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South Tyneside and Sunderland Coast Visitor Survey Analysis

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Summary

This report is an analysis of visitor survey data collected along the South Tyneside, Sunderland and Durham coastline in 2016, 2019 and 2020. The work has been commissioned by South Tyneside Council and Sunderland City Council to better understand recreational use of the coast and to support planning policy and decision making relating to the protection of these European sites.

The visitor surveys were undertaken by Bluegrass Research, and covered 3 different periods (each with a slightly different geographic coverage):

- Spring 2016: covering South Tyneside, Sunderland and Durham (also extending just into Hartlepool) (633 interviews undertaken);
- Spring 2019: covering South Tyneside only (344 interviews);
- Winter 2019/2020: covering South Tyneside, Sunderland and just into Durham (1,213 interviews).

Surveys were undertaken by surveyors who roamed the coast and counted the number of people visible each hour and interviewed a sample of the people seen. Analysis particularly focussed on the more recent data (2019 and 2019/20). Key findings include:

- Higher counts were typical at South Bents to Sunderland North Pier (an average of 18.9 people seen on a count), followed by Tyne to Frenchman's Bay (14.9), compared to low numbers at Sunderland South Pier to Ryhope Denemouth (5.0) and Frenchman's Bay to Lizard Point (6.3).
- The main activity was dog walking (44% of interviewees in the Spring 2019 and 53% in the Winter).
- Overall, across all survey locations in Spring 2019 and Winter 2019/20, the majority of interviewees (49%) were visiting on their own, followed by those visiting with their partner (29%) and those visiting with family including children (10%).
- Across all survey locations and periods, the age group category most commonly given by interviewees was 50-64 years (40% of interviewees), followed by 30-49 (28%) and 65+ years (24%).
- Interviewees with dogs had on average 1.5 dogs per group (mean), this included a maximum count of 11 dogs with a single interviewee.
- Three-quarters (75%) of interviewees who used the site for dog walking said that they let their dog(s) off the lead when on the beach.
- The percentage of dog walkers who said that nothing would attract them elsewhere ranged from 23% at Frenchman's Bay to Lizard Point in spring 2019, to 76% at Tyne to Frenchman's Bay in winter 2019/20.
- Factors that would attract dog walkers to use alternative sites included space to let their dog off the lead (mentioned by 19% overall) and being closer to home (12% overall).
- The majority of interviewees (70%) drove to the site where they were interviewed, 25% walked, 2% cycled and 2% used public transport.

- In Winter 2019/20, the top reasons given for visiting the coast (across all interviewees) were enjoyment (given by 59% of interviewees), convenience (55%) and the views (29%).
- Interviewees stated they tended to visit at all times during the day. During the summer there was a marked peak in the early morning (before 8am) while in the winter the most popular times to visit in the winter were 2-4 and 10-12.
- In the Spring 2019 survey, interviewees were asked how important they thought the coast was as a wildlife site. Overall, 86% said it was very important and 12% said it was quite important.
- The Winter 2019/20 survey asked all interviewees whether they would use a suitable area of green space instead of the coast if it was closer to home, 70% said they wouldn't (i.e. they would still go to the coast), 27% said they would use it sometimes and 2% said they would use it most of the time.
- A variety of alternative visitor destinations (besides the coast section where interviewed) were named by interviewees. Across all locations the most common alternatives were South Shields, Seaham and Seaburn.
- Close to home (33% of interviewees) was the most common reason for visiting the location where the interview took place. Other reasons included enjoyment of the beach or sea (22%) and the views (11%).
- 1,390 interviewee postcodes could be accurately mapped (i.e. full, valid postcodes).
- For the Winter 2019/20 surveys the highest percentage of interviewees were from Sunderland (40% of interviewees), followed by South Tyneside (35%), and County Durham (17%).
- Across all 1,390 interviewees the median distance (home postcode to coastal section where interviewed) was 3km, distances ranged from 47m to 468km and the third quartile (i.e. 75% of interviews) was 7.2km.
- Different stretches of the coast had different draws and people came from farther afield to some locations compared to others. There were also statistically significant differences between the activities: for example dog walkers (median 4.8km) tended to live closer to the coast site where interviewed compared to walkers (median 9.2km).

Contents

Acknowledgements

1.   Introduction

1.1   This report is an analysis of visitor survey data collected along the South Tyneside, Sunderland and Durham coastline in 3 separate periods: Spring 2016; Spring 2019 and Winter 2019/2020. Visitor survey work was conducted by Bluegrass Research and data provided to Footprint Ecology for analysis. The work has been commissioned by South Tyneside Council and Sunderland City Council to better understand the issues in relation to recreation use of the coast, and to support planning policy and decision making relating to the protection of European sites.

European sites

1.2   The South Tyneside, Sunderland and Durham coast is internationally important for wildlife. There are three relevant European sites (see Map 1) that in some places overlap:

- Durham Coast Special Area of Conservation (SAC),
- Northumbria Coast Special Protection Area (SPA),
- Northumbria Coast Ramsar.

1.3   The Durham Coast SAC[1] is the only example of Atlantic vegetated sea cliffs on magnesian limestone exposures in the UK. The sea cliffs provide a complex set of habitats including diverse grasslands, flushes and scrub. This variety provides for some unique vegetation communities.

1.4   The Northumbria Coast SPA[2] encompasses a large stretch of coastline and designated habitats including rocky outcrops, sandy beaches, dunes, intertidal rock platforms and sand/mudflats, and also includes the piers. The qualifying features are breeding Arctic Tern *Sterna paradisaea* and Little Tern *Sterna albifrons,* and non-breeding Purple Sandpiper *Calidris maritima* and Turnstone *Arenaria interpres*.

1.5   The Northumbria Coast Ramsar[3] covers almost the same area as the SPA (note there are some minor differences in the boundaries of the two sites

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[1] https://sac.jncc.gov.uk/site/UK0030140
[2]https://designatedsites.naturalengland.org.uk/Marine/MarineSiteDetail.aspx?SiteCode=UK9006
131&SiteName=northumbria&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=&HasCA
=1&NumMarineSeasonality=4&SiteNameDisplay=Northumbria%20Coast%20SPA
[3] https://rsis.ramsar.org/RISapp/files/RISrep/GB1019RIS.pdf

around Berwick-upon-Tweed). The Ramsar lists the noteworthy fauna as the international populations of overwintering Turnstone and Purple Sandpiper and breeding Little Tern.

Visitor Surveys

1.6 The visitor surveys were undertaken by Bluegrass Research, and cover 3 different periods, for which the geographic coverage differed each time. These periods, starting with the earliest, were:

- Spring 2016: covering South Tyneside, Sunderland and Durham (also extending just into Hartlepool)
- Spring 2019: covering South Tyneside only,
- Winter 2019/2020: covering South Tyneside, Sunderland and just into Durham.

1.7 In this analysis we focus on the Spring 2019 and Winter 2019/2020 as the most recent and robust data. The Spring 2016 data is only used as a check of trends reported from the Spring 2019 and Winter 2019/2020 analysis.

Map 1: Location of the coastal designated sites within the context of South Tyneside and Sunderland.
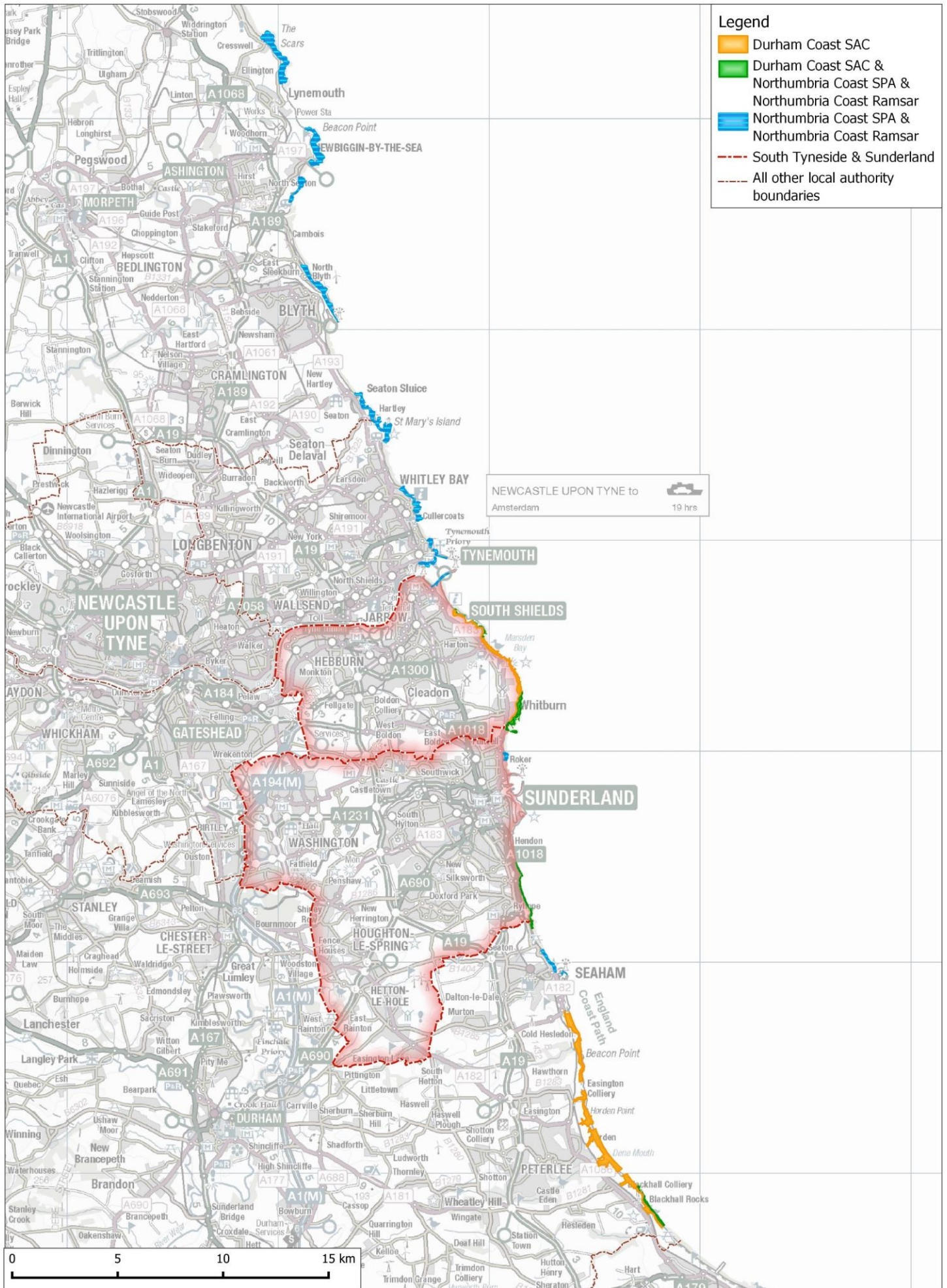
Legend

- Durham Coast SAC
- Durham Coast SAC & Northumbria Coast SPA & Northumbria Coast Ramsar
- Northumbria Coast SPA & Northumbria Coast Ramsar
- —·— South Tyneside & Sunderland
- —··— All other local authority boundaries

0   5   10   15 km

2. Methods

Overall approach

2.1   Data were collected from 3 separate periods which follow largely similar methodologies, however the data collection, geographic remit and extent of survey areas covered in each of these collection periods did vary over time. The data collection methods for each period are important to understand as they have implications for the results and how these can be compared. The methods for each period are summarised below.

2.2   Overall, across all survey periods, the main approach taken involved surveyors conducting on-site, face-to-face interviews with members of the public who were using the sites. Surveyors were instructed to roam very large set areas to interview people (between 1km and 3km stretches of coastline), therefore allowing them to intercept as many people as possible.

2.3   Across all survey periods there was also a count of people and dogs on the hour. This was a count of all people and dogs visible at that moment in time, within the field of view. However, the count area could differ greatly depending where the surveyor was stood at the time within the wide area in which they were roaming. Therefore, these can only be considered an indication of the levels of access.

2.4   More detail on the surveys in each of the 3 periods, starting with the oldest, is set out below:

- Spring 2016,
- Spring 2019, and
- Winter 2019/2020.

2.5   These 3 periods are named these for simplicity, but it should be acknowledged that they comprise a range of dates, differing for each survey, between October and April (as detailed for each below).

Spring 2016 surveys

2.6   These surveys consisted of 42 separate, 3-hour survey shifts, amounting to 126 hours. Surveys were undertaken between 20th January and 31st March 2016. This survey consisted of face-to-face interviews and counts of numbers of people. Exact dates and times for each interview undertaken were recorded, with earliest surveys starting at 7:46 and last surveys finishing at

16:53. However, exact surveying dates and times for each location were not set out. But it is noted that dates and times were staggered to cover mornings, afternoons and evenings, and also weekdays and weekends.

2.7 The survey methodology indicates that the counts conducted were considered an estimate and counts were not carried out when an interview was being conducted. The surveys were undertaken at 12 broad locations, see Map 2, and covered locations within South Tyneside, Sunderland and Durham (with one just extending into Hartlepool). The 12 locations organised by the 3 local authorities in which these largely fall are as follows:

- **South Tyneside:**
    o 1. Tyne to Frenchman's Bay
    o 2. Frenchman's Bay to Lizard Point
    o 3. Lizard Point to South Bents
- **Sunderland:**
    o 4. South Bents to Sunderland North Pier
    o 5. Sunderland South Pier to Ryhope Denemouth
- **Durham:**
    o 6. Ryhope Denemouth to Seaham Harbour
    o 7. Seaham Hall Beach
    o 8. Nose's Point
    o 9. Easington Colliery
    o 10. Horden
    o 11. Blackhall Rocks
    o 12. Crimdon Beach (just extending into Hartlepool)

2.8 The survey locations are shown in Map 2, with circles of varying sizes used to indicate the stretches of coast along which surveyors roamed to interview people and conduct counts. These highlight that areas in which surveyors could roam included some very long stretches of coast. The first 6 locations (northern half) were broad areas (usually c. 3km stretches of coast), with the surveyors roaming between 2 named locations. The final 6 locations (southern half) were more specific sites (often around 1km stretches). The interviews and counts (based on the field of view on the hour) were conducted within these broad areas. Without a record of the specific point locations where the interviews were conducted, the calculation of a linear distance between the interviewees home postcode and the survey point was impossible.

2.9 In this report we make a brief reference to 2016 survey data for a comparison. This information is considered to have been superseded by more recent surveys undertaken in the last 2 years and so is only analysed

for a few specific questions as a commentary on potential change over time and for greater data robustness.

