



Visitor surveys and recreation  
impact assessment work to inform  
the Dorset Council Local Plan:  
Coastal Sites.

Durwyn Liley, Sophie Lake, Cath Shellswell & Emma  
Bishop

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



**FOOTPRINT**  
ECOLOGY

Footprint Contract Reference: 658

Date: 9<sup>th</sup> November 2022

Version: Final

Recommended Citation: Liley, D., Lake, S., Shellswell, C. & Bishop, E. (2022). Visitor surveys and recreation impact assessment work to inform the Dorset Council Local Plan: Coastal Sites. Report by Footprint Ecology.

## Summary

This report has been commissioned by Dorset Council and presents the results of visitor surveys and recreation impact assessment conducted in the spring 2022 at a range of Dorset coastal sites. The surveyed sites include: Chesil and the Fleet Special Area of Conservation (SAC), Chesil Beach and the Fleet Special Protection Area (SPA)/Ramsar, Isle of Portland to Studland Cliffs SAC and St. Albans Head to Durlston Head SAC.

These sites are part of the national site network and as such are afforded strict legal protection and the work has been commissioned to inform the Habitats Regulations Assessment (HRA) that will accompany the emerging Dorset Council Local Plan. At the Chesil sites, a mitigation strategy has been established to address impacts from recreation and the survey is necessary to identify where people come from and therefore the scale of risk associated with the Dorset Council Local Plan sites. The two other SAC sites are designated for the limestone grassland interest and certain species interest and there is less clarity regarding potential risks and necessary steps required to address them. As such visitor work and impact assessment work were required.

## Visitor survey

Surveys involved face-face interviews with a random sample of people at 8 locations and, at the same locations, tally counts of the number of people seen entering/leaving the site. 4 survey locations were at Chesil and the Fleet and the other four scattered along the coast at representative locations between Portland and Durlston.

### *Tally counts*

- In total, 1398 groups were noted entering, leaving or passing through at the survey point.
- These groups contained a total of 3069 people (of which 301 were minors) and 439 dogs.
- mean group size was 2.2 people (of which 0.2 were minors) and 0.3 dogs.
- There was 1 dog for every 7 people.
- Visitor numbers were higher at the weekend at all locations with 66% of groups entering counted at the weekend.

### *Visitor interviews*

- A total of 326 interviews were conducted (184 at the 4 Chesil survey points and 142 at the other locations).
- 56% of interviewees were on a day trip or short visit and had travelled directly from home that day, 41% were on holiday in the area and staying away from home and 3% were staying with friends or family in the area.

- 43% of interviewees gave walking as their main activity and 28% stated they dog walking was the main activity. A wide range of other main activities were also noted, many of which were undertaken by small numbers of interviewees.
- Many groups were undertaking multiple activities during their visit overall, activities undertaken by at least 5% of interviewees at some point during their visit included: walking (57%), dog walking (37%), wildlife/bird watching (13%) and fishing (5%).
- 66% of interviewees had at least 1 dog with them.
- There were significant differences in the relative proportions of interviewees undertaking different main activities comparing between those on holiday and those on a short visit from home, for example walking was the main activity for 54% of holiday makers and 35% of those on a short visit from home and dog walking was the main activity for 20% of holiday makers and 33% on a short visit from home.
- 82% of interviewees had travelled by car.
- 33% of interviewees were visiting for 1-2 hours and the average visit duration was 100 minutes, with little difference between holiday makers and those on a short visit from home.
- 47% of interviewees had been visiting the locations where interviewed for at least 10 years and 28% were on their first visit.
- interviewees had visited the interview location around 44 times on average over the past year.
- 46% of interviewees tended to visit the location where interviewed equally through the year, 20% indicated they tended to visit more in the spring and 17% in the summer.
- Across all interviewees the median route length (i.e. distance walked or ridden on site) was 3.3km. Those on short visits directly from home undertook longer routes (median 4km) than holiday makers (median = 2km).
- Previous knowledge of the area/experience was the main factor influencing route choice (15% of interviewees).
- Scenery/the variety of views was the most common reason for choosing to visit the location (coastal site) where interviewed, rather than another location (30% of interviewees).
- Interviewees gave a wide range of locations as alternatives that they would have visited that day if they had not visited the location where interviewed: Portland (15% of interviewees) and Studland 9%) were the most commonly cited locations.
- Interviewees came from a wide range of locations – the top 5 being: Weymouth (9%), Swanage (6%), Bournemouth/Poole (4%) and Greater London (4%).
- Taking just those on a short visit directly from home, half lived within 11.97km of the survey location and 75% within 32.8km.
- 43% of interviewees (that gave a valid postcode) were residents of Dorset, virtually all of which were on a visit directly from home.
- For those interviewees on a short visit directly from home and interviewed at the 4 Chesil locations, the median distance from the home postcode to survey point was 12.50km and 75% of interviewees lived with 29.7km.

