footprint ECOLOGY

North Kent
Visitor Survey results

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Date: September 2011

Version: Final

Recommended Citation: Fearnley, H. & Liley, D. (2011). North Kent Visitor Survey Results. Footprint Ecology.

Summary – Key findings:

Visitor numbers, patterns and activities visiting patterns:

- 542 groups of visitors were interviewed representing information from 930 people with 502 dogs.
- 65% (345) interviewed groups were accompanied by at least one dog.
- 96% (521) interviewed groups were local residents who made their visit from home.
- 61% of interviewees stated they visit the area equally all year.
- 26% of visitor groups made their trip daily and 18% visited most days.
- The highest number of visitor interviews was conducted at Riverside Country Park.
- 70% of visitors who arrive by foot made their visits either daily or most days (in comparison to 31% who arrive by car).
- 62% of interviewees were dog walking.
- 23% of interviewees were walking.

Travel and distance to survey locations:

- 63% of visitors travelled to their visit location by car or van, 34% of visitors arrived by foot, 3% arrived by bicycle and 2 by public transport.
- The distance visitors travelled to different survey locations differed.
- 50% of visitors who arrived by car lived within 4.2km of their visit location and 50% of visitors who arrived by foot lived within 0.8km of their visit location.
- 90% of visitor by car lived within 24.8km and 90% of visitors who arrived by foot lived within 2.7km of their visit locations.

Visitor routes:

- The length of a visitor's route varied according to the activity undertaken and by survey location.
- 23% of visitors stated they walked off the paths and onto the mudflats or the open beach.
- Of the 23% of visitors who routes took them onto the mudflats 65% were accompanied by at least one dog.

Visit motivations and mitigations:

- 28% of interviewees stated their main reason for visiting the locations was the site was ' close to home'; 26% stated 'good for the dog/dog enjoys it'; 12% stated because it was the 'right place for the activity'.
- Interviewees were asked what features would be necessary to make another site attractive as an alternative and 63% responded 'nothing'. Of the remaining 37% of responses, 19% identified 'closer to home'; 18% indicated 'better path surfacing/improved path network' and 16% cited 'more dog friendly' as features which would attractive them to alternative locations.
- 44% of visitors indicated they would spend less time at a visit location if dogs were required to be on a lead (and 15% indicted this would increase the amount of time they spent). Specific measures could be attractive to some visitors and act as a deterrent to other.
- 35% of visitors would spend less time at a location if parking charges were introduced.
- Better path surfacing and the creation of marked trails and routes are features which visitors have indicated would encourage them to spend more time at a location.

Summary

This report presents the results of an on-site visitor survey of the North Kent shoreline. The survey was devised to establish how the shoreline is currently used by visitors for recreation. The work was commissioned by Greening the Gateway and is part of a wider project to investigate the observed decline in bird numbers across the European and Internationally designed sites in the region.

The visitor surveys were conducted in February and March 2011 to assess the level and type of visitor use at selected locations across the shoreline. The interviews were structured to elicit generic and site specific information and visitor details to help us build a picture of who, where, when and why people use the coast. In total 21 access locations were surveyed for eight 2 hour sessions, four sessions were conducted at a weekday and on a weekend day for each location which totalled 336 visitor monitoring hours. A total of 1398 visitors were recorded entering and leaving the survey locations and 542 visitor groups were interviewed. The interview data represents the visiting patterns of 930 people and their 502 dogs. The average group size was 1.7 but 55% of interviewees were not visiting with another person.

There were differences in visitor numbers between the survey locations with the highest number of people were recorded at location 11 Riverside country park (446 people and 78 interviews) while location 16 (Stoke Ouze A228 layby) was the least busy (2 people and 2 interviews). Visitor numbers were typically higher on weekend days than weekdays and 96% of interviewees were local residents.

Visitors undertook a wide range of activities. A very high proportion of visitors were undertaking dog walking (62%) as their main activity and a further 23% were walking which account for 85% of the main activity responses. Across all locations visits were typically short with 57% of visits lasting less than an hour. Two main modes of transport were used to access visit location with 63% of visitors arriving by car and 34% by foot.

The home postcodes of visitors were used to identify the linear distance between the survey location and the visitors home and we found 50% of visitor who arrived by foot lived within 0.9km of their visit location and 90% lived within 2.7km while 50% of visitors who arrived by car lived within 4.2km of their visit location and 90% lived within24.6km.

Route information showed that the length of each visitor route differs varied depending on the activity they undertook and the location visited. Cyclists and joggers covered a greater distance that walkers and dog walkers. We also identified that 23% of visitor routes strayed from the path network and crossed onto the intertidal areas.

Contents

Acknowledgements

1   Introduction

Overview

1.1   This report provides the results of on site visitor surveys conducted during February and March 2011 along the North Kent shoreline between Graves end and Whitstable including three survey locations on the Isle of Sheppy. This visitor report part of a wider project to investigate an observed decline in bird numbers across the European and Internationally protected sites in the region.

The links between housing, access and nature conservation impacts

1.2   A real and current issue for nature conservation in the UK is how to accommodate increasing pressure 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. 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) and coastal sites (Saunders et al. 2000; Randall 2004; Liley & Sutherland 2007; Clarke et al. 2008; Liley 2008; Stillman et al. 2009) provides compelling indications of the links between housing, development and nature conservation impacts.

1.3   The issues are not, however, straight forward. 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 restricted 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).Therefore, 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 there, and that the number of local residents will be closely linked to the number of visitors at a site. Increasing the amount of housing potentially will lead to increased population and therefore increased access. The issues are often particularly acute in coastal areas, as the coast will always have a strong draw for visitors and the areas attractive to people and wildlife tend to coincide along a narrow strip of land around the water's edge. Often managing increased development, the provision of access and maintaining the nature conservation interest involves a balancing act.

1.4   The impacts and issues are complex and researchers tend to focus on the ecological or theoretical implications of their research and avoid making practical recommendations. While there is a large body of scientific and grey literature addressing the impacts of access in coastal environments, and a number of reviews on the effects of access are available (for example see (Hockin et al. 1992; Nisbet 2000; Saunders et al. 2000; Kirby

et al. 2004; Woodfield & Langston 2004a; Woodfield & Langston 2004b; Penny Anderson Associates 2006; Lowen et al. 2008; Stillman et al. 2009) these rarely provide detailed guidance to inform policy or planning. It is often difficult for conservation practitioners or policy makers to fully understand the implications of the research, let alone see a plan or project through appropriate assessment or understand the practical measures necessary to avoid adverse effects on the integrity of a site.

1.5   A detailed understanding of the recreational use of sites is clearly therefore important to underpin strategic planning and policy, particularly where there are development pressures around European Protected Sites. The spatial patterns of recreational access (both on the water and on the shore) and other disturbance (commercial shipping, industry, military training etc) are also critical to reaching a full understanding of access issues. In particular the relationship between access and development (e.g. how housing relates to access) is often the missing piece in the jigsaw as few ecologists are interested in such issues (but see Clarke et al. 2006; Liley & Clarke 2006; Liley, Sharp, & Clarke 2008).

The North Kent marshes

1.6   This study is concerned with the visitor pressure along the 342.3km shoreline of North Kent between Gravesend and Whitstable and the Isle of Sheppy. This stretch of shoreline encompasses three Special Protection Areas (SPAs) and a Ramsar: the Thames Estuary and Marshes SPA, the Medway Estuary and Marshes SPA and the Swale SPA. The Thames Estuary and Marshes is also Ramsar designated at within Gravesham the Ramsar area extends further west outside of the SPA area. The shoreline includes a range of habitats that include wide sandy beaches, shingle beaches, mudflats, saltmarsh and developed habitats (docks, marinas etc).

Aims and Objectives

1.7   In this report we set out the results of on-site visitor surveys that involved direct counts of visitors and interviews with samples of visitors at a range of locations along the shoreline. Visitor data are necessary to understand visitor patterns and motivations of individuals using this wide stretch of coastline. This information will allow us to identify areas of coast with the greatest pressures and determine how far visitors are travelling to the shoreline. We can then consider how they use the coast, how long they spend and their motivation for the visit. This visitor information will allow us to evaluate how the North Kent marshes and shoreline are currently used by local residents and visitors. Parallels are also drawn between the results of this visitor survey and other recent visitor surveys undertaken by Footprint Ecology.

2 Methods

2.1 The visitor and bird data collection were carefully co-ordinated and designed to undergo comprehensive and parallel analysis. This report only details the methodology and results from the 'on site' visitor monitoring element of the project. The methodologies for the bird and disturbance monitoring are in a separate report

Identification of Survey Sites

2.2 Twenty one locations were selected where bird and visitor monitoring over the Winter (in February and March) period of 2010/2011. Visitor and bird survey points were not always in exactly the same locations as the visitor surveys were targeted at access locations to maximise the opportunity of encountering individuals whereas the bird survey locations were points that provided a good vantage point and site line of the birds. The visitor survey locations were typically car-parks or footpath intersections. Each survey location was coded and named and the nomenclature and grid reference of these points and can be found in Table 1. The survey locations of the visitor monitoring are detailed in Map 1. Location 8 was not surveyed as an initial visit revealed only very small numbers of visitors actually left their car and walked around the area, and as the aim was to maximise the number of possible interviews location 8 was replaced with survey location 22.

Map 1: Locations of visitor survey points across the North Kent marshes

Castle Point District (B)

Medway (B)

Thurrock (B)

20
19
17
21
16
15
18
22

5

Gravesham District (B)

Swale District (B)

13
14

12

11
9
8
6

10

7
Canterbury District (B)

4
3
2
1

Tonbridge and Malling District (B)

Maidstone District (B)

NORTH SEA

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10
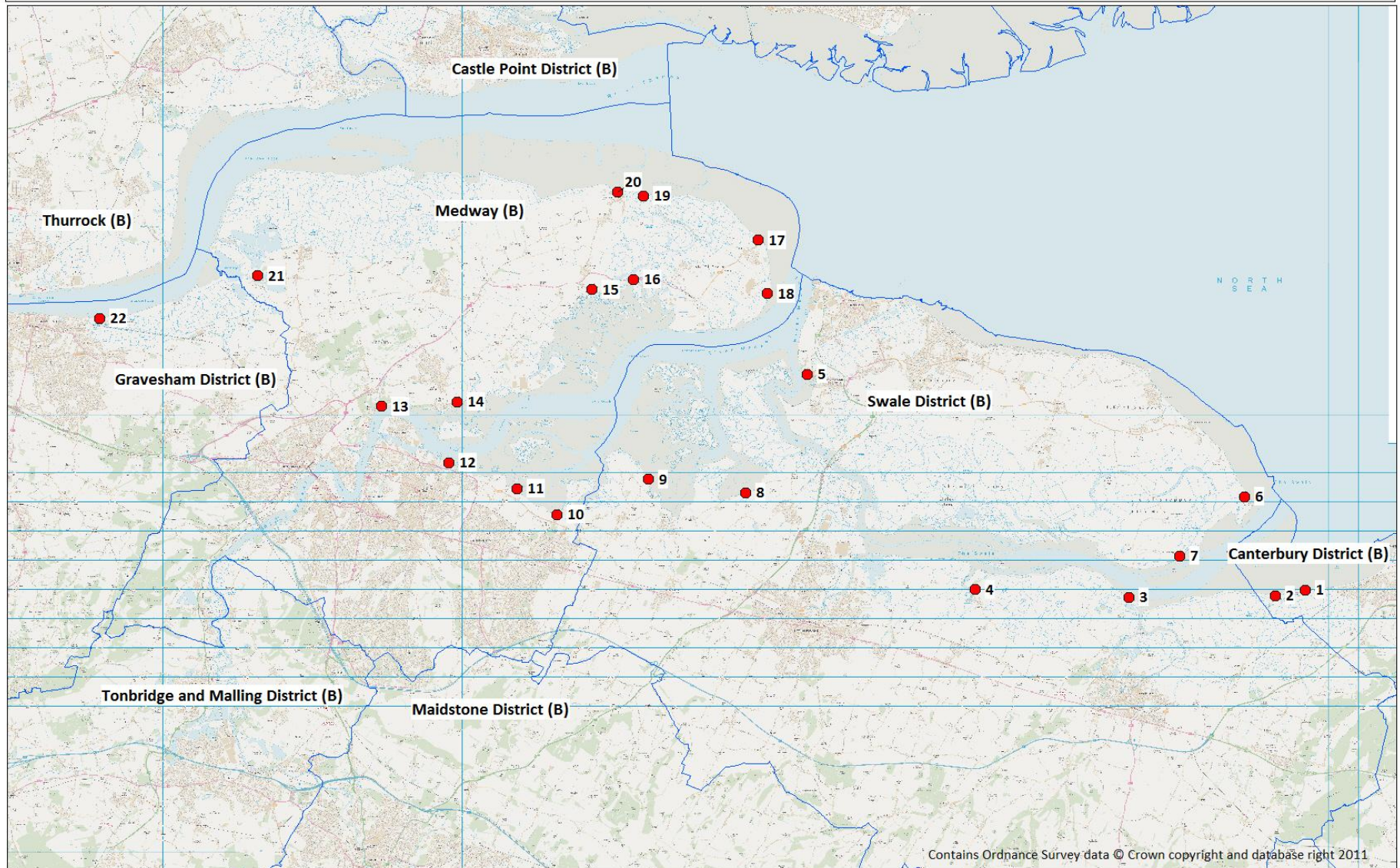
Visitor surveys

2.3 The visitor survey work focussed on people counts and interviews with a random sample of visitors. Counts and interviews were conducted at carefully 21 selected sample points, to capture the range of recreational use believed to occur within each section. The surveyor undertook the counts and interviews in two-hour sessions, spread over a day (07:30 – 09:30; 10:00-12:00; 12:30-14:30; 15:00-17:00). This collected eight hours of survey information on each day for each section monitored. Visitor pressure was consistently recorded across all sites and sections between dawn and dusk to allow direct comparisons between visitor patterns across all of the 21 survey locations and also provided the surveyors with breaks.

2.4 Each location was surveyed for two whole days a full day on both a week day and a day over a weekend. In total 336 visitor monitoring hours over forty two days were completed between February and March 2011.

2.5 During each two hour period the surveyor recorded the number of people (and the number of groups) passing (i.e. entering and leaving if at an access point). Separate totals were recorded for entering and leaving. The number of dogs was also counted. As many people leaving the site as possible were interviewed. The sample of people interviewed was randomised through the surveyor approaching all people leaving (as long as they were not already interviewing others). Only one person (selected at random) from each group / party was interviewed. The following survey protocol was followed:

- 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.
- Surveyors carried photo ID and wore high visibility jackets.
- No unaccompanied minors were approached or interviewed.
- Surveyors carried business cards that were handed out to anyone wanting to check their identity.
- Surveyors were polite and courteous at all times.
- Surveyors were trained in the questionnaire and interview approach, ensuring standard sampling.
- All surveyors read a risk assessment and carried a mobile phone at all times. The police were notified in advance of the presence of our surveyors.
- We aimed to avoid days with inclement weather and incorporated some flexibility into the fieldwork to allow for such days.

2.6 The questionnaire was reasonably brief and the survey was designed to capture the following visitor information (a copy of the questionnaire (figure 16) can be found in Appendix 1):

- Access points used
- Activities undertaken
- Home postcode of the visitor
- Route travelled on site

- Identify opinions relating to management issues and potential changes
- Other parts of the area visited
- Route travelled on site
- Visitor profile: age, employment status etc.
- Home postcode and whether a local resident or visiting tourist

Visitor postcodes

2.7   The distance between each visitors home postcode and the access point of the site they visited was analysed to provide an indication of the spatial distribution of visitors. The visitor data consists of the group size of each interviewee reflecting the true number of individuals represented by the visitor surveys. Each interviewed visitor to the North Kent Marshes was asked for the full postcode from which they had travelled. GIS (MapInfo Professional v10.0) was used to geocode (plot) each postcode location so the distance each group of visitors travelled to the access points could be calculated. Postcodes from the interview data were geocoded using a standard Royal Mail postcode database (Postzon™ 100 data).

Settlements

2.8   The home postcode location of each regional visitor was queried against the Settlement GIS layer available through the Ordnance Survey open data products using MapInfo (v10). Thus, identifying which postcodes fell within the boundaries of each urban settlement.

Visitor routes

2.9   Information on people's routes was collected using maps in the field, with the interviewer probing the interviewee about their route and showing the interviewee the map. Routes were drawn as lines on the map, individually cross-referenced to each questionnaire. These data were subsequently entered into a GIS as polylines. Within the GIS (MapInfo v10.0) these were then summarised to give a total length of route.

2.10   In addition route data were also collected using small GPS Travel Tracker units which were handed to visitors as they entered or first passed through the survey locations. The trackers logged the location of the visitors every three seconds. These points were uploaded using the host software of the unit @trip then imported from a CSV format into MapInfo (v10.5) using GPS tracking software add in Blue-Marble. All GPS points were correct to British Coordinate System (British OSGRS 80 Grid). The stream of consecutive GPS points were then converted to polylines using another add in application to Mapinfo called 'Connect the dots'.

Data and Analysis

2.11   Data analysis was conducted using Minitab (v14). Unless otherwise stated all errors are standard errors. Statistical tests for significance were conducted using chi-squared (χ^2).

3   Results

Visitor Numbers & Overview of Data

3.1   A total number of 168 survey sessions were conducted equating to 336 hours of survey time. Interviews were undertaken between 9th February 2011 and 14th March 2011. Each site was surveyed on a week and weekend day for eight hours between 07:30 and 17:00.

3.2   A total number of 542 people were interviewed which represents visitor information from 930 visitors with 502 dogs. The average group visitor size was 1.7 and this value varied between the survey locations with some areas being more popular with larger groups of visitors and other locations more popular with single visitors (Table 1).

3.3   Of the 542 visitor groups 49% of people fell into 41-65 age groups category. 19% were over 65 24% were aged between 18-40 and 7% of the people in groups were under 18.