Map 2: Location of survey areas in the 2016 surveys.
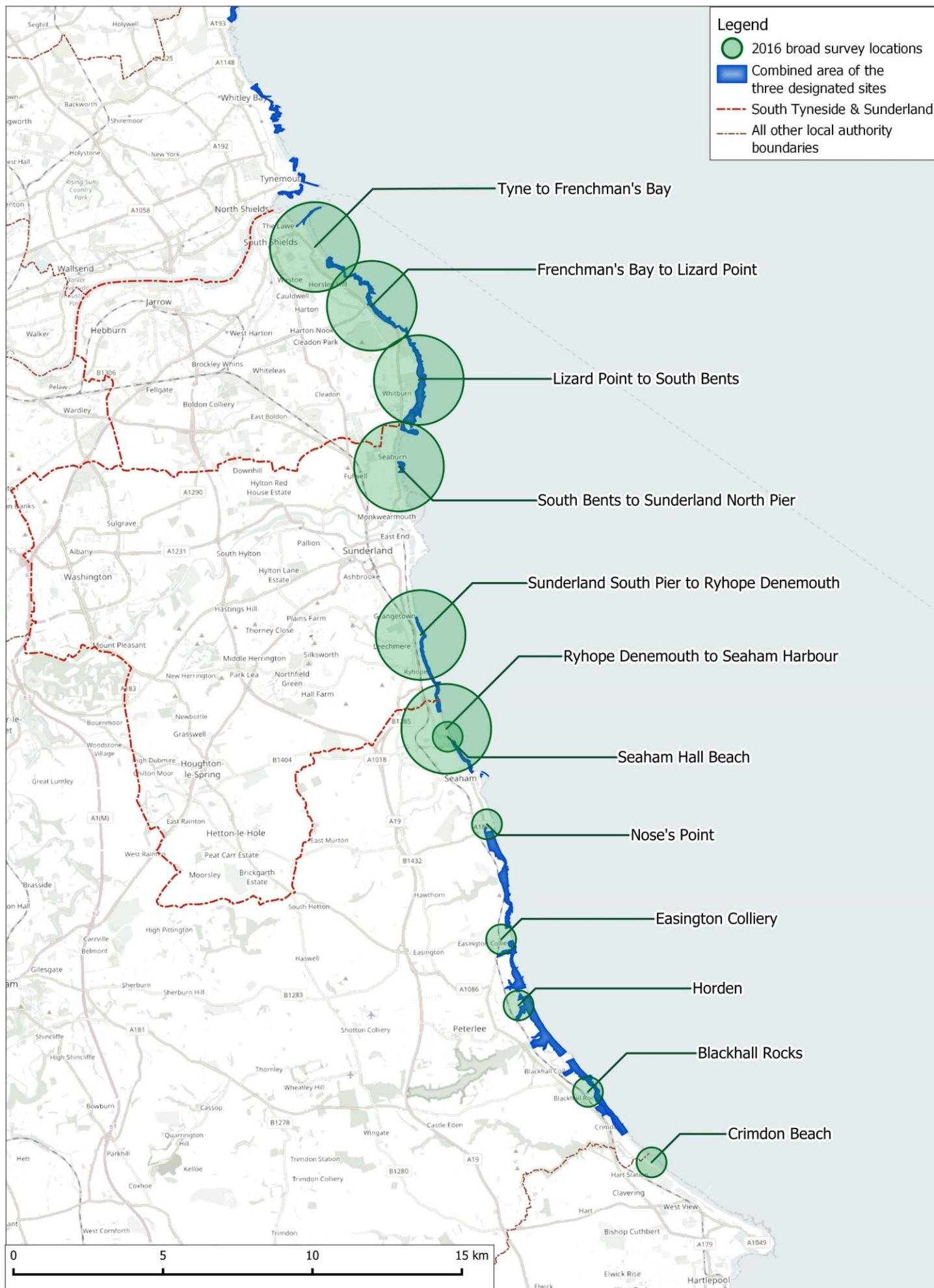
Tyne to Frenchman's Bay

Frenchman's Bay to Lizard Point

Lizard Point to South Bents

South Bents to Sunderland North Pier

Sunderland South Pier to Ryhope Denemouth

Ryhope Denemouth to Seaham Harbour

Seaham Hall Beach

Nose's Point

Easington Colliery

Horden

Blackhall Rocks

Crimdon Beach

0   5   10   15 km

Spring 2019 and Winter 2019/2020 surveys

2.10   In light of the need for more detailed and more recent surveys, repeat surveys were conducted by Bluegrass Research in early Spring 2019 for South Tyneside, and again in Winter 2019/2020 for South Tyneside and Sunderland – see Map 3.

2.11   The locations used in these surveys were again broad locations, which covered long stretches of coast (e.g. stretches were up to 3 km of coastline). Importantly the broad areas also differed slightly between the 2 periods of Spring 2019 and Winter 2019/2020. Because the extent of the areas surveyed differed, these data were not pooled and treated as one dataset.

2.12   These surveys were conducted on tablets with a GPS facility that logged the location of each interview. The questions asked in the survey are summarised in the appendix in Table 22.

Spring 2019 surveys

2.13   Surveys were conducted between 22nd February and 27th April 2019. These surveys had a smaller geographic remit and were focused on just South Tyneside. Survey effort was evenly distributed between the 3 broad locations listed below. However, these broad survey locations often overlapped – see Map 3. Survey effort was not evenly distributed between the 2 to 3 sublocations, listed below, which were highlighted as focal areas in the methodology - see surveying effort by location in Table 1:

- **1. Tyne to Frenchman's Bay**
    - South Pier
    - Trow Lea at water's edge
- **2. Frenchman's Bay to Lizard Point**
    - Marsden Grotto
    - Marsden Point
- **3. Lizard point to South Bents**
    - Mill Lane
    - Sea Lane
    - Souter Point

2.14   Surveys were undertaken as 18 shifts of 3 hours each, with 6 at each of the 3 broad locations (see Table 1), amounting to 54 hours. Surveys were generally conducted on different individual dates, with 17 separate dates for the 18 sessions. Timings of surveys for 3 hour shifts were 08:00 to 11:00; 11:00 to 14:00; and 14:00 to 17:00.

2.15   Effort was consistent between weekdays and weekend days (9 sessions on both, see Table 1). However, effort was not consistent across all survey sessions within these; with unbalanced effort for locations within weekends, see Table 1, and also not consistent between time periods; with more effort between 2 pm – 5 pm and less between 11 am – 2 pm, see Table 1.

Table 1: Summary of the number of visitor surveying sessions in Spring 2019. Each session amounted of 3 hours of surveying.

Broad Locations and sublocation focal areas	Weekday			Weekend			Total
	11am-2pm	2pm-5pm	8am-11am	11am-2pm	2pm-5pm	8am-11am	
1. Frenchman's Bay to Lizard Point	**1**	**1**	**1**		**2**	**1**	**6**
Marsden Grotto	1				2		**3**
Marsden Point		1	1			1	**3**
2. Lizard Point to South Bents	**1**	**1**	**1**	**1**	**1**	**1**	**6**
Mill Lane	1				1		**2**
Sea Lane		1		1			**2**
Souter Point			1			1	**2**
3. Tyne to Frenchman's Bay	**1**	**1**	**1**	**1**	**1**	**1**	**6**
South Pier	1	1		1			**3**
Trow Lea at water's edge			1		1	1	**3**
Total	**3**	**3**	**3**	**2**	**4**	**3**	**18**

Winter 2019/20 surveys

2.16   A repeat set of surveys were conducted between 26th October 2019 and 14th March 2020. These surveys had a wider geographic remit, with the broad locations defined for these survey areas differing slightly from the Spring 2019 surveys, and additional surveys to cover both South Tyneside and Sunderland (and just into Durham). The broad locations were as follows:

- o **1. Tyne to Frenchman's Bay**
- o **2. Frenchman's Bay to Lizard Point**
- o **3. Lizard Point to South Bents**
- o **4. South Bents to Sunderland North Pier**
- o **5. Sunderland South Pier to Ryhope Denemouth**
- o **6. Ryhope Denemouth to Seaham Harbour**

2.17   The repeat surveys in Winter 2019/20 were undertaken in 65 shifts (see Table 2) of 3 hours each, giving a total of 195 hours. Surveys were usually conducted on different individual dates, with 49 separate dates for the 65 sessions. Timings of surveys were for 3 hour shifts - as in the Spring 2019 surveys (see Table 2).

2.18   The survey effort was largely evenly spread, however given there were an uneven number of shifts, it meant effort was not consistent across all survey locations, between weekday and weekend and times (Table 2).

Table 2: Summary of visitor surveying sessions between October 2019 and March 2020. Each session amounted to 3 hours of surveying.

Location	Weekday			Weekend			Total
	11am-2pm	2pm-5pm	8am-11am	11am-2pm	2pm-5pm	8am-11am	
1. Tyne to Frenchman's Bay	2	2	2	2	2	1	11
2. Frenchman's Bay to Lizard Point	2	2	2	2	1	2	11
3. Lizard Point to South Bents	1	2	2	2	2	2	11
4. South Bents to Sunderland North Pier	2	1	2	2	2	1	10
5. Sunderland South Pier to Ryhope Denemouth	2	2	1	2	2	2	11
6. Ryhope Denemouth to Seaham Harbour	2	2	2	1	2	2	11
Total	**11**	**11**	**11**	**11**	**11**	**10**	**65**

Map 3: Broad survey locations areas in the Spring 2019 and Winter 2019/2020 surveys. The density of surveying effort is plotted from the GPS locations of interviews using a green heatmap to show clusters.
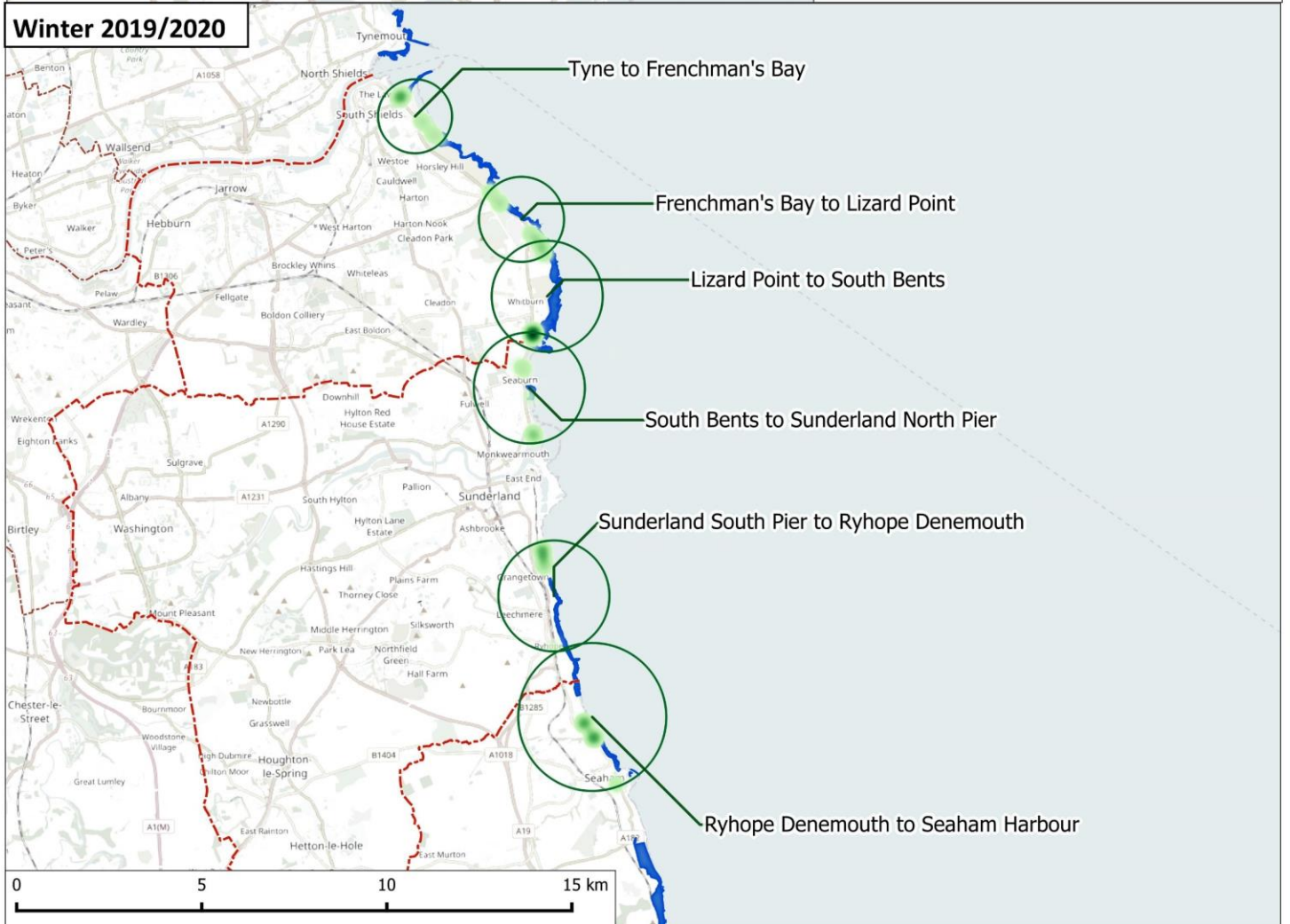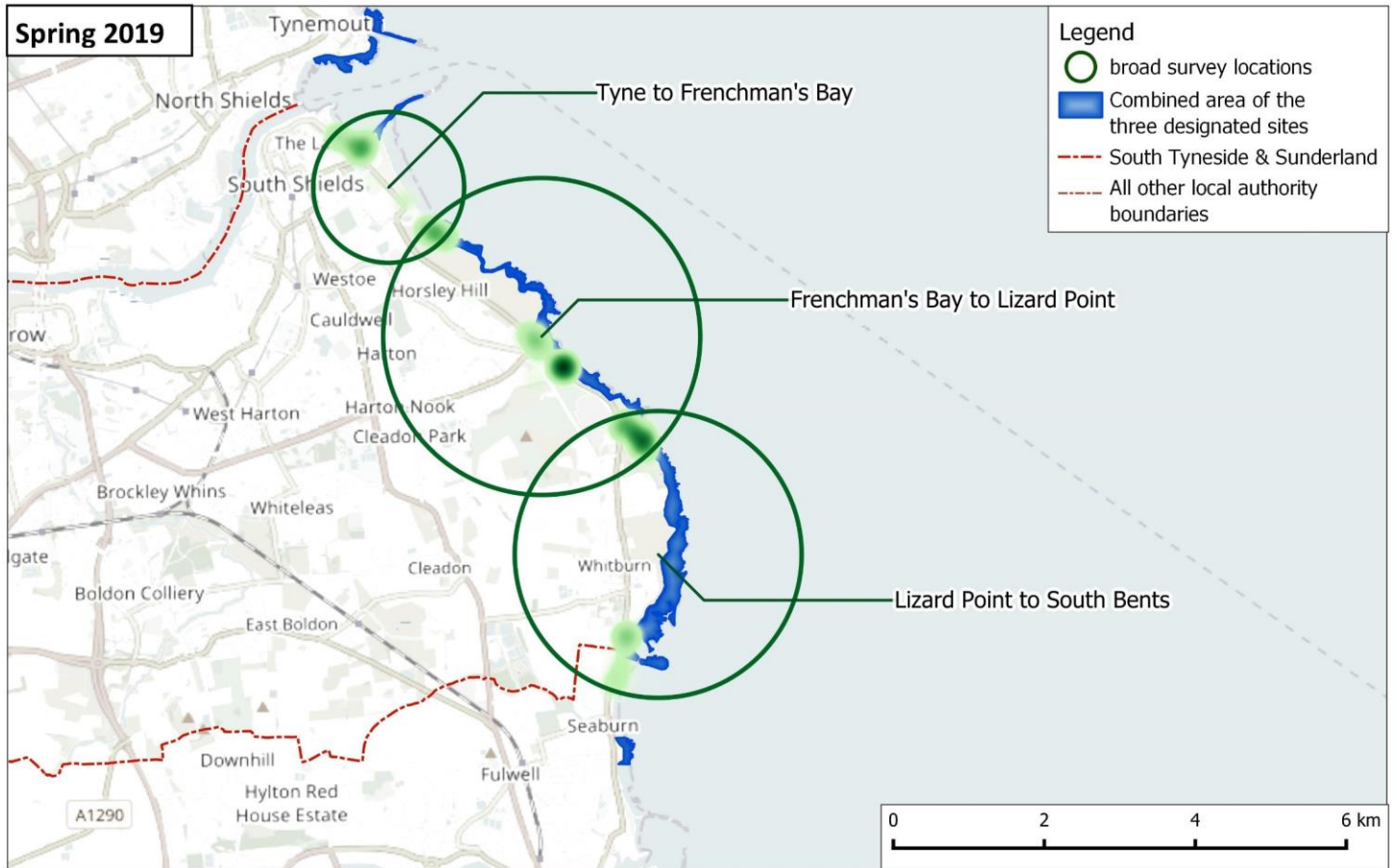
Spring 2019

Tyne to Frenchman's Bay

Frenchman's Bay to Lizard Point

Lizard Point to South Bents

Legend
- broad survey locations
- Combined area of the three designated sites
- South Tyneside & Sunderland
- All other local authority boundaries

Winter 2019/2020

Tyne to Frenchman's Bay

Frenchman's Bay to Lizard Point

Lizard Point to South Bents

South Bents to Sunderland North Pier

Sunderland South Pier to Ryhope Denemouth

Ryhope Denemouth to Seaham Harbour

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Data analysis

2.19   Count data collected were of limited use, due to the lack of a set area of the count - the roaming nature of the surveys meant this could refer to different parts of the coast within a single survey location. The field of view could therefore be of different sized areas. The counts have therefore been presented as a simple average for the broad locations to give an indication of the level of footfall.

