requirements for further visitor work. In particular it is important to recognise how the data in this report can be used and where the results should be treated with caution.

4.28 This visitor survey provides data on catchments for the surveyed locations, patterns of access to the survey points and a direct comparison with the original work undertaken in 2005. For the survey locations, data have been gathered on the number of people entering and leaving and precise data relating to their profile, motivations and reasons for visiting.

4.29 The data do not give us an accurate indication of total visitor numbers to the SPA. In order to derive such an estimate, counts would need to be conducted at a randomly selected sample of access points (see original 2005 survey report for discussion) or complete survey coverage would be necessary. Complete coverage could be achieved for car visitors, through the car park counts and the first of these series of counts was commissioned by the SAMM (Strategic Access Management and Monitoring) project in 2013 (Fearnley 2013).

4.30 In order to be confident of a change in visitor numbers over time, the direct comparison between visitor tallies between the survey periods (2005 and 2012/13) is limited. It is possible to directly compare a small number of access points and compare count data from the different surveys (2005 and 2012/13). The ideal measure of change over time would be multiple counts collected each year – for example car park counts (which took place for the first time in 2013, (Fearnley 2013)) or through the use of automated counters (trials are currently in progress), allowing trends to be determined year by year and over many different access points.

4.31 In order to consider changes in terms of the ecological impacts, it is necessary to relate visitor patterns to ecological data, for example by analysing bird data with the visitor data, and considering direct impacts (such as disturbance to birds on the nest, fire incidence, or changes in dog fouling levels, for example).

4.32 Clearly there is a need for the other strands of the monitoring strategy to supplement the results presented in this report and provide the understanding necessary to help refine and develop the mitigation measures. There may be merit in reviewing the list of measures and prioritising funds. We would also

suggest that car park transects and work on visitor patterns to SANGs should be prioritised. As part of the visitor survey contract, Footprint Ecology is working with the SAMM project to update the monitoring strategy to incorporate the findings from this report.

Implications for the management of the SPA and the Delivery Framework

4.33 The visitor survey results indicate that there are limited significant differences between the visitor interview data from 2005 and 2012 at the locations surveyed (paragraph 3.56). The Thames Basin Heaths clearly attracts visitors from the local area, with a high proportion of visitors using the sites on a regular basis for short visits. Dog walking is the main activity. There appears to have been some increases in use at selected sites (Table 30) but overall relatively no significant change in visitor numbers since 2005 (paragraph 3.56).

4.34 In 2005, 76% of visitors interviewed lived within 5km of the access point at which they were interviewed[19] and in 2012 this value was slightly higher at 81%. This would seem to lend support to the continued use of a 5km zone for instructing general mitigation for new development. The high volume of postcodes gathered in this survey, including data from additional access points, does also mean that it is possible to clearly see where visitors originate from.

4.35 The high proportion of dog walkers identified within the survey (and the suggestion that use of the Thames Basin Heaths by professional dog walkers is increasing) would suggest that the focus of access management measures should be directed towards dog walkers and their dogs. There is evidence that certain dog walkers specifically select heathland sites because of the terrain, size of sites and attractiveness for dogs (e.g. Liley, Sharp, & Clarke 2008). This information will help inform the provision of alternative sites around the SPA.

[19] Note that this value is derived from the cumulative frequency distribution of the linear distance between a visitor's home postcode and the survey location at which they were interviewed and was derived from a chart similar to Figure 3.

References

Adams, W.M. (1996) *Future Nature*. Earthscan, London.

Alessa, L., Bennett, S.M. & Kliskey, A.D. (2003) Effects of knowledge, personal attribution and perception of ecosystem health on depreciative behaviors in the intertidal zone of Pacific Rim National Park and Reserve. *Journal of Environmental Management*, **68**, 207–218.

Bathe, G. (2007) Political and social drivers for access to the countryside: the need for research on birds and recreational disturbance. *Ibis*, **149**, 3–8.

Bird, D.M. (2004) *Natural Fit, Can Green Space and Biodiversity Increase Levels of Physical Activity*. RSPB, Sandy, Bedfordshire.

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.

Clarke, R.T., Liley, D. & Sharp, J. (2008) *Assessment of Visitor Access Effects and Housing on Nightjar Numbers on the Thames Basin Heaths and Dorset Heaths SPAs*. Footprint Ecology / Natural England.

Clarke, R.T., Liley, D., Underhill-Day, J.C. & Rose, R.J. (2006) *Visitor Access Patterns on the Dorset Heaths*. English Nature.

Clarke, R.T., Sharp, J. & Liley, D. (2008) *Access Patterns in South-east Dorset. The Dorset Household Survey: Consequences for Future Housing and Greenspace Provision.* Footprint Ecology / Poole Borough Council.

Cruickshanks, K., Liley, D. & Hoskin, R. (2010) *Suffolk Sandlings Visitor Survey Report*. Footprint Ecology / Suffolk Wildlife Trust.

English Nature. (2002) *Revealing the Value of Nature*. English Nature, Peterborough.

Fearnley, H. (2013) *Results from the 2013 Driving Transects Across the Thames Basin Heaths SPA*. Footprint Ecology.

Fearnley, H. & Liley, D. (2011) *North Kent Visitor Survey Results*. Footprint Ecology / Greening the Gateway.

Fearnley, H., Liley, D. & Cruickshanks, K. (2011) *Visitor Survey from Results Breckland SPA*. Footprint Ecology Unpublished Report.

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. (2006) *Predicting Visitor Numbers to the Thames Basin Heaths.* Footprint Ecology / CEH.

Liley, D., Clarke, R.T., Mallord, J.W. & Bullock, J.M. (2006a) *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.

Liley, D., Clarke, R.T., Underhill-Day, J. & Tyldesley, D.T. (2006b) *Evidence to Support the Appropriate Assessment of Development Plans and Projects in South-east Dorset*. Footprint Ecology / Dorset County Council.

Liley, D., Fearnley, H. & Cruickshanks, K. (2010) *Exe Visitor Survey, 2010*. Footprint Ecology / Teignbridge District Council.

Liley, D., Jackson, D.B. & Underhill-Day, J.C. (2006) *Visitor Access Patterns on the Thames Basin Heaths*. English Nature Research Reports, N682, Peterborough.

Liley, D., Sharp, J. & Clarke, R.T. (2008) *Access Patterns in South-east Dorset. Dorset Household Survey and Predictions of Visitor Use of Potential Greenspace Sites. Dorset Heathlands Development Plan Document.* Footprint Ecology / Poole Borough Council.

Liley, D., Underhill-Day, J. & Sharp, J. (2009) *Green Space Quality: Guidelines for SANGS Surrounding the Thames Basin Heaths SPA*. Footprint Ecology / Natural England.

Liley, D, Morris, R.K.A, Cruickshanks, K, Macleod, C, Underhill-Day, J, Brereton, T & Mitchell, J. (2012) *Options for Management of Particular Activities on Marine Protected Areas*. Natural England Commissioned Research Report, Footprint Ecology / Bright Angel Consultants / MARINElife.

Mallord, J.W. (2005) *Predicting the Consequences of Human Disturbance, Urbanisation and Fragmentation for a Woodlark Lullula Arborea Population*. UEA, School of Biological Sciences, Norwich.

Mallord, J.W., Dolman, P.M., Brown, A.F. & Sutherland, W.J. (2007a) Linking recreational disturbance to population size in a ground-nesting passerine. *Journal of Applied Ecology*, **44**, 185–195.

Mallord, J.W., Dolman, P., Brown, A. & Sutherland, W.J. (2007b) Quantifying density dependence in a bird population using human disturbance. *Oecologia*, **153**, 49–56.

Morris, N. (2003) *Health, Well-being and Open Space Literature Review*. Edinburgh Colleage of Art and Heriot-Watt University, Edinburgh.

Moss, S. (2012) *Natural Childhood*. National Trust.

Murison, G. (2002) *The Impact of Human Disturbance on the Breeding Success of Nightjar Caprimulgus Europaeus on Heathlands in South Dorset, England*. English Nature, Peterborough.

Murison, G., Bullock, J.M., Underhill-Day, J., Langston, R., Brown, A.F. & Sutherland, W.J. (2007) Habitat type determines the effects of disturbance on the breeding productivity of the Dartford Warbler Sylvia undata. *Ibis*, **149**, 16–26.