3.4   A total of 65% (354)of interviewed groups of visitors had dogs with them which gives an average of 0.9 dogs per group of interviewed visitors across all survey locations and the equivalent of 0.5 dogs per person. The highest number of visitor interviews were conducted at location 11 (River side Country Park) where 78 interviews were completed and only 2 people were interviewed at location 16 (Stoke Ouze A22 layby)(Table 1).

3.5   The number of visitors recorded entering survey locations totalled 1398 and these visitors were in 722 different groups. The visitor monitoring captured interview data from 75% of the total number of visitor groups entering all the survey locations. The total number of people recorded entering each site over the eight survey session ranged between 2 at location 16 (Stoke Ouze layby) to 446 at location 11 Riverside Country Park. The bird survey work (Liley & Fearnley 2011) also identified location 11 Riverside Country Park as the busiest of all survey locations.

3.6   There was a significant difference (χ^2_{20} = 2574.8, p<0.001, n=1398) in the number of visitors that were recorded entering each survey location which shows that the number of visitors using each site was not consistent during the survey sessions.

3.7   The average refusal rate across all the survey locations was low (7%). Site 19 – All Hallows-Yantlett and Site 10 –Motney Hill turning had the highest refusal rates with 25% and 24% of approached visitors unwilling to participate. This refusal rate is lower than those observed in other recent visitor surveys (Fearnley, Clarke, & Liley 2010; Fearnley, Liley, & Cruickshanks 2010).

3.8   The majority of interviewed visitor groups (96% / 521) were local residents and had travelled to the site from their home a further 1% (8 groups)were on a day trip or short visit and were staying with friends and family and a further 2% (10 groups) of interviewees were on holiday in the area and staying away from home. The remaining 1% (3 groups) of visitors gave other reasons for their visit to the survey locations.

Table 1: Summary statistics from the visitor monitoring across 21 survey locations along the North Kent marshes during February and March 2011.

Site code	Site Name	Easting of survey location	Northing of survey location	Number of interviewed visitors	Number of visitors in interviewed groups	Mean group size	Number of groups with dogs	Number of dogs recorded	Percentage of groups with dogs	Number of people entering the site	Percentage of interview refusals from approached visitors	Percentage of groups with dogs	Percentage of people interviewed who entered the site
1	Seasalter-The Oaze	607220	164972	46	82	1.8	27	33	59	91	2	59	51
2	South Oaze	606222	164776	30	49	1.6	22	33	73	49	9	73	61
3	Oare Marshes	601308	164723	37	53	1.4	21	34	57	45	0	57	82
4	Conyer	596155	164980	41	87	2.1	29	39	71	100	2	71	41
5	Queensborough	590548	172369	29	34	1.2	19	25	66	36	15	66	81
6	Shell Ness	605181	168175	16	30	1.9	7	11	44	28	6	44	57
7	Harty	603002	166142	6	21	3.5	2	4	33	21	0	33	29
9	Upchurch	585225	168774	13	27	2.1	8	13	62	34	0	62	38
10	Motney Hill turning	582165	167556	38	66	1.7	20	31	53	110	24	53	35
11	Riverside Country Park	580821	168454	78	148	1.9	47	76	60	446	6	60	17
12	The Strand, Gillingham	578544	169346	34	51	1.5	23	30	68	81	21	68	42
13	Lower Upnor	576287	171272	17	39	2.3	10	13	59	59	0	59	29
14	Hoo St. Werburgh	578816	171428	32	53	1.7	30	40	94	100	20	94	32
15	Middle Stoke	583327	175282	12	14	1.2	11	17	92	12	0	92	100
16	Stoke Ouze A228 layby	584733	175630	2	2	1.0	2	2	100	2	0	100	100
17	Grain Beach	588914	176984	27	41	1.5	15	19	56	41	7	56	66
18	Grain Power Station	589201	175151	21	35	1.7	16	21	76	45	0	76	47
19	All Hallows-Yantlett	585058	178495	3	3	1.0	3	3	100	4	25	100	75
20	All Hallows - Holiday Park	584200	178627	18	25	1.4	16	19	89	28	5	89	64
21	Cliff Creek	572152	175750	26	36	1.4	20	33	77	43	4	77	60
22	Shornmead	571054	175674	16	34	2.1	6	6	38	23	0	38	70
			Totals	542	930	1.7	354	502		1398	7 (average)	68 (average)	

Interviewed visitors and total visitor observed entering survey location

3.9   There was a significant strong correlation between the number of visitors recorded entering each location and the number of people interviewed (Spearman's rank correlation co-efficient r_s=0.91, P<0.001 and Figure 1). This confirms that more interviews were conducted at sites with a higher number of visitors as many more visitors were interviewed and observed at Riverside Country Park (Figure 1). This strong relationship also indicates a consistent level of monitoring between the fields surveyors and between the sites.

Figure 1: The number of people interviewed at each survey location against the number of people recorded entering the same location.
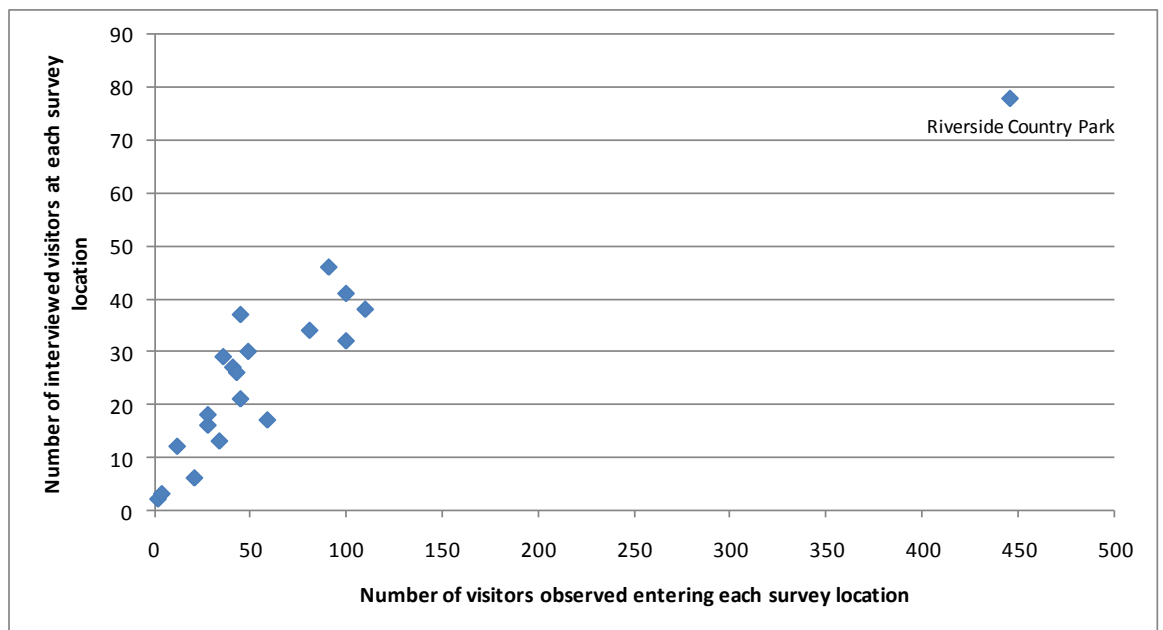
Group size

3.10   The majority of interviews (55%) represent the visiting patterns of single visitors and was the most frequently encountered group size. A further 32% of interviews were from interviewees who were in a group of two people and the 13% of interviews captured information from groups of 3 or more people. In terms of actual numbers of visitors the majority of people 37% (342) made their visits in groups of two and 32% (300) made their visits alone.

Dogs

3.11   The monitoring revealed the importance of the North Kent marshes as a place for visitors to take and exercise themselves and their dogs. At every survey location visitors with dogs were present and overall 65% of the groups interviewed contained at least one dog with them.

3.12   Across all the sites a total of 502 dogs were recorded. The percentage of groups accompanied by dogs did vary between the different locations. All interviewed groups at Site 16 (South Oaze A228 layby) and Site 19 (All Hallows – Yantlett) had dogs with them, but only a limited number of visitors were interviewed at these locations. Other

sites where a high percentage of visitors were accompanied by dogs were location 14 (Hoo St. Werburgh) where 94% of groups had dogs, site 15 (Middle Stoke) where 92% of interviewed groups had dogs and site 18 (Grain Power Station) where 76% of interviewed groups had dogs. The lowest number of interviewed visitors with dogs were at location 7 (Harty) where 33% of groups had dogs and site 22 (Shornmead) where 38% of groups were accompanied by dogs.

Time Spent at survey location

3.13   All visitors were asked how long they spent or would spend in the area (survey location). The analysis is conducted for only those visitors which were local and travelled from home (answered 1 to question 1 in Appendix A, (Figure 12). The majority of groups (57%) spent less than an hour in the area. Just under a third (30%) of interviewed groups advised they spent between 1 and 2 hours in the area and the visits from remaining 13% lasted over 3 hours.

3.14   The length of time people spent at an area varied with site. At sites 6 (Shell Ness) and site 7 (Harty) a total of 64% and 60% (respectively) of interviewed visitors spend more than two hours at these locations. In contrast at sites 17 (Grain Beach), 12 (The Strand, Gillingham) and site 5 (Queensborough) 85%, 85% and 82% of interviewed groups spent less than an hour in these locations (Table 2).

Table 2: The percentage of interviewed visitors by length of time length of visit per survey location

Site code	Less than 1 hour	Between 1 and 2 hours	Between 2 and 3 hours	More than three hours	Blank
1	71	16	7	7	0
2	41	17	28	14	0
3	49	30	14	8	0
4	68	29	0	0	2
5	82	18	0	0	0
6	29	7	50	14	0
7	0	40	40	20	0
9	33	33	17	17	0
10	58	39	3	0	0
11	58	34	4	4	0
12	85	12	0	3	0
13	63	31	6	0	0
14	52	45	3	0	0
15	75	25	0	0	0
16	50	50	0	0	0
17	85	11	0	4	0
18	24	62	5	10	0
19	33	33	0	33	0
20	80	20	0	0	0
21	23	62	15	0	0
22	19	50	13	19	0

Temporal visitation in visitor patterns

3.15   Visitors were asked whether seasonality influences how frequently they visit the survey locations. The interviewees were able to select multiple answers and a total of 622 responses from 522 interviewed visitors who had travelled from home. Nearly two

thirds of visitors (61%) stated that their visit patterns were not influenced by seasonality as they visited the survey location equally all year. A total of 13% of the responses indicated a preference for summer visitation with 8% of the responses indicating a preference for making Autumn visits, 4% for Winter visits and the remaining 9% of responses favoured Spring visitation.

3.16   The majority of interviewed visitors (26%) made a visit to the survey location daily and 18% visited most days. A total of 67% of interviewed visitors (350 people) who travelled from home visited the survey location at least once a week. Visitors which did not visit at least once a month accounted for 12% of the responses
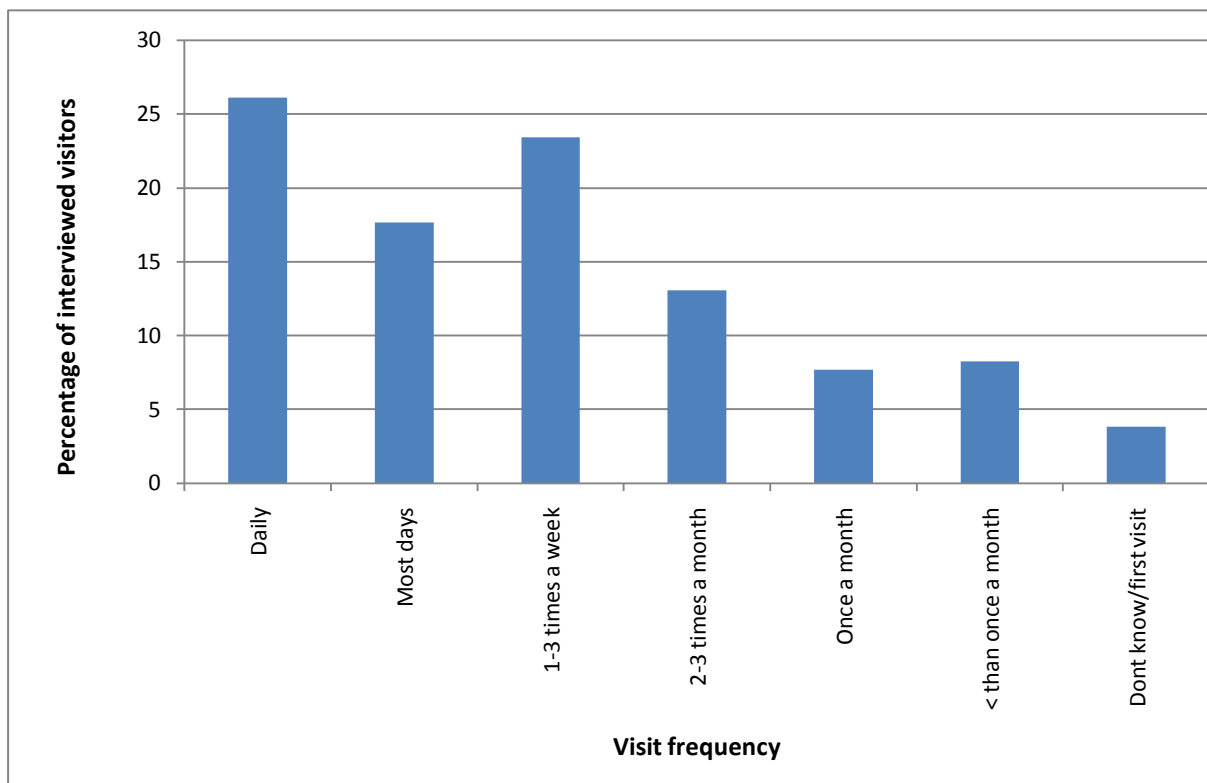
Figure 2: The percentage of visited who travelled from home and where not on holiday groups by their frequency of visit to location.

3.17   Of the visitors to each survey location, sites 19, 14 and 5 had the highest percentage of visitors who visited daily whereas at locations 6, 7 and 9 highest percentage of visitors made trips to these locations less than once a month.

Table 3: The percentage of interviewed visitors who visited each site categorised per visit frequency category as a percentage of all interviewed visitor per survey location.

Location code	Daily	Most days	1 to 3 times a week	2 to 3 times a month	Once a month	Less than once a month	Don't know/first visit
1	9	22	40	13	4	11	0
2	17	10	34	28	3	3	3
3	22	22	19	19	11	8	0
4	41	7	17	5	10	12	7

5	57	32	7	0	4	0	0
6	7	14	21	7	7	29	14
7	20	0	0	0	20	40	20
9	17	8	17	17	8	25	8
10	17	17	31	17	8	8	3
11	19	16	30	18	8	6	3
12	36	24	6	18	6	9	0
13	6	19	25	0	19	19	13
14	61	10	13	6	3	3	3
15	33	33	17	17	0	0	0
16	0	50	50	0	0	0	0
17	22	22	11	15	15	11	4
18	38	24	10	10	0	0	19
19	67	33	0	0	0	0	0
20	40	20	20	20	0	0	0
21	19	15	42	12	4	4	4
22	0	6	50	6	31	6	0

3.18   Visitors were questioned as to whether they preferred to visit an area at a certain time of day and were give a choice of six categories where multiple categories could be selected. Each interviewee responded to an average 1.5 categories and a total 760 responses to this question were given. The majority of responses to this question showed that the majority (24%) of visitors to the site did not have a preferred time of day to visit. A total of 39% of the responses indicated a preference for morning visitation and 33% indicated they tended to visit the areas during the afternoon. Only 4% of the responses stated they visit the areas after 5pm but the low response rate is likely to be reflective of winter survey period when daylight hours are shorter.

3.19   Survey effort across all locations was equally split between weekdays and weekends with the same eight survey sessions per location. Therefore if visitor use was consistent between weekends and weekdays the same number of visitor interviews from each location over both periods. Of the 521 groups interviewed 56% (290 visitors) were interviewed at the weekend and 44% (231 visitors) on a weekday. Overall the weekday to weekend ratio for the total number of visitors is very similar to the weekday: weekend values noted in other recent visitor surveys (Clarke et al. 2006; Liley, Jackson, & Underhill-Day 2006; Fearnley, Clarke, et al. 2010; Fearnley, Liley, et al. 2010) . Counts of the total number of visitors recorded entering each survey location also reflect a similar pattern but with a larger divide between weekend and weekday use with 69% of people recorded at weekends and 31% on weekdays this difference is significant (Sign test of medians, median = 14, p=0.04, n=21).

Activities

3.20   Visitors were asked about the main activity they undertook during their visit the marshes for which only one response was allowed. The survey then allowed multiple other responses to be checked as activities also undertaken during the same visit. For example a visitors main activity undertaken during their visit could be ' dog walking'

with other activities such as 'meet up with friends' and 'see the sea and enjoy the scenery' listed as other activities undertaken during the same visit.

3.21 The most popular main activity undertaken by interviewed visitors during their visit was dog walking as stated by 62% of interviewees. The second most popular activity cited by 23% of the visitors was walking. A total of 4% of visitors made their trip to wildlife watch and 3% of visitors were on a cycle ride (Table 4). The bird survey work (Liley & Fearnley 2011) noted also that dog walking and walking were the most popular activities and that 47% of people were accompanied by at least one dog. The differences between the two values are most likely explained by the different survey techniques. The bird work was observational and so the activities of all visible people in the area were recorded (people on large and small boats, helicopters, etc and these people are unlikely to have dogs with them). The percentage of people recorded from the bird survey with dogs will be lower as a much broader range of activities and people will have been recorded from the bird work than the face to face interviews of the visitor survey.

3.22 A total of 2% of visitors to the survey locations gave other activities which were not categorised on the questionnaire. These 8 visitors state their other main activities as one of the following: investigating family history; photography; pub; quad biking; wardening; wildfowling and 2 visitors provided work related responses.

Table 4: The number and percentage of visitor responses when asked 'What is the main activity you are undertaking today'.