2.20   All GIS analysis were conducted in QGIS 3.4. Home postcodes were geocoded using Royal Mail Postzon postcode data from 2020. Only full, valid postcodes were used in analysis of visitor origins, partial postcodes or named towns/villages were not included in any analysis due to the variation in precision.

2.21   In Spring 2019 and Winter 2019/2020 the interview location was automatically recorded by the tablet's GPS facility as part of the survey. A visual check of these locations indicated some infrequent, but large inaccuracies, presumably due to the tablet failing to get an accurate GPS signal. In total around 25 GPS points of interviews were either well offshore or inland (9 (3%) GPS points of interviews in Spring 2019 and 16 (1%) in Winter 2019/2020), and in addition 60 points did not match the given survey location (11 interviews (3%) in Spring 2019 and 49 interviewees (4%) in Winter 2019/2020).

2.22   Due to the uncertainties in the GPS locations and the lack of GPS locations in the 2016 surveys, we used the broad locations only to categorise the data and calculate how far away visitors originated. For the calculations of linear distance between the interviewees home postcode and the survey location, we calculated the distance from postcode to Mean High Water (MHW). The MHW was divided into sections to represent the coastline roamed in the survey for each broad location. We used a nearest GIS calculation (QGIS NNJoin plugin, point to line calculation) to calculate the minimum distance between the interviewee's postcode and the nearest part of the surveyed coastline they were interviewed at.

2.23   Within the report we make use of a number of averages, using means and medians as appropriate, and they are often presented together to show the distribution of values. For all data analysis involving statistical tests the data were not normally distributed (usually positively skewed, with a small

number of very high outlier values), and therefore we used non-parametric tests and median values.

3.   Results: hourly counts

Spring 2019 and Winter 2019/2020 surveys

3.1   Table 3 summarises the average number of people observed on a single hourly count for the 2 separate survey periods (Spring 2019 and Winter 2019/20) and as a combined total. Higher counts appear to have been typical at South Bents to Sunderland North Pier (an average of 18.9 people seen on a count), followed by Tyne to Frenchman's Bay (14.9), compared to low numbers at Sunderland South Pier to Ryhope Denemouth (5.0) and Frenchman's Bay to Lizard Point (6.3). Note the count method involved the surveyor roaming and a count done on the hour of the area visible, so it is difficult to directly compare across locations.

Table 3: Summary of average number of people and dogs seen on the hour at each broad site. For the total column the highest 2 values are highlighted in red and lowest 2 values are highlighted in blue.

Broad location	Spring 2019			Winter 19/2020			Total		
	n	people	dogs	n	people	dogs	n	people	dogs
1. Tyne to Frenchman's Bay*	6	9.4	3.0	11	18.0	6.8	17	**14.9**	5.4
2. Frenchman's Bay to Lizard Point*	6	5.8	3.0	11	6.6	1.8	17	**6.3**	**2.2**
3. Lizard Point to South Bents*	6	9.1	3.7	11	14.0	6.6	17	12.3	**5.6**
4. South Bents to Sunderland North Pier				9	18.9	6.9	9	**18.9**	**6.9**
5. Sunderland South Pier to Ryhope Denemouth				10	5.0	1.6	10	**5.0**	**1.6**
6. Ryhope Denemouth to Seaham Harbour				9	7.0	3.0	9	7.0	3.0

* It should be noted that survey areas differed slightly between survey periods, and caution is advised with comparisons.

3.2   Table 4 shows the number of dogs per person, which was largely similar as a whole across the coast and between the 2 survey periods. Values for the individual broad survey locations in the 2 survey periods ranged from 0.27

(e.g. around 1 dog for every 4 persons) to 0.51 (just over 1 dog for every 2 people).

Table 4: Summary of number of dogs per person at each broad site. For the total column the highest 2 values are highlighted in red and lowest 2 values are highlighted in blue.

	Spring 2019		Winter 19/2020		Total	
	n	Dogs per person	n	Dogs per person	n	Dogs per person
1. Tyne to Frenchman's Bay*	6	0.32	11	0.38	17	0.36
2. Frenchman's Bay to Lizard Point*	6	0.51	11	0.27	17	**0.35**
3. Lizard Point to South Bents*	6	0.41	11	0.47	17	**0.45**
4. South Bents to Sunderland North Pier			9	0.37	9	0.37
5. Sunderland South Pier to Ryhope Denemouth			10	0.32	10	**0.32**
6. Ryhope Denemouth to Seaham Harbour			9	0.43	9	**0.43**

* It should be noted that survey areas differed slightly between survey periods, and caution is advised with comparisons.

2016 surveys

3.3   The 2016 results could not be converted into average calculations for each site. However, the total was 2,121 people counted across all locations. Assuming 42 shifts, totalling 126 hours of surveying and therefore 168 counts on the hour, a simple average was 12.6 people in each count across the entire survey. This compared to 11.6 people in the Winter 19/2020 surveys and 8.1 people in the Spring 2019 surveys, but note the different areas make these figures not directly comparable.

4.   Results: interviews

4.1   The interview data are summarised in this section by individual questions. The data used are from the Spring 2019 and Winter 2019/2020 surveys, with supporting data from Spring 2016 for just a few questions. The number of interviewees in each survey period was:

- 633 interviews in Spring 2016;
- 344 interviews in Spring 2019, and;
- 1,213 interviews in Winter 2019/2020.

Activity (Q1)

Spring 2019 and Winter 2019/2020 surveys

4.2   Overall, across all the Spring 2019 and Winter 2019/2020 surveys, the main activity was dog walking, involving 44% (150 interviewees) and 53% (637 interviewees) of those interviewed in each period respectively.

4.3   Dog walking was consistently the main activity group recorded at each location and period, with the percentage of interviewees ranging from 43% to 59% (Table 5). Furthermore, walking was consistently the second main activity group encountered at each location and period, ranging from 28% to 44%. A combined category of 'other' was typically placed third, however a notable exception to this was sea angling in section 5 (see Map 4), Sunderland South Pier to Ryhope Denemouth (17% of interviewees). The location of activities along the coastline from the visitor data is also summarised in the Map 4.

Table 5: Number (%) of interviewees conducting different activities at each broad survey location. Top 3 activities for each row are highlighted in red.

	Survey location	Dog walking	Walking	Other	Sea angling	Holiday / short break	Cycling	Bird watching	Jogging	Horse riding	Total
Spring 2019	1. Tyne to Frenchman's Bay*	40 (46)	38 (44)	3 (3)	0 (0)	3 (3)	1 (1)	1 (1)	1 (1)	0 (0)	87 (100)
	2. Frenchman's Bay to Lizard Point*	57 (43)	38 (29)	21 (16)	0 (0)	8 (6)	4 (3)	1 (1)	4 (3)	0 (0)	133 (100)
	3. Lizard Point to South Bents*	53 (43)	42 (34)	16 (13)	0 (0)	2 (2)	7 (6)	1 (1)	2 (2)	1 (1)	124 (100)
Winter 2019/2020	1. Tyne to Frenchman's Bay*	100 (46)	89 (41)	11 (5)	2 (1)	5 (2)	5 (2)	2 (1)	1 (0)	1 (0)	216 (100)
	2. Frenchman's Bay to Lizard Point*	75 (46)	61 (37)	11 (7)	2 (1)	8 (5)	2 (1)	4 (2)	(0)	1 (1)	164 (100)
	3. Lizard Point to South Bents*	102 (54)	52 (28)	15 (8)	1 (1)	8 (4)	2 (1)	5 (3)	3 (2)	0 (0)	188 (100)
	4. South Bents to Sunderland North Pier	128 (57)	80 (36)	5 (2)	3 (1)	2 (1)	1 (0)	1 (0)	2 (1)	3 (1)	225 (100)
	5. Sunderland S. Pier to Ryhope Denemouth	95 (51)	44 (24)	7 (4)	31 (17)	0 (0)	5 (3)	2 (1)	2 (1)	0 (0)	186 (100)
	6. Ryhope Denemouth to Seaham Harbour	137 (59)	91 (39)	1 (0)	0(0)	2 (1)	1 (0)	0 (0)	2 (1)	0 (0)	234 (100)
	Total	**787 (51)**	**535 (34)**	**90 (6)**	**39 (3)**	**38 (2)**	**28 (2)**	**17 (1)**	**17 (1)**	**6 (0)**	**1557 (100)**

* It should be noted that survey areas differed slightly between survey periods, and caution is advised with comparisons.

Map 4: Interviewee main activities for the broad survey locations in Spring 2019 and Winter 2019/2020.

Spring 2019

Legend
Broad locations:
- ●——● 1. Tyne to Frenchman's Bay
- ●——● 2. Frenchman's Bay to Lizard Point
- ●——● 3. Lizard Point to South Bents

Winter 2019/2020

Legend
Pie chart activity:
- ⬛ Dog walking
- 🟩 Walking
- ⬜ Other
- 🟦 Sea angling
- 🟥 Holiday / short break in area
- 🟨 Cycling
- 🟦 Bird watching
- 🟧 Jogging
- 🟪 Horse riding

Legend
Broad locations:
- ●——● 1. Tyne to Frenchman's Bay
- ●——● 2. Frenchman's Bay to Lizard Point
- ●——● 3. Lizard Point to South Bents
- ●——● 4. South Bents to Sunderland North Pier
- ●——● 5. Sunderland South Pier to Ryhope Denemouth
- ●——● 6. Ryhope Denemouth to Seaham Harbour

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2016 surveys

4.4   Brief reference is made here to the activities recorded in the 2016 survey. Again, the most common activity at every single location was dog walking, ranging from 50% to 88% of interviewees. This was usually followed by walking, again with an exception of sea angling at survey point 5, Sunderland South Pier to Ryhope Denemouth.

Table 6: Number (%) of interviewees conducting each activity from the 2016 visitor surveys. Top 3 values in each row are highlighted in red.

	Dog walking	Walking	Blank	Beachcombing	Sea angling	Other	Total
SOUTH TYNESIDE	**142 (70)**	**49 (24)**	**3 (1)**	**(0)**	**(0)**	10 (5)	**204 (100)**
1. Tyne to Frenchman's Bay	49 (80)	8 (13)	1 (2)	(0)	(0)	3 (5)	61 (100)
2. Frenchman's Bay to Lizard Point	44 (73)	15 (25)	(0)	(0)	(0)	1 (2)	60 (100)
3. Lizard Point to South Bents	49 (59)	26 (31)	2 (2)	(0)	(0)	6 (7)	83 (100)
SUNDERLAND	**65 (58)**	**36 (32)**	**4 (4)**	**(0)**	5 (4)	**2 (2)**	**112 (100)**
4. South Bents to Sunderland North Pier	48 (54)	35 (39)	4 (4)	(0)	(0)	2 (2)	89 (100)
5. Sunderland South Pier to Ryhope Denemouth	17 (74)	1 (4)	(0)	(0)	5 (22)	0 (0)	23 (100)
DURHAM	**188 (59)**	**93 (29)**	**4 (1)**	**21 (7)**	**6 (2)**	**5 (2)**	**317 (100)**
6. Ryhope Denemouth to Seaham Harbour	52 (50)	35 (33)	(0)	15 (14)	1 (1)	2 (2)	105 (100)
7. Seaham Hall Beach	26 (51)	16 (31)	1 (2)	4 (8)	2 (4)	2 (4)	51 (100)
8. Nose's Point	22 (69)	10 (31)	(0)	(0)	(0)	0 (0)	32 (100)
9. Easington Colliery	28 (88)	4 (13)	(0)	(0)	(0)	0 (0)	32 (100)
10. Horden	9 (56)	4 (25)	2 (13)	(0)	1 (6)	0 (0)	16 (100)
11. Blackhall Rocks	30 (65)	10 (22)	1 (2)	2 (4)	2 (4)	1 (2)	46 (100)
12. Crimdon Beach	21 (60)	14 (40)	(0)	(0)	(0)	0 (0)	35 (100)
Total	**395 (62)**	**178 (28)**	**11 (2)**	**21 (3)**	**11 (2)**	**17 (3)**	**204 (100)**

Visitor profile (Q11/17/18)

4.5 Overall, across all survey locations in Spring 2019 and Winter 2019/20, the majority of interviewees (49%) were visiting on their own, followed by those visiting with their partner (29%) and those visiting with family including children (10%), see Table 7.

4.6 There was some variation between locations and survey periods, with the highest proportion of interviewees on their own recorded from section 5, Sunderland South Pier to Ryhope Denemouth in Winter 2019/20 (64%) and slightly more groups of friends/families at Tyne to Frenchman's Bay in Spring 2019 (30% in total).

Table 7: Number (%) of interviewees by group type, with the top value in each row highlighted in red.

	Survey location	One person	Couple	Group of friends	Family group with children under 16	Family group without children	Friends and family group	Other	Walking group[2]	Total
Spring 2019	1. Tyne to Frenchman's Bay[1]	40 (46)	21 (24)	11 (13)	7 (8)	6 (7)	2 (2)	0 (0)	-	**87 (100)**
	2. Frenchman's Bay to Lizard Point[1]	51 (38)	46 (35)	14 (11)	17 (13)	2 (2)	2 (2)	1 (1)	-	**133 (100)**
	3. Lizard Point to South Bents[1]	58 (47)	45 (36)	3 (2)	16 (13)	1 (1)	0 (0)	1 (1)	-	**124 (100)**
Winter 2019/2020	1. Tyne to Frenchman's Bay[1]	107 (50)	63 (29)	14 (6)	25 (12)	4 (2)	3 (1)	0 (0)	0 (0)	**216 (100)**
	2. Frenchman's Bay to Lizard Point[1]	69 (42)	57 (35)	11 (7)	18 (11)	4 (2)	3 (2)	0 (0)	2 (1)	**164 (100)**
	3. Lizard Point to South Bents[1]	97 (52)	53 (28)	9 (5)	21 (11)	7 (4)	0 (0)	1 (1)	0 (0)	**188 (100)**
	4. South Bents to Sunderland North Pier	99 (44)	75 (33)	26 (12)	21 (9)	1 (0)	2 (1)	0 (0)	1 (0)	**225 (100)**
	5. Sunderland South Pier to Ryhope Denemouth	119 (64)	30 (16)	19 (10)	14 (8)	0 (0)	3 (2)	1 (1)	0 (0)	**186 (100)**
	6. Ryhope Denemouth to Seaham Harbour	117 (50)	68 (29)	20 (9)	17 (7)	7 (3)	4 (2)	0 (0)	1 (0)	**234 (100)**

[1] It should be noted that survey areas differed slightly between survey periods, and caution is advised with comparisons.

[2] The category of 'Walking group' was used in the Winter 2019/20 survey but not in Spring 2019.

4.7   Across all survey locations and periods, the age group category most commonly given by interviewees was 50-64 years (40% of interviewees), followed by 30-49 (28%) and 65+ years (24%). The number of interviewees aged 18-29 was low (between 4% and 9%) at all locations and periods and was 7% overall (see Table 8).

Table 8: Number (%) of interviewees by age category, with the top two values in each row highlighted in red.

	Survey location	18-29	30-49	50-64	65+	Prefer not to say	Total
Spring 2019	1. Tyne to Frenchman's Bay*	8 (9)	19 (22)	37 (43)	20 (23)	3 (3)	87 (100)
	2. Frenchman's Bay to Lizard Point*	12 (9)	34 (26)	57 (43)	29 (22)	1 (1)	133 (100)
	3. Lizard Point to South Bents*	5 (4)	37 (30)	50 (40)	29 (23)	3 (2)	124 (100)
Winter 2019/2020	1. Tyne to Frenchman's Bay*	13 (6)	61 (28)	97 (45)	44 (20)	1 (0)	216 (100)
	2. Frenchman's Bay to Lizard Point*	15 (9)	42 (26)	61 (37)	45 (27)	1 (1)	164 (100)
	3. Lizard Point to South Bents*	11 (6)	42 (22)	87 (46)	48 (26)	0 (0)	188 (100)
	4. South Bents to Sunderland North Pier	13 (6)	72 (32)	79 (35)	57 (25)	4 (2)	225 (100)
	5. Sunderland South Pier to Ryhope Denemouth	12 (6)	51 (27)	68 (37)	54 (29)	1 (1)	186 (100)
	6. Ryhope Denemouth to Seaham Harbour	22 (9)	73 (31)	81 (35)	52 (22)	6 (3)	234 (100)

* It should be noted that survey areas differed slightly between survey periods, and caution is advised with comparisons.