## Impacts of recreation

Site visits were made to Portland Bill and Townsend Common to check for recreation impacts and these are placed in context with the experience of the Footprint Ecology team and our knowledge of the coastal sites. Impacts are identified relating to trampling damage at specific very busy locations and also there are a range of other access issues that are largely linked to specific activities, including dog walking but also extending to climbing, coastering, kayaking, bouldering, wild camping etc.

## Implications for the Dorset Council Local Plan HRA

The coastline is a World Heritage Site, National Trail (the South West Coast Path), is well promoted and clearly has a huge draw for visitors. There are a wide range of recreation opportunities and well-established management of access in place. Teasing apart the relative impact from local residents as opposed to day visitors from further afield and tourists is complicated and difficult.

In terms of the Local Plan HRA, we would suggest that it should be possible to rule out adverse effects on integrity from recreation and the Portland to Studland Cliffs SAC and the St Albans Head to Durlston Head SAC with respect to the overall quantum of growth and much of the housing growth across Dorset – away from the coast. Based on the results presented here and our knowledge of the coast, we would flag risks from housing development in the coastal strip, including marked increases within the settlements, villages and towns (including Weymouth and Swanage) that are close to the SACs or where there is easy access onto the SAC (for example direct footpath links or a very short drive to local parking etc). Such locations are likely to be attractive to people who are drawn to living close to the coast and likely to visit regularly, potentially avoiding the busier locations. Any such cases would need to be considered on a case-by-case basis and mitigation may be necessary and will need to be secured in any allocation-specific policy wording.

For tourism development, risks will relate to tourist accommodation in new locations (i.e. new campsites, glamping, self-catering etc) that has direct or easy access onto the SACs or any that have the potential to change the distribution of visitor use (new provision or attractions) linked to the SAC sites. Tourism policies could identify the relevant issues and necessary restrictions in place.

For Chesil and the Fleet, where the existing mitigation strategy is in place to secure mitigation, the postcode data indicate plan-led growth from a wide area will be relevant. HRA will need to ensure adequate mitigation is in place to address growth in settlements that include Bridport and Dorchester.