Main visitor activity	Number of visitor responses	As percentage of total visitor responses
Dog Walking	323	62
Walking	119	23
Wildlife watching	19	4
Cycling	16	3
Bait digging/cockling/crab tilling	11	2
Jogging/power walking/Nordic walking	9	2
Outing with family/children	8	2
Other	8	2
Fishing	3	1
See the sea and enjoy the scenery	3	1
Boating	1	0
Meet up with friends	1	0
Total	521	100

3.23 The main activities stated by interviewees at the different survey locations show that across all survey locations the overwhelming majority of sites are visited for dog walking (Table 5 and map 1). Only at location 7 and 22 is an activity other than dog walking the activity undertaken by the majority of interviewed groups and here walking was the most popular main activity.

3.24 The only possible water based activities that were undertaken by the interviewed groups were boating (listed by three groups at location 10) and fishing (which could be either shore or water based which was given by 7 groups at location 17 and 6 groups at

location 22). No visitors stating kitesurfing, windsurfing or canoeing/kayaking as a main activity were encountered. This could well be explained by timing of the

Table 5: The main activity undertaken at each site expressed as a percentage of the number visitors to each survey location stating their main activities.

Site code	Dog walking	Walking	Jogging/power walking/Nordic walking	Outing with children/family	Cycling	Wildlife watching	Boating	Bait digging/cockling/crab tiling	Fishing	See the seas and enjoy the scenery	Meet up with friends	Other	Number of interviewed visitors
1	53	27	4	7	0	0	0	4	0	4	0	0	45
2	62	10	3	0	0	0	0	24	0	0	0	0	29
3	54	11	5	0	0	30	0	0	0	0	0	0	37
4	63	32	2	0	0	2	0	0	0	0	0	0	41
5	71	11	0	0	14	0	0	0	0	0	0	4	28
6	43	7	0	0	14	29	0	0	0	0	0	7	14
7	20	60	0	0	0	0	0	0	0	0	0	20	5
9	75	17	0	0	8	0	0	0	0	0	0	0	12
10	50	36	6	3	3	0	3	0	0	0	0	0	36
11	60	35	0	0	5	0	0	0	0	0	0	0	77
12	67	21	3	3	6	0	0	0	0	0	0	0	33
13	56	44	0	0	0	0	0	0	0	0	0	0	16
14	94	0	0	0	0	0	0	0	0	0	3	3	31
15	83	17	0	0	0	0	0	0	0	0	0	0	12
16	100	0	0	0	0	0	0	0	0	0	0	0	2
17	44	33	0	4	0	0	0	7	7	4	0	0	27
18	76	10	0	5	5	0	0	0	0	0	0	5	21
19	100	0	0	0	0	0	0	0	0	0	0	0	3
20	90	10	0	0	0	0	0	0	0	0	0	0	10
21	77	12	0	0	0	8	0	0	0	0	0	4	26
22	19	44	0	6	6	6	0	0	6	0	0	13	16

Table 6: Other activities stated by interviewees which are undertaken at each site. The values represent the number of responses given by the interviewed groups at each location – interviewees could undertake more than one of these activities.
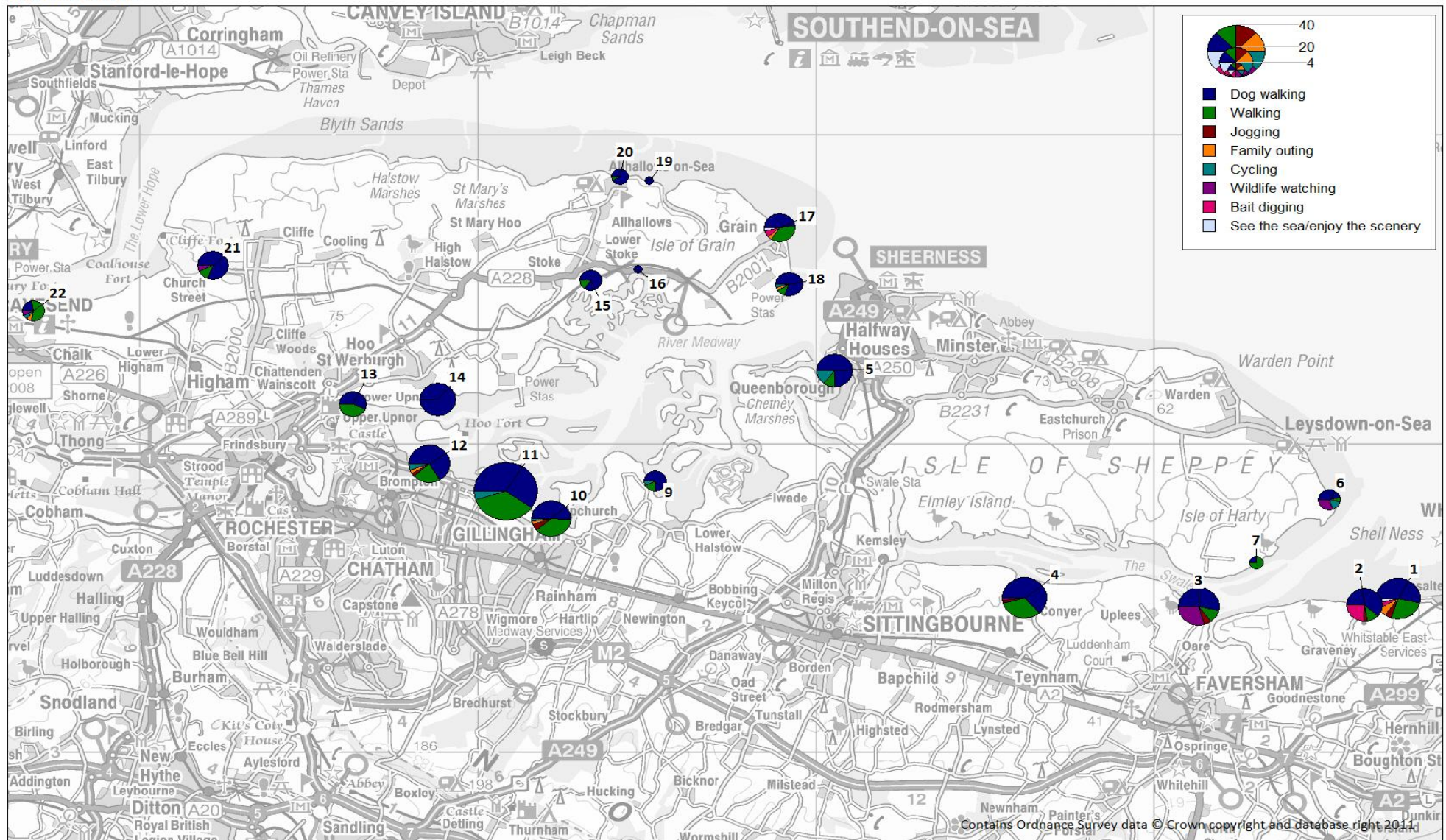
Location Code	Dog walking	Walking	Jogging/power walking/Nordic walking	Outing with children/family	Cycling	Wildlife watching	Other	See the sea and enjoy the scenery	Meet up with friends	Windsurfing	Boating	Kite surfing	Bait digging / cockling/crab tiling	Canoeing / Kayaking	Fishing	Total
1	1	12	2	1		1	1	2	1							21
2	3	9			1	4		1	1							19
3	1	1		1				1								4
4	3	21		2		17	1	1	3							48
5		3	1	1												5
6		1			1		1									3
7	1	2		2		3		2	3							13
9		7							1							8
10	1	6			1	2										10
11		41	2			4		1								48
12		12		1												13
13	1	1		1					1							4
14		3				2			2							7
15	1					1	1		1							4
16		1														1
17	3			2			3	3								11
18		11		2				5								18
19			1			1										2
20		5														5
21		12				7		4								23
22	3	2														5
Total	18	150	6	13	3	42	7	20	13							272

winter survey when the conditions would be demanding to undertake these activities.

3.25   Baiting digging was given as a main activity at only three survey locations 2 17 and 1 where 24% , 7% and 4% interviewed visitors undertook this activity (Table 5 and Map 1).

3.26   Additional activities which were undertaken in the same visit as the main activity are summarised per survey location in Table 6. The most popular additional activities undertaken in a visitor were walking (with 150 responses), wildlife watching (with 42 responses) and see the sea and enjoy the scenery (with 20 responses).

3.27   The number of additional activities undertaken by visitors at the different survey locations differed. The widest variety of activities were recorded at locations 1 where visitors undertook 8 different activities and location 4 where visitors were 7 different activities were recorded (Table 6 and Map 2).

Map 2: Graduated pie chart of the number of visiting undertaking each main activity per location

Legend:
- 40
- 20
- 4

- Dog walking
- Walking
- Jogging
- Family outing
- Cycling
- Wildlife watching
- Bait digging
- See the sea/enjoy the scenery

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Motivations for site visit

3.28   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 then asked which had the most influence over your choice of visit location today. The majority of visitors' choice of visit location was most influenced by distance to location (reflected by close to home in Table 7) and stated by 28% of visitors. The second most given reason for choice of visit location was that it was good for the dog or that the dog enjoyed it, and this response was cited by 26% of visitors Table 7 (which is not surprising given that 68% of visitor groups were accompanied by dogs (paragraph 3.11)).

3.29   Only 1% of the responses (3 visitors) commented that good/easy car parking is what attracted them to their visit location (Table 7).

3.30   An additional 1491 responses were given by the interviewed groups when asked which factors made/motivated them to make a visit to the survey location. Again close to home and good for dog/dog enjoys it were the most frequently cited factors/motivations Table 8. Habitat and familiarity was also frequently cited with 10% of the responses as was the ability to let the dog off the lead and right place for activity which were given by 96 and 97 interviewees (Table 8).

Table 7: The factor which most influenced each visitor to make a trip to the specific location where they were interviewed. Data are from visitor responses from all survey locations

Factor which most heavily influence choice of visit location	Number of responses	As percentage
Close to home	148	28
Good for dog/dog enjoys it	137	26
Right place for activity	64	12
Other	25	5
Quality of this area of coast	22	4
Habit / familiarity	18	3
Quick and easy travel route from home	17	3
Quiet with no traffic noise	14	3
Particular wildlife interest	14	3
Don't know/Others in party chose	11	2
Not many people	8	2
Ability to let dog off the lead	7	1
Suitability of area given weather conditions	7	1
Closest coast to home	7	1
Choice of routes/ability to do different circuits	5	1
Rural feel	4	1
Good/easy parking	3	1
Particular facilities	3	1
Ability to see boats/watch water activities	3	1
Refreshments/cafe/pub nearby	3	1
Particular launching facilities	1	0
Substrate type (sandy beach)	0	0

Total	521	100

Table 8: Other factors which also influenced each visitor to make a trip to the specific location where they were interviewed. Data are from visitor responses from all survey locations

Other factors which influenced choice of visit location	Number of responses	As percentage of total responses
Close to home	284	19
Good for dog /dog enjoys it	164	11
Habit / familiarity	144	10
Ability to let the dog off the lead	133	9
Quality of this area of coast	96	6
Right place for activity	94	6
Quick and easy travel route from home/accommodation	69	5
Quiet with no traffic noise	69	5
Good and easy parking	65	4
Other	62	4
Choice of routes/ability to do different circuits	57	4
Not many people	46	3
Suitability of area given weather conditions	43	3
Closest coast to home	40	3
Particular wildlife interest	35	2
Refreshments / cafe/pub nearby	32	2
Rural feel	20	1
Feel safe here	10	1
Ability to see boats/watch activities on the water	8	1
Particular facilities here	8	1
Don't know/others in party chose	7	0
Substrate type	3	0
Particular launching facilities	2	0
Total	1491	100

Visitors attitudes towards possible changes to locations

3.31   Visitors were asked whether the duration of their visit would alter if specific changes were made to the location they visited. The results of all visitor responses (for all survey locations) were analysed collectively. The most positive change of which would potentially increase the amount of time spent at a location by 18% of the visitors was better path surfacing where 18% of responses.

3.32   A total of 44% of visitors indicated they would spend less time at a location if their dogs were required to be on a lead again this is likely to be reflective of high proportion of interviewed visitors who were accompanied by at least one dog. A total of 35% of visitor groups would also spend less times if parking charges were increased or introduced and the visit time by 32% of the visitors is likely to be reduced also if the sites become busier (Table 9)

Table 9: Responses given by interviewees in responses to any increase or decrease in the length of time they would spend at the survey location in responses to changes. Responses are expressed as a percentage of each change category and should be read by row.

Would you spend more time at the survey location if the following changes were made?	Less	Unsure	More
Site busier with more people	32	67	0
Creation of marked trails and routes with interpretation	3	81	16
Increased or introduction of parking charges	35	65	0
Dogs required to be on leads	44	41	15
Presence of warden/beach manager	2	90	8
Part of shore closed in areas sensitive for wildlife	11	85	3
Better path surfacing / routing	3	80	18

Other visits and visit locations

3.33　　Interviewees were also asked whether they made visits to places for similar purposes. The location of other given places was linked to the main activity the visitor stated they were undertaking. Given that 62% of visitors stated their main activity was dog walking we only collated the free text data for these respondents. The most popular other places to dog walk were surprisingly all country parks with Capstone Country Park, the most frequently cited with 9% of the responses, Shorne Woods Country Park (6%), Jeskyns Country Park (5%) and Riverside Country Park (5%).

Table 10: The other places interviewees who cited dog walking as their main activity visit regularly for similar purposes. Only locations which had over 2% of the responses are included in this table as an additional 140 locations were cited by only 1 or two interviewees.

Other locations visited by visitors dog walking	Number of respondents who gave as answer	As percentage of all other areas visited by dog walkers
Capstone CP	36	9
Shorne Woods CP	25	6
Jeskyns CP	19	5
Riverside Country Park	19	5
Grain	16	4
Whitstable	15	4
Herne Bay	12	3
All Hallows	9	2
The Strand	9	2
Blean Woods	7	2
Gillingham Park	7	2
Oare Marshes	7	2

3.34　　Visitors were asked what features would be necessary to make another site attractive for use instead of the location where they were interviewed. The interviewees were not prompted for a responses and more than one option could be selected. A total of 536 responses were stated and the most popular response was 'nothing' accounting for 63% of the responses (Table 8). This suggests that it would be difficult to deflect these visitors from the sites which they were visiting.

3.35   Visitors would be attracted to another site if it was closer to home (than the location at which they were interviewed) had a good path network or better path surfacing and was more dog friendly than the survey location (Table 8).

Table 11: Responses given by interviewees when asked what features would be necessary to make another site attractive for use an as alternative to the site where they were interviewed.

What features would be necessary to make another site attractive for you instead of here?	Number of responses	Percentage of total responses	Percentage of total responses excluding 'nothing'
Nothing	338	63	
Closer to home	37	7	19
Better path surfacing / path network	35	7	18
More dog friendly	31	6	16
Measures to control other users	28	5	14
Attractive scenery	21	4	11
Refreshments (cafe/pub)	17	3	9
Better / easier parking	13	2	7
Cheaper/ free parking	6	1	3
Toilets	5	1	3
Better information / maps/board	3	1	2
Better launching / access to water	2	0	1

3.36   Visitors also provided a range of other features / management which encourage them to use other sites and these included cycle ways to alternative locations, areas with dog bins, fencing around roads at other recreational locations (so dogs can not run onto the highways),not so much litter in other places, child friendly sites and less dogs off lead.

3.37   It is clear that visitors have very different preferences as to what attracts or deters them different recreational areas. Some people are drawn to quieter areas and some prefer busier areas because they feel safer. We can speculate that any visitors specific preferences will be based on where they live, the main activity they undertake and their mobility.

Mode of transport to visitor location

3.38   Just under two thirds of the interviewed visitors (63% or 326) to all survey locations travelled by car/van, 34% (178) arrived by foot, 3% (15) by bicycle and 0% (2) by public transport.

3.39   At two (location 7 and 16) of the 21 survey location visitors arrived exclusively by car (Table 12 and map 3). Visitor arrived by foot at 20 locations, bicycle at 8 locations and public transport was used by visitors to access only two locations (Table 12 and map 3). Locations 20 (80%) and 5 (68%) had the highest percentage of visitors who arrived by foot and at locations 7 and 16 visits arrived exclusively by car but this could be reflective of the small number of interviewed visitors at these locations (Table 12 & Figure 3).

Table 12: The mode of transport used by visitors to the North Kent marshes. The values per transport category are expressed as a percentage of the total number of interviewed visitors at per location who arrived by each transport mode.