Pretty, J., Griffin, M., Peacock, J., Hine, R., Selens, M. & South, N. (2005) A countryside for health and well-being: the physical and mental health benefits of green exercise. *Countryside Recreation*, **13**, 2–7.

Sharp, J., Clarke, R.T., Liley, D. & Green, R.E. (2008) *The Effect of Housing Development and Roads on the Distribution of Stone Curlews in the Brecks*. Footprint Ecology / Breckland District Council.

Thames Basin Heaths Joint Strategic Partnership Board. (2009) *Thames Basin Heaths Special Protection Area Delivery Framework*.

TNS Research International. (2011) NECR083 - Monitor of Engagement with the Natural Environment: The national survey on people and the natural environment - Annual Report from the 2010-11 survey, http://naturalengland.etraderstores.com/NaturalEnglandShop/NECR083

UE Associates. (2009) *Visitor Access Patterns on Ashdown Forest*. Conducted for Mid Sussex and Wealden District Councils.

Underhill-Day, J.C. (2005) *A Literature Review of Urban Effects on Lowland Heaths and Their Wildlife*. English Nature, Peterborough.

Underhill-Day, J., White, J., Liley, D. & Sharp, J. (2008) *Thames Basin Heaths-A Monitoring Strategy. Consultation Draft*. Footprint Ecology / Natural England, Wareham, Dorset.

Appendices

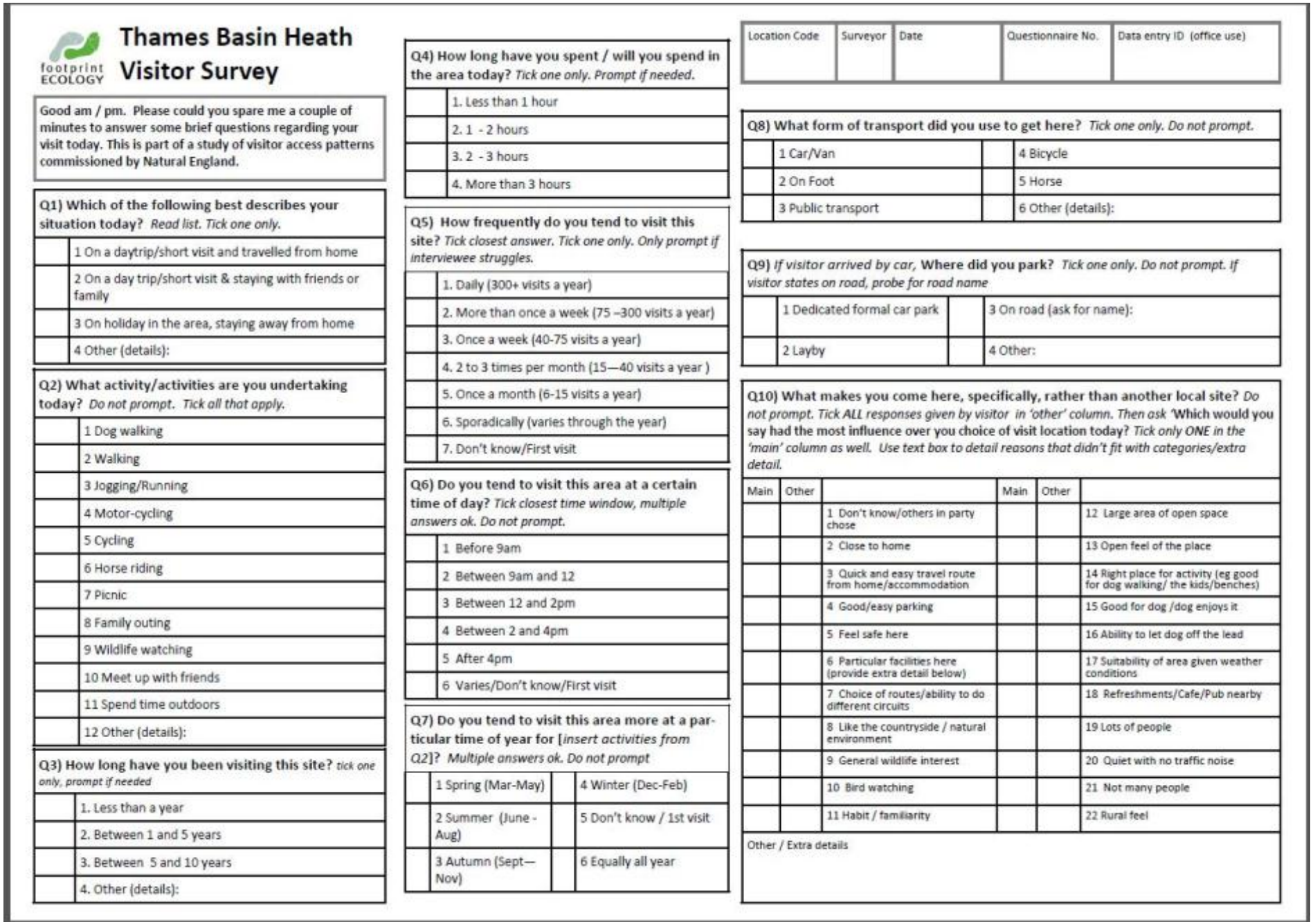
Figures

Maps

Tables

Table 32: Visitor survey locations with corresponding car park locations in the 2013 Thames Basin Heaths driving transects report Fearnley (2013)

Visitor survey location code	Visitor survey name	Car park reference in (Fearnley 2013)	Estimated capacity
1	Mytchett Place Road	643	60
2	Nightingale Road/A323	679	12
3	The Lookout	10	350
4	Top of Bracknell Road	Not included, impossible to distinguish between heath users and residents	3
5	Top of Kings Ride	No car parking area	0
6	Bourley Road	722 & 723	24
7	S entrance to Bramshill Plantation	599	0
8	N entrance to Warren Heath	600	12
9	Car park off Cricket Hill Lane	14	11
10	Car park off the A30	12	15
11	Black Bushes Road	580	9
12	Chobham Road, Chobham Common	5	60
13	Chobham Common (Staple Hill)	7	25** value differs from value of 60 in Fearnley (2013) as initial estimate of 60 spaces has now been revised.
14	Lightwater Country Park	908, 909, 910, 911, 912, 913	172
15	Sandpit Hill	831	7
16	Queens Road, Cowshot Common	Not included (survey location off road)	5
17	B3011 opposite Arrow Lane	594	6
18	Play area, Springfield Ave	No car parking area	0
19	South Road	607	8
20	Off Crowthorne Road	11	15
21	Salt Box Road	588	30
22	Burdenshott Road	592	25
23	Sandy Track car park, Chobham Road, Horsell	829	20
24	Six Crossroads car park, Shore's Road	4	36
25	E of Aberconway House (Wren's Nest car park)	1	20
26	Currie's Clump (Boldermere Car Park)	2	80
27	Lay-by opposite Wyndrush House on Chapel Lane	639	6
28	Path intersection just off Sandy Hill Road	No included	30
29	Car park 150m to the east of the Foresters Arms Pub GU52 9EP	702	20
30	Car park off roundabout where B3348 meets A3095	280	11
31	Intersection of paths adjacent to large lay-by on south side of the A30	671	26
32	Second lay-by on Old Guildford Rd, opposite a firebreak	640	18
40	In proximity of car park east of Bolder Mere	3	20



Thames Basin Heath Visitor Survey

footprint ECOLOGY

Good am / pm. Please could you spare me a couple of minutes to answer some brief questions regarding your visit today. This is part of a study of visitor access patterns commissioned by Natural England.