## Contents

Summary .....	ii
<b>Visitor survey .....</b>	<b>ii</b>
<i>Tally counts .....</i>	<i>ii</i>
<i>Visitor interviews .....</i>	<i>ii</i>
<b>Impacts of recreation .....</b>	<b>iv</b>
<b>Implications for the Dorset Council Local Plan HRA.....</b>	<b>iv</b>
<b>Contents.....</b>	<b>v</b>
<b>Acknowledgements .....</b>	<b>vi</b>
<b>1. Introduction .....</b>	<b>7</b>
<b>Overview .....</b>	<b>7</b>
<b>The Dorset Council Local Plan, legislative context and need for this report.....</b>	<b>7</b>
<i>Relevant European sites .....</i>	<i>8</i>
<b>2. Methods.....</b>	<b>12</b>
<b>Visitor survey .....</b>	<b>12</b>
<i>Survey locations.....</i>	<i>12</i>
<i>Survey logistics.....</i>	<i>15</i>
<i>Questionnaire design.....</i>	<i>15</i>
<i>Survey timings.....</i>	<i>15</i>
<b>Impact assessment.....</b>	<b>16</b>
<b>3. Results: Tally counts.....</b>	<b>18</b>
<b>4. Results: Visitor interviews .....</b>	<b>22</b>
<b>Overview of interview data .....</b>	<b>22</b>
<b>Activity (Q2 &amp; Q3) .....</b>	<b>23</b>
<b>Mode of Transport (Q3).....</b>	<b>26</b>
<b>Temporal visit patterns (Q4 – Q7) .....</b>	<b>28</b>
<i>Visit duration (Q5).....</i>	<i>28</i>
<i>Length of time visiting (Q4) .....</i>	<i>30</i>
<i>Visit frequency (Q8).....</i>	<i>31</i>
<i>Time of year (Q7).....</i>	<i>34</i>
<b>Effects of pandemic on visit patterns (Q9).....</b>	<b>34</b>
<b>Routes taken on site (Q11-14) .....</b>	<b>35</b>
<b>Reasons for choice of location (Q14).....</b>	<b>40</b>
<b>Alternative locations visited (Q15-17).....</b>	<b>42</b>
<b>Visitor origins (home postcodes) (Q18-20).....</b>	<b>45</b>
<b>5. Impacts of Recreation.....</b>	<b>51</b>
<b>Portland Bill.....</b>	<b>53</b>
<b>Townsend.....</b>	<b>58</b>
<b>Wider context and other parts of the coast .....</b>	<b>61</b>
<i>Overall numbers of visitors.....</i>	<i>61</i>

<i>Specific activities.....</i>	<i>63</i>
<b>6. Discussion.....</b>	<b>66</b>
<b>Key findings.....</b>	<b>66</b>
<b>Implications for the HRA of the Dorset Council Local Plan .....</b>	<b>67</b>
<i>Chesil &amp; the Fleet data combined.....</i>	<i>69</i>
<b>7. References.....</b>	<b>72</b>
<b>Appendix 1: Questionnaire .....</b>	<b>73</b>
<b>Appendix 2: Summary rainfall during visitor interview/tally sessions.....</b>	<b>82</b>

## Acknowledgements

This report has been commissioned by Dorset Council. We are grateful to Oliver Rendle for overseeing the work. Thanks also to the following for their advice, support and discussion: Nick Squirrell (Natural England) and John Stobart (Natural England). We are also grateful to the various landowners and local contacts who assisted with access and provided permission to undertake the surveys.

Survey work was undertaken by: Philippa Croucher, Abigail Dodge, Hazel Greenland, Jackie Lake, Sally Mitchell and Sue Powner.

# 1. Introduction

## Overview

- 1.1 This report has been commissioned by Dorset Council and presents the results of a visitor survey at coastal sites conducted in the spring 2022. The work has been commissioned to inform the Habitats Regulations Assessment (HRA) of the emerging Dorset Council Local Plan.

## The Dorset Council Local Plan, legislative context and need for this report

- 1.1 The Dorset Council Local Plan will set the levels of housing growth for the Dorset Council area and will allocate land for development. It will also include policies relating to tourism, the local economy and employment.
- 1.2 The Dorset Council Local Plan will be subject to Habitats Regulations Assessment (HRA) and this will need to demonstrate that adverse effects on integrity can be ruled out, alone or in-combination, for all European sites, as a result of the policies within the plan. Tourism policies and increased local housing could all generate increased recreation use which in turn could create risks for the European sites. Issues are varied and include disturbance, increased fire risk, contamination and damage (for general reviews see: Liley et al., 2010; Lowen et al., 2008; Ross et al., 2014; Underhill-Day, 2005).
- 1.3 The designation, protection and restoration of European wildlife sites is embedded in the Conservation of Habitats and Species Regulations 2017, as amended, which are commonly referred to as the 'Habitats Regulations'. Importantly, the amendments (the Conservation of Habitats and Species (amendment) (EU Exit) Regulations 2019<sup>1</sup>) take account of the UK's departure from the EU.
- 1.4 The Regulations provide strict protection for European sites and this extends to local plans. Regulation 105 *et seq* addresses the assessment of local plans

---

<sup>1</sup> The amending regulations generally seek to retain the requirements of the 2017 Regulations but with adjustments for the UK's exit from the European Union. See Regulation 4, which also confirms that the interpretation of these Regulations as they had effect, or any guidance as it applied, before exit day, shall continue to do so.

and there is also Government Guidance on the interpretation and application of the Regulations which includes local plans<sup>2</sup>. Local planning authorities, as public bodies, are given specific duties as ‘competent authorities’. A competent authority should only approve a project or give effect to a plan where it can be ascertained that there will not be an adverse effect on the integrity of the European site(s) (or exceptionally, if there is overriding public interest and no alternatives).