Site code	Car/van	Foot	Bicycle	Public transport	Total number interviewed visitors per

					location
1	76	24	0	0	45
2	86	10	0	3	29
3	92	8	0	0	37
4	59	41	0	0	41
5	18	68	14	0	28
6	71	14	14	0	14
7	100	0	0	0	5
9	42	50	8	0	12
10	72	25	3	0	36
11	74	21	5	0	77
12	48	48	3	0	33
13	56	44	0	0	16
14	39	58	0	3	31
15	42	58	0	0	12
16	100	0	0	0	2
17	48	52	0	0	27
18	48	48	5	0	21
19	33	67	0	0	3
20	20	80	0	0	10
21	96	4	0	0	26
22	38	56	6	0	16

Map 3: Graduated pie chart of the number of visitors arriving at each location by different transport modes

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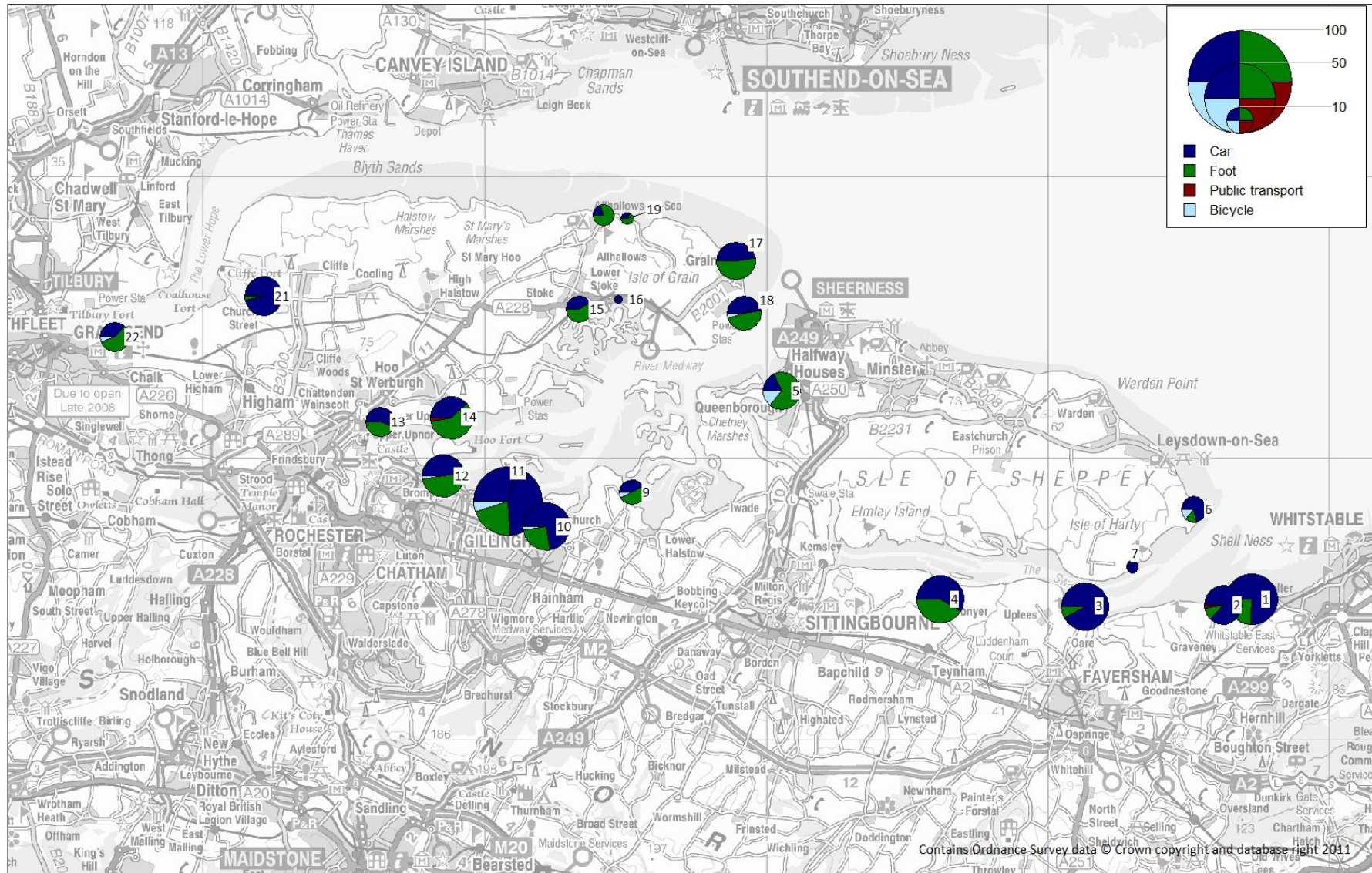
3.40   The absolute number of interviewed visitors to each survey location by their mode of
        arrival transport is shown in Figure 3 and map 3 and illustrates that most visitors arrive
        at the survey locations by car. However, the proportion of visitors arriving using
        different transport modes does vary with location
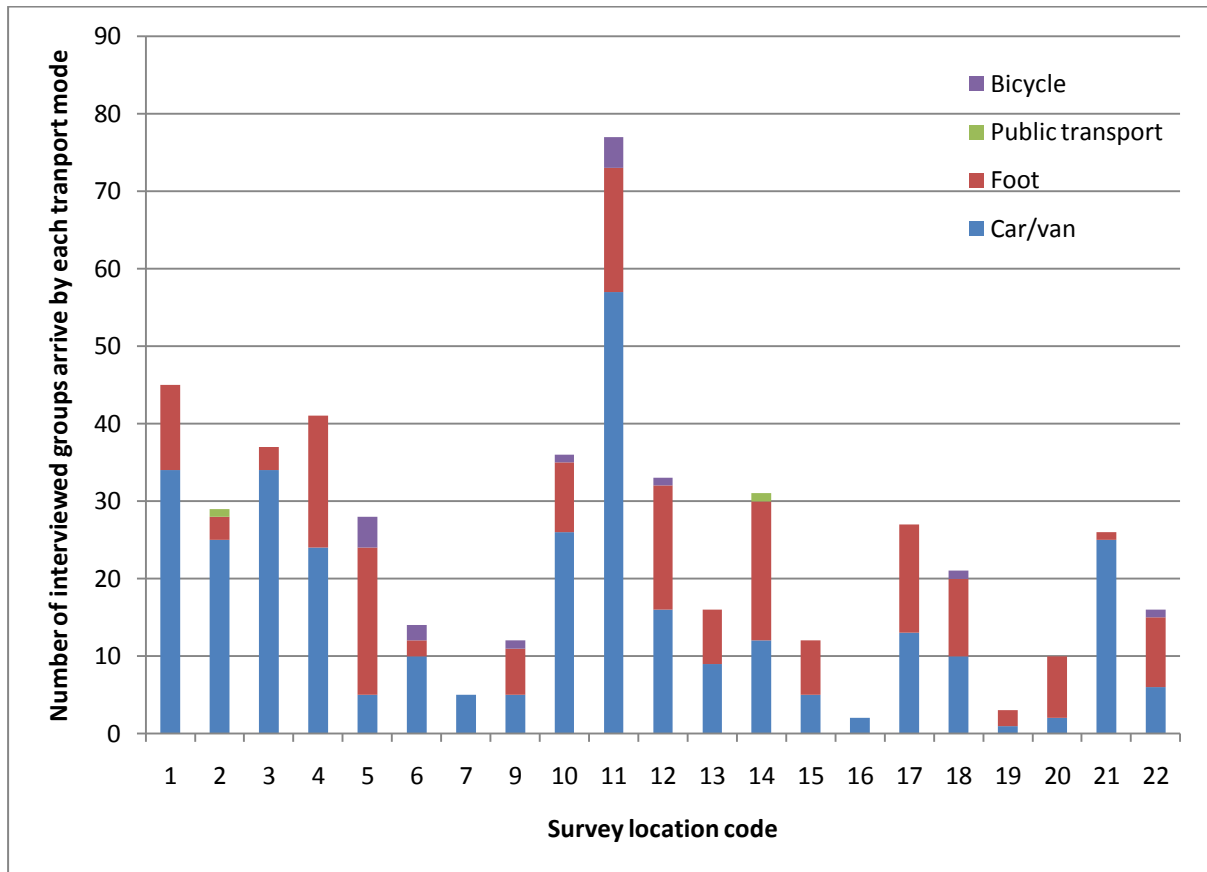
Figure 3: The number of interviewed groups arriving at each survey location by different modes of transports.

Home postcodes of interviewed visitors

3.41   From the 521 visitors interviewed and were visiting from home only 8 visitors (or 1.5%)
        provided invalid or incomplete postcodes. Overall the visitor monitoring captured the
        home postcode locations of 98.5% of visitors who were local residents to the area.
        Fifteen of 19 the interviewees who were on holiday or not local to the area provided
        valid postcodes.

3.42   Map 4 shows the postcode locations of all interviewed visitors who provided a valid
        postcode. Interviewed visitor had come from Kent, Essex, Hertfordshire, London and
        Brighton. The majority of visitors came from Kent notably Gillingham.

3.43   From the 521 regional visitors 415 postcodes could be associated with urban
        settlements and 106 postcodes fell beyond the boundaries of urban areas. Only
        settlements which contained postcodes from four or more visitors are included in Table
        13.

3.44   The overwhelming majority of visitors from urban areas came from Gillingham (122 or
        29%) and a further 43 (or 10%) came from Whitstable.

We also considered in which Borough/Districts the interviewed visitors were resident. Just over half (52%) of all interviewed visitors lived in the Medway and just under a quarter (24%) lived in Swale. A total of 88% of interviewed visitors came from three areas Medway, Swale and Canterbury (

3.45   Table 14). The district and borough boundaries along with the home postcode locations of interviewed visitors are illustrated on Map 5.

Table 13: Number of visitors to the North Kent marshes whose home postcode falls within the settlement boundaries of each urban area.

Settlement	Number of visitors
Gillingham	122
Whitstable	43
Isle of Grain	29
Faversham	26
Queenborough	21
Strood	17
Gravesend	16
Chatham	15
Hoo	15
Sittingbourne	13
Maidstone	8
Teynham	8
Rochester	7
Minster	6
Allhallows	5
Canterbury	5
Cliffe Woods	5
Cliffe (Medway)	4
Deal	4

Table 14: Number of interviewed visitors to the North Kent marshes whose home postcode falls within different Districts and Boroughs.

District / Borough	Interviewed residents per Borough/District	% of all interviewed residents
Medway (B)	268	52
Swale District (B)	125	24
Canterbury District (B)	59	12
Gravesham District (B)	24	5
Maidstone District (B)	8	2
Dover District	5	1
Ashford District (B)	2	0
Bexley London Borough	2	0
Dartford District (B)	2	0
Lewisham London Borough	2	0
Sevenoaks District	2	0
Southwark London Borough	2	0
Thanet District	2	0
Basildon District	1	0
Bromley London Borough	1	0
Enfield London Borough	1	0
Greenwich London Borough	1	0
Harrow London Borough	1	0
Shepway District	1	0
The City of Brighton and Hove (B)	1	0
Tonbridge and Malling District (B)	1	0
Wandsworth London Borough	1	0
Total	512	

Map 4: Postcodes of interviewed visitors
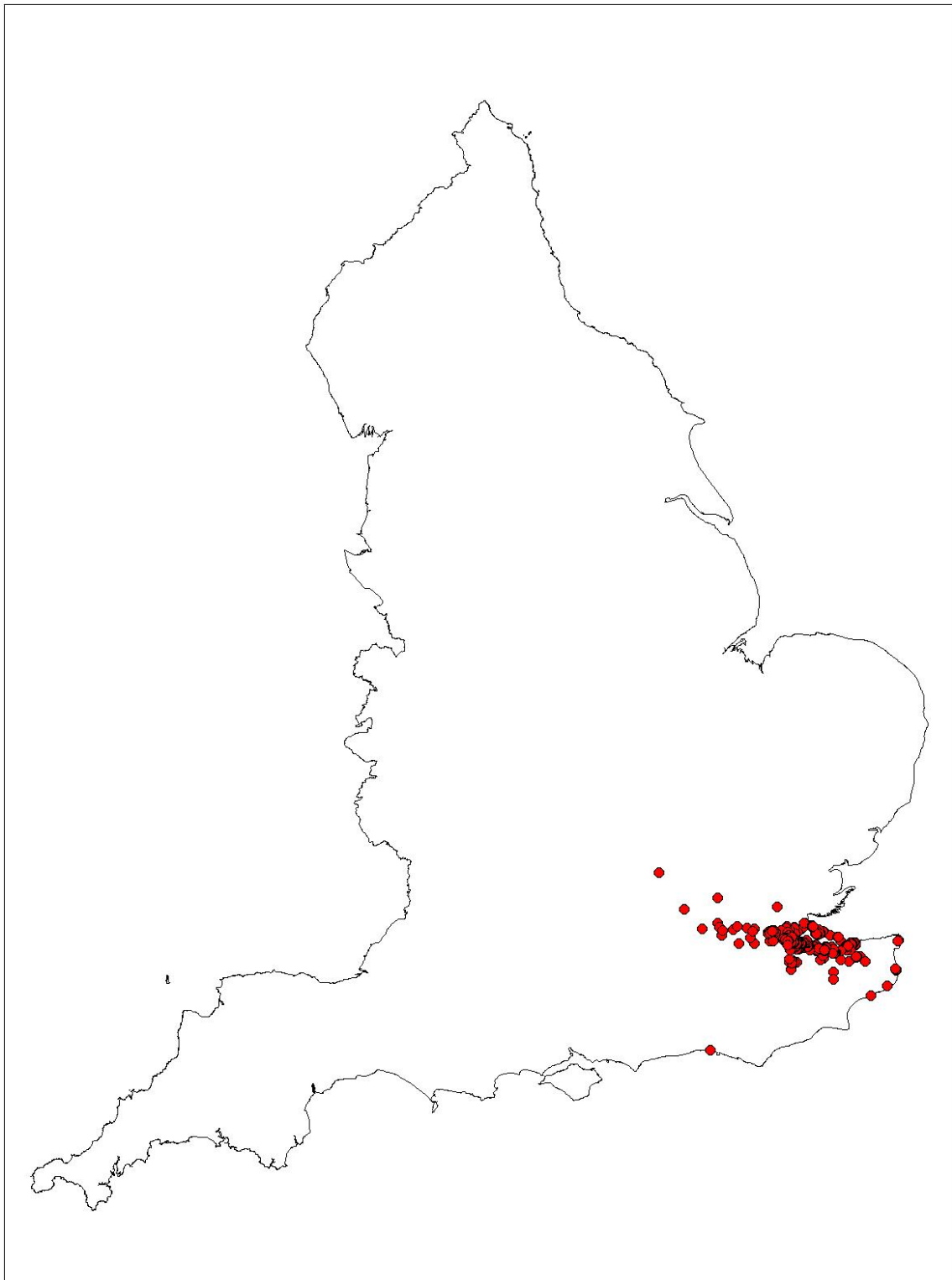
Visit frequency and dog ownership by postcode

3.46   Interviewee visit frequency was considered on a per postcode basis and the spatial data illustrates that visitors with postcodes nearer to survey location have a higher visit frequency (map 5).

3.47   Map 6 shows the postcode locations of visitors who were accompanied by dogs. More visitors were interviewed who were accompanied by dogs than visitors who were not accompanied by dogs.

Distance to survey locations from visitors home postcode

General

3.48   The home postcode locations of regional visitors to the survey locations are shown in map 7. Visitors also appeared to travel different distances to different survey locations (Figure 4) with location 7 (Harty) attracting visitors from the largest catchment area where 50% of visitors lived within 30km whereas visitors to location 5 (Queensborough) were much more local with 50% of interviewees living within 0.6km.

3.49   Across all survey location visitors lived on average (a linear distance of) 6.5km from the survey location where they were interviewed. The shortest distance from a postcode location to a survey location was 0.1km to access location 6 (Shell Ness) and the greatest distance was 95.3km to visit location 18 (Grain Power Station) (Figure 4).

Distance and activities

3.50   The distance travelled to undertake different activities was also investigated and it appears that visitors travel different distances to undertake different activities. Half of visitors who were dog walking lived within 2.2km of their visited location where as half of visitors who were' wildlife watching' lived within 24.6km of their chosen visit location (Table 15). This suggests that visitors are willing to travel further to sites which are more suited to their chosen activity (children's facilities, opportunities to wildlife watch and fish).