Q1) Which of the following best describes your situation today? *Read list. Tick one only.*

	1 On a daytrip/short visit and travelled from home
	2 On a day trip/short visit & staying with friends or family
	3 On holiday in the area, staying away from home
	4 Other (details):

Q2) What activity/activities are you undertaking today? *Do not prompt. Tick all that apply.*

	1 Dog walking
	2 Walking
	3 Jogging/Running
	4 Motor-cycling
	5 Cycling
	6 Horse riding
	7 Picnic
	8 Family outing
	9 Wildlife watching
	10 Meet up with friends
	11 Spend time outdoors
	12 Other (details):

Q3) How long have you been visiting this site? *tick one only, prompt if needed*

	1. Less than a year
	2. Between 1 and 5 years
	3. Between 5 and 10 years
	4. Other (details):

Q4) How long have you spent / will you spend in the area today? *Tick one only. Prompt if needed.*

	1. Less than 1 hour
	2. 1 - 2 hours
	3. 2 - 3 hours
	4. More than 3 hours

Q5) How frequently do you tend to visit this site? *Tick closest answer. Tick one only. Only prompt if interviewee struggles.*

	1. Daily (300+ visits a year)
	2. More than once a week (75 –300 visits a year)
	3. Once a week (40-75 visits a year)
	4. 2 to 3 times per month (15—40 visits a year)
	5. Once a month (6-15 visits a year)
	6. Sporadically (varies through the year)
	7. Don't know/First visit

Q6) Do you tend to visit this area at a certain time of day? *Tick closest time window, multiple answers ok. Do not prompt.*

	1 Before 9am
	2 Between 9am and 12
	3 Between 12 and 2pm
	4 Between 2 and 4pm
	5 After 4pm
	6 Varies/Don't know/First visit

Q7) Do you tend to visit this area more at a particular time of year for [*insert activities from Q2***]?** *Multiple answers ok. Do not prompt*

	1 Spring (Mar-May)		4 Winter (Dec-Feb)
	2 Summer (June - Aug)		5 Don't know / 1st visit
	3 Autumn (Sept—Nov)		6 Equally all year

Location Code	Surveyor	Date	Questionnaire No.	Data entry ID (office use)

Q8) What form of transport did you use to get here? *Tick one only. Do not prompt.*

	1 Car/Van		4 Bicycle
	2 On Foot		5 Horse
	3 Public transport		6 Other (details):

Q9) *If visitor arrived by car,* **Where did you park?** *Tick one only. Do not prompt. If visitor states on road, probe for road name*

	1 Dedicated formal car park		3 On road (ask for name):
	2 Layby		4 Other:

Q10) What makes you come here, specifically, rather than another local site? *Do not prompt. Tick ALL responses given by visitor in 'other' column. Then ask* **'Which would you say had the most influence over you choice of visit location today?** *Tick only ONE in the 'main' column as well. Use text box to detail reasons that didn't fit with categories/extra detail.*

Main	Other		Main	Other	
		1 Don't know/others in party chose			12 Large area of open space
		2 Close to home			13 Open feel of the place
		3 Quick and easy travel route from home/accommodation			14 Right place for activity (eg good for dog walking/ the kids/benches)
		4 Good/easy parking			15 Good for dog /dog enjoys it
		5 Feel safe here			16 Ability to let dog off the lead
		6 Particular facilities here (provide extra detail below)			17 Suitability of area given weather conditions
		7 Choice of routes/ability to do different circuits			18 Refreshments/Cafe/Pub nearby
		8 Like the countryside / natural environment			19 Lots of people
		9 General wildlife interest			20 Quiet with no traffic noise
		10 Bird watching			21 Not many people
		11 Habit / familiarity			22 Rural feel

Other / Extra details

Figure 13: Visitor survey questionnaire

Q11i) Aside from here, do you visit any other places (max 3) for *{insert activity in Q2}*? *IF YES:* Please could you name the three locations you visit most often? *Please ask interviewee to spell place names as we need to identify the sites on a map. May need to prompt for the name of a nearby town or village to help us identify the site.* Q11ii).**Thank you. When you visit *{insert location name given in 11i (1)}* How do you usually travel there?** *Enter response in Q11b* then ask **How often on average to you go there?** *Enter response in Q11c frequency column. Repeat for locations 2 and 3.*

11a) Name of Site (pls give as much detail as possible, nearby town or village, road name etc)	11b) Travel mode (1=Car, 2=Foot, 3=Public transport, 4= Bike)	11c) Frequency 1. Daily, 2=More than once a week, 3=Once a week, 4= 2-3 times a month, 5= once a month, 6= Sporadically, 7=Don't know
1.		
2.		
3.		

Q12) Now I'd like to ask you about your route today. Looking at the area shown on this map, can you show me where you started your walk or visit today. And the finish point. And your route please ? *Probe to ensure route accurately documented. Use* **P** *to indicate where visitor parked,* **E** *to indicate start point and* **X** *to mark exit and mark route with a line. Use solid line for actual route and dotted line for expected / remaining route.*

GPS USED: Y/N GPS Number: START TIME: END TIME:

Q13) Did you enter the heath from here or another access point . *Tick one, do not prompt.*

1 This access point	2 Different access point	3 Don't know

Q14) Is/was your route today reflective of your usual route when you visit here for *{insert activity in Q2}* . *Tick one, do not prompt.*

1 Yes, normal	2 Longer than normal	3 Shorter than normal	4 Not sure/no typical visit

Q15) Did your visit today involve walking off the paths ? *Tick one only, do not prompt*

1 Yes	2 No	3 Not sure

Q16) What (if anything) influenced your choice of route here today? *Multiple answers ok. Do not prompt. Tick closest answers . Use free text box additional influences or/and detail.*

	1 Weather		5 Group members (kids, less able)
	2 Daylight		6 Muddy tracks/paths
	3 Time		7 Followed marked trail
	4 Other people		8 Activity undertaken (e.g. presence of dog)
	9 Other (please detail):		

Q17) Do you have any other comments about this area?

Q18 For [*insert visitors main activity*] what features would be necessary to make AN-OTHER site attractive for you to use INSTEAD of here? *Do not prompt. Categorise as appropriate. Multiple answers ok.*

	1 No features/nothing		6 Better / easier parking
	2 More dog friendly		7 Good views
	3 Close to home		8 Circular walks
	4 Better path surfacing/network		9 Large open space
	5 Better information / maps / boards		10 Attractive scenery

Free Text: other reasons / detail:

So that we can check whether we have a representative sample, please answer

Q19) What is your full home postcode? *(this is the most important piece of information required from the survey, please make every effort to record correctly)*
If visitor unable/refuses to give postcode:
What is the name of the nearest village/town? *(Please ensure correct spelling)*

Q19b) If visitor is on holiday ask:
Which town/village are you staying in?

Q20)How many of your party fall into the following age categories? *Enter no. per category*

	1 Under 18		3 41-65
	2 18-40		4 Older than 65

Q 21) Can I just check how many dogs you have with you today?

To complete once interview has finished. Route mapped ? Y / N

Time:	Gender of respondent (M / F):	Interview conducted part way through route (tick if yes)
Group size (total people):	Dog (s) seen off leads? Y/N	

Figure 13: Visitor survey questionnaire (continued…)

Thames Basin Heaths 2012 Visitor Survey / TALLY SHEET

Date	
Day of Week	
Surveyor	
Location Code	
Location Name	

Time Period / Session (tick one)	
(1) 0700—0900	
(2) 1000—1200	
(3) 1300—1500	
(4) 1700—1900	

WEATHER: **Rainfall** (tick one)		**Cloud cover** (8ths) in middle of period:	
None		**Temperature** (tick those that apply):	
Yes, less than ¼ of the 2 hour time period		cool	
Yes, ¼ to ½ of the 2 hour period		mild	
Yes, ½ to ¾ of the 2 hour period		warm	
Yes, more than ¾s of the 2 hour period		hot	

Give any further descriptions of weather conditions (especially if likely to influence visitor nos.—e.g. thunder storm or high winds). Also any details of road works/ access restrictions.

No. of interview refusals during 2-hr survey period	
No. of visitors approached but already interviewed	
Total no. of interviews during 2-hr survey period	
No. of the first questionnaire during 2-hr survey period	
No. of commercial dog walking vehicles parked during 2-hr survey period	
Max no. of vehicles parked during 2-hr survey period	

TALLY: record people passing or within predefined count area (use notes box to describe how tally completed if no clear entrance / exit)

Entering the Site				Leaving the Site			
Total Groups	**Total Adult**	**Total Children**	**Total Dogs**	**Total Groups**	**Total Adult**	**Total Children**	**Total Dogs**

record any incidents, any unusual activities/types of access or any reasons for an unusual no. of visitors

After session FOUR only: give an overview of the site—how busy, types of visitors, any issues such as unsociable behaviour etc.