- 1.5 Initial HRA work has identified potential risks from growing recreation use (potentially linked to local housing) at a number of different European sites in and around Dorset. The aim of this report is to provide baseline data on visitor use and an understanding of visitor patterns at some of these sites, including the links between where people live and where they go for recreation. A particular issue with the coast is that it has a strong and unique draw for visitors (e.g. Clarke et al., 2008; Liley et al., 2008) and a high proportion of recreational visits may be from well outside the county or be very occasional. Understanding the relative proportions of tourists to local residents and the frequency with which local residents in Dorset use the Coast is clearly fundamental. We place the results in context by considering the impacts of recreation at the relevant sites, drawing on our local experience and site visits to particular locations. These results will then provide the evidence to inform the HRA of the Dorset Council Local Plan.

### *Relevant European sites*

- 1.6 The focus of this report is the Dorset coast and a similar, but separate report, has been produced for the inland, chalk grassland sites. The area of interest runs from West Bay to Studland, encompassing Chesil Bank, the Fleet and the cliffed coast running from Portland eastwards. This stretch of coast encompasses a number of European sites (see Table 1 for descriptions and qualifying features).
- 1.7 For Chesil and the Fleet SAC/SPA/Ramsar recreation impacts have long been recognised and Dorset Council has established a strategic approach to mitigation. Visitor data are relevant for the Local Plan HRA to check where people visit from and therefore help inform the potential scale of impact from Plan-led growth. For the other coastal sites, it is necessary to gain a

---

<sup>2</sup> Habitats regulations assessments: protecting a European site. Defra and Natural England. 24 February 2021. <https://www.gov.uk/guidance/habitats-regulations-assessments-protecting-a-european-site> (accessed 4 March 2021)

better understanding of recreation use by local residents and further more identify the scale of any impacts.

- 1.8 For the avoidance of any doubt, this report does not extend to cover the Studland Dunes part of the coast, as this is within the Dorset Heaths. There is a long established mitigation approach which addresses recreation impacts on the Dorset Heaths and these issues are therefore monitored and addressed separately.

Dorset Coastal Sites Visitor Survey

**Table 1: European sites relevant to this report. Hyperlinks relate to the conservation objectives on the Natural England website.**