3.51   Dog walking, jogging/power walking/Nordic walking and cycling were the activities which were undertaken closest to home by visitors. A total of 75% of dog walkers lived within 4.5km of the visited location, 75% of visitors who were jogging/power walking/Nordic walking lived within 3.4km of their visit location and 75% of visitors who were cycling lived within 4.7km of their visit location (Table 15). Visitors who were walking their dogs lived closer to their visit location than visitors who stated walking as their main activity as result also noted by Fearnley, Clarke, et al. (2010).
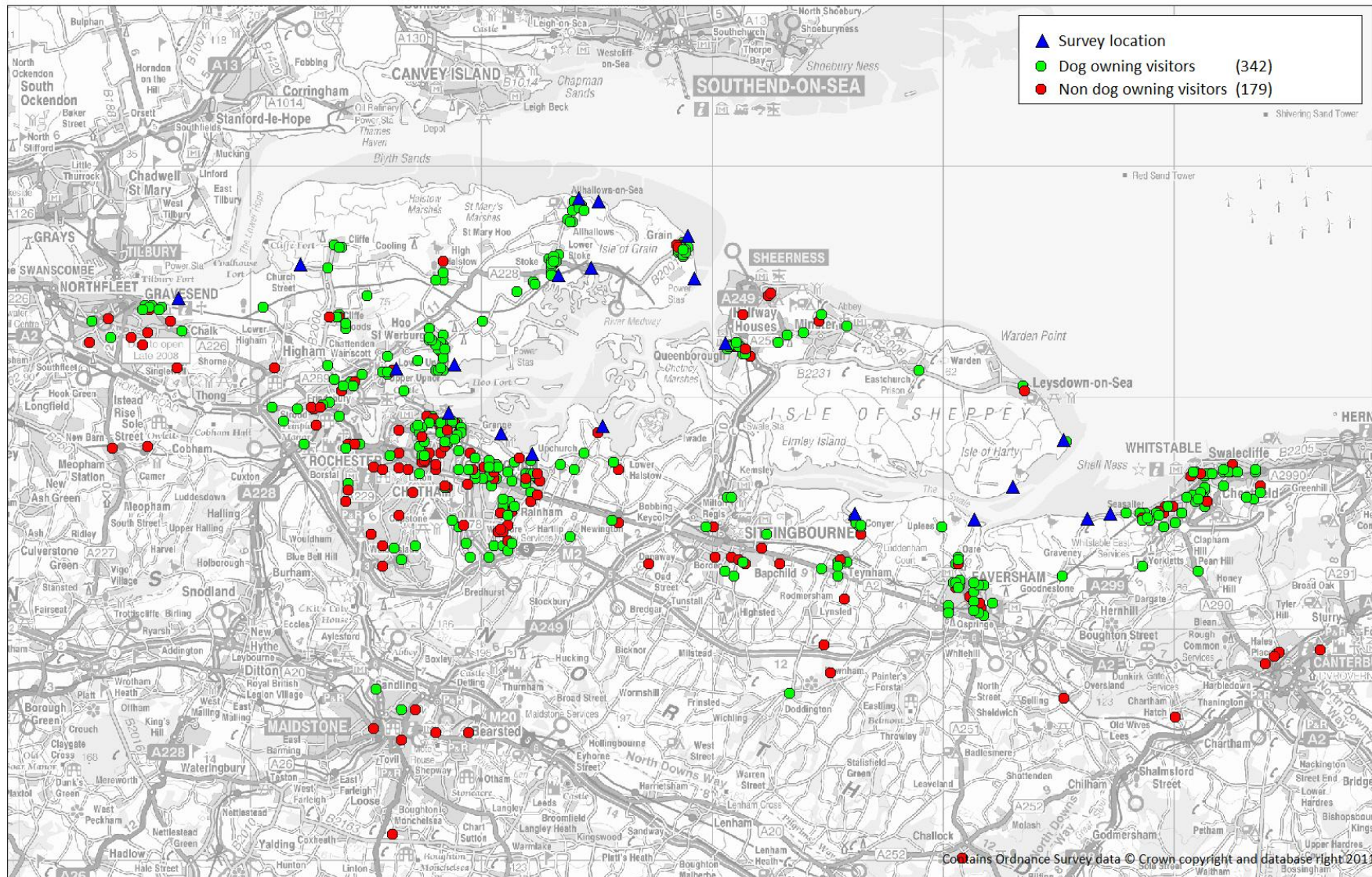
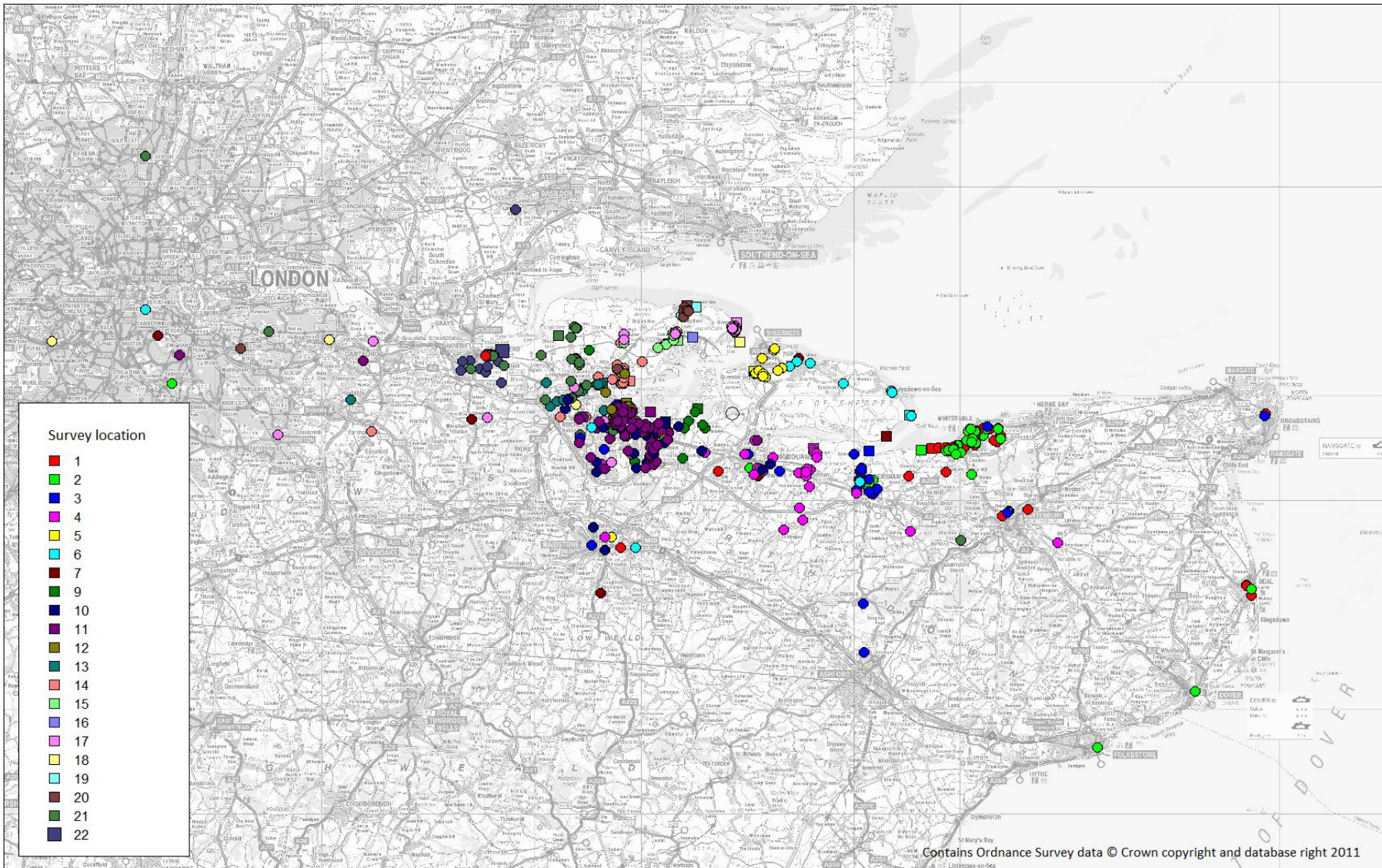# Map 5: Visit frequency of interviewees to survey locations

Legend:
- ▲ Survey location
- ● Interviewees who visit less frequently than most days
- ● Interviewees who visit daily or most most days

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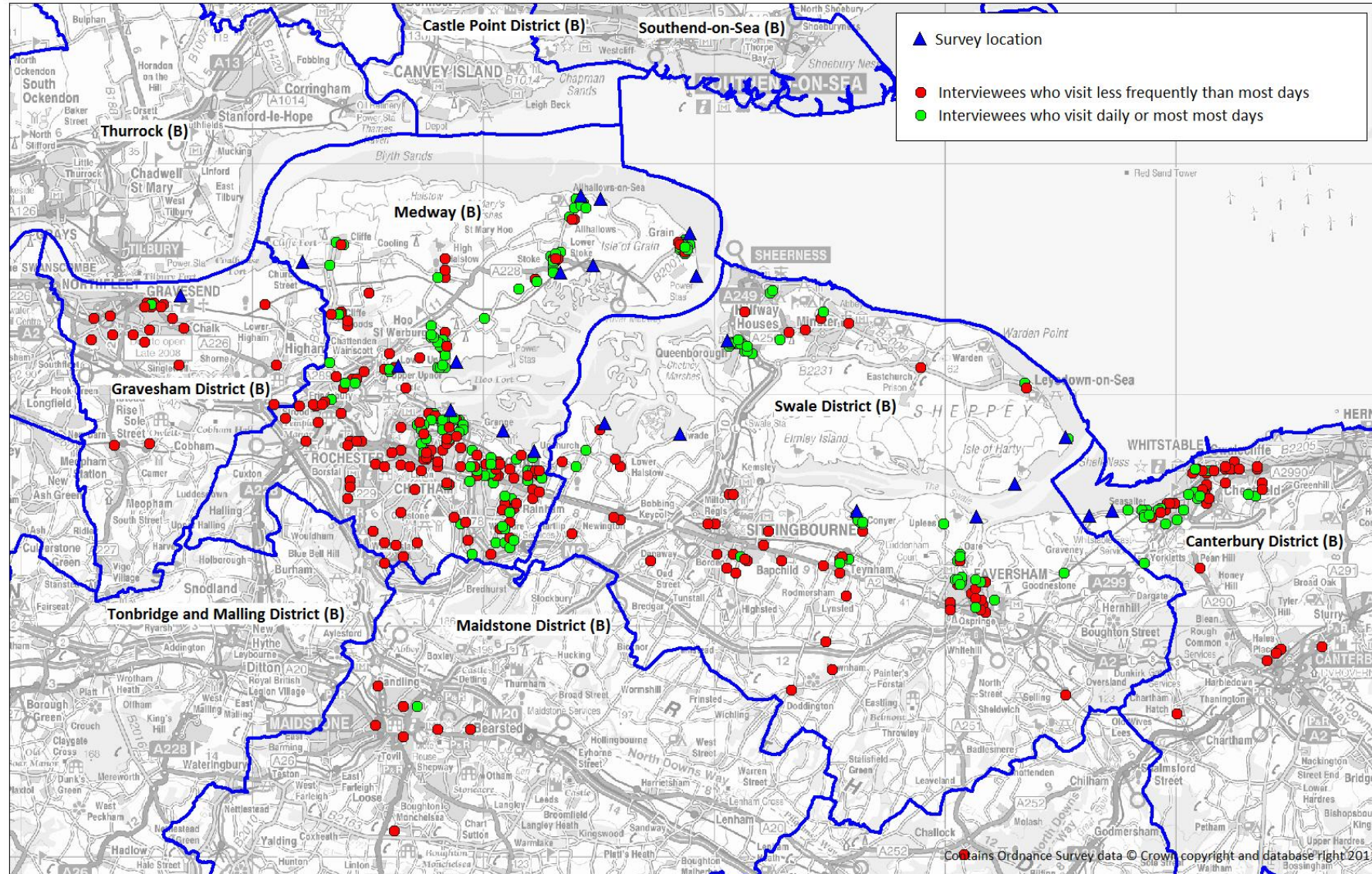
Map 6: Postcodes of dog owning and non dog owning visitors

Legend:
- ▲ Survey location
- ● Dog owning visitors (342)
- ● Non dog owning visitors (179)

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Map 7: Home postcodes of interviewed visitors to survey locations. Postcodes are colour coded to the location visited. Postcodes are dots and survey locations squares

Survey location

■	1
■	2
■	3
■	4
■	5
■	6
■	7
■	9
■	10
■	11
■	12
■	13
■	14
■	15
■	16
■	17
■	18
■	19
■	20
■	21
■	22

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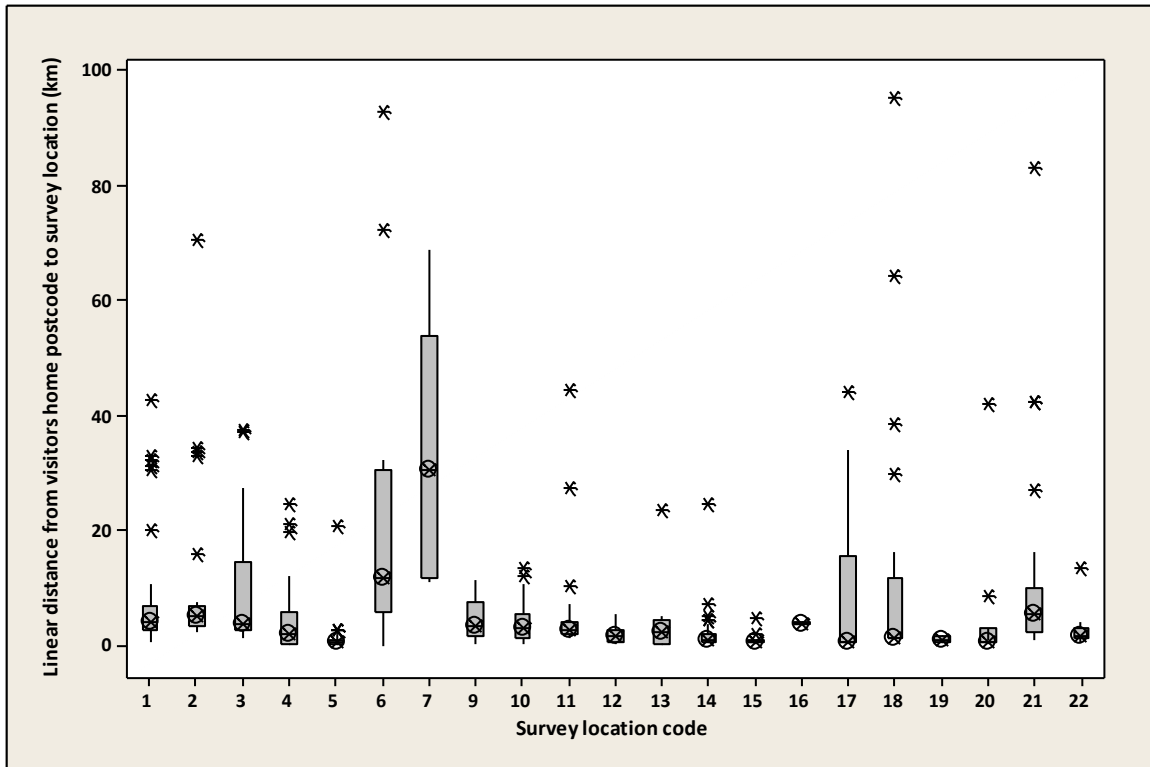
Figure 4: Linear distance of the visitor's home postcode to the survey location where they were interviewed. The figure excludes data from visitors who stated they were on vacation. These plots show the median (i.e. the midpoint value of the data – represented by a the circle over the horizontal line), the interquartile range (i.e. 25%-75% of the data – represented by the box, while the vertical lines show the upper and lower limits of the data, with the outlying values represented by asterisks.
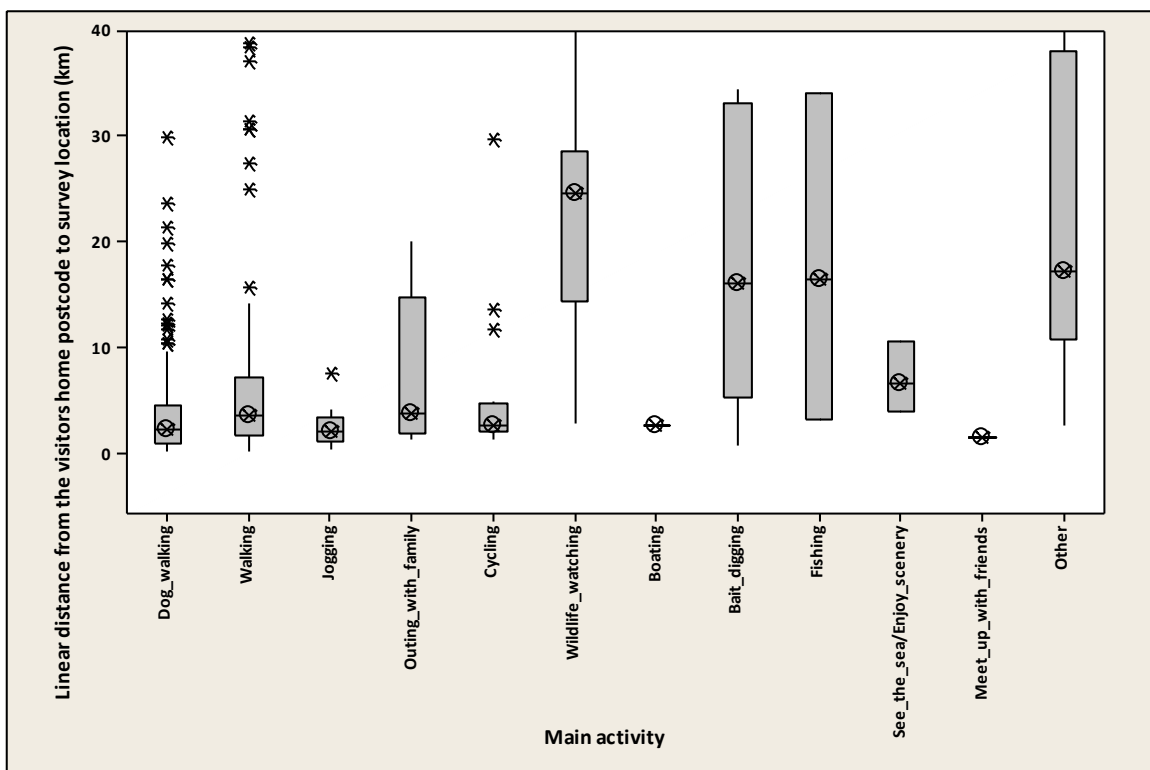
Figure 5: Linear distance between interview location and the visitors home postcode, grouped by the main activity undertaken during their visit. The graph has been truncated at 40km. These plots show the median

(i.e. the midpoint value of the data – represented by a the circle over the horizontal line), the interquartile range (i.e. 25%-75% of the data – represented by the box, while the vertical lines show the upper and lower limits of the data, with the outlying values represented by asterisks. Illustration of the data presented in Table 15.

Table 15: Linear distance (km) from visitors home postcode to survey location grouped by main activity undertaken.

Main activity undertaken during visit	Number of interviewed visitors	Minimum distance (km)	Median distance (km)	Distance (km) within which 75% of visitors live	Maximum distance (km)
Dog walking	323	0.1	2.2	4.5	42.7
Walking	119	0.2	3.5	7.1	83.2
Jogging/power walking/Nordic walking	9	0.4	2.1	3.4	7.6
Outing with family/children	8	1.3	3.7	14.7	20.1
Cycling	16	1.2	2.7	4.7	29.8
Wildlife watching	19	2.7	24.6	28.7	92.8
Boating	1	2.6	2.6		2.6
Bait digging/cockling/crab tiling	11	0.6	16.2	33.1	34.5
Fishing	3	3.2	16.4	34.2	34.2
See the sea and enjoy the scenery	3	3.9	6.6	10.6	10.6
Meet up with friends	1	1.5	1.5		1.5
Other	8	2.5	17.2	38.0	95.3

Transport mode and distance to survey locations

3.52   The methods of transport used to travel to the interview location and the distance of the visitors home postcode was investigated and (Figure 6) shows the distance between the visitors home postcode and the interview location categorised by transport mode. Visitors who arrived by car/van travelled a greater distance to visit their chosen location in comparison to those who arrived by foot or bicycle (Figure 6, Figure 7, Figure 8, Figure 9 and Table 16). Visitors arriving by public transport were omitted from Figure 6 because of the small sample size.

3.53   Table 16 details the distances between the home postcode of visitors and their visit location. Absent values in the table are reflective of the small sample size. Overall median distance between home and the interviewed survey location was 2.75km. When mode of transport is considered 50% of interviewed visitors who arrived by foot lived within 0.8km, 50% of visitors by car lived within 4.2km and 50% of visitors by bicycle lived within 2.7km of their visit locations (Figure 7, Figure 8 and Figure 9).

Visitors travelled further by car to visit the more remote areas (which have a limited number of access routes) of the North Kent marshes on the Isle of Sheppy and Grain (Table 16) than they did to visit locations closer urban settlements.