Dog walking specific questions (Q3/4/5)

4.8   Interviewees who use the site for dog walking were asked for further details regarding their dog walks. The number of dogs with them on the day of the interview varied from 0 to 11, the most common number being just 1 dog (70%), see Table 9. Excluding those who did not have a dog with them on the day of the interview, and those who did not give an answer, the mean number of dogs per interviewee was 1.5 dogs.

Table 9: The number of dogs with the interviewee on the day of the interview, as number (%) of interviewees. Only a subset of interviewees was asked this question, so percentages are given as a proportion of this subset.

| | Survey location | Number of dogs with the interviewee group | | | | | | | | Total |
		0	1	2	3	4	5	11	Blank	Total
Spring 2019	1. Tyne to Frenchman's Bay*	3 (6)	35 (73)	6 (13)	2 (4)	0 (0)	0 (0)	0 (0)	2 (4)	**48 (100)**
	2. Frenchman's Bay to Lizard Point*	3 (5)	40 (65)	14 (23)	4 (6)	0 (0)	1 (2)	0 (0)	0 (0)	**62 (100)**
	3. Lizard Point to South Bents*	3 (5)	37 (63)	13 (22)	4 (7)	1 (2)	0 (0)	1 (2)	0 (0)	**59 (100)**
Winter 2019/2020	1. Tyne to Frenchman's Bay*	7 (6)	75 (68)	25 (23)	2 (2)	0 (0)	0 (0)	0 (0)	1 (1)	**110 (100)**
	2. Frenchman's Bay to Lizard Point*	5 (6)	50 (63)	21 (26)	2 (3)	0 (0)	0 (0)	0 (0)	2 (3)	**80 (100)**
	3. Lizard Point to South Bents*	7 (6)	79 (67)	27 (23)	4 (3)	0 (0)	0 (0)	0 (0)	1 (1)	**118 (100)**
	4. South Bents to Sunderland North Pier	3 (2)	105 (77)	26 (19)	2 (1)	0 (0)	0 (0)	0 (0)	1 (1)	**137 (100)**
	5. Sunderland S. Pier to Ryhope Denemouth	3 (3)	72 (71)	19 (19)	4 (4)	1 (1)	0 (0)	0 (0)	2 (2)	**101 (100)**
	6. Ryhope Denemouth to Seaham Harbour	1 (1)	100 (72)	28 (20)	7 (5)	2 (1)	0 (0)	0 (0)	0 (0)	**138 (100)**

* It should be noted that survey areas differed slightly between survey periods, and caution is advised with comparisons.

4.9   Three-quarters (75%) of interviewees who used the site for dog walking said that they let their dog(s) off the lead when on the beach (Table 10). The survey location/period which had the lowest proportion of dog walkers letting their dog(s) off the lead was Frenchman's Bay to Lizard Point in winter 2019/20, where 64% let their dog(s) off the lead on the beach.

Table 10: Number (%) of interviewees by whether they let their dog(s) off the lead on the beach. Only a subset of interviewees was asked this question, so percentages are given as a proportion of this subset.

	Survey location	Yes	No	Blank	Total
Spring 2019	1. Tyne to Frenchman's Bay*	36 (75)	10 (21)	2 (4)	**48 (100)**
	2. Frenchman's Bay to Lizard Point*	47 (76)	13 (21)	2 (3)	**62 (100)**
	3. Lizard Point to South Bents*	47 (80)	11 (19)	1 (2)	**59 (100)**
Winter 2019/2020	1. Tyne to Frenchman's Bay*	83 (75)	26 (24)	1 (1)	**110 (100)**
	2. Frenchman's Bay to Lizard Point*	51 (64)	25 (31)	4 (5)	**80 (100)**
	3. Lizard Point to South Bents*	94 (80)	22 (19)	2 (2)	**118 (100)**
	4. South Bents to Sunderland North Pier	97 (71)	37 (27)	3 (2)	**137 (100)**
	5. Sunderland S. Pier to Ryhope Denemouth	81 (80)	18 (18)	2 (2)	**101 (100)**
	6. Ryhope Denemouth to Seaham Harbour	108 (78)	29 (21)	1 (1)	**138 (100)**

* It should be noted that survey areas differed slightly between survey periods, and caution is advised with comparisons.

4.10 Almost half (46%) of the dog walkers interviewed said that they visit at least once a day, including (15%) who visit multiple times each day. Dog walkers at Section 1, Tyne to Frenchman's Bay in Spring 2019 were particularly frequent visitors, with 54% indicating that they visit at least once a day (Table 11 and Figure 1).

Table 11: Number (%) of interviewees by frequency of visits for the purpose of dog walking. Only a subset of interviewees was asked this question, so percentages are given as a proportion of this subset.

	Survey location	3+ times a day	Twice a day	Once a day	Couple of times a week	Once a week	Once a month	Less than once a month	Blank	Total
Spring 2019	1. Tyne to Frenchman's Bay*	1 (2)	5 (10)	20 (42)	9 (19)	6 (13)	2 (4)	3 (6)	2 (4)	**48 (100)**
	2. Frenchman's Bay to Lizard Point*	4 (6)	11 (18)	9 (15)	21 (34)	8 (13)	6 (10)	3 (5)	0 (0)	**62 (100)**
	3. Lizard Point to South Bents*	4 (7)	7 (12)	17 (29)	18 (31)	7 (12)	2 (3)	4 (7)	0 (0)	**59 (100)**
Winter 2019/2020	1. Tyne to Frenchman's Bay*	4 (4)	12 (11)	37 (34)	39 (35)	11 (10)	7 (6)	0 (0)	0 (0)	**110 (100)**
	2. Frenchman's Bay to Lizard Point*	2 (3)	12 (15)	22 (28)	24 (30)	9 (11)	4 (5)	5 (6)	2 (3)	**80 (100)**
	3. Lizard Point to South Bents*	1 (1)	16 (14)	38 (32)	31 (26)	11 (9)	12 (10)	8 (7)	1 (1)	**118 (100)**
	4. South Bents to Sunderland North Pier	5 (4)	19 (14)	43 (31)	38 (28)	19 (14)	8 (6)	3 (2)	2 (1)	**137 (100)**
	5. Sunderland S. Pier to Ryhope Denemouth	3 (3)	10 (10)	40 (40)	28 (28)	10 (10)	7 (7)	2 (2)	1 (1)	**101 (100)**
	6. Ryhope Denemouth to Seaham Harbour	0 (0)	8 (6)	43 (31)	40 (29)	24 (17)	14 (10)	7 (5)	2 (1)	**138 (100)**

* It should be noted that survey areas differed slightly between survey periods, and caution is advised with comparisons.
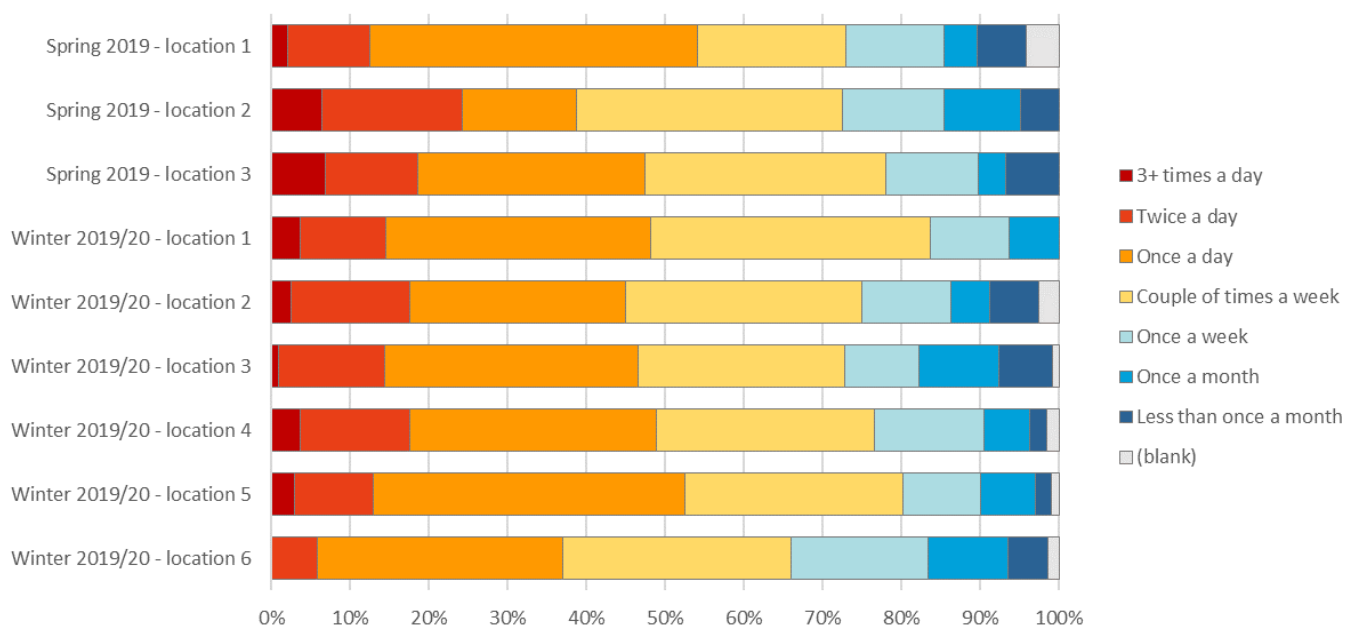

Figure 1: Summary of visit frequency for dog walking

4.11   Dog walkers were also asked what might attract them to going somewhere else rather than the coast. This was a multiple-choice question and answers varied greatly between survey locations and periods. The percentage of dog walkers who said that nothing would attract them elsewhere ranged from 23% at Frenchman's Bay to Lizard Point in spring 2019 to 76% at Tyne to Frenchman's Bay in winter 2019/20 (Table 12). Factors that would attract dog walkers included space to let their dog off the lead (mentioned by 19% overall) and being closer to home (12% overall).

Table 12: Number (%) of interviewees with answers to Q5b - what would attract them to walking their dog somewhere else, rather than the coast. Multiple answers were possible for this question. Percentages are given as a proportion of dog walkers. Top 3 values in each row are highlighted in red.

	Survey location	Closer	Parking	Space	Safety	Nothing	Other	(blank)	Total
Spring 2019	1. Tyne to Frenchman's Bay*	9 (19)	3 (6)	10 (21)	2 (4)	13 (27)	14 (29)	1 (2)	**48 (100)**
	2. Frenchman's Bay to Lizard Point*	17 (27)	4 (6)	15 (24)	6 (10)	14 (23)	11 (18)	1 (2)	**62 (100)**
	3. Lizard Point to South Bents*	10 (17)	3 (5)	12 (20)	5 (8)	14 (24)	22 (37)	0 (0)	**59 (100)**
Winter 2019/2020	1. Tyne to Frenchman's Bay*	8 (7)	4 (4)	14 (13)	5 (5)	84 (76)	0 (0)	0 (0)	**110 (100)**
	2. Frenchman's Bay to Lizard Point*	8 (10)	7 (9)	17 (21)	5 (6)	49 (61)	0 (0)	2 (3)	**80 (100)**
	3. Lizard Point to South Bents*	10 (8)	3 (3)	23 (19)	4 (3)	81 (69)	0 (0)	3 (3)	**118 (100)**
	4. South Bents to Sunderland North Pier	11 (8)	10 (7)	26 (19)	7 (5)	89 (65)	0 (0)	2 (1)	**137 (100)**
	5. Sunderland S. Pier to Ryhope Denemouth	8 (8)	10 (10)	27 (27)	3 (3)	59 (58)	0 (0)	1 (1)	**101 (100)**
	6. Ryhope Denemouth to Seaham Harbour	19 (14)	5 (4)	17 (12)	5 (4)	97 (70)	0 (0)	1 (1)	**138 (100)**

* It should be noted that survey areas differed slightly between survey periods, and caution is advised with comparisons.

Transport (Q13)

4.12   The majority of interviewees (70%) drove to the site where they were interviewed, 25% walked, 2% cycled and 2% used public transport. 'Other' (1%) included people who had run/jogged, arrived on horseback or had taken a taxi. Tyne to Frenchman's Bay in the spring 2019 survey had the highest proportion of interviewees walking to the site, with 36%, see Table 13.

Table 13: Number (%) of interviewees by mode of transport

	Survey location	Drive	Walk	Cycle	Public transport	Other	Total
Spring 2019	1. Tyne to Frenchman's Bay*	53 (61)	31 (36)	1 (1)	1 (1)	1 (1)	**87 (100)**
	2. Frenchman's Bay to Lizard Point*	87 (65)	36 (27)	5 (4)	4 (3)	1 (1)	**133 (100)**
	3. Lizard Point to South Bents*	84 (68)	31 (25)	5 (4)	2 (2)	2 (2)	**124 (100)**
Winter 2019/2020	1. Tyne to Frenchman's Bay*	140 (65)	62 (29)	5 (2)	6 (3)	3 (1)	**216 (100)**
	2. Frenchman's Bay to Lizard Point*	119 (73)	36 (22)	2 (1)	6 (4)	1 (1)	**164 (100)**
	3. Lizard Point to South Bents*	139 (74)	40 (21)	2 (1)	4 (2)	3 (2)	**188 (100)**
	4. South Bents to Sunderland North Pier	147 (65)	75 (33)	2 (1)	1 (0)	0 (0)	**225 (100)**
	5. Sunderland S. Pier to Ryhope Denemouth	139 (75)	41 (22)	5 (3)	0 (0)	1 (1)	**186 (100)**
	6. Ryhope Denemouth to Seaham Harbour	184 (79)	44 (19)	2 (1)	3 (1)	1 (0)	**234 (100)**

* It should be noted that survey areas differed slightly between survey periods, and caution is advised with comparisons.

Reasons for visiting (Q2a)

Winter 2019/2020: all activities

4.13   In Winter 2019/20 the reason for visiting was asked of all interviewees, regardless of activity types. Overall, the top reasons given for visiting the coast were enjoyment (given by 59% of interviewees), convenience (55%) and the views (29%). Enjoyment and convenience were within the top 3 reasons for all of the survey locations, with the third most common reason being either the views, health, tranquillity or parking (Table 14).

Table 14: Number (%) of interviewees by reason for visiting, from the winter 2019/20 survey. Multiple answers were possible for this question so percentages may add up to more than 100%. The top 3 values in each row are highlighted in red.

Survey location	Enjoyment	Convenience	Views	Health	Tranquillity	Parking	Space for dog	Own safety	Ease of access	No greenspace access	Other	Total
1. Tyne to Frenchman's Bay*	153 (71)	115 (53)	76 (35)	76 (35)	51 (24)	31 (14)	31 (14)	30 (14)	34 (16)	2 (1)	40 (19)	**216 (100)**
2. Frenchman's Bay to Lizard Point*	89 (54)	71 (43)	72 (44)	58 (35)	50 (30)	30 (18)	32 (20)	20 (12)	25 (15)	1 (1)	47 (29)	**164 (100)**
3. Lizard Point to South Bents*	122 (65)	87 (46)	71 (38)	50 (27)	72 (38)	22 (12)	36 (19)	19 (10)	17 (9)	0 (0)	43 (23)	**188 (100)**

Survey location	Enjoyment	Convenience	Views	Health	Tranquillity	Parking	Space for dog	Own safety	Ease of access	No greenspace access	Other	Total
4. South Bents to Sunderland North Pier	133 (59)	137 (61)	60 (27)	46 (20)	39 (17)	44 (20)	40 (18)	26 (12)	18 (8)	6 (3)	17 (8)	225 (100)
5. Sunderland South Pier to Ryhope Denemouth	60 (32)	108 (58)	24 (13)	18 (10)	12 (6)	32 (17)	16 (9)	7 (4)	12 (6)	3 (2)	41 (22)	186 (100)
6. Ryhope Denemouth to Seaham Harbour	157 (67)	145 (62)	54 (23)	23 (10)	8 (3)	57 (24)	33 (14)	11 (5)	3 (1)	2 (1)	1 (0)	234 (100)
Total	714 (59)	663 (55)	357 (29)	271 (22)	232 (19)	216 (18)	188 (15)	113 (9)	109 (9)	14 (1)	189 (16)	1,213 (100)

* It should be noted that survey areas differed slightly between survey periods, and caution is advised with comparisons.