Figure 14: Visitor tally survey form

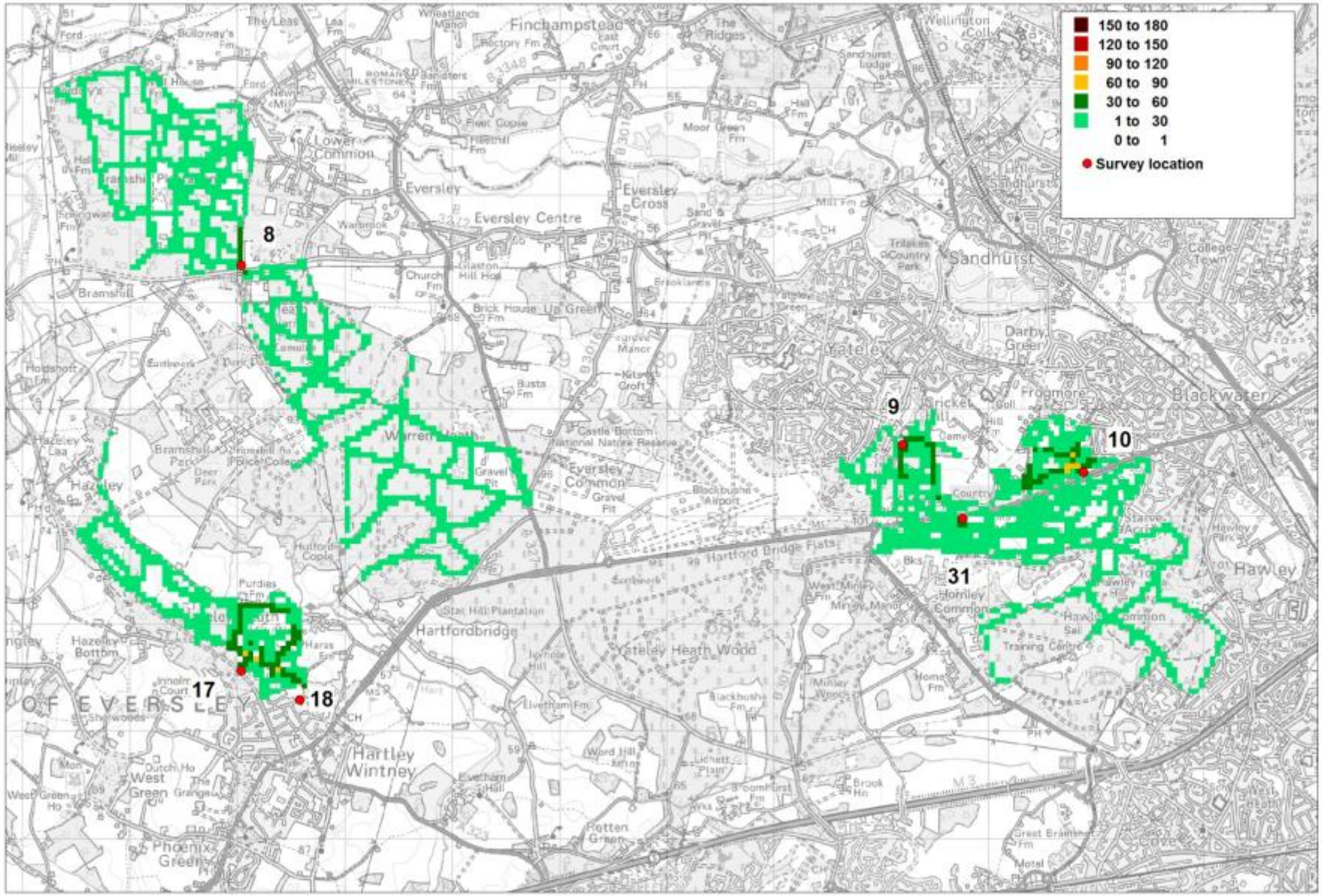
Table 33: Summary of 2012 tally data for total people recorded entering the busy survey locations in 2012 with details of weather and events

Survey location	05/08/2012	07/08/2012	10/08/2012	11/08/2012	14/08/2012	20/08/2012	25/08/2012	26/08/2012	Total
3			208	131					339
15		103		93					196
21			119				104		223
23						141		126	267
24	149				123				272
Events	Olympics	Olympics	Olympics	Olympics					
Weather	Rain	Rain					Rain		

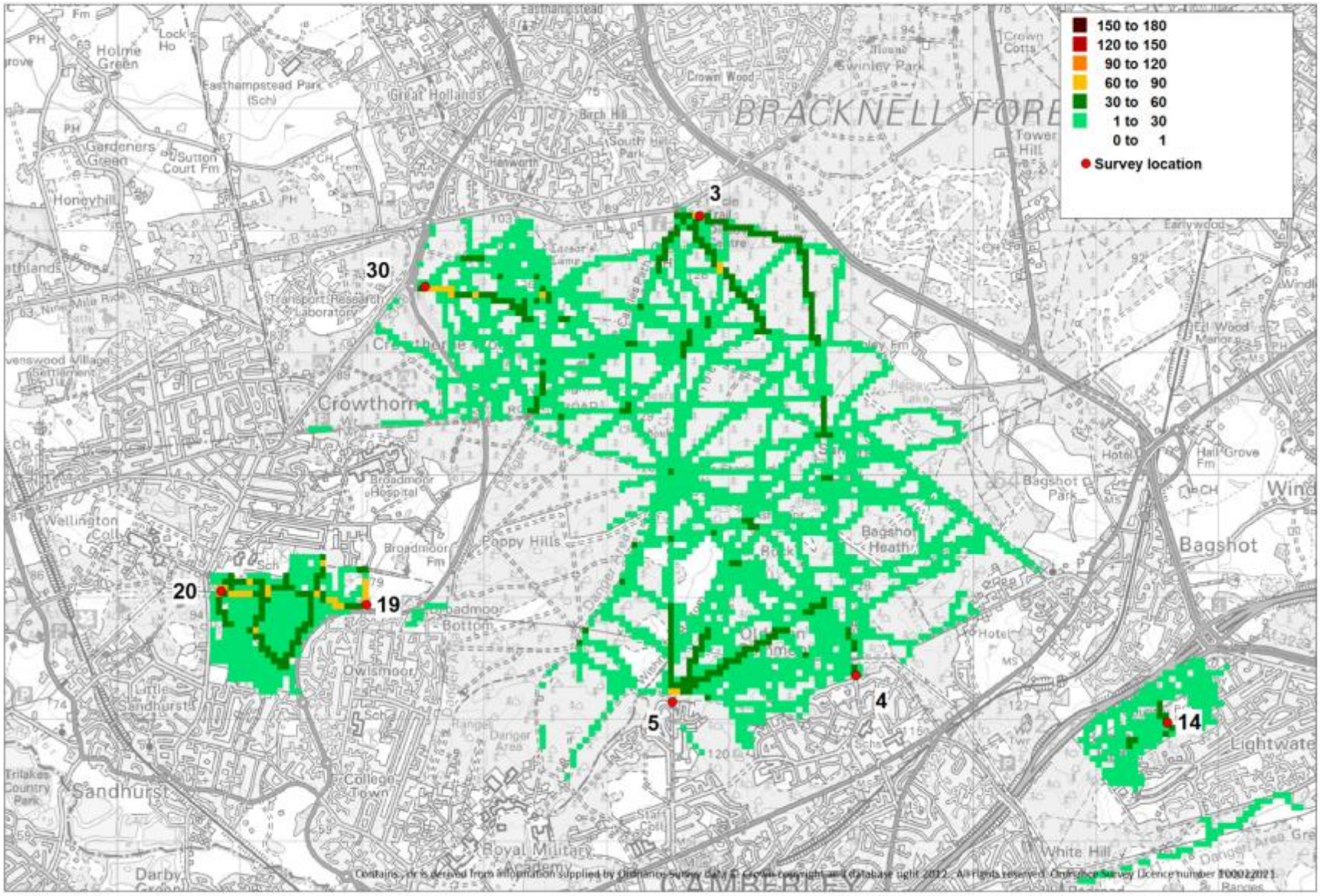
Table 34: Summary of 2013 tally data for total number of people recoded entering the busy survey locations during the recounts in 2013 with details of weather and events

Survey location	04/08/2013	05/08/2013	09/08/2013	10/08/2013	13/08/2013	19/08/2013	24/08/2013	25/08/2013	Total
3			306	400					706
15		86		75					161
21			158				164		322
23						151		209	360
24	270				200				470
Events									
Weather		Rain	Rain				Rain	Rain	