3.54   Map 8 and the cumulative frequency curves for visitors arriving by car (Figure 7), on foot (Figure 8) and by bicycle (Figure 9) show the localised use of the sites by residents arriving on foot and bicycle compared to the distances between home postcode and visit location of interviewees arriving by car. Ninety percent of visitors by car lived

within 24.8km of their visit location, a far greater distance to 2.7km (for ninety percent of visitors by foot) and 13.6km (for ninety percent of visitors by bicycle).
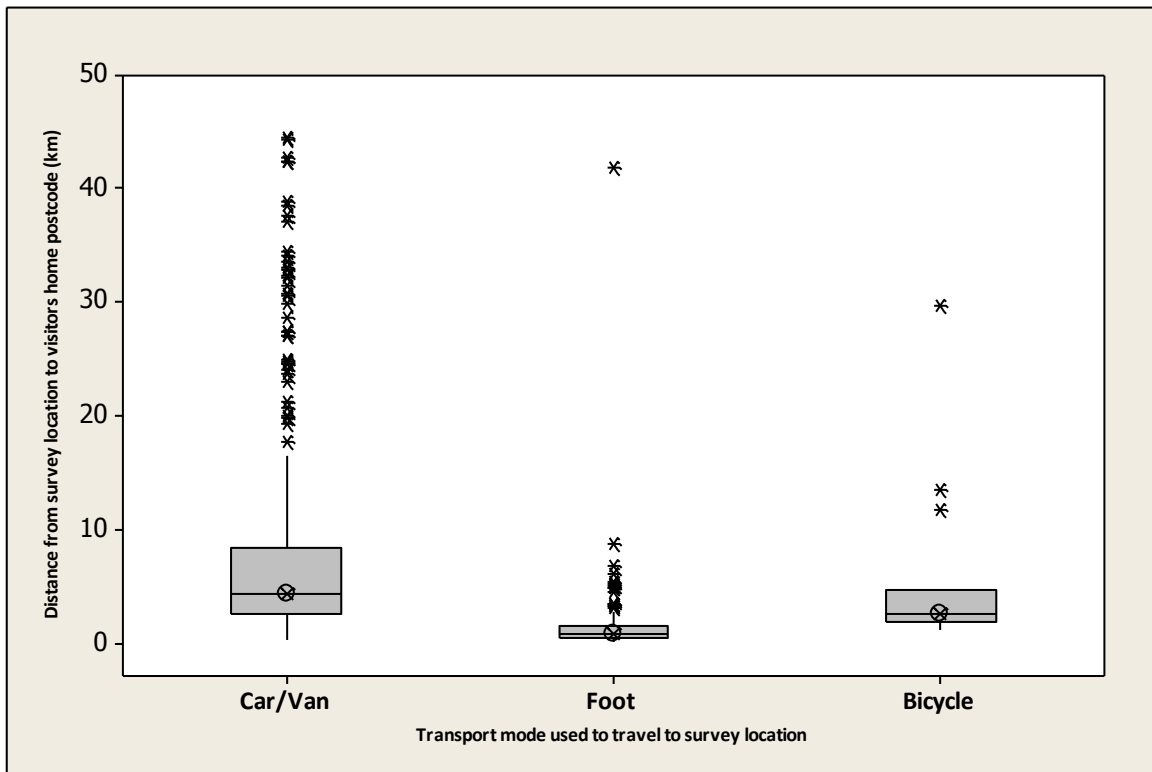

Figure 6: Linear distances travelled by different transport modes from visitors home postcodes to the interview location. Only two visitors arrived by public transport so were omitted from this graph which has been truncated at 50km. These plots show the median (i.e. the midpoint value of the data – represented by a the circle over the horizontal line), the interquartile range (i.e. 25%-75% of the data – represented by the box, while the vertical lines show the upper and lower limits of the data, with the outlying values represented by asterisks.

Table 16: Distances (km) travelled to each survey location, separately got the (N) visitors arriving by car, on foot, by bicycle and by public transport.

| Site	Site Name	Car						Foot						Bicycle						Public Transport			
		N	Min	25%	Median	75%	Max	N	Min	25%	Median	75%	Max	N	Min	25%	Median	75%	Max	N	Min	Median	Max
1	Seasalter-The	34	2.7	4.0	5.3	7.6	42.7	11	0.7	1.4	2.0	2.4	6.9										
2	South Oaze	25	2.4	3.6	5.1	7.0	34.5	3	2.7	2.7	5.4	6.1	6.1							1		70.5	
3	Oare Marshes	34	1.4	2.8	4.1	15.8	37.6	3	1.9	1.9	1.9	2.0	2.0										
4	Conyer	24	2.1	2.8	5.6	8.0	24.6	17	0.2	0.2	0.4	0.5	2.4										
5	Queensborough	5	1.0	1.0	2.3	11.7	20.8	19	0.2	0.3	0.5	0.6	0.9	4	1.2	1.3	2.1	2.9	2.9				
6	Shell Ness	10	2.9	7.7	13.2	42.4	92.8	2	0.1		1.4		2.7	2	11.7		20.8		29.8				
7	Harty	5	11.1	11.9	30.7	53.9	69.0																
9	Upchurch	5	5.6	6.2	7.8	11.3	11.6	6	0.4	1.2	1.6	2.9	5.0	1	2.0		2.0		2.0				
10	Motney Hill	26	0.3	2.3	4.2	7.7	12.2	9	0.3	0.9	1.0	1.7	3.1	1	13.6		13.6		13.6				
11	Riverside	57	1.3	2.3	3.2	4.6	44.5	16	1.3	1.5	2.1	3.4	5.3	4	2.2	2.3	2.5	3.9	4.3				
12	The Strand,	16	1.3	1.9	2.4	3.1	5.4	16	0.3	0.5	0.7	0.9	4.9	1	4.8		4.8		4.8				
13	Lower Upnor	9	0.6	2.4	4.0	5.3	23.7	7	0.2	0.3	0.5	0.6	3.4										
14	Hoo St.	12	1.1	1.5	2.1	4.4	24.6	18	0.6	0.6	0.8	1.2	4.6							1		5.3	
15	Middle Stoke	5	0.6	0.6	0.8	3.5	5.0	7	0.3	0.3	0.6	0.7	1.1										
16	Stoke Ouze	2	4.0		4.0		4.0																
17	Grain Beach	13	0.8	8.3	15.6	21.4	44.3	14	0.4	0.5	0.6	0.7	0.9										
18	Grain Power	10	1.3	1.5	11.7	45.0	95.3	10	1.3	1.3	1.3	1.4	1.6	1	1.5		1.5		1.5				
19	All Hallows-	1	1.6		1.6		1.6	2	0.8		0.8		0.9										
20	All Hallows -	2	1.1		1.1		1.1	8	0.2	0.5	0.6	6.9	42.0										
21	Cliff Creek	25	1.2	2.7	5.9	10.2	83.2	1	1.9		1.9		1.9										
22	Shornmead	6	2.5	2.9	3.5	6.6	13.6	9	0.8	1.1	1.3	1.5	2.0	1	2.7		2.7		2.7				
	Overall	326	0.3	2.6	4.2	8.4	95.3	178	0.1	0.5	0.8	1.5	42.0	15	1.2	2.0	2.7	4.8	29.9	2	5.3	37.9	70.5
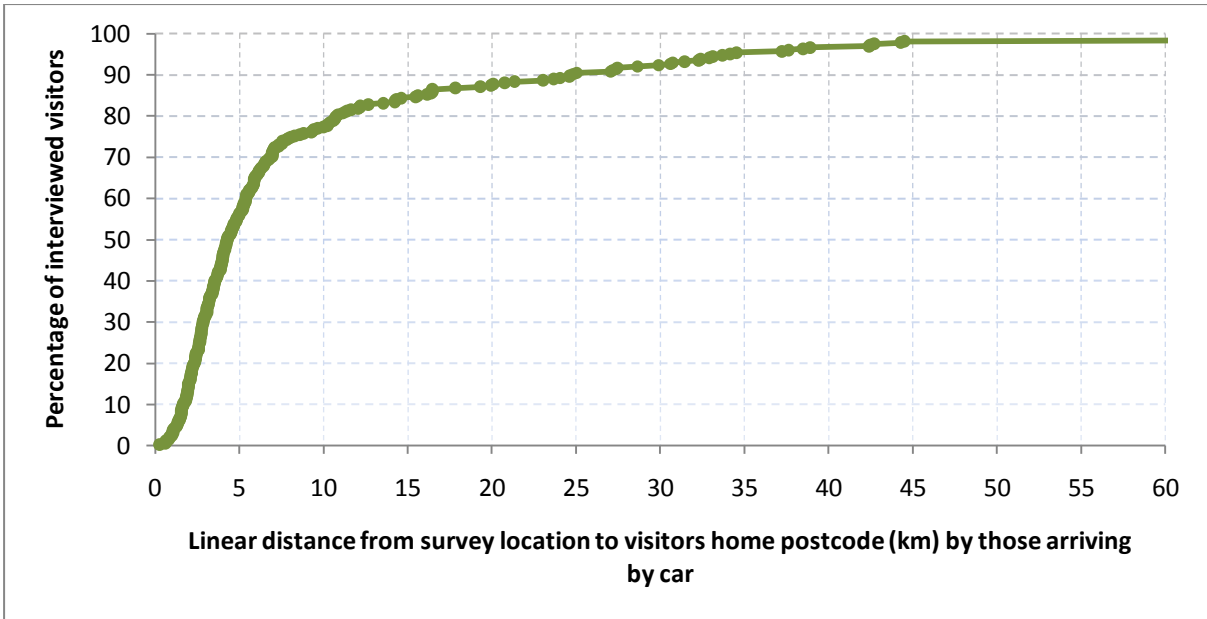
Figure 7: Cumulative frequency distribution of the linear distance by car from the interviewed visitors' home postcode to the survey location. The graph was truncated at 60km.
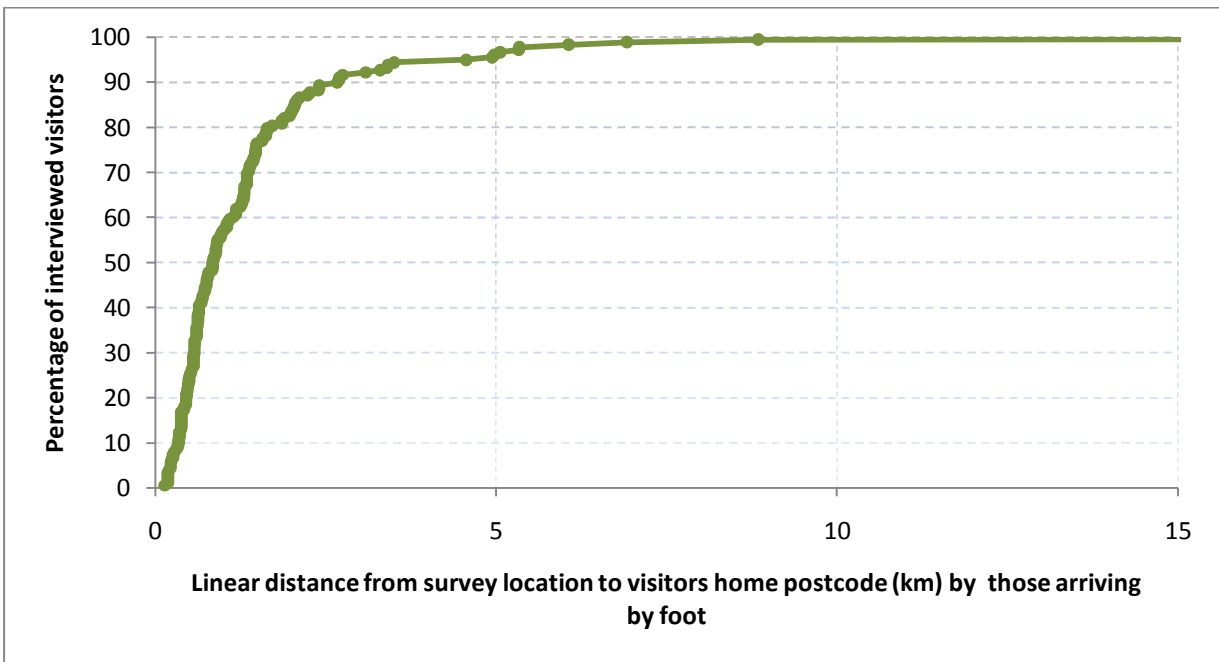

Figure 8: Cumulative frequency distribution of the linear distance by foot from the interviewed visitors' home postcode to the survey location. The graph was truncated at 15km.
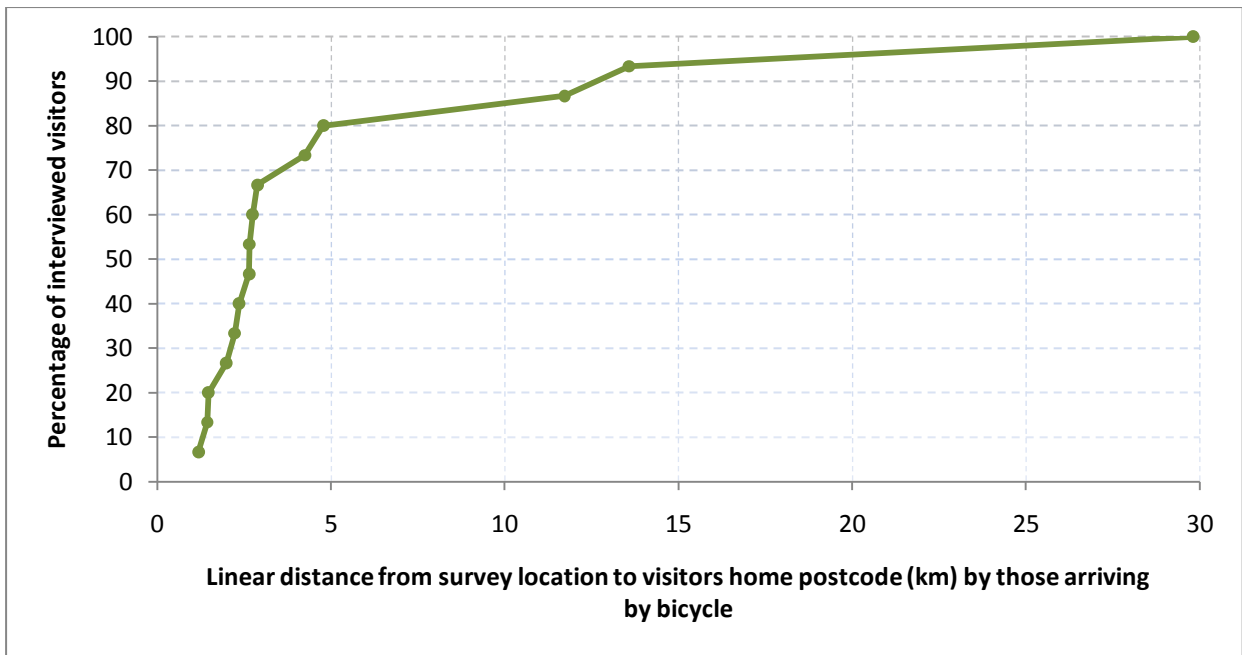
Figure 9: Cumulative frequency distribution of the linear distance by bicycle from the interviewed visitors' home postcode to the survey location. The graph was truncated at 30km.

Transport and visit frequency

3.55   Just under a third (31%) of visitors who arrive by car visit the North Kent marshes daily or most days in comparison with 70% of visitors who arrive by foot. Although a lower number of visitors make recreational trips to the North Kent shoreline by foot, these visitors will make more visits to the area than the greater number of visitors who arrive by car, and visit less frequently.