Spring 2019: dog walkers

4.14   In Spring 2019, only the dog walkers were asked for their reasons for choosing to walk their dog at the coast. Overall, the most common reasons were convenience (45% of interviewees), plenty of space for their dog to run around off the lead (36%) and to enjoy the beach/sea (29%). At Tyne to Frenchman's Bay, having space for their dog to run around was viewed as particularly important to interviewees, given by 46% (Table 15).

Table 15: Number (%) of interviewees by reason for visiting, from the spring 2019 survey. The 'Total' column refers only to dog walkers. Multiple answers were possible for this question so percentages may add up to more than 100%. The top 3 values in each row are highlighted in red.

Survey location	Convenient / close to home	Plenty of space for my dog to run around	Enjoy the beach / sea	Views	Tranquillity	Health/wellbeing	Ease of access	Parking	I feel safe here	Nowhere suitable close to home	Other	Total
1. Tyne to Frenchman's Bay*	17 (35)	22 (46)	19 (40)	8 (17)	5 (10)	12 (25)	10 (21)	8 (17)	6 (13)	2 (4)	3 (6)	48 (100)
2. Frenchman's Bay to Lizard Point*	29 (47)	19 (31)	14 (23)	14 (23)	15 (24)	9 (15)	5 (8)	8 (13)	8 (13)	7 (11)	5 (8)	62 (100)
3. Lizard Point to South Bents*	30 (51)	19 (32)	16 (27)	17 (29)	14 (24)	7 (12)	9 (15)	4 (7)	4 (7)	1 (2)	8 (14)	59 (100)

Survey location	Convenient / close to home	Plenty of space for my dog to run around	Enjoy the beach / sea	Views	Tranquillity	Health/wellbeing	Ease of access	Parking	I feel safe here	Nowhere suitable close to home	Other	Total
Total	76 (45)	60 (36)	49 (29)	39 (23)	34 (20)	28 (17)	24 (14)	20 (12)	18 (11)	10 (6)	16 (9)	169 (100)

* It should be noted that survey areas differed slightly between survey periods, and caution is advised with comparisons.

Visit frequency and timing (Q9/10)

4.15   Interviewees were asked about their frequency of visits at different times of the year, in the summer months and the winter months. Responses were categorised by the surveyors, with categories given in Figure 2. Figure 2 highlights visit frequency between the summer and winter months overall differed little, and that most interviewees visited once a day or a couple of times a week. Full data for each location and visit frequency are given in appendix 2 (winter months in Table 23 and summer months in Table 24).
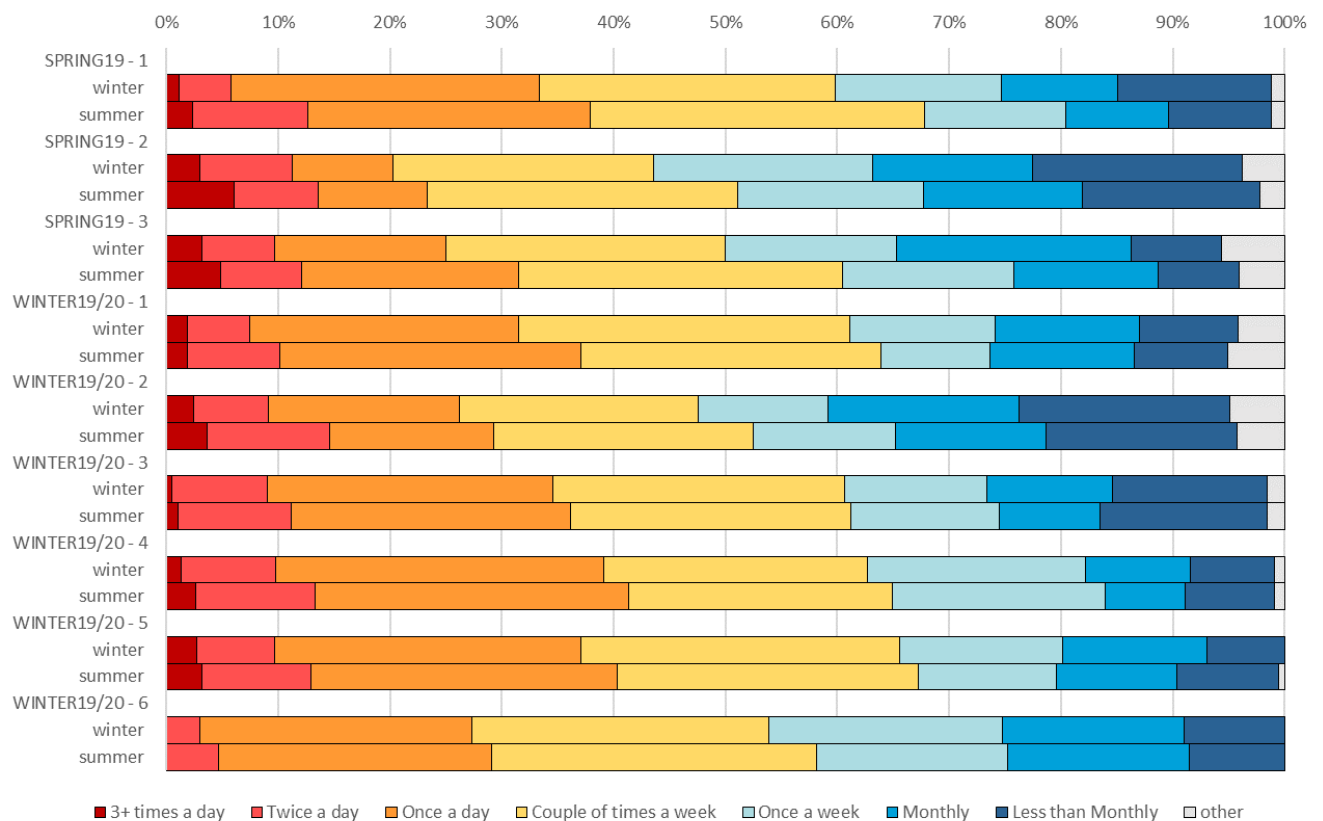

Legend: 3+ times a day | Twice a day | Once a day | Couple of times a week | Once a week | Monthly | Less than Monthly | other

Figure 2: Reported frequency of visiting in winter and in summer by interviewees, shown separately for each location and survey period.

4.16   Interviewees were then asked to select a time period, or multiple periods, in which they tended to visit. Generally, the most popular times to visit in the winter were between 10am and 4pm (see Figure 3). Overall, across the Spring 2019 and Winter 2019/20 surveys, 55% said they visit between 2pm and 4pm, 51% visit between 10am and 12pm and 46% visit between 12pm and 2pm.

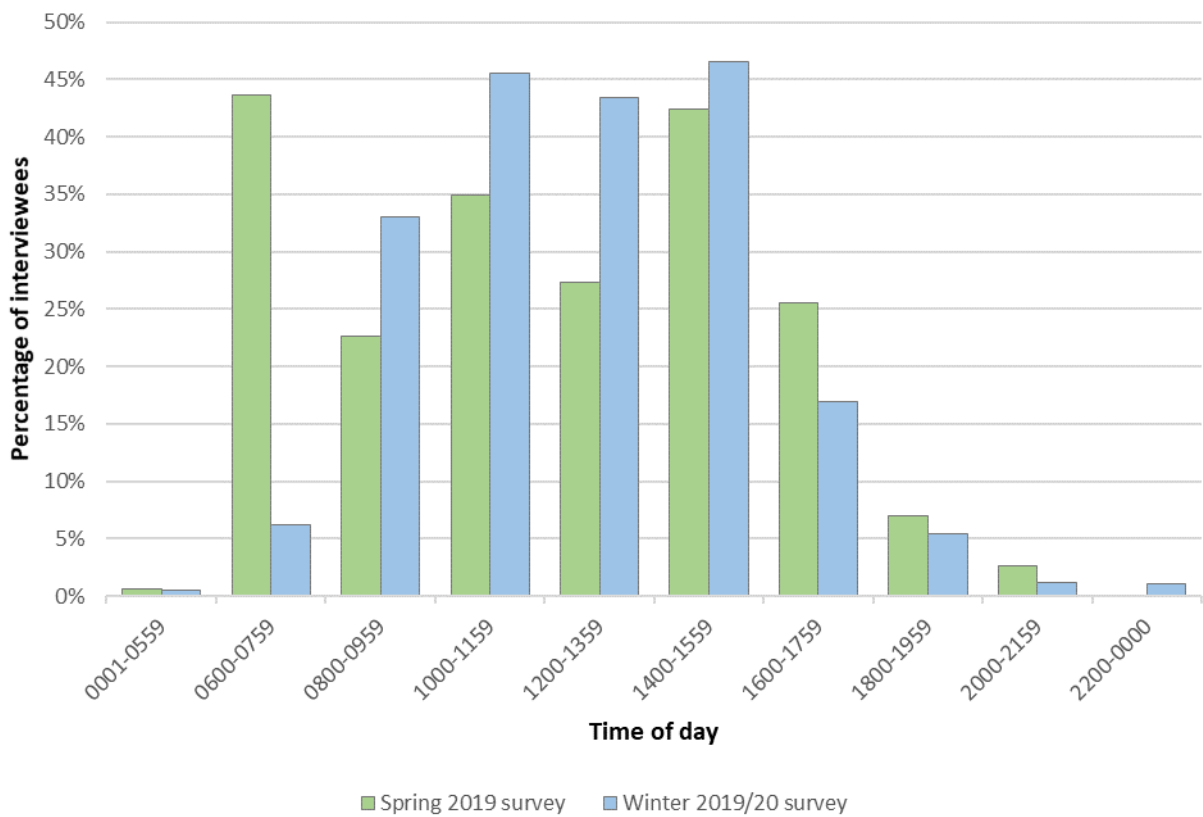**Figure 3: Typical timings of winter visits, by survey. Multiple answers were possible for this question.**

Visitor awareness (Q14): Spring 2019

4.17   In the Spring 2019 survey, interviewees were asked how important they thought the coast was as a wildlife site. Overall, 86% said it was very important and 12% said it was quite important. Awareness was similar across all 3 locations – see Table 16.

Table 16: Number (%) of interviewees by importance of site for wildlife

	Survey location	Very important	Quite important	Not very important	Not at all important	Total
Spring 2019	1. Tyne to Frenchman's Bay	74 (85)	11 (13)	1 (1)	1 (1)	**87 (100)**
	2. Frenchman's Bay to Lizard Point	114 (86)	17 (13)	1 (1)	1 (1)	**133 (100)**
	3. Lizard Point to South Bents	109 (88)	12 (10)	1 (1)	2 (2)	**124 (100)**
	Total	**297 (86)**	**40 (12)**	**3 (1)**	**4 (1)**	**344 (100)**

Use of an alternative, closer site (Q2b/c)

Winter 2019/2020: all activities

4.18   The Winter 2019/20 asked all interviewees whether they would use a suitable area of green space instead of the coast if it was closer to home, 70% said they wouldn't (i.e. they would still go to the coast), 27% said they would use it sometimes and 2% said they would use it most of the time.

Spring 2019: dog walkers

4.19   The Spring 2019 survey asked this question only of dog walkers. When asked whether they would use a suitable area of green space to walk their dog instead of the coast if it was closer to home, 8% said they probably would use it some of the time and 5% said they probably would use it most of the time.

Named alternative sites (Q7)

4.20   Overall, 72% of interviewees from the Spring 2019 and Winter 2019/20 surveys said that they also visit other places for similar purposes as their visit to the coast. They were then asked to name up to 3 sites that they visit most often. The top 3 sites named by interviewees at each survey location and period are shown in Table 17. Combined answers are presented as a word cloud in Figure 4. The majority of the locations named were other coastal locations in the region, and mostly elsewhere within the European designations.

Table 17: Three most popular alternative sites named by interviewees at each survey location and period. Interviewees could name up to 3 other sites that they visit.

	Survey location	Site name (% of interviewees)
Spring 2019	1. Tyne to Frenchman's Bay*	Seaburn (11) Tynemouth (9) Souter Point (8)
	2. Frenchman's Bay to Lizard Point*	Tynemouth (11) Seaburn (8) Northumberland (8) Roker (8)
	3. Lizard Point to South Bents*	South Shields (11) Seaham (7) Roker (6) Northumberland (6) Lake District (6)

	Survey location	Site name (% of interviewees)
Winter 2019/2020	1. Tyne to Frenchman's Bay*	Seaham (10) Tynemouth (10) The Leas (7)
	2. Frenchman's Bay to Lizard Point*	South Shields (12) The Leas (10) Seaburn (10) Cleadon Hill (10)
	3. Lizard Point to South Bents*	South Shields (22) Seaburn (12) Cleadon Hill (12)
	4. South Bents to Sunderland North Pier	South Shields (17) Seaham (11) Seaburn (10)
	5. Sunderland South Pier to Ryhope Denemouth	Seaham (24) Roker (11) Backhouse Park (8)
	6. Ryhope Denemouth to Seaham Harbour	South Shields (14) Roker (13) Ryhope (10)

* It should be noted that survey areas differed slightly between survey periods, and caution is advised with comparisons.

Figure 4: Word cloud showing other sites that interviewees also visit. Interviewees could name up to 3 other sites (Q7). Font size relates to the number of interviewees naming each site. Word cloud created using www.WordClouds.com.

Main reasons for visiting the site (Q8)

4.21   All interviewees were asked to name the main thing about the particular site (where interviewed) that makes them visit it. Figure 5 shows the result from the Winter 2019/20 data as this involved even survey effort across the coast. The most common reason (given by 33% overall) was close to home, followed by enjoyment of the beach or sea (22%) and the views (11%).