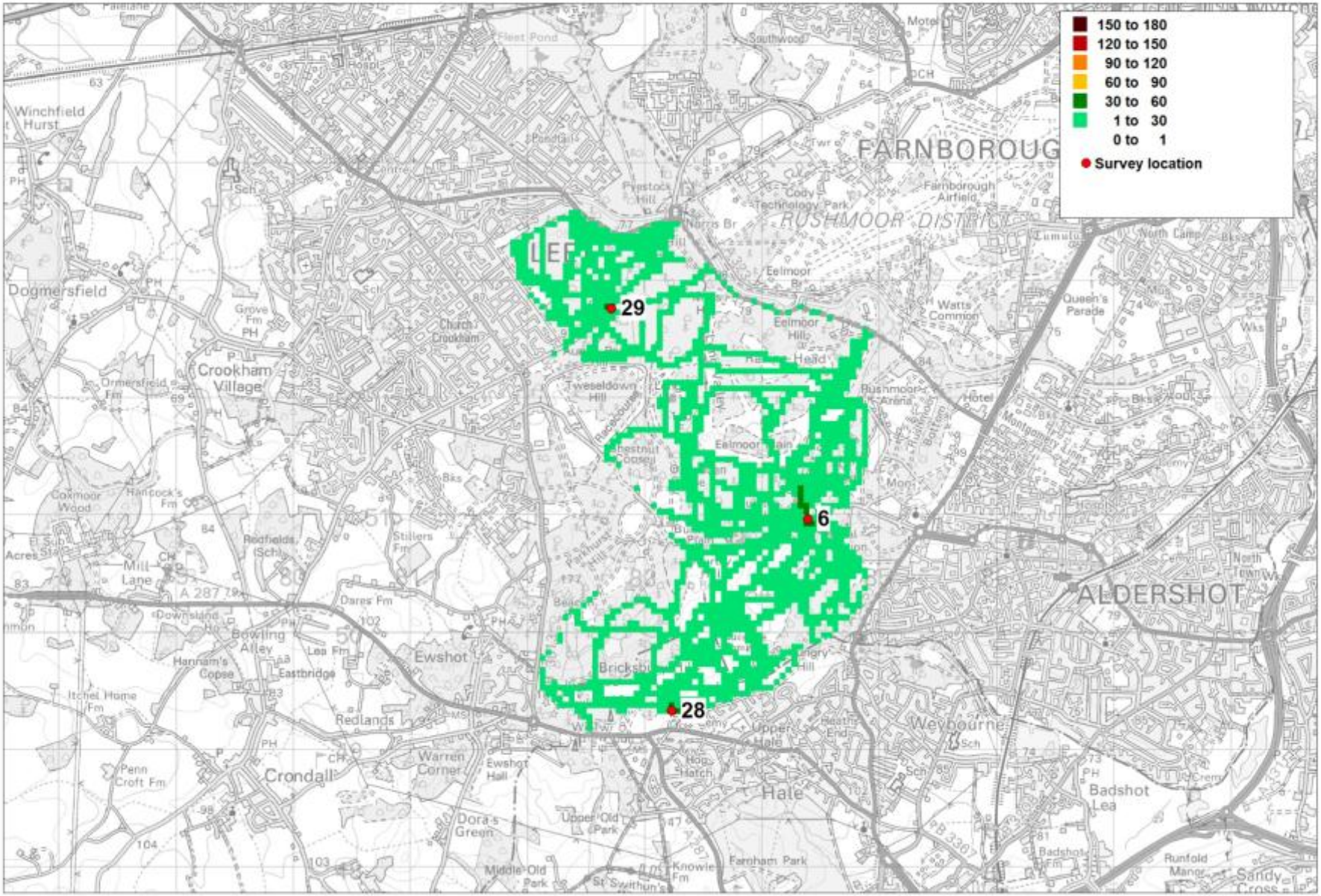
Map 12: Number of visitor routes per 50m grid cell across Bramshill, Hazeley Heath, Castle Bottom to Yateley and Hawley Common SSSIs



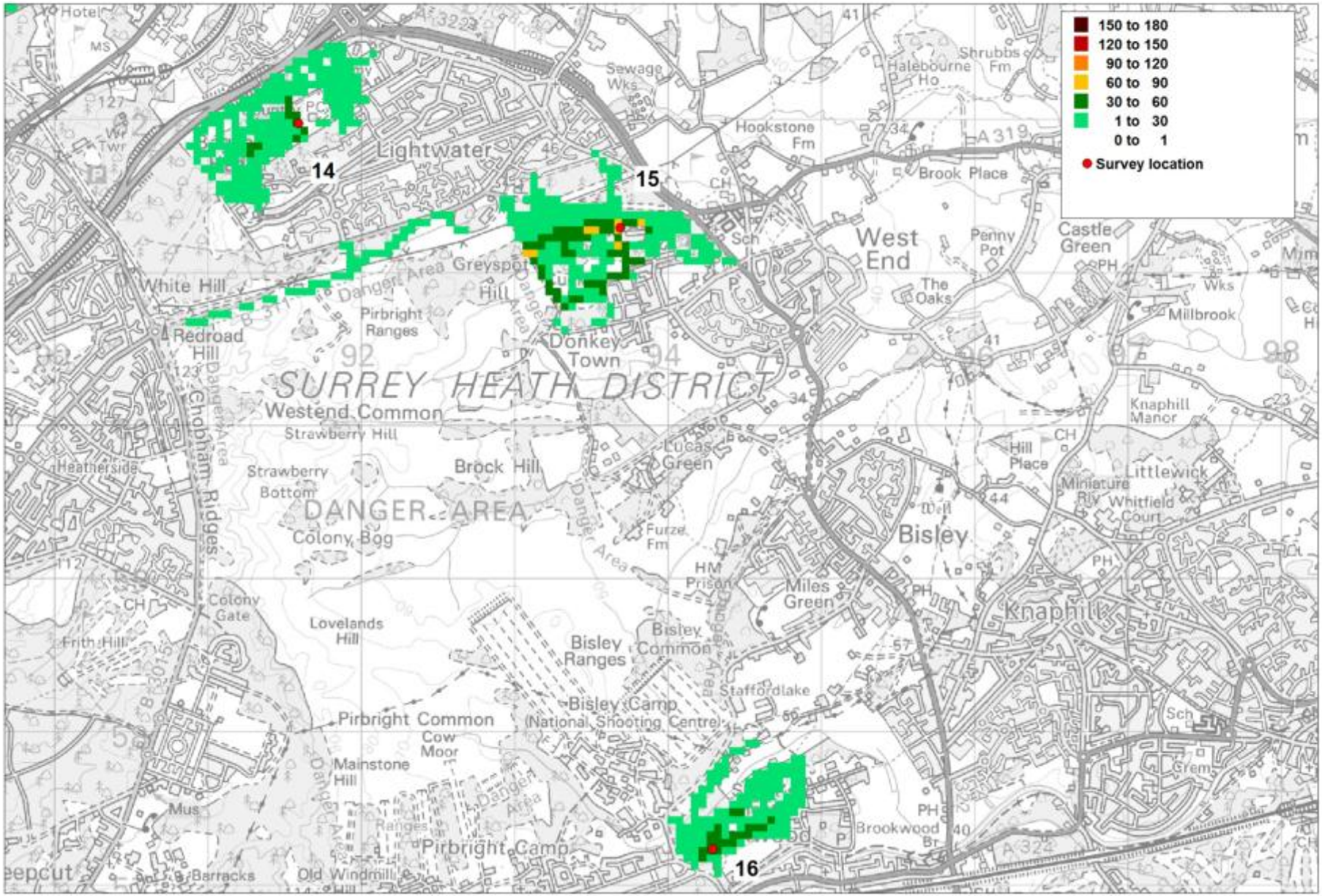
Map 13: Number of visitor routes per 50m grid cell across Sandhurst to Owls Bogs and Heaths and Broadmoor to Bagshot Woods and Heaths SSSIs