Table 17: Number interviewed visitors by visit frequency and transport type

Transport Mode	Visitors who visit less frequently than most days	Visitors who visit daily or most days	Total
Car	226	100	326
Foot	55	123	178
Public Transport	2		2
Bicycle	10	5	15
Grand Total	293	228	521

Map 8: Transport mode used by each interviewee to travel to survey location

Legend:
- ▲ Survey location
- ● Car (326)
- ● Foot (178)
- ● Bicycle (15)
- ● Public transport (2)

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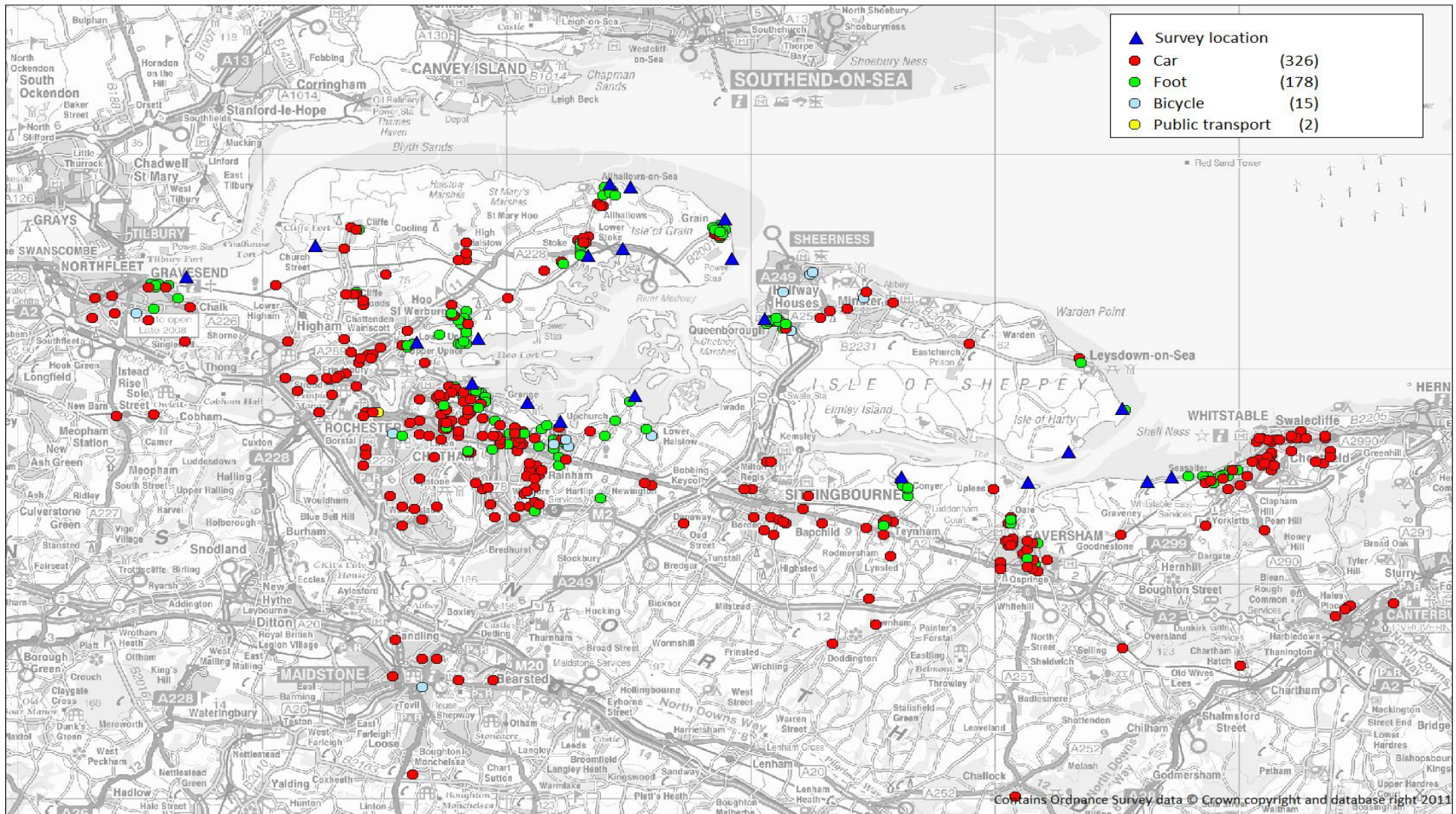
Visitor Routes

3.56   A total of 528 mapable routes were gathered from the 542 interview visitors, so routes were gathered for 97% of all groups interviewed. Just over 10% of visitor routes (60 routes) were collected using GPS units and the remaining routes were mapped onto paper. Both sets of routes were digitised as described in paragraph 2.10 and Map 9 presents all the mapped visitor routes.

3.57   Excluding holiday makers and those not local to the region the route data for 507 visitor routes were undertaken. We considered whether route length varied according to main visitor activity and also with location.

Route length by activity

3.58   There was a significant difference in route length when categorised by main activity (Kruskal Wallis H=34.61m 7df, p<0.001, boating, fishing, enjoy the scenery and meet up with friends were excluded from this analysis because of the small sample size). As would be expected visitors who were cycling undertook the longest routes with 50% of interviewees covering at least 9.2km (Table 18).

3.59   Boating, see the sea and enjoy the scenery and fishing had the shortest route lengths but with such a small number of visitor responses it is impossible to determine whether the route lengths associated with these activities are representative. This also applies to the single visitor who stated their main activity was to meet with friends (Table 18).
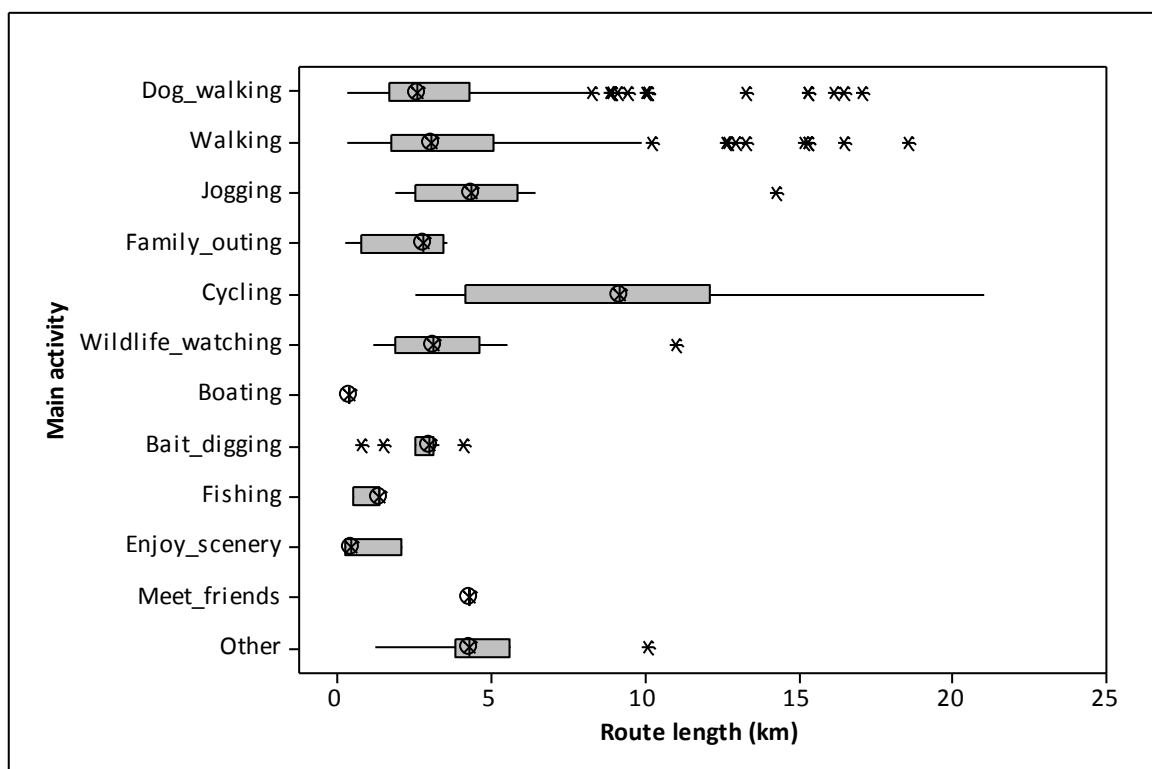

Figure 10: Route length (km) of visitors per main activity category. The plot is truncated at 25km. These plots show the median (i.e. the midpoint value of the data – represented by a the circle over the horizontal line), the interquartile range (i.e. 25%-75% of the data – represented by the box, while the vertical lines show the upper and lower limits of the data, with the outlying values represented by asterisks.

Map 9: The digitised routes of interviewed visitors at all locations

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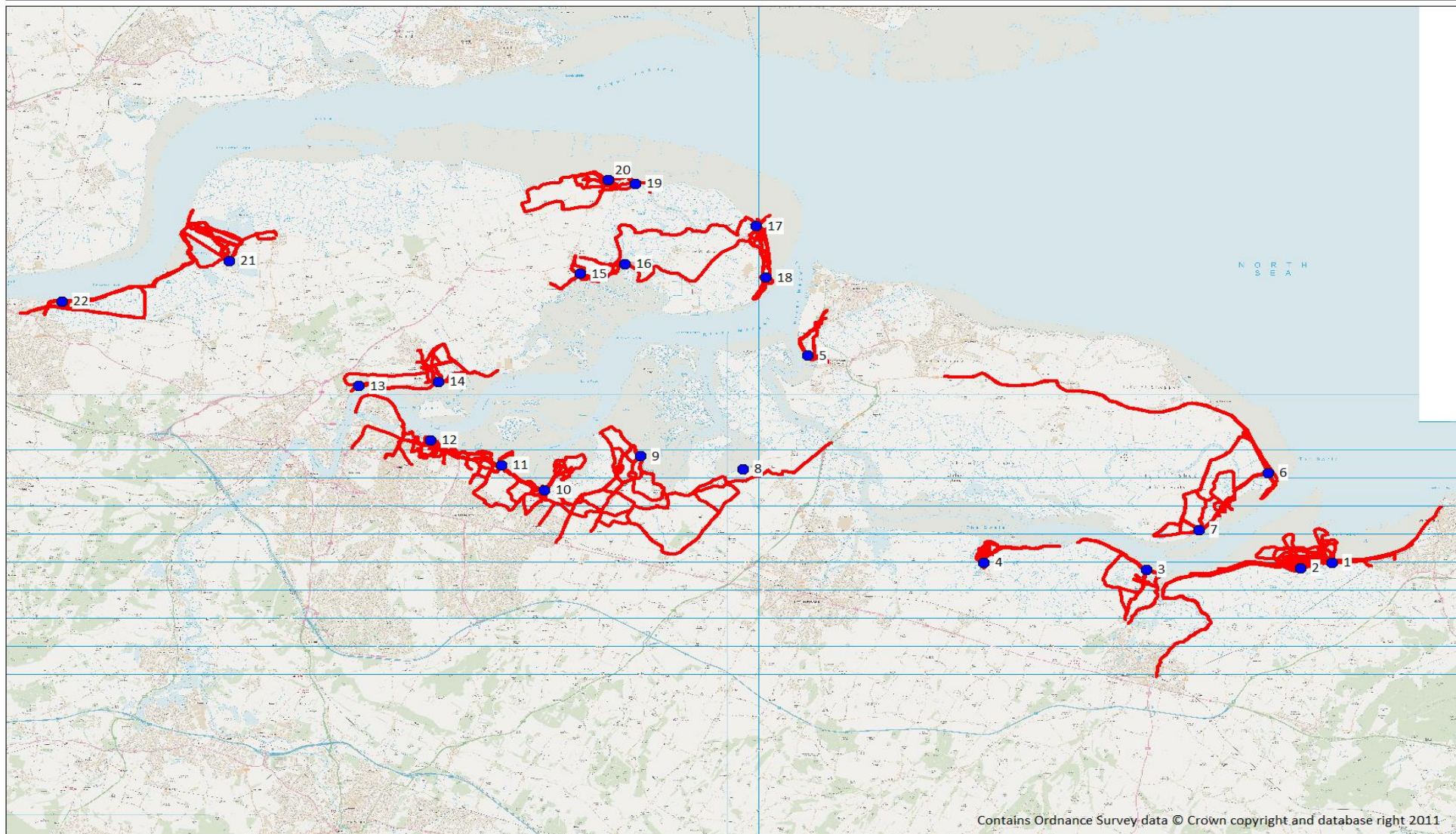
Table 18: Visitor route length (km) per main activity category where N= number of interviewed visitors.

Main activity	N	Mean	Minimum	Median	Maximum
Cycling	16	9.9	2.5	9.2	25.5
Jogging/power walking/Nordic walking	9	5.1	1.9	4.3	14.2
Other	7	4.9	1.2	4.3	10.1
Meet up with friends	1	4.3	4.3	4.3	4.3
Wildlife watching	19	3.5	1.1	3.1	11.0
Walking	116	4.3	0.3	3.0	18.5
Bait digging/cockling/crab tiling	11	2.7	0.7	2.9	4.1
Outing with children/family	5	2.2	0.2	2.8	3.6
Dog walking	316	3.3	0.3	2.6	17.0
Fishing	3	1.0	0.5	1.3	1.3
See the sea and enjoy scenery	3	0.9	0.2	0.4	2.0
Boating	1	0.4	0.4	0.4	0.4

3.60   The mean and median route distances taken by dog walkers is lower than that taken by walkers mainly because the walkers started their journey from home. Half of all visitors who were walking as a main activity covered 3.0km compared to the 2.6km covered by half of all dog walkers dog walkers (Table 18).

Route length by location

3.61   There was also a significant difference between routes lengths at the different survey locations (Kruskal-Wallis H=157.81, 18 df, p<0.001), (Figure 11 and Table 19) location 16 (Stoke Ouze layby) and location 19 (All Hallows-Yantlett) were excluded from this test because of their small sample sizes. On average visitors to Harty (location 7) and Upchurch (location9) covered the greatest distance. Visitors to Grain beach (location 17) and Lower Upnor (location 13) had the shortest routes.
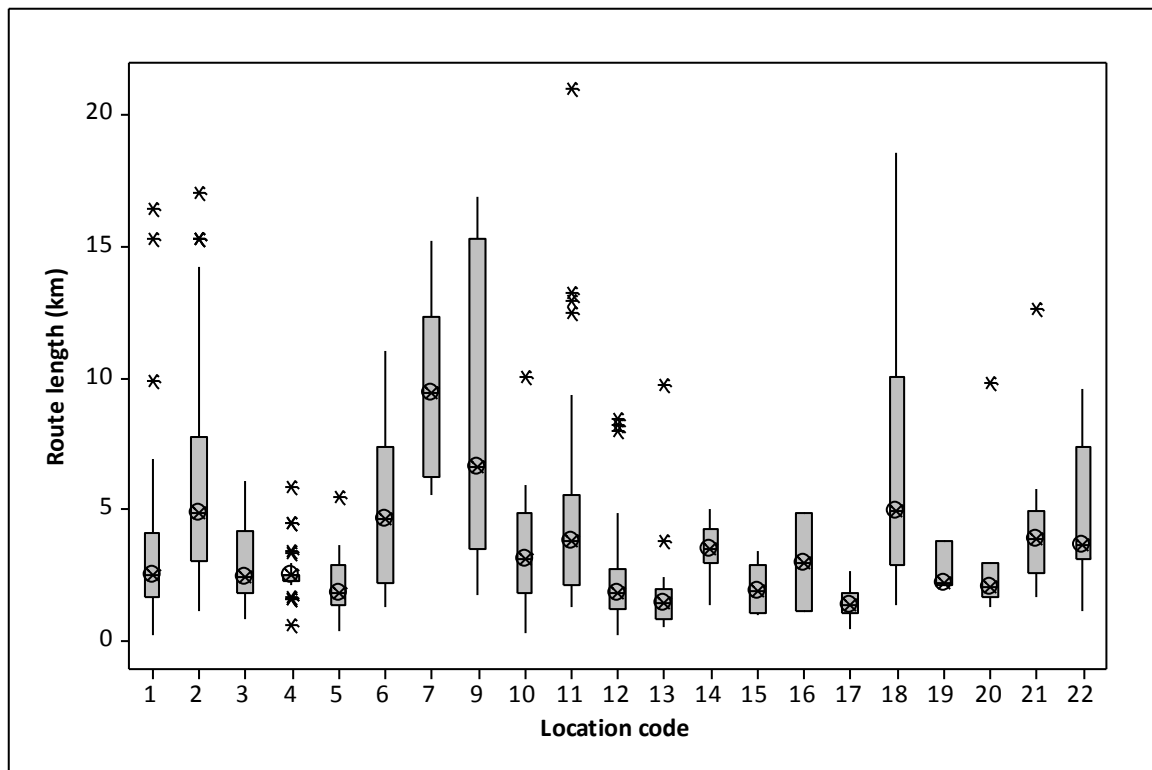
Figure 11: Route length (km) of visitors per survey location. The plot is truncated at 22km. These plots show the median (i.e. the midpoint value of the data – represented by a the circle over the horizontal line), the interquartile range (i.e. 25%-75% of the data – represented by the box, while the vertical lines show the upper and lower limits of the data, with the outlying values represented by asterisks.

Table 19: Visitor route length (km) per survey location where N= number of interviewed visitors.

Location code	N	Mean	Minimum	Median	Maximum
7	5	9.3	5.6	9.4	15.2
9	12	8.4	1.8	6.6	16.9
18	19	6.0	1.4	4.9	18.5
2	29	6.3	1.1	4.9	17.0
6	14	6.2	1.3	4.6	25.5
21	26	4.1	1.6	3.8	12.6
11	75	4.6	1.3	3.8	21.0
22	15	4.7	1.1	3.7	9.6
14	31	3.4	1.3	3.5	5.0
10	36	3.3	0.3	3.1	10.0
16	2	3.0	1.1	3.0	4.8
1	39	3.5	0.2	2.5	16.4
4	40	2.5	0.6	2.5	5.8
3	36	2.8	0.8	2.4	6.0
19	3	2.7	2.1	2.2	3.7
20	10	2.8	1.3	2.0	9.8
15	12	2.0	1.0	1.9	3.4
5	28	2.1	0.3	1.8	5.4
12	32	2.4	0.2	1.8	8.4
13	16	2.0	0.5	1.4	9.8
17	27	1.4	0.4	1.3	2.6

3.62   Overall 23% of visitors stated they walked off the paths and onto the mudflats or open beach, 76% of visitors stated they stayed on the paths and 2% were not sure where their route took them.

3.63   Of the 23% of interviewed visitors whose route took them onto the mudflats or open beach 64% had at least one dog with them and 36% were not accompanied by a dog. The bird study (Liley & Fearnley 2011) identified that 37% of all activities which took place on the intertidal (mudflats) resulted in a major flight (a sign of disturbance).

3.64   The proportion of visitors who went onto the open beach or mudflats was not constant between locations (Table 20). A much higher proportion of visitors ventured away from the paths and onto the shore at locations 1 (Seasalter), 2 (South Oaze) and 6 (Shell Ness) than at any other the other locations. In total there were five locations where visitors did not deviate from the path network or go onto the open beach/mudflats (Table 20).

Table 20: The number of interviewees (n) routes which went on the open beach in comparison to those who stayed on a path. Values are compared for each location and expressed as number of visitors (n) and as a percentage of total routes per location.

Location code	Route onto open beach/mudflat		Remained on paths no route on open beach/mudflat		Unsure	
	n	%	n	%	n	%
1	31	69	14	31	0	0
2	21	72	8	28	0	0
3	0	0	37	100	0	0
4	8	20	32	78	1	2
5	1	4	27	96	0	0
6	8	57	5	36	1	7
7	2	40	3	60	0	0
9	0	0	12	100	0	0
10	1	3	35	97	0	0
11	7	9	69	90	1	1
12	3	9	30	91	0	0
13	14	88	2	13	0	0
14	4	13	26	84	1	3
15	0	0	12	100	0	0
16	0	0	2	100	0	0
17	3	11	23	85	1	4
18	8	38	11	52	2	10
19	1	33	2	67	0	0
20	1	10	9	90	0	0
21	5	19	20	77	1	4
22	0	0	16	100	0	0
Total responses	118		394		8	

4   Discussion

4.1   The data presented in this report provide a fascinating overview of the winter recreational use of the North Kent coastline across a wide range of coastal sites, encompassing a variety of beach types, habitats and types of location. Some survey locations were on open coast and others at the edge of estuaries, some locations captured visitor information from those using informal car parks and we interviewed people at locations specifically geared for recreational enjoyment such as Riverside country park. It is perhaps therefore not surprising that that there is a wide variation across the sites in terms of the number of people interviewed and recorded at each location, the activities undertaken and how the visitors travelled to each location (i.e. by car, foot or other means).