European site	Qualifying features	Description
<a href="#">Chesil &amp; The Fleet SAC</a>	H1210 Annual vegetation of drift lines H1220 Perennial vegetation of stony banks H1150# Coastal lagoons H1330 Atlantic salt meadows ( <i>Glauco-Puccinellietalia maritimae</i> ) H1420 Mediterranean and thermo-Atlantic halophilous scrubs ( <i>Sarcocornetea fruticosi</i> )	A long linear shingle beach enclosing a brackish lagoon on the south coast of England in Dorset. The site comprises of the Fleet, the largest and best example of a barrier-built saline lagoon and Chesil Bank, one of the three major shingle structures in the UK. The salinity gradient, peculiar hydrographic regime and varied substrates, together with associated reedbed and intertidal habitats have resulted in the Fleet being extraordinarily rich in wildlife. Chesil Bank supports important shingle plant communities.
<a href="#">Chesil Beach &amp; the Fleet Ramsar</a>	Criterion 1: The Fleet is an outstanding example of rare lagoon habitat and is the largest of its kind in the UK. In Europe lagoons are classified as a priority habitat by the EC Habitats and Species Directive. The site also supports rare saltmarsh habitats. Criterion 2: The Fleet supports 15 specialist lagoonal species – more than any other UK site – and five nationally scarce wetland plants as well as ten nationally scarce wetland animals. Chesil Bank is one of the most important UK sites for shingle habitats and species. Criterion 3: The site is the largest barrier-built saline lagoon in the UK, and has the greatest diversity of habitats and of biota. Criterion 4: The site is important for a number of species at a critical stage in their life cycle including post-larval and juvenile bass <i>Dicentrarchus labrax</i> . Criterion 8: The site is important as a nursery for bass <i>Dicentrarchus labrax</i> .	The site includes the whole of the Fleet lagoon and the adjacent Chesil Bank. The Fleet is the largest and best example of a barrier-built saline lagoon in the UK and Chesil is one of the three major shingle structures in the UK. The salinity gradient, peculiar hydrographic regime and varied substrates, together with associated reedbed and intertidal habitats and the relative lack of pollution in comparison to most other lagoons, have resulted in the Fleet becoming extraordinarily rich in wildlife. Outstanding communities of aquatic plants and animals are present, supporting large numbers of wildfowl and waders. Chesil Bank is of great significance to the study of coastal geomorphology and supports nationally important populations of shingle plants and invertebrates. It is also an important breeding site for seabirds.
<a href="#">Chesil Beach &amp; the Fleet SPA</a>	A195(B) <i>Sterna albifrons</i> : Little tern A050(NB) <i>Anas penelope</i> : Eurasian wigeon	A long linear shingle beach enclosing a brackish lagoon on the south coast of England in Dorset. The site supports large numbers of wintering waterbirds, including Wigeon. Chesil Bank is an important breeding site for Little Terns.
<a href="#">Isle of Portland to Studland Cliffs SAC</a>	H1210 Annual vegetation of drift lines H1230 Vegetated sea cliffs of the Atlantic and Baltic coasts H6210# Semi-natural dry grasslands and scrubland facies: on calcareous substrates ( <i>Festuco-Brometalia</i> )	Jurassic and Cretaceous sea cliffs recognised as a World Heritage Site overlooking the English Channel in Dorset. The outstanding geology supports extensive swathes of calcareous grassland with early spider orchid and the endemic early gentian; sea cliff vegetation on hard rocks and a diversity of

## Dorset Coastal Sites Visitor Survey

European site	Qualifying features	Description
	S1654 <i>Gentianella anglica</i> : Early Gentian	habitat on seepage rich slumping clays. A highly ephemeral drift line is present on sandy shingle throughout the site.
<a href="#">St Albans</a> <a href="#">Head to</a> <a href="#">Durlston</a> <a href="#">Head SAC</a>	H1230 Vegetated sea cliffs of the Atlantic and Baltic coasts H6210# Semi-natural dry grasslands and scrubland facies: on calcareous substrates ( <i>Festuco-Brometalia</i> ) S1304 <i>Rhinolophus ferrumequinum</i> : Greater Horseshoe Bat S1654 <i>Gentianella anglica</i> : Early Gentian	Jurassic and Cretaceous sea cliffs recognised as a World Heritage Site overlooking the English Channel in Dorset. The outstanding geology supports extensive swathes of calcareous grassland with early spider orchid and the endemic early gentian; sea cliff vegetation on hard rocks and a diversity of habitat on seepage rich slumping clays. Sea caves and mines, a legacy of the stone quarrying industry, have created habitat for the greater horseshoe bat and a highly ephemeral drift line is present on sandy shingle throughout the site.

## 2. Methods

### Visitor survey

- 2.1 Visitor surveys comprised direct counts ('tallies') of people passing a fixed point and interviews with a random sample of those people.