- close to home (34.8%)
- enjoy the beach/sea (24.1%)
- views (9.5%)
- space for dog (5.2%)
- tranquility (5.1%)
- parking (4.6%)
- natural environment (4.3%)
- ease of access (1.7%)
- good for children (1.5%)
- feels safe (0.6%)
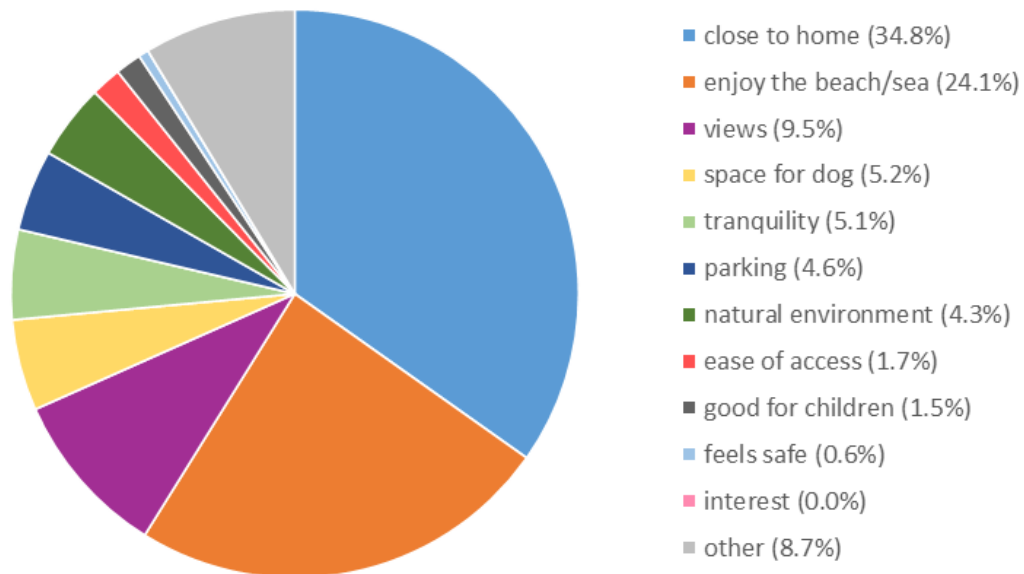- interest (0.0%)
- other (8.7%)

Figure 5: Pie chart showing interviewees' main reasons for visiting the site. Based on Winter 2019/20 data only

Visitor views on future changes (Q15): Spring 2019

4.22   Interviewees were asked for their views on future plans for access along the coast. This was unique to the Spring 2019 survey. It should also be noted that these questions were preceded by one regarding how important people felt the coast was for wildlife, and were preceded by the statement *"As the number of people who use the coast increases the pressures, on the unique environment will increase. With this in mind, to what extent would you support or object to plans which require… "*. This was then followed by each of the following statements:

- *Visitors only walking on designated paths along the coast,*
- *Dog owners to keep dogs on a lead during sensitive times for wildlife,*
- *Dog owners to keep dogs on a lead when walking through specific areas.*

4.23   Responses were categorised into the following classes using a flash card of the following exact wording:

- *"Completely object to some extent",*
- *"Object to some extent",*
- *"Neither completely support nor object",*
- *"Support to some extent",*
- *"Completely support".*

4.24   Overall, there was high levels of support reported for the suggested plans, and across all 3 options, the percentage of interviewees ranged from 62% to 70% in complete support. The highest support was in favour of the two dog specific restrictions. Whereas the more general idea regarding all visitors having to keep on designated paths had some stronger objections, with 9% of interviewees "completely object to some extent".
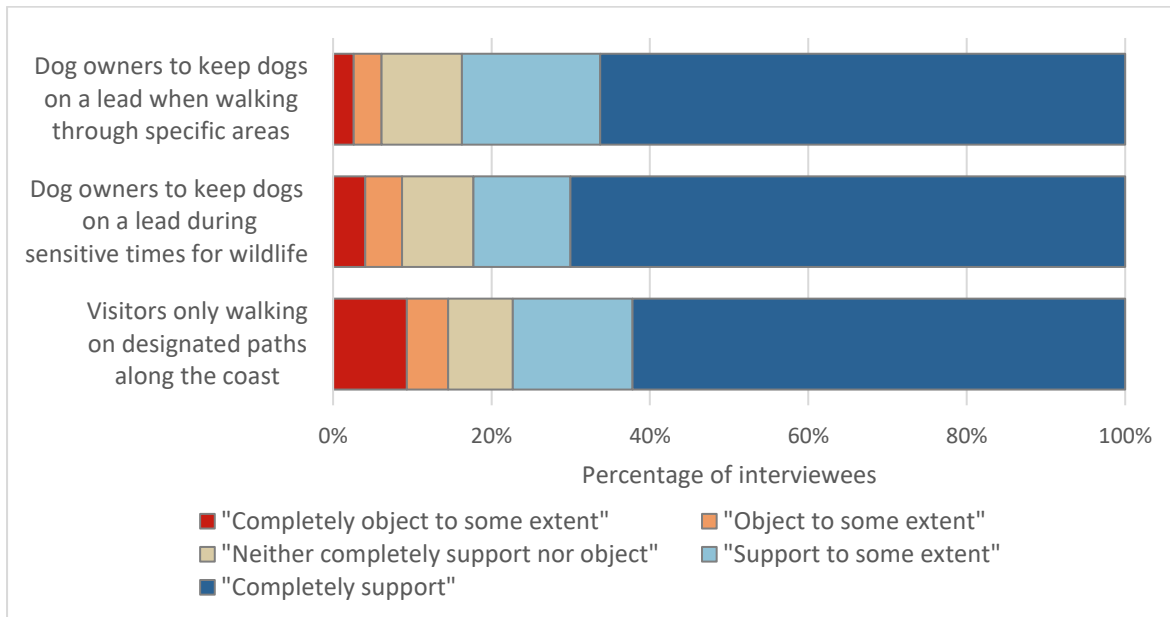
Figure 6: Interviewees' support or objection for each of 3 statements, shown as the percentage of interviewees in each set class as given in the questionnaire.

Visitor origins (Q12)

Spring 2019 and Winter 2019/2020 surveys

4.25   Of the 1,557 interviews conducted in the Spring 2019 and Winter 2019/2020 surveys, a total of 1,537 (99%) interviewees provided a postcode. However, not all postcodes were valid. Matching the interviewee's postcodes to a national database resulted in 1,390 (89%) postcodes being successfully mapped. Only data from interviewees with successfully georeferenced postcodes are used in this subsequent analysis section. Plotting the Interviewee postcodes in GIS allowed us to extract the local authority within which each postcode was located (see Table 18).

4.26   For the Spring 2019 surveys, which were conducted within South Tyneside, 67% of interviewee's (196 interviewees) postcodes fell within the South Tyneside District, followed by 16% in Sunderland District (46), and 6% in County Durham (18). Interviewees from 19 other local authorities accounted for 11% of interviews (33).

4.27   For the Winter 2019/20 surveys which covered South Tyneside and Sunderland these proportions clearly changed. The highest percentage of interviewees were from Sunderland, with 40% of interviewees (435), followed by 35% of interviewees from South Tyneside (383), and 17% from County Durham (18).

Table 18: Summary of local authority area in which interviewees were resident.

Local authority	Number of interviewees (percentage of interviewees for the column)	
	Spring 2019 *South Tyneside only*	Winter 2019/20 *South Tyneside & Sunderland*
South Tyneside District	196 (67)	383 (35)
Sunderland District	46 (16)	435 (40)
County Durham	18 (6)	189 (17)
Gateshead District	8 (3)	14 (1)
North Tyneside District	2 (1)	12 (1)
Newcastle upon Tyne District	2 (1)	9 (1)
Northumberland	3 (1)	4 (0)
Stockton-on-Tees	1 (0)	6 (1)
Calderdale District	2 (1)	3 (0)
Leeds District	0 (0)	3 (0)
Cheshire West and Chester	0 (0)	3 (0)
Darlington	3 (1)	0 (0)
Derbyshire Dales District	0 (0)	2 (0)
City of Edinburgh	0 (0)	2 (0)
Eden District	0 (0)	2 (0)
All other local authorities*	11 (4)	29 (3)
Total	**293 (100)**	**1097 (100)**

*all with no more than 2 interviewees within a local authority across both surveys.

4.28   We calculated linear (Euclidean) distances between the interviewee home postcode and nearest part of the MHW polyline for the broad location they were interviewed at.

4.29   Distances ranged from 47 metres to 468 kilometres (an interviewee from near Exeter) and are summarised in Table 19 (for full breakdown see Appendix 2, Table 25). The combined data – which has unbalanced survey effort, with more surveys in South Tyneside – shows typical distances of around 14 km (mean value). Taking each survey period separately, the same approximate pattern was still visible, with a mean of around 14 km. Data were not normally distributed, and medians were quite different.

Table 19: Summary statistics for interviewee distances from home postcode to the coastline (using MHW) for the survey area from the Spring 2019 and Winter 2019/2020 combined data.

	n	Mean ± SE	Median	Q3	Min – max
All interviewees					
All interviewees	1390	14.2 ± 1.25	3.0	7.2	0 - 467.5
By period (KW; H= 0.06, df=1, p=0.800)					
Spring 2019 - South Tyneside only	293	14.4 ± 2.5	2.5	7.0	0 - 391.3
Winter 2019/20 - South Tyneside & Sunderland	1097	14.2 ± 1.44	3.1	7.3	0 - 467.5
By broad survey location (KW; H= 30.69, df=5, p<0.001)					
1. Tyne to Frenchman's Bay*	282	11.2 ± 2.48	2.3	6.8	0.1 - 406.8
2. Frenchman's Bay to Lizard Point*	262	21.6 ± 3.66	3.6	7.7	0 - 420.8
3. Lizard Point to South Bents*	277	23.1 ± 3.92	3.7	9.3	0 - 467.5
4. South Bents to Sunderland North Pier	204	9.4 ± 2.15	3.1	6.4	0 - 298.5
5. Sunderland South Pier to Ryhope Denemouth	163	6.5 ± 1.81	1.5	4.5	0 - 225.8
6. Ryhope Denemouth to Seaham Harbour	202	7.8 ± 1.56	3.0	8.3	0 - 283.4
By activity (KW; H= 157.26, df=8, p<0.001) – note categories sorted by n.					
Dog walking	703	5.4 ± 0.65	2.1	4.8	0 - 221.7
Walking	477	15.1 ± 2.15	3.8	9.2	0.1 - 420.8
Other	83	32.5 ± 7.61	6.5	19.5	0.2 - 295.5
Sea angling	36	17.1 ± 9.03	4.7	12.2	0.5 – 330.0
Holiday / short break	29	168.9 ± 23.71	146.2	254.0	0.3 - 467.5
Cycling	26	4.8 ± 1.91	2.0	4.0	0.2 - 47.1
Bird watching	15	9.3 ± 2.6	5.1	13.0	0.4 - 31.8
Jogging	15	14.4 ± 11.13	1.3	4.5	0.5 - 168.8
Horse riding	6	4.9 ± 2.22	2.5	9.9	0.9 - 14.3

* It should be noted that survey areas differed slightly between survey periods, and caution is advised with comparisons.

4.30   Using the combined Spring 2019 and Winter 2019/2020 survey data, there was a statistically significant difference between locations (KW; H= 30.69, df=5, p<0.001), indicating that different stretches of the coast have different draws, and people come from further afield to some locations compared to others. There were also statistically significant differences between the activities, however caution is advised with some of the smaller sample sizes. For the largest activity group, dog walkers, the typical distances were small

(median 4.8 km), indicating relatively local use, while walkers were from further afield (median 9.2 km).

4.31   The third quartile (i.e. distance within which 75% of visitors originated) are summarised for each survey location and period in Table. These third quartile values (Q3 values) indicate the catchment from which the majority of visitors originated. Plotting the interviewees' distances as a cumulative percentage (Figure 7) shows how the relative amount of visitors changed with distance. This curve of visitor distances is also shown in relation to the the Q3 or 75th percentile, a solid orange line on Figure 7 shows where 7.2 km (the Q3 across both periods) is in relation to this curve. This point accounts for most of the visitors, and is at the point before the long tail of visitors from some large distances from the coast.
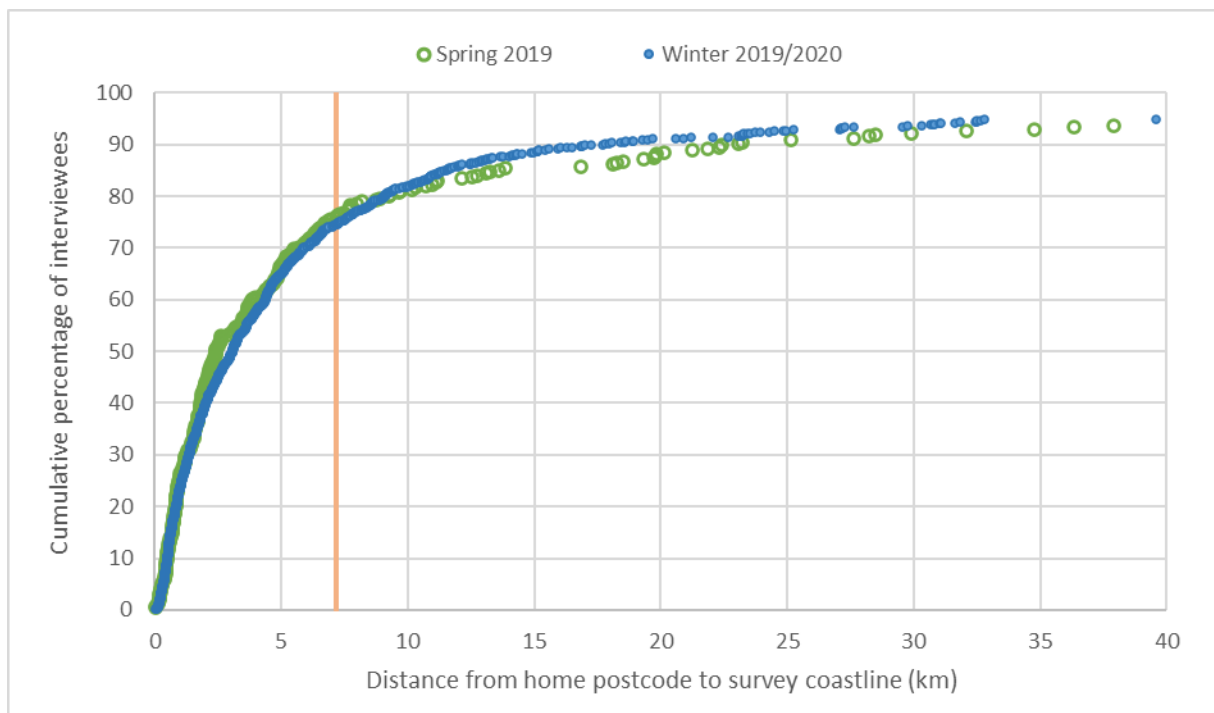
Figure 7: The distance of interviewees' home postcodes from the survey coastline (km) plotted as a cumulative percentage. The open, green circles show interviewees from Spring 2019 and smaller closed blue circles show interviewees from Winter 2019/20. The orange line indicates the Q3, or 75th percentile based on both these datasets pooled, which was 7.2 km.

4.32   The distances appear to be variable even at individual locations between the 2 periods. However, overall, they indicate typical distances of around 7 km across both the South Tyneside sites (Spring 2019) and Sunderland (Winter 2019/2020).

Table 20: Summary third quartiles (Q3 values) for survey locations and periods in Spring 2019 and Winter 2019/2020 surveys. For the total column the highest 2 Q3 values are highlighted in red and lowest 2 Q3 values are highlighted in blue.

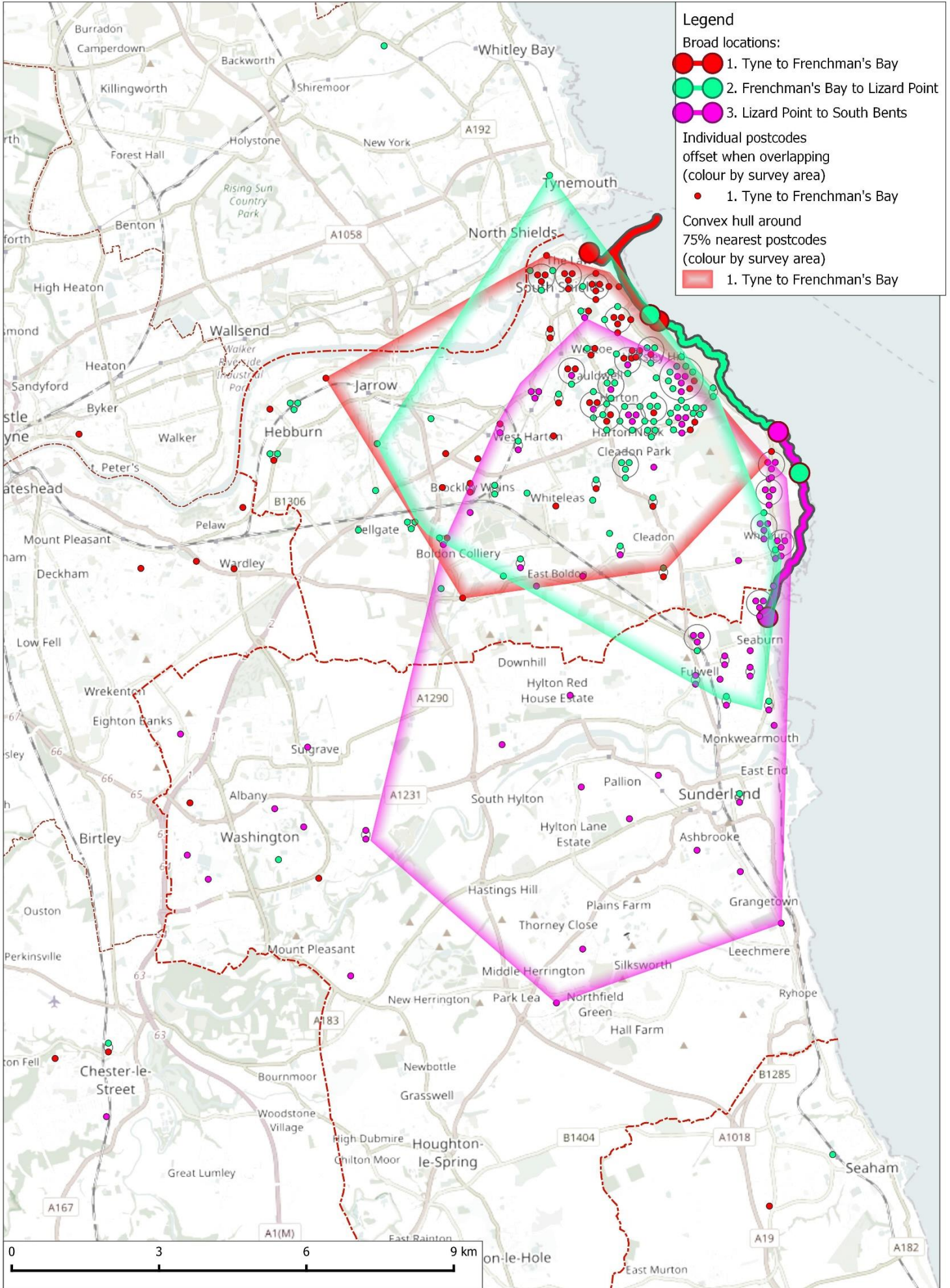|	Spring 2019		Winter 2019/2020		Total	
	n	Q3	n	Q3	n	Q3
1. Tyne to Frenchman's Bay*	78	7.4	204	6.4	282	6.8
2. Frenchman's Bay to Lizard Point*	111	6.5	151	10.4	262	7.7
3. Lizard Point to South Bents*	104	9.3	173	9.1	277	**9.3**
4. South Bents to Sunderland North Pier			204	6.4	204	**6.4**
5. Sunderland South Pier to Ryhope Denemouth			163	4.5	163	**4.5**
6. Ryhope Denemouth to Seaham Harbour			202	8.3	202	**8.3**
Total	293	7.0	1097	7.3	1390	7.2

* It should be noted that survey areas differed slightly between survey periods, and caution is advised with comparisons.