4.2   The visitor work was conducted in February and March 2011 and were the work to have been commissioned during the summer, it is likely that the results would have been very different, especially in capturing visitor information from those participating in water sports or visitors spending more on their time at the waters edge or on the beach. However visitor data should be gathered during the winter period when the SPA interest features (over wintering bird assemblages and species) are present.

4.3   Visitor access patterns probably vary through the winter and therefore to fully understand recreational use in relation to the wintering birds, visitor survey work would ideally have been conducted throughout the winter. In particular over the Christmas and new year period, when many people are on holiday would probably involved different levels and patterns of use. Running these sorts of surveys through the winter would have been costly and complex, not just at the data gathering stage but also during screening and analysis.

4.4   The fieldwork was limited to a selection of locations chosen to capture a reasonable spread around the coastline, including locations on the Isle of Sheppy. Each location was selected after much consideration, as they coincided with the bird survey locations, access to many of the stretches of the shoreline where there were known to be wintering bird populations was limited and so some provisional survey (bird and visitor) locations had to be reconsidered following site visits. It is important to acknowledge that is was not possible to survey all access locations along the shoreline and therefore the results – such as the numbers of visitors from different settlements and the number recorded across the shoreline are for the survey locations themselves rather than the shoreline itself.

4.5   A comparison of recent visitor surveys conducted with or by Footprint Ecology are summarised in Table 21. The North Kent works comprised of 542 interviews from 42 two hour survey sessions over 21 survey locations provides a valuable data set. Fewer interviews were conducted in North Kent than for the Solent visitor survey which was of a similar size. This is most likely due to the remoteness of the North Kent area (and the survey locations) and a lower population density within easy reach of the coastline.

4.6 While there was a wide range of activities recorded, two types dominated: walking and dog walking. The highest percentage of visitors stating dog walking as the main activity (62%) was recorded during this visitor survey, this is far higher than the percentage of visitors dog walking at the Solent (42%) and higher than those noted at Suffolk (53%).The percentage of interviewed groups that were accompanied by dogs (65%) is again higher in this project than in the visitor surveys we have recently been involved with (Table 21).

4.7 The postcode maps (maps 5 and 7) reflect the importance of the transport network with a pattern of home postcodes along the major roads between Gravesend and Whitstable and Rochester and Stoke. Four different modes of transport were used to access the shoreline with 63% arriving by car and 34% by foot, the remainder arrived by either by public transport or bicycle. The percentage of visitors arriving by car and by foot varied with survey location and the locations near Grain and Queensborough received a higher percentage of 'foot' visitors than car. In contrast the survey locations near to Gillingham and Faversham had a higher percentage of 'car' visitors (map 3). Those visitor who arrived by car on the most part have travelled further to visit the survey location than those who arrived by foot. Locations with a higher percentage of car visitors could have a wider catchment area and appeal to visitors (the site may be family friendly, the nearest area of green space for those residing in urban areas etc.) or either have a comparative low number of dwellings nearby.

4.8 Map 5 is also particularly important and relevant to strategic planning as small clusters of postcodes adjacent or near to the survey locations are those of visitors who visit locations either daily or on most days. This study has found that 70% of visitors who arrive by foot visit either daily or most days (Table 17) compared to the 30% of visitors who arrive by car and make their visit either daily or most days. Table 21 shows that coastal locations have a higher number of visitors arriving by foot in comparison to inland locations where the majority of visitors arrive by car. We have identified that at North Kent 90% of visitors to survey locations who arrived by foot lived within 2.7km and 90% of visitor by car lived within 24.6km.

Table 21: Summary of other recent visitor survey results undertaken by Footprint Ecology this study North Kent is listed in the final column.

Category	South Sandlings (Suffolk) (Cruickshanks, Liley, & Hoskin 2010)	Breckland (Fearnley, Liley, et al. 2010)	Solent (Fearnley, Clarke, et al. 2010)	Exe (Liley & Cruickshanks 2010)	North Kent (this report (Fearnley & Liley 2011))
Habitat (at access locations)	Forestry and heath	Commercial Forestry plantation	Estuary and Open coast	Estuary and sand dune system	Estuary and Open coast
Survey season	2009 & 2010 (summer and winter)	Summer 2010	Winter 2009/2010	February & March 2010	February & March 2011
Report publication	February 2011	December 2010	October 2010	December 2010	Expected July/August 2011
Number of interviews	596	279	784	586	542
Survey locations	18	11	20	8	21
Number of two hour survey sessions across the survey locations	190	88	40	64	42
Total visitor recorded (group size from interview data)	1301	677	1322	1138	930
Total dogs	582	200	550	307	502
Percentage of interviewed groups with a least one accompanying dog	63	51	53	38	65
Percentage of interviewed groups dog walking	53	36	42	39	62
Percentage of groups walking	22	24	44	38	23
Percentage of visitor groups arriving by car	80	91	46	60	63
Percentage of visitor groups arriving by foot	17	7	51	29	34
Distance (km) from survey location of the home postcode of 50% of interviewed groups who arrived by foot	0.42	1.0	0.7	0.7	0.85
Distance (km) from survey location of the home postcode of 90% of interviewed groups who arrived by foot	3.4	1.5	2.5	2.9	2.7
Distance (km) from survey location of the home postcode of 50% of interviewed groups who arrived by car	7.6	9.5	4	9.8	4.2
Distance (km) from survey location of the	22.3	50	28.5	56.6	24.6

home postcode of 90% of interviewed groups who arrived by car					
Median distance (km) from home postcode to survey location of visitors were dog walking	4.9	5.6	1.2	2.0	2.2
Median distance (km) from home postcode to survey location of visitor who were walking	13.5	15.5	2.7	5.6	3.5
Main two reasons given by interviewees as to why they visited particular area	Close to home Good for dog	Good for activity Close to home	Close to home Attractive scenery / views	Attractive scenery Close to home	Close to home Good for dog
Number of visitor routes	561	243	774	586	507
Median route distance of dog walkers (km)	2.9	3.2	2.55	1.6	2.6
Median route distance of walkers	3.9	3.7	3.10	2.1	3.0
The percentage of visitor routes that went onto the beach or intertidal	-	-	25	75 (targeted surveys at water sport users)	23

4.9   The route data showed where people went during their visit. Map 9 shows all the
        digitised routes (both those collected with the GPS units and those manually mapped
        during the interviews) across the study area and gives an insight into how visitors
        spread from each location. We have shown that route length varies with activity and
        location (Table 17 and Table 18). There is a caveat with the interpretation of the route
        lengths. The routes of visitors who arrive by foot was mapped from their home location
        and the routes of visitors who took a GPS unit and those who arrive by car, bicycle or
        public transport were mapped from the access location. Therefore the route lengths of
        those who have walked from home will encompass the 'travel' distance to and from the
        survey location, this make direct comparison of visitor route lengths solely by activity
        more complex (Table 17). However, the crucial route information is length and
        distribution of visitor routes along the shoreline as routes along the beach, mudflats or
        in/on the water are those which we believe have the most potential to disturb birds.

4.10   Of 507 digitised routes, three quarters (75%) of visitors stated they stayed on the paths
        and did not go onto the beach, the mudflat on onto the water. Of those visitors who
        went onto the beach or the mudflats 63% of were accompanied by at least one dog.
        Where visitors go also varied with location which is likely to be influenced by the
        physical characteristics of each location and the tide height at the time of visit.

4.11   The median route lengths of walkers and dogs walkers within North Kent are very
        similar to those found in comparative visitor survey work (although a caveat exists, it
        exists in all data sets so comparison between different surveys is viable). The range of
        median route distances for dog walkers in recent work range from 1.6km at the Exe to
        3.2km at the Brecks and here we observed a value of 2.6km. For walkers the values
        ranged from 2.1km (at the Exe) to 3.9km (at Suffolk) here the median route distance
        was 3.0km.

4.12   The visitor monitoring has helped us identify where visitors come from to visit the
        coast, what activities they undertake, their motivation for visiting, how frequently they
        visit and what underlies people's choice of where they go. This understanding of
        visitation patterns is fundamental to underpin access management and green
        infrastructure provision in the future. Such measures are important in order to ensure
        any impacts from recreation to the relevant European sites around the North Kent
        Marshes are avoided or effectively mitigated. 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.

4.13   With respect to the impacts of access on relevant sites, Regulation 61 ensures that
        competent authorities can only agree to a plan/project which is likely to have a
        significant effect (alone or in-combination) after having determined that it will not
        adversely affect the integrity of any European site (subject to imperative reasons of
        over-riding public interest and consideration of alternative solutions). Impacts
        associated with recreational activities that can be linked to plans or projects should

therefore be avoided through the correct application of Regulation 61 by competent authorities. Regulation 61 applies to all European sites and therefore covers both SACs and SPAs (listed Ramsar features are also protected as a matter of government policy). New development and strategic development plans must therefore address any impacts of increased recreation to European sites.

4.14   Also relevant is Article 6(2) of the Habitats Directive, which requires Member States to take appropriate steps to avoid, in the SACs and SPAs, the deterioration of natural habitats and the habitats of species as well as disturbance of the species for which the areas have been designated. Article 6(2) states that "member states shall take appropriate steps to avoid..... deterioration of natural habitats.... as well as disturbance of the species..."; the wording therefore puts a responsibility on the member state to address such issues where they arise.

4.15   A key issue to be taken into account in respect of recreational impact strategies associated with any new development is whether a credible link can be made between the potential impacts and development per se (and hence with a 'plan or project' as identified in regulation 61). It is not simply a matter of how far away visitors are drawn from on a regular basis; it is important to understand how access levels relate to disturbance and is this disturbance resulting in any population impacts wintering bird assemblages.

4.16   Most interviewed visitors in North Kent visited a location primarily because it was close to home and also because it was good for the dog (Table 7), bearing in mind that 65% of visitors had at least one dog with them. These responses match those given by visitors from work in Suffolk, and a similarly high percentage of visitors (63%) were also accompanied by at least one dog. It seems that residents in North Kent tend to visit areas of coast nearest to them and as the majority of visitors interviewed were dog walking the areas a higher percentage of visitors perceived the area visited as 'good for the dog'. A relatively small percentage of visitors (4%) to North Kent shoreline commented that they visited the interview location because of the quality of the coastline whereas in the Solent and Exe visitor surveys attractive scenery and views scored highly (Table 21). The North Kent shoreline in general has a much more industrial feel with extensive areas of mudflat and marsh which may not provide the same visitor experience as the more manicured areas of the Solent and coastal diversity of the Exe.

4.17   We have established the majority of visitors to the area come to walk or dog walk and the median distance between the home postcode of a dog walker and the interview location was 2.2km (those who arrived by car and on foot) and of walkers the distance was 3.5km. These values fit comfortably within the distance range of other recent visitor surveys (Table 21). There is a distinct difference between the median distances between visit location and visitor postcode for visitors to coastal areas in comparison to inland area. The survey work at Suffolk (non coastal forestry and heath) and Breckland (commercial forestry) shows that visitors travel a much greater distance to use these areas than they do to visit coastal locations (Table 21). This is most likely relating to

higher housing density around the coast than around the study areas in Suffolk and Breckland.

4.18   We have identified the distances that visitors travelled to access locations on the coast and considered the visit frequency of those who arrive by foot and by car and established the distance between the home locations of the main two user groups of the shoreline (walkers and dog walkers). An increase in the number of people living close to the shoreline will be expected to result in an increase in visitor use of shoreline.

4.19   Once the results of the other elements of Phase I are available it will be possible to identify which (if any) activities are linked to likely significant effects on the SPA interest features. It will also be useful to identify which activities are the issue, when the activities are undertaken and where along the shoreline they occur. This understanding combined with the findings in this report can then be used to further inform the need for, and scale of any mitigation measures.

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Appendix 1

Figure 12: Visitor questionnaire used during the visitor survey fieldwork for the North Kent marshes

North Kent Visitor Survey

Good am / pm. Please could you spare me a few minutes to take part in a short survey about your visit today. The survey is being conducted for Gravesham/ Medway and Swale local authorities. To look at current recreational use of the area.

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: [note details below]:	

Q2 What is the main activity you are undertaking today? *Do not prompt. Tick only one main activity and tick as many other activities as visitor gives*

Main	Other	
		1 Dog walking
		2 Walking
		3 Jogging/power walking/Nordic walking
		4 Outing with children/family
		5 Cycling
		6 Wildlife watching
		7 Windsurfing
		8 Kite surfing
		9 Boating (give details in free text)
		10 Bait Digging / Cockling / Crab tiling
		11 Canoeing / kayaking
		12 Fishing
		13 See the sea and enjoy the scenery
		14 Meet up with friends
		15 Other/further detail:

Q3 How long have you spent / will you spend in the area today? *Tick one only.*

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

Q4 Over the past year, roughly how often have you visited this part of the coast? *Tick closest answer. Tick one only. Only prompt if interviewee struggles.*

1. Daily	
2. Most days (180 + visits)	
3. 1 to 3 times a week (40—180 visits)	
4. 2 to 3 times per month (15-40 visits)	
5. Once a month (6-15 visits)	
6. Less than once a month (2-5 visits)	
7. Don't know/First visit	

Q5 Do you tend to visit this area at a certain time of day? *Tick closest, multiple answers ok*

1 Before 9am	
2 Between 9am and 12	
3 Between 12 and 3pm	
4 Between 3 and 5pm	
5 After 5pm	
6 No/Don't know/First visit	

Q6 Do you tend to visit this area more at a particular time of year for [insert activity]? *Multiple answers ok*

1 Spring		4 Winter	
2 Summer		5 Don't know / 1st visit	
3 Autumn		6 Equally all year	

Q7 How did you get here? What form of transport did you use? *Tick one only. Do not prompt.*

1 Car/Van		4 Bicycle	
2 On Foot		5 By water (boat, canoe)	
3 Public transport		6 Other (please detail)	

Q9 What makes you come here, specifically, rather than another local site? *Tick all responses given by visitor in 'other' column. Do not prompt. Tick closest answers then ask 'Which would you say had the most influence over you choice of site visit today? Tick only one in the 'main' column. Tick closest answers. 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 Right place for activity (eg kite surf/fishing/good for kids)
		2 Close to home			13 Particular wildlife interest
		3 Quick and easy travel route from home/accommodation			14 Ability to see boats/watch activities on the water
		4 Good/easy parking			15 Substrate type (e.g. Sandy beach)
		5 Feel safe here			16 Good for dog /dog enjoys it
		6 Particular facilities here (provide detail in other text box about facilities)			17 Ability to let dog off the lead
		7 Choice of routes/ability to do different circuits			18 Suitability of area given weather conditions
		8 Quality of this area of coast			19 Particular launching facilities
		9 Rural feel			20 Refreshments/Cafe/Pub nearby
		10 Quiet with no traffic noise			21 Closest coast to home
		11 Habit / Familiarity			22 Not many people
		Other / Extra details			

Q8 Aside from this location, do you visit any other places for similar purposes as you visited here today? *IF YES: which locations do you visit most often? Do not prompt. Please ask visitor to spell place names as these will be mapped and prompt to elicit whether place is coastal or inland*

Name of location	Coastal or inland?

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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 parked (if travelling by car) and 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 parking,* **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. If relevant add tideline.*

Q10 Is/Was your route today a typical length for you when you visit this location for [*insert activity***]?** *Single tick only, do not prompt, code as appropriate.*

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

Q11 What (if anything) influenced your choice of route here today? *Multiple answers ok. Do not prompt. Tick closest answers as appropriate. Use free text box for reasons that didn't fit with categories/extra detail.*

	1 Rainfall			6 Muddy tracks/paths
	2 Daylight			7 Wind
	3 Cold			8 Tide
	4 Other users (i.e. presence of people)			9 Activity undertaken (e.g. presence of dog)
	5 Time available			10 Particular members of group (e.g. kids)

Free Text: other reasons / detail:

Q12 And in terms of this location, if the following changes were made, would you spend more or less time here for [*insert activity***]?** *Read out each type of change in turn.*

	more	less	Neither / don't know	Comment
Site is busier with more people				
Better path surfacing / routing				
Parking charges or increased charges				
Dogs required to be on leads				
Presence of warden / beach manager				
Part of shore closed in areas sensitive for wildlife				

Q13 For [*insert activity***] what features would be necessary to make another site attractive for you to use instead of here?** *Do not prompt. Categorise as appropriate.*

	1 No features / nothing		7 Measures to control other users
	2 More dog friendly		8 Toilets
	3 Better launching / access to water		9 Better / easier parking facilities
	4 Better path surfacing / path network		10 Cheaper/free parking
	5 Refreshments (e.g. cafe / pub)		11 Closer to home
	6 Better information / maps / boards		12 Attractive scenery

Free Text: other reasons / detail:

Q14 Do you have any other comments about this area?

Finally, so that we can check whether we have a representative sample, please answer the following questions. This information will not be used for anything else.

Q15 What is your full home postcode?
If unable/refusal to give postcode: **What is the name of the nearest village/town or if in a city the nearest district/suburb?** *Enter as much detail as possible to allow the location to be mapped.*

Q16 How many of your party fall into the following age categories? *Enter number*

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

THAT IS THE END. THANK YOU VERY MUCH FOR YOUR TIME

COMPLETE AFTER INTERVIEW FINISHED:	Interview conducted part way through route (tick if yes)	Surveyor:	NOTES:
Date:	Number of dogs:	Accompanying map? (tick for yes, x for no):	
Time:	Dog(s) seen off leads? Y/N	Gender of respondent (M / F):	
Location:	Group size (total people):		