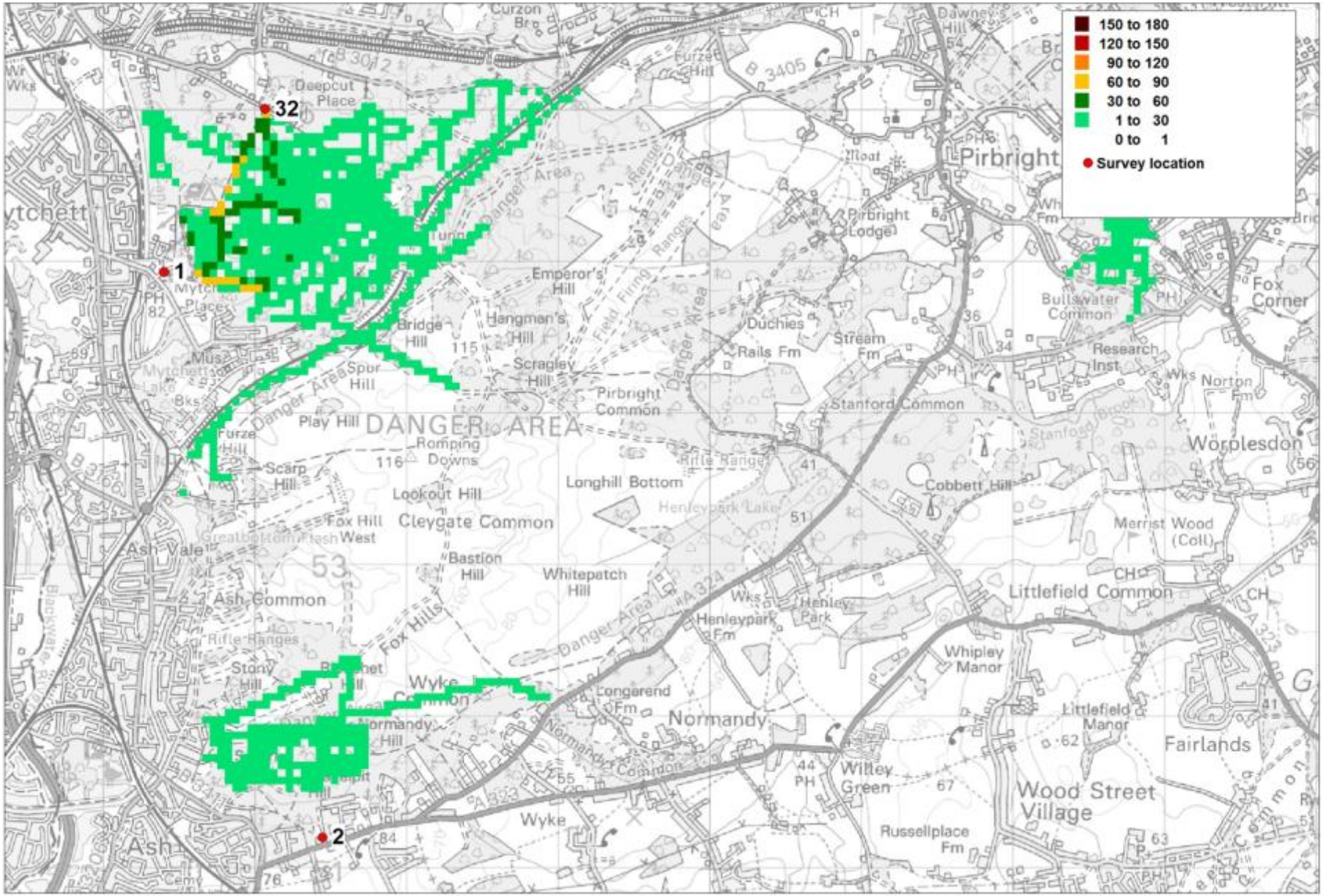
Map 14: Number of visitor routes per 50m grid cell across Bourley and Long Valley SSSI



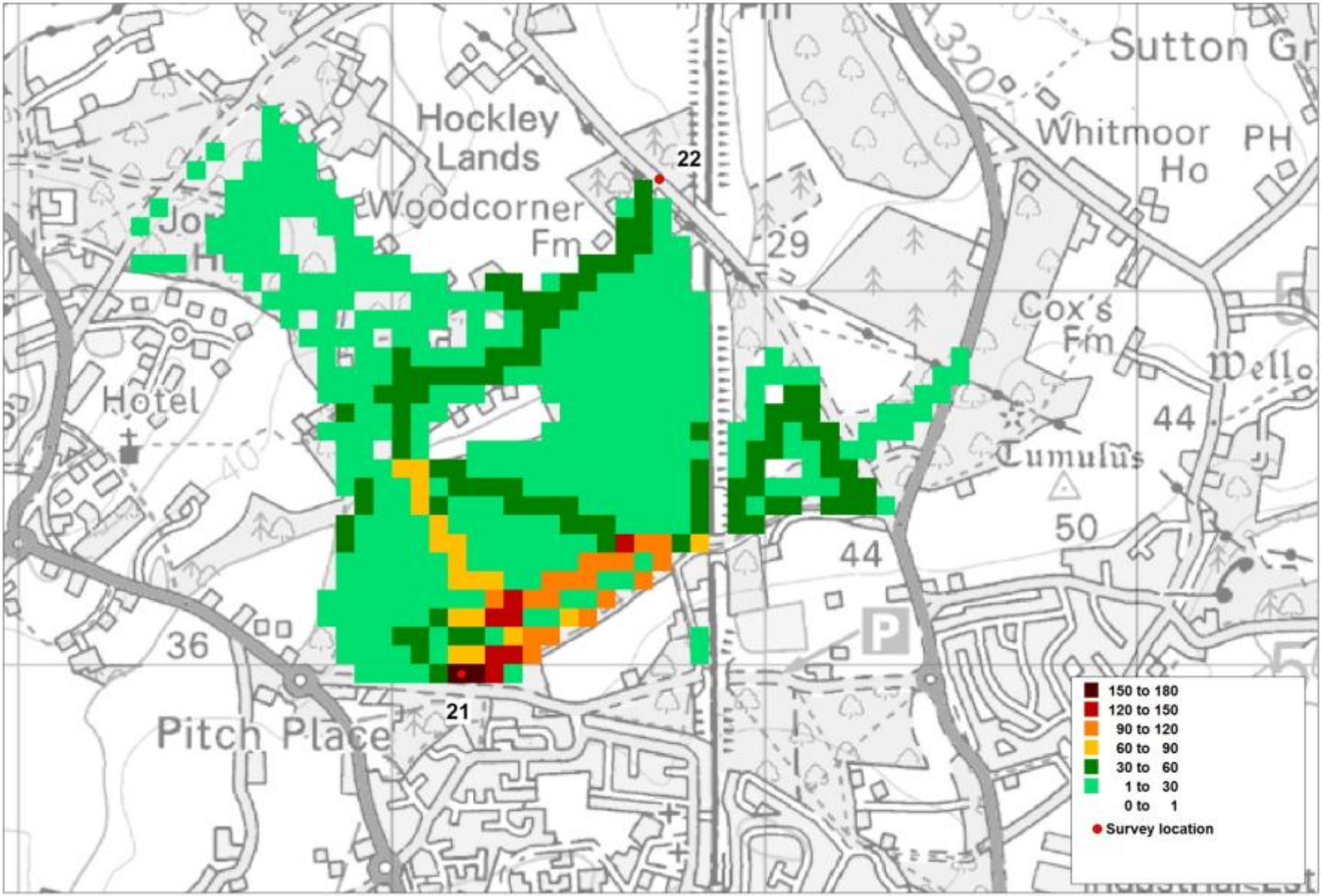
Map 15: Number of visitor routes per 50m grid cell across Colony Bog and Bagshot Heath SSSI