4.33   The 75% nearest interviewees can also be expressed as an area using convex hulls, which represent irregular shapes drawn enclosing individual postcodes. These convex hulls are shown in Map 5 and 6 and seem to indicate ellipses along the coastline, rather than extending far inland. However these also show the variable extent of the catchment for different parts of the coast, for example the area for Section 5, Sunderland South Pier to Ryhope Denemouth is almost a third the size of the next adjacent survey area, Section 6, Ryhope Denemouth to Seaham Harbour.

Map 5: Interviewee postcodes from Spring 2019.

Legend
Broad locations:
1. Tyne to Frenchman's Bay
2. Frenchman's Bay to Lizard Point
3. Lizard Point to South Bents
Individual postcodes
offset when overlapping
(colour by survey area)
1. Tyne to Frenchman's Bay
Convex hull around
75% nearest postcodes
(colour by survey area)
1. Tyne to Frenchman's Bay

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Map 6: Interviewee postcodes from Winter 2019/2020.

Legend

Broad locations:
- 1. Tyne to Frenchman's Bay
- 2. Frenchman's Bay to Lizard Point
- 3. Lizard Point to South Bents
- 4. South Bents to Sunderland North Pier
- 5. Sunderland South Pier to Ryhope Denemouth
- 6. Ryhope Denemouth to Seaham Harbour

Individual postcodes offset when overlapping
(colour by survey area)
- 1. Tyne to Frenchman's Bay

Convex hull around 75% nearest postcodes
(colour by survey area)
- 1. Tyne to Frenchman's Bay

Map 7: Interviewee postcodes from 2016.

Legend

localcoastpolyline-2016survey

1. Tyne to Frenchman's Bay
2. Frenchman's Bay to Lizard Point
3. Lizard Point to South Bents
4. South Bents to Sunderland North Pier
5. Sunderland South Pier to Ryhope Denemouth
6. Ryhope Denemouth to Seaham Harbour
7. Seaham Hall Beach
8. Nose's Point
9. Easington Colliery
10. Horden
11. Blackhall Rocks
12. Crimdon Beach

Individual postcodes offset when overlapping
(colour by survey area)
• 1. Tyne to Frenchman's Bay

Convex hull around 75% nearest postcodes
(colour by survey area)
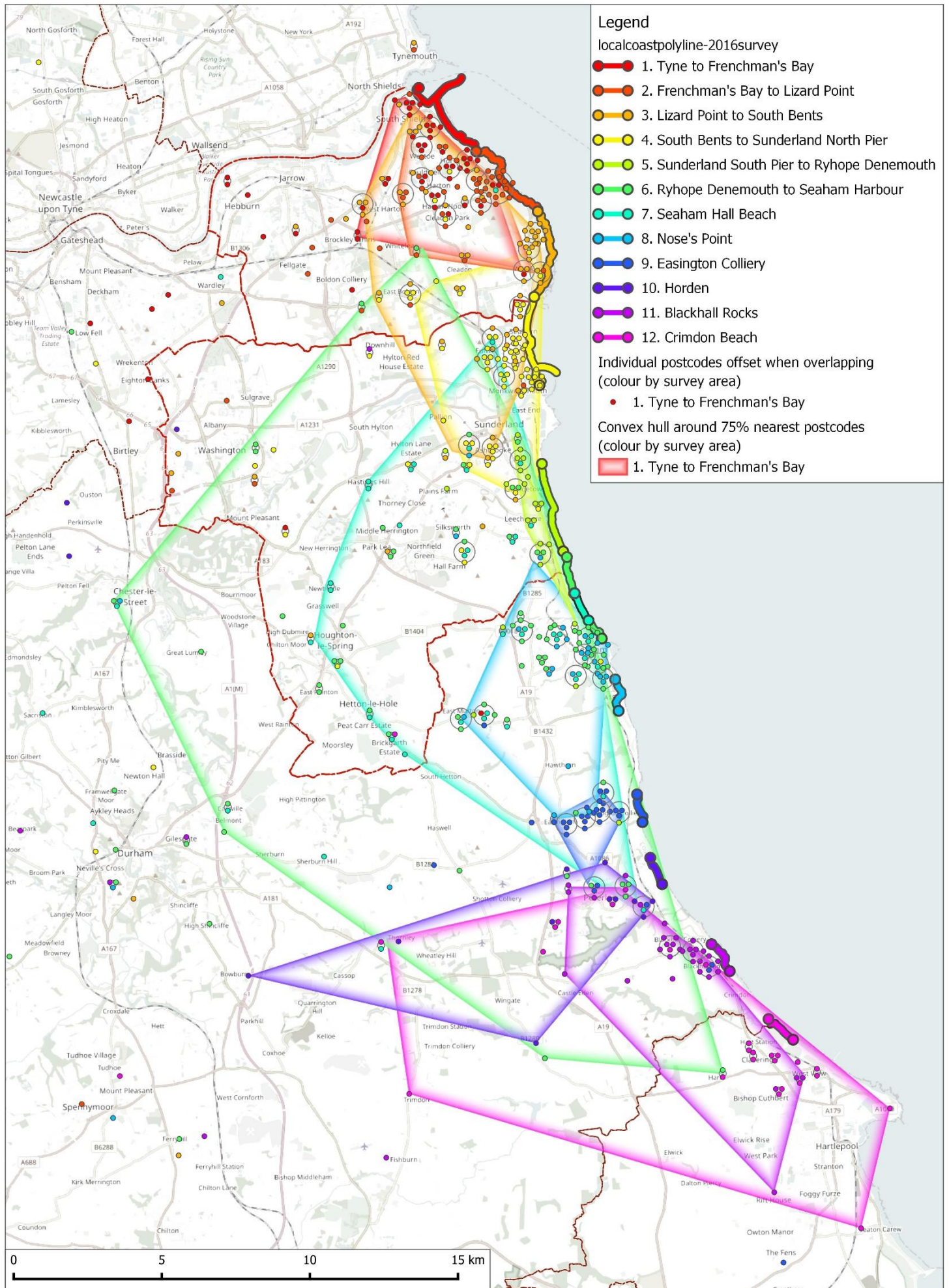1. Tyne to Frenchman's Bay

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4.34   The interviewee postcodes from the 2016 surveys are shown in Map 7 and summarised in Table 20, which showed an overall Q3 value of 7.8km across all interviewees. However, these surveys included locations in Durham, which appeared to have a larger draw than the South Tyneside and Sunderland locations. Distance calculations for Durham sites showed a Q3 value of 12.3km, compared to 5.6km at South Tyneside and 3.9km at Sunderland. There were significant differences between the 3 regions in the distances that interviewees lived from the coast.

4.35   In addition, there were significant differences between survey points, with highest Q3 values of 21.6km at Horden (although a small sample size is noted) compared to the smallest value of 3.0km at Easington Colliery.

Table 20: Summary statistics for interviewee distances from home postcode to the coastline (MHW) for the survey area from the 2016 data.

Subset	n	Mean – SE	Median	Q3	Min – max
All interviewees					
	597	8.9 ±1.12	2.7	7.8	0 - 395.5
By local authority (KW; H= 55.76, df=2, p<0.001)					
South Tyneside	188	5.2 ± 0.71	2.1	5.6	0.1 - 88.99
Sunderland	105	3.5 ± 0.51	1.3	3.9	0 - 25.06
Durham	304	13 ± 2.12	4.2	12.3	0.2 - 395.51
By survey point (KW; H= 86.19, df=11, p<0.001)					
1. Tyne to Frenchman's Bay	58	4 ± 0.67	1.5	6.1	0.3 - 19.16
2. Frenchman's Bay to Lizard Point	55	3.4 ± 0.75	1.3	4.1	0.2 - 33.85
3. Lizard Point to South Bents	75	7.4 ± 1.58	3.2	6.0	0.1 - 88.99
4. South Bents to Sunderland N. Pier	83	3.9 ± 0.63	1.5	4.0	0 - 25.06
5. Sunderland S. Pier to Ryhope	22	1.9 ± 0.48	0.8	3.3	0.3 - 9.25
6. Ryhope to Seaham Harbour	97	13.3 ± 2.28	7.8	15.8	0.2 - 167.39
7. Seaham Hall Beach	51	23.5 ± 10.08	6.3	12.0	0.6 - 395.51
8. Nose's Point	31	8.6 ± 3.35	2.4	7.4	0.3 - 99.62
9. Easington Colliery	32	2.8 ± 0.5	1.9	3.0	0.6 - 15.62
10. Horden	15	16.6 ± 8.96	4.0	21.6	0.6 - 138.34
11. Blackhall Rocks	44	6.7 ± 1.3	2.4	11.5	0.4 - 35.29
12. Crimdon Beach	34	17 ± 7.55	5.2	16.9	0.7 - 257.19

5.   Discussion

5.1   The results provide an overview of visitor use and access patterns along the South Tyneside, Sunderland and Durham Coast. The results highlight that the coast provides a recreation space that is regularly used by local residents for a range of recreation activities, particularly dog walking. The postcode data provide important information on visitor origins to inform planning policy in relation to the European sites along the coast, and the need to avoid adverse effects on integrity from increased housing growth.

5.2   Key metrics are highlighted in Table 21.

Table 21: Some key summary metrics from the 2019/20 visitor surveys.

Visitor metric	Spring 2019 *South Tyneside only*	Winter 2019/20 *South Tyneside & Sunderland*
Season and Year	Feb-April 2019	Oct 2019 – Mar 2020
Number of survey points	3 areas	6 areas
Total hours fieldwork	54	195
Number of interviews	344	1,213
% interviewees activity: dog walking	44	53
% interviewees activity: walking	34	34
% interviewees arriving by car	65	72
% interviewees visiting daily or more than once a day	25 (winter months) 30 (summer months)	33 (winter months) 36 (summer months)
Median distance to home postcode (from broad survey area MHW)	2.5	3.1
75th percentile for postcode data (from broad survey area MHW)	7.0	7.3

Limitations

5.3   There are some limitations in the data which are important to recognise. Firstly, the roaming survey approach meant large areas of coast could be covered and potentially the number of interviewees is maximised, however it does provide difficulty in determining how far visitors had come and means direct comparison between surveys is difficult.

5.4   It also influences the counts of people and dogs, which were undertaken as a count on the hour. The roaming nature of surveys means that surveyors did not have a fixed survey location and a set field of view to ensure the counts were comparable each time. Broad locations with high or low values may

indicate locations with a large or small field of view, rather than genuinely high or low footfall. As such these can only be used to give an indication of the levels of access but cannot be compared between locations or over time.

5.5   The approach used to calculate the distance from home postcode to the nearest part of coast (MHW) has the possibility to underestimate linear distances. This is because people may not have visited the nearest part of the coastal section – for example it may not have included any parking access.

2016 specific limitations

5.6   The 2016 surveys had some acknowledged limitations prior to this work, and this was partly the reason behind the more recent repeat surveys. Specific limitations for the 2016 survey include the fact that no fixed survey point locations were recorded (either as fixed survey points or recorded survey locations from GPS), so linear distances between interviewee's home postcode and an explicit survey point could not be calculated.

5.7   Furthermore, there was no detailed methodology on survey dates and times, so the balance of weekdays and weekends was not known.

Spring 2019 and Winter 2019/20 specific limitations

5.8   For the 3 South Tyneside areas (Tyne to Frenchman's Bay, Frenchman's Bay, to Lizard Point, and Lizard point to South Bents) used in both Spring 2019 and Winter 2019/20 the exact survey areas differed between years (see Map 3) and as such direct comparison over time is difficult.

5.9   The Spring 2019 surveys had even coverage across the 3 broad locations, but not between the 2-3 smaller sub-locations identified within these. As such there is the potential for greater survey effort at particular focal points. There was also uneven survey effort between weekdays and weekends, and between the set survey times of day. This has the potential to mean a particular visitor type located in particular area or visiting at a particular time of day were sampled more frequently.

5.10   During the Winter 2019/20 survey effort was not evenly distributed across the 6 locations, either between weekdays and weekends, or across the 3 time periods.

5.11   The results from Q15, relating to future plans for the area with regards to access restrictions, indicate some very positive views to restrictions on

access. This level of support is perhaps unexpected and may be in part due to bias following the preceding question, which related to the awareness of the site's importance for wildlife.
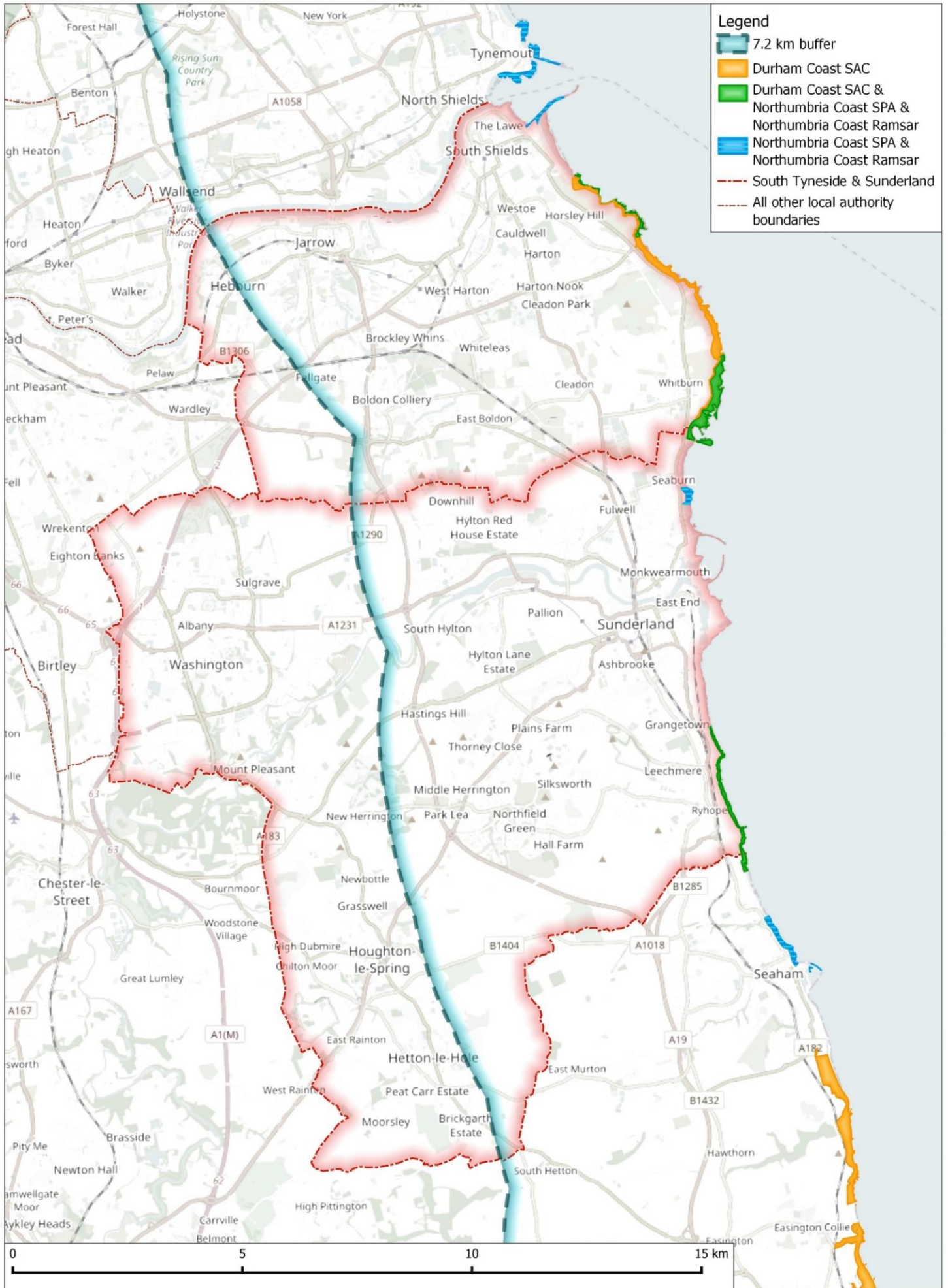
Recommendations for future surveys

5.12   The data provide adequate recent data to inform planning policy and inform recreation management. However, it is important to note that recreation use is unlikely to remain static and may change over time in relation to changes in local housing, access provision, transport patterns and other factors. There is also uncertainty on the effect of the current coronavirus pandemic upon access patterns in the long term. We therefore recommend long term monitoring and future repeat surveys.