#### *Survey locations*

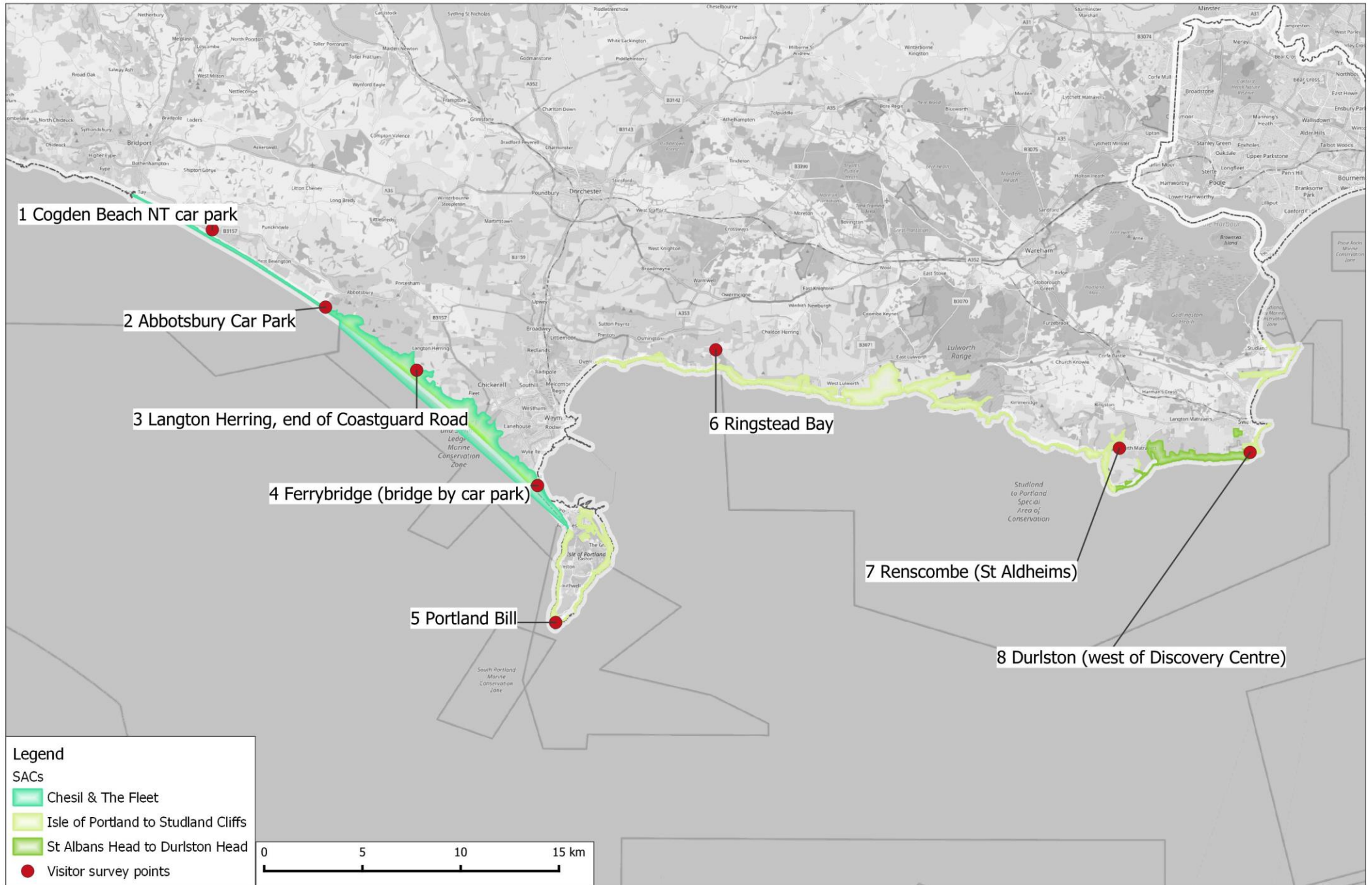
- 2.1 Visitor surveys took place at 8 survey points, 4 in the vicinity of Chesil and the Fleet and the other 4 spread from Portland to Durlston. There are numerous locations where people can access the coast and visitor surveys were intended to provide data from a selection of locations that were representative and were locations likely to be visited by a range of visitors including Dorset residents. Survey points are shown in Map 1 and summarised in Table 2.