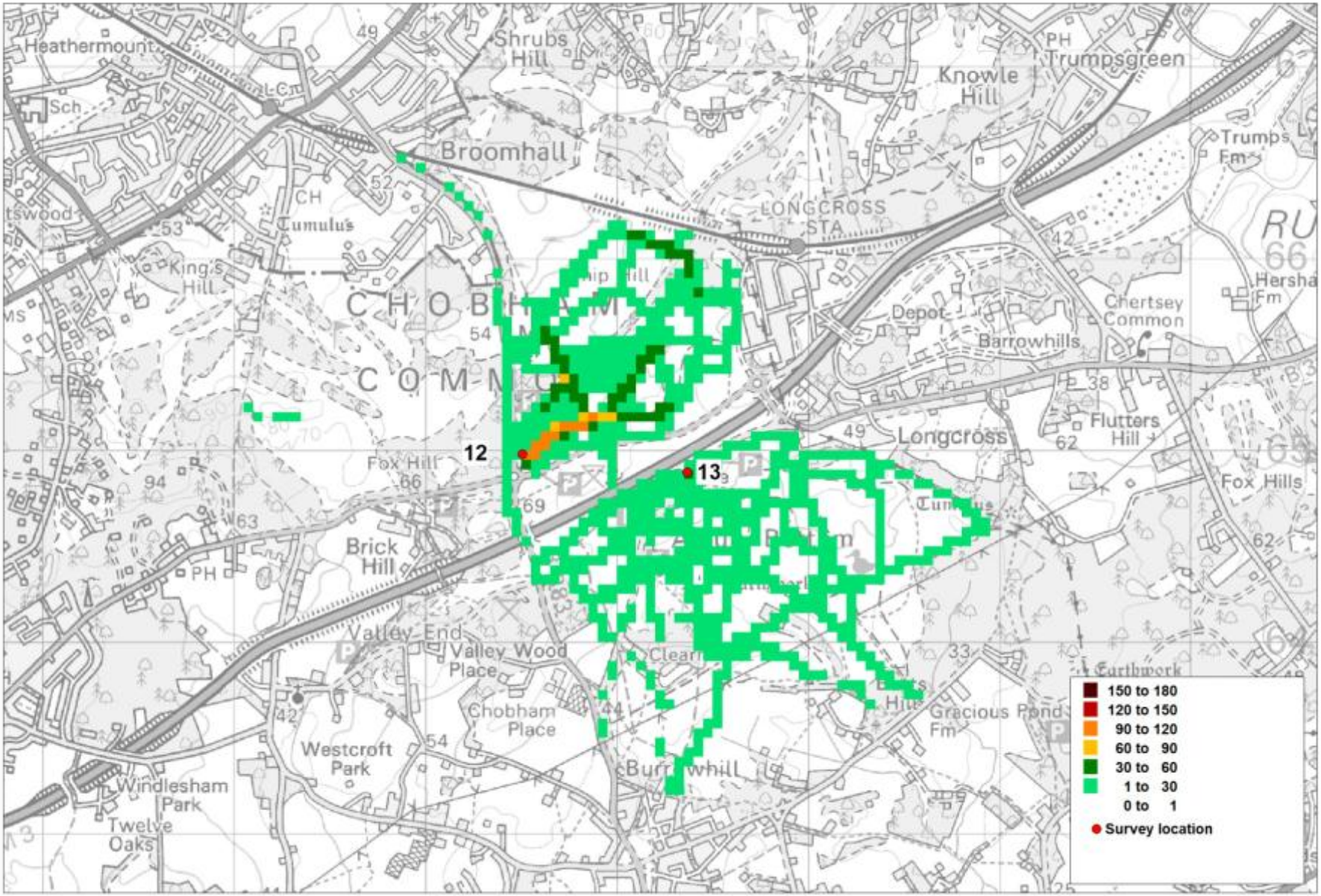
Map 16: Number of visitor routes per 50m grid cell across Ash to Brookwood Heaths SSSI



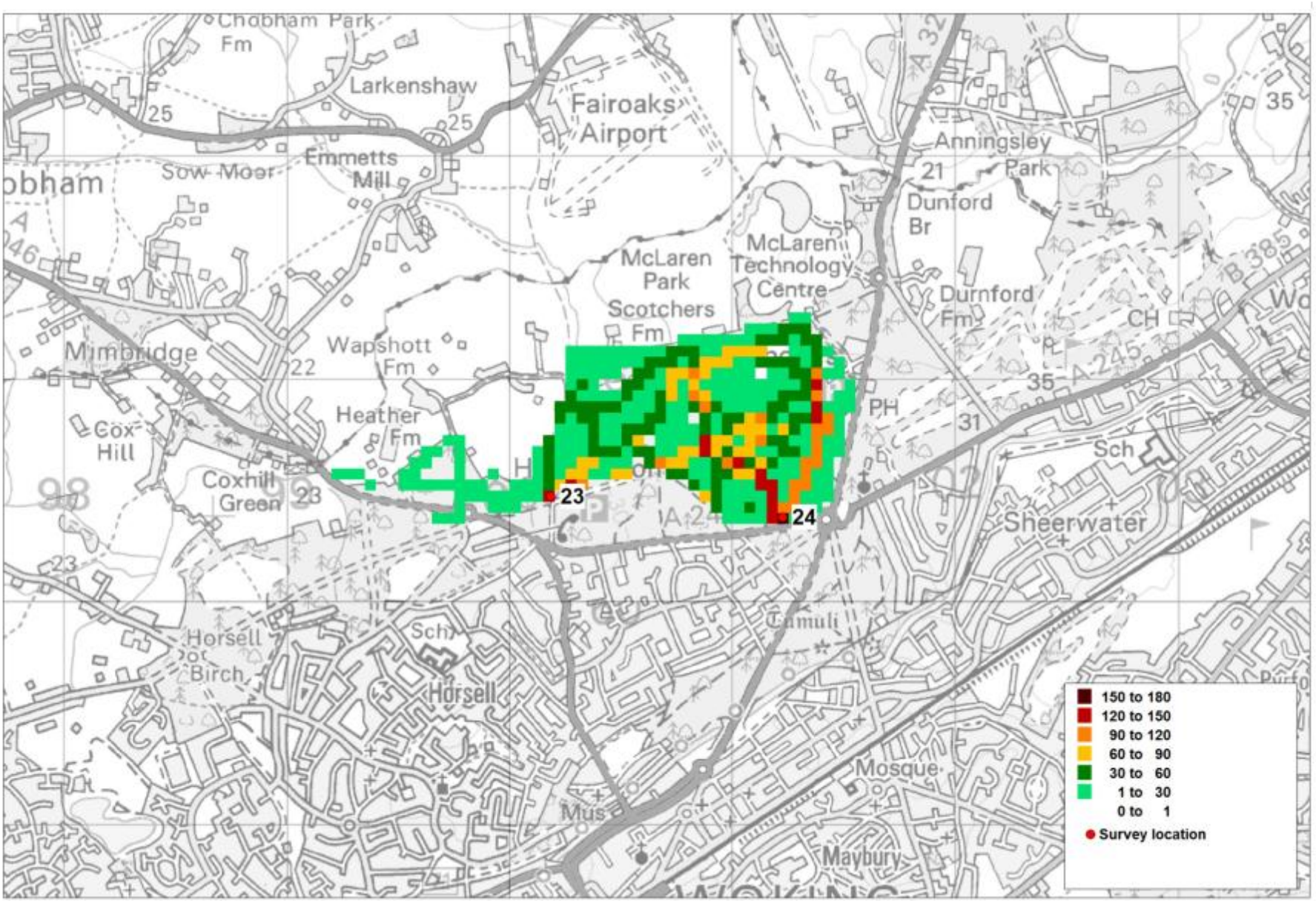
Map 17: Number of visitor routes per 50m grid cell across Whitmoor Common SSSI



Map 18: Number of visitor routes per 50m grid cell across Chobham Common SSSI



Map 19: Number of visitor routes per 50m grid cell across Horsell Common SSSI



Map 20: Number of visitor routes per 50m grid cell across Ockham and Wisley Commons SSSI