5.13   Further resurveys would be useful on a regular basis and should use a carefully considered and repeatable methodology, and cover the entire survey area. Surveys undertaken in this way will provide a discrete pulse of data that can be used to determine change and compare with previous data. We suggest a 5 year interval would be sufficient, but this could be adjusted as necessary if particular change has occurred. Such pulses of survey work would provide clear data on zones of influence and broad changes in recreation use. There also may be some benefit from small scale, local surveys at specific locations to understand particular local issues, for example to inform signage, engagement or mitigation interventions at a particular location. Such local surveys could be specific and targeted to the particular issue or concern.

5.14   For the larger surveys, we suggest the survey methods are changed so that set survey points are used, as this allows greater comparability and could allow a more reliable tally count of passing footfall. This would also allow more accurate analysis of the linear distance between interviewee's home postcode and the survey point, by using fixed survey points. The survey points selected for future monitoring should be carefully considered to represent the different types of access points (e.g. busy formal car parks to informal access from residential areas, rural areas to more urban areas), areas used by different types of visitors (e.g. walkers, dog walkers, cyclists, anglers etc.) and have a good geographic spread.

5.15   Survey effort should be equal between survey points, with similar coverage at weekdays and weekends and times of day to ensure the survey points can be confidently compared.

Conclusions and a Zone of Influence

5.16   The collated data here provide an overview of recreation along the South of
Tyne to Seaham coastline, and data are pooled from different years and
locations. Data from several surveys in the area are collated here and a
synthesis of these show largely similar patterns over time. The results inform
the zone of influence within which future housing growth is likely to result in
increased recreation use, and can be used to inform planning policy and
subsequent mitigation.

5.17   A 7.2 km zone of influence is shown in Map 8, which is a buffered distance
from the combined extent of the European sites highlighted. This is based
simply on the 75th percentile (i.e. the distance within which 75% of the
nearest interviewees lived) from interview data, applied as a buffer of fixed
distance around the European site boundary. The use of the 75th percentile
in this way has become a standard way of identifying the area within which
the majority of visitors originate. By setting the zone at 75%, those visitors
who travel long distances are excluded.

5.18   To provide context, selected examples of the 75th percentile (drawn from
similar surveys undertaken by Footprint Ecology at other countryside sites
around England and giving the 75th percentile derived from all visitors in the
survey), ranked by distance, include:

- Rodborough Common: 3.9km (Panter & Caals, 2019b);
- North West Estuaries: 5.2 km (Liley et al., 2017)
- Thanet Coast: 5.4km (P. Saunders & Liley, 2019)
- Solent Coastline: 5.6km (Liley & Tyldesley, 2013)
- Epping Forest: 6.2km (Liley et al., 2018);
- South Downs (heathland sites only): 6.7km (Lake & Liley, 2014);
- East Devon Pebblebed Heaths: 8.2km (Liley, Panter, & Underhill-
Day, 2016);
- Ashdown Forest: 9.6km (Liley, Panter, & Blake, 2016);
- New Forest: 13.8km (Liley et al., 2020)
- Deben Estuary: 14.2km (Lake et al., 2014);
- Hatfield Forest: 17.8km (G. Saunders et al., 2019);
- Cannock Chase: 15.3km (Panter & Liley, 2019);
- Purbeck: 18.8km (Cruickshanks & Floyd, 2014);
- Braunton Burrows: 19.2km (Liley & Saunders, 2019);
- Cotswold Beechwoods: 20.5km (Panter & Caals, 2019a);
- North Norfolk Coast: 147.5km (Panter et al., 2017);
- Norfolk Broads: 194.7km (Panter et al., 2017).

5.19   It can be seen that the 7.2km distance derived from the survey data presented here is relatively small for coastal sites and consistent with data from other parts of the country. As far as we are aware, all strategic mitigation schemes addressing recreational impacts have used the 75th percentile (although with some slight variation in how it is defined, for example rounding up, cutting to local authority boundaries etc.).

Map 8: The extent of a 7.2 km Zone of Influence.

Legend

- 7.2 km buffer
- Durham Coast SAC
- Durham Coast SAC & Northumbria Coast SPA & Northumbria Coast Ramsar
- Northumbria Coast SPA & Northumbria Coast Ramsar
- South Tyneside & Sunderland
- All other local authority boundaries

Appendix 1: Summary of questions in Spring 2019 and Winter 19/20 surveys

Table 22: List of questions asked in the Spring 2019 and Winter 2019/2020 surveys.

No.	Question	Spring 2019	Winter 2019/ 2020
Q1a	**SHOWCARD** Using the following list, please state all activities you carry out at this site	✔	✔
Q1b	What is the main purpose of your visit today?	✔	✔
Q2a	**SHOWCARD** Focussing on your current activity, why do you choose to carry this out at the coast? Please specify all that apply.		✔
Q2b	If a suitable area of green space was available close to your home would you use this as an alternative the coast?		✔
Q2a	**SHOWCARD** Focussing on the dog walking, why do you choose to walk your dog at the coast? Please specify all that apply.	✔	
Q2b	Do you walk your dog at the coast because you feel there is nowhere suitable to do so close to your home?	✔	
Q2c	If a suitable area of green space was available close to your home would you use this as an alternative to walking your dog at the coast?	✔	
Q3	How many dogs do you have with you today?	✔	✔
Q4	Do you let your dogs off the leash on the beach?	✔	✔
Q5a	How often would you say you walk your dog here?	✔	✔
Q5b	What might attract you to going somewhere else rather than the coast? Please specify all that apply.	✔	✔
Q6	Which parts of this coast do you use?	✔	✔
Q7a	Aside from this location, do you visit any other places for similar purposes as you visited here today?	✔	✔
Q7b	Which 3 locations do you visit most often for these purposes?	✔	✔
Q8	**SHOWCARD** What is the main thing about this particular site that makes you visit it?	✔	✔
Q9a	During the Winter months (Oct-Apr), at what time(s) do you usually visit/use this site?	✔	✔
Q9b	How often do you typically visit this site during the summer months (May-Sep)?	✔	✔
Q10	During the winter months, at what time do you usually visit/use this site?	✔	✔
Q11	**SHOWCARD** How would you describe the group that you are here with today?	✔	✔
Q12a	We are trying to understand where our coastal users come from and your postcode is the easiest way to capture this. Are you willing to provide your full postcode?	✔	✔

No.	Question	Spring 2019	Winter 2019/ 2020
Q13	How do you usually get to this site?		
Q14	**SHOWCARD** When you think about the coast, how important do you think it is as a wildlife site?	✔	
Q15	As the number of people who use the coast increases the pressures on the unique environment will increase. With this in mind, to what extent would you support or object to plans which require…	✔	
Q15 a	**SHOWCARD** Visitors only walking on designated paths along the coast	✔	
Q15 b	**SHOWCARD** Dog owners to keep dogs on a lead during sensitive times for wildlife	✔	
Q15c	**SHOWCARD** Dog owners to keep dogs on a lead when walking through specific areas	✔	
Q16 a	Do you think this site could be improved in any way?	✔	
Q16 b	In what ways? Please select all that apply.	✔	
Q17	**SHOWCARD** Age	✔	✔
Q18	Gender	✔	✔

Appendix 2: Additional data tables

Table 23: Number (%) of interviewees by frequency of visits during winter months (October to April)

	Survey location	3+ times a day	Twice a day	Once a day	Couple of times a week	Once a week	Once a month	Less than once a month	Blank	Total
Spring 2019	1. Tyne to Frenchman's Bay*	1 (1)	4 (5)	24 (28)	23 (26)	13 (15)	9 (10)	12 (14)	1 (1)	**87 (100)**
	2. Frenchman's Bay to Lizard Point*	4 (3)	11 (8)	12 (9)	31 (23)	26 (20)	19 (14)	25 (19)	5 (4)	**133 (100)**
	3. Lizard Point to South Bents*	4 (3)	8 (6)	19 (15)	31 (25)	19 (15)	26 (21)	10 (8)	7 (6)	**124 (100)**
Winter 2019/2020	1. Tyne to Frenchman's Bay*	4 (2)	12 (6)	52 (24)	64 (30)	28 (13)	28 (13)	19 (9)	9 (4)	**216 (100)**
	2. Frenchman's Bay to Lizard Point*	4 (2)	11 (7)	28 (17)	35 (21)	19 (12)	28 (17)	31 (19)	8 (5)	**164 (100)**
	3. Lizard Point to South Bents*	1 (1)	16 (9)	48 (26)	49 (26)	24 (13)	21 (11)	26 (14)	3 (2)	**188 (100)**
	4. South Bents to Sunderland North Pier	3 (1)	19 (8)	66 (29)	53 (24)	44 (20)	21 (9)	17 (8)	2 (1)	**225 (100)**
	5. Sunderland South Pier to Ryhope Denemouth	5 (3)	13 (7)	51 (27)	53 (28)	27 (15)	24 (13)	13 (7)	0 (0)	**186 (100)**
	6. Ryhope Denemouth to Seaham Harbour	0 (0)	7 (3)	57 (24)	62 (26)	49 (21)	38 (16)	21 (9)	0 (0)	**234 (100)**

* It should be noted that survey areas differed slightly between survey periods, and caution is advised with comparisons.

Table 24: Number (%) of interviewees by frequency of visits during summer months (May to September)

	Survey location	3+ times a day	Twice a day	Once a day	Couple of times a week	Once a week	Once a month	Less than once a month	Other	Total
Spring 2019	1. Tyne to Frenchman's Bay*	2 (2)	9 (10)	22 (25)	26 (30)	11 (13)	8 (9)	8 (9)	1 (1)	**87 (100)**
	2. Frenchman's Bay to Lizard Point*	8 (6)	10 (8)	13 (10)	37 (28)	22 (17)	19 (14)	21 (16)	3 (2)	**133 (100)**
	3. Lizard Point to South Bents*	6 (5)	9 (7)	24 (19)	36 (29)	19 (15)	16 (13)	9 (7)	5 (4)	**124 (100)**
Winter 2019/2020	1. Tyne to Frenchman's Bay*	4 (2)	18 (8)	58 (27)	58 (27)	21 (10)	28 (13)	18 (8)	11 (5)	**216 (100)**
	2. Frenchman's Bay to Lizard Point*	6 (4)	18 (11)	24 (15)	38 (23)	21 (13)	22 (13)	28 (17)	7 (4)	**164 (100)**
	3. Lizard Point to South Bents*	2 (1)	19 (10)	47 (25)	47 (25)	25 (13)	17 (9)	28 (15)	3 (2)	**188 (100)**
	4. South Bents to Sunderland North Pier	6 (3)	24 (11)	63 (28)	53 (24)	43 (19)	16 (7)	18 (8)	2 (1)	**225 (100)**
	5. Sunderland South Pier to Ryhope Denemouth	6 (3)	18 (10)	51 (27)	50 (27)	23 (12)	20 (11)	17 (9)	1 (1)	**186 (100)**
	6. Ryhope Denemouth to Seaham Harbour	0 (0)	11 (5)	57 (24)	68 (29)	40 (17)	38 (16)	20 (9)	0 (0)	**234 (100)**

* It should be noted that survey areas differed slightly between survey periods, and caution is advised with comparisons.

Table 25: Summary statistics for interviewee distances from home postcode to the coastline (MHW) for the survey area from the 2019 and 2019/20 data shown separately.

Subset	Spring 2019					Winter 19/2020				
	n	Mean ± SE	Median	Q3	Min – max	n	Mean - SE	Median	Q3	Min – max
All interviewees										
	293	14.4 ± 2.5	2.5	7.0	0 - 391.3	1097	14.2 ± 1.44	3.1	7.3	0 - 467.5
By survey point										
1. Tyne to Frenchman's Bay*	78	12.1 ± 5.14	2.2	7.4	0.2 - 391.3	204	10.8 ± 2.81	2.4	6.4	0.4 - 406.8
2. Frenchman's Bay to Lizard Point*	111	10.4 ± 2.61	2.4	6.5	0.2 - 166.1	151	29.9 ± 5.98	4.6	10.4	0.2 - 420.8
3. Lizard Point to South Bents*	104	20.3 ± 5.17	3.5	9.3	0.1 - 306.8	173	24.7 ± 5.46	3.8	9.1	0.1 - 467.5
4. South Bents to Sunderland North Pier						204	9.4 ± 2.15	3.1	6.4	0 - 298.5
5. Sunderland South Pier to Ryhope Denemouth						163	6.5 ± 1.81	1.5	4.5	0.2 - 225.8
6. Ryhope Denemouth to Seaham Harbour						202	7.8 ± 1.56	3	8.3	0.1 - 283.4
By activity										
Bird watching	3	16.4 ± 8.47	18.5	29.9	0.8 - 29.9	12	7.5 ± 2.47	4.5	10.4	0.4 - 31.8
Cycling	12	6.4 ± 3.73	2.8	4.8	0.7 - 47.1	14	3.3 ± 1.61	4.5	3.6	0.2 - 23.7
Dog walking	125	7.6 ± 2.53	1.8	4.2	0.1 - 221.7	578	5 ± 0.57	1.4	5	0 - 198.5
Holiday / short break	8	148.8 ± 47.69	98	271.6	32.1 - 391.3	21	176.6 ± 27.8	2.4	254	0.3 - 467.5
Horse riding	1	n/a	3.9	n/a	3.9 - 3.9	5	5.1 ± 2.71	159.1	11.4	0.9 - 14.3
Jogging	7	5.1 ± 3.08	1.8	4.7	0.8 - 23.3	8	22.6 ± 20.9	1	4.1	0.5 - 168.8
Other	34	22.3 ± 6.96	6.5	18.2	0.6 - 149.2	49	39.6 ± 11.92	1.3	23.1	0.2 - 295.5
Sea angling						36	17.1 ± 9.03	6.5	12.2	0.5 - 330
Walking	103	11.2 ± 3.01	3.5	7.5	0.2 - 203.1	374	16.2 ± 2.61	4.7	9.5	0.1 - 420.8

* It should be noted that survey areas differed slightly between survey periods, and caution is advised with comparisons.