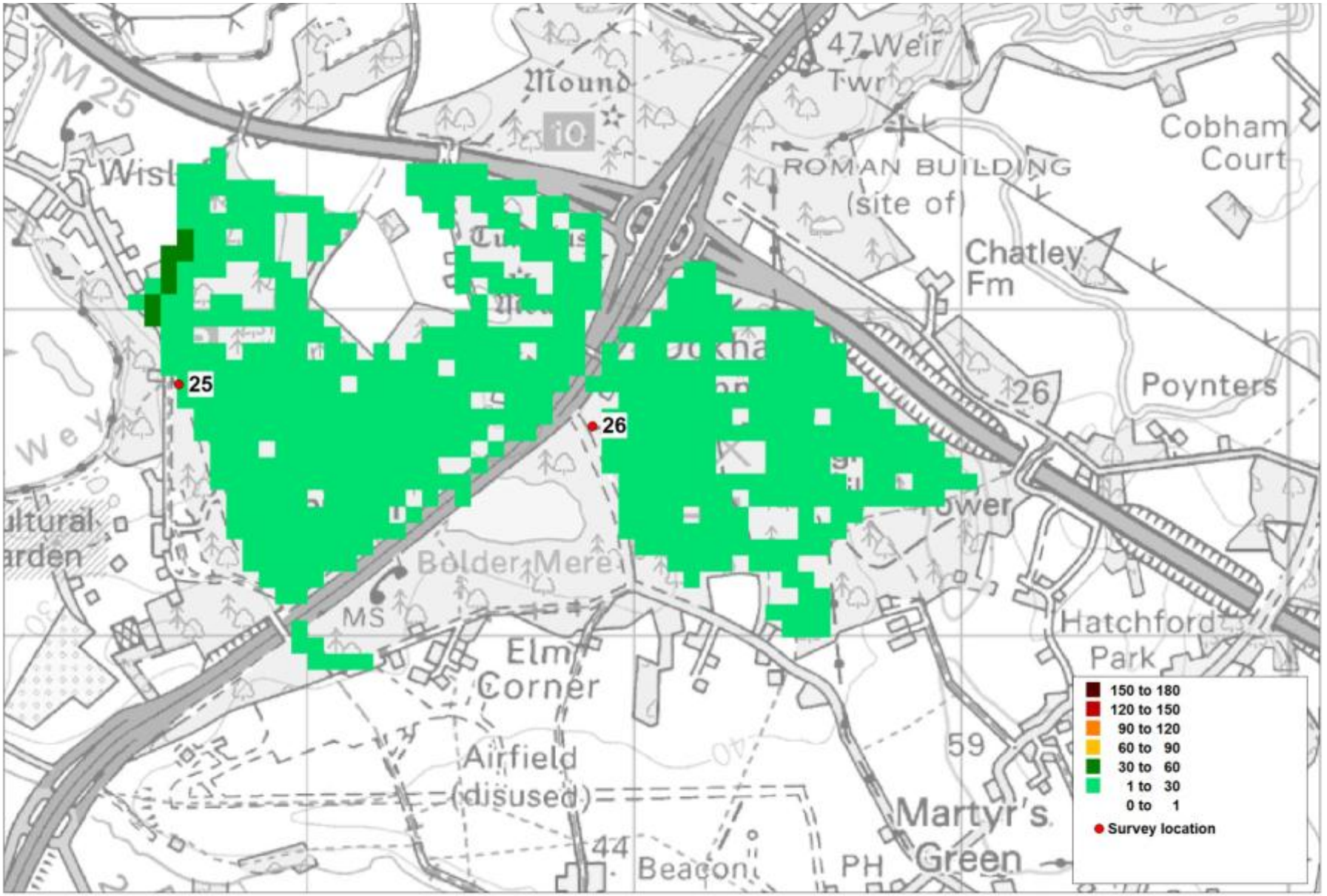


Table 35: Summary of weather and event over visitor survey days. A dot indicates the date an access point was surveyed and the colour coding relates to the average rain fall over the four survey sessions. The darker the colour the heavier the rain category.

Date	Day	Holiday	Events	Location code																											
				1	2	3	4	5	6	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
12/05/2012	Saturday				•						•																				•	
13/05/2012	Sunday								•	•		•																				
14/05/2012	Monday																		•		•									•			
15/05/2012	Tuesday																			•		•									•		
18/05/2012	Friday															•		•													•		
19/05/2012	Saturday					•											•												•				
20/05/2012	Sunday						•							•									•										
21/05/2012	Monday							•							•									•									
25/05/2012	Friday			•																					•							•	
26/05/2012	Saturday												•													•							
27/05/2012	Sunday			•																							•						
28/05/2012	Monday				•																												
01/06/2012	Friday										•																						•
02/06/2012	Saturday																				•								•				
03/06/2012	Sunday	Half term	Jubilee weekend																			•								•			
04/06/2012	Monday								•			•																					
08/06/2012	Friday					•											•																
09/06/2012	Saturday														•																	•	
10/06/2012	Sunday							•								•																	
11/06/2012	Monday						•							•																			
15/06/2012	Friday																									•			•				
16/06/2012	Saturday																	•							•								
17/06/2012	Sunday																							•									•
18/06/2012	Monday																						•				•						
26/06/2012	Saturday																		•														
27/06/2012	Sunday																			•													
28/06/2012	Monday									•																							
03/08/2012	Friday	Summer holiday	Olympics																•														
04/08/2012	Saturday																							•					•		•		
05/08/2012	Sunday																									•				•		•	
06/08/2012	Monday															•													•		•		
07/08/2012	Tuesday																•													•		•	
10/08/2012	Friday					•																	•	•									
11/08/2012	Saturday					•				•						•	•															•	
12/08/2012	Sunday				•				•		•	•															•						
13/08/2012	Monday				•				•																		•						•
14/08/2012	Tuesday																			•						•		•					
15/08/2012	Wednesday																											•					

Date	Day	Holiday	Events	Location code																												
				1	2	3	4	5	6	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
17/08/2012	Friday			•						•											•	•												
18/08/2012	Saturday			•															•	•								•						•
19/08/2012	Sunday													•	•						•	•												
20/08/2012	Monday										•	•			•										•									
23/08/2012	Thursday						•	•																										
24/08/2012	Friday													•				•															•	
25/08/2012	Saturday		Bank holiday weekend				•	•															•											
26/08/2012	Sunday																	•							•									
04/08/2013	Sunday																									•								
05/08/2013	Monday																•																	
09/08/2013	Friday						•																•											
10/08/2013	Saturday						•										•																	
13/08/2013	Tuesday																																	
19/08/2013	Monday																																	
24/08/2013	Saturday		Bank holiday weekend																				•											
25/08/2013	Sunday																									•								

Table 36: Summary of 'other' visitor comments when asked 'For {insert visitor activities/activity} what features would be necessary to make another site attractive for you to use instead of here?' Comments were categorised by key word displayed as the column header. Responses could contain multiple key words. Not all responses could be categorised.

Survey location	Water	Dog	Easy access	Safe	Shade	Close to home	Woodland	Trails	Quiet	More facilities, benches, interpretation and refreshments	Bike trails	Total responses
1	4	8	3	2	1	2	5	1	1	3	2	34
2	0	1	0	0	0	2	0	0	2	0	0	8
3	1	6	2	9	0	0	3	16	2	4	8	47
4	2	4	0	2	0	0	0	1	1	0	1	12
5	2	6	1	4	0	0	1	0	3	0	2	25
6	1	10	0	4	0	0	2	0	0	0	0	15
8	3	6	1	2	1	0	0	0	0	0	2	20
9	0	1	2	1	0	0	0	0	0	0	0	12
10	0	1	0	0	0	1	2	0	0	2	0	17
12	0	2	0	2	0	0	0	0	0	0	0	9
13	0	1	2	1	0	0	2	2	2	0	0	11
14	2	2	0	0	0	0	0	0	0	1	0	4
15	3	3	1	1	0	1	0	0	0	1	0	17
16	1	1	0	1	0	0	0	0	1	0	0	4
17	1	6	0	0	0	0	0	0	1	0	0	9
18	1	1	0	0	0	0	0	0	0	0	0	11
19	2	1	1	0	0	0	0	0	1	0	0	14
20	4	3	0	0	0	0	0	0	1	0	0	12
21	4	11	0	6	0	1	0	0	1	2	0	27
22	4	6	0	3	0	0	0	0	2	1	0	17
23	4	15	1	13	1	0	1	0	2	0	0	30
24	7	17	3	3	2	0	2	0	1	2	0	46
25	2	6	0	0	0	2	0	0	1	0	0	17
26	1	4	1	4	1	0	1	0	0	3	0	14
27	0	3	0	1	0	1	0	0	4	0	1	11
28	5	5	0	2	0	1	0	0	0	0	0	12
29	1	9	0	6	0	1	0	0	0	0	0	16
30	0	6	1	3	0	0	0	0	2	4	0	24
31	0	5	0	2	0	0	0	0	6	3	0	23
32	2	7	1	4	0	0	3	0	1	1	0	24
Response totals	**57**	**157**	**20**	**76**	**6**	**12**	**22**	**20**	**35**	**27**	**16**	**542**