Dorset Coastal Sites Visitor Survey

**Table 2: Survey Points**

Map ref	Name	Grid Reference	Description
1	Cogden Beach NT car park	SY50248853	National Trust car park with access to foreshore. Surveyor located at southern edge of car park
2	Abbotsbury Car Park	SY56018459	Car park, toilets and café adjacent to beach. Close to western edge of the Fleet. Surveyor positioned by boardwalk onto beach
3	Langton Herring (end of Coastguard Road)	SY60658136	Path junction and track with area used for boat launching on inland side of the Fleet. Surveyor at end of track by shore access.
4	Ferrybridge (by Visitor Centre car park)	SY66837554	Main car park, visitor centre and café off road to Portland Bill. Surveyor positioned at end of bridge by centre.
5	Portland Bill car park	SY67716844	Large car park with toilets and nearby café/pub and lighthouse near end of Bill. Surveyor positioned at southern edge of car park to east of toilet block.
6	Ringstead Bay car park	SY75878241	National Trust car park high up on slope (away from beach and café) with range of paths including access to White Nothe and Burning Cliff. Surveyor positioned on track towards western edge of car park and roaming to intercept people.
7	Renscombe car park, St Aldhelm's Head	SY96437742	Public car park at base of St. Aldhelm's with access to Chapman's Pool and coast path. Surveyor positioned at southern edge of car park in order to intercept people heading on diagonal footpath or along track to coastguard cottages.
8	Durlston (west of Discovery Centre)	SZ02957684	Well known country park with centre, café, toilets, lighthouse etc. Surveyor positioned around 200m west of the car park on the tarmac road that leads down to the lighthouse and where grassland opens out.

# Map 1: Visitor survey locations



### *Survey logistics*

- 2.2 Surveyors undertook counts and visitor interviews within standard two-hour periods, standardised across survey points. Face-to-face interviews were conducted with a random selection of visitors, with the surveyor selecting the next person they saw after completing the previous interview, with only one person interviewed per group or party.
- 2.3 Alongside the interview data, surveyors maintained a tally of all people passing, recording the number of groups (of any size), individuals, minors, dogs and cyclists. These counts allow a comparison across survey points in terms of visitor volume/footfall, and indicate the proportion of visitors that were interviewed at each location.

### *Questionnaire design*

- 2.4 The questionnaire (Appendix 1) was designed using Snap Surveys software and was conducted using tablet computers running the Snap Mobile Anywhere app. The route that the interviewee had taken on site (or was planning to take) was drawn by the surveyor onto a paper map, using a unique reference number to match it to the corresponding questionnaire data and these routes were subsequently digitised into GIS.

### *Survey timings*

- 2.5 Each survey point was surveyed for 16 hours, with 8 hours on a weekend day and 8 hours on a weekday. Surveys were split into 2 hour periods to provide breaks for the surveyors and comparable survey windows across all locations. Survey times comprised: 07:00 - 09:00, 10:30 - 12:30, 14:00 - 16:00, and 17:00 - 19:00hrs. Every effort was made to avoid severe weather conditions.
- 2.6 Surveys took place between the 5<sup>th</sup> and the 23<sup>rd</sup> May 2022.
- 2.7 We deliberately avoided the bank holiday weekend as having some locations (but not others) surveyed in what may be a particularly atypical weekend would make comparison difficult. The surveys also avoided any major televised sporting events. Survey effort was otherwise spread within the survey windows, ensuring surveys were not weighted too much on a single date, and were spread survey effort over multiple dates, reducing the risk of bad weather on a few dates influencing the results (as far as possible).

2.8 Nonetheless, the weather during the survey was changeable and 15 of the 2-hour survey sessions (out of a total of 64 sessions) had some rain (see Appendix 2). Sites where there were more than 2 survey sessions with rain were: Langton Herring and Durlston. At Durlston there was rain for 6 of the survey sessions.

## Impact assessment

2.9 Separate to the visitor surveys, we summarise the concerns with coastal recreation and the relevant European sites, drawing on our local knowledge and site visits to selected locations. This impact assessment section is focussed on the sites east of Chesil (as there is already a recognition of impacts at Chesil and the Fleet and a mitigation strategy already in place). The focus therefore relates to the two SAC sites that comprise the cliffed coastline:

- Isle of Portland to Studland Cliffs SAC
- St Albans Head to Durlston Head SAC.

2.10 Site visits were undertaken to check for recreation impacts at specific locations (Portland Bill on the 21<sup>st</sup> June and Townsend Common on the 30<sup>th</sup> June). These sites were chosen to provide specific context. The SSSI condition assessment for Portland Bill reflects long-standing issues with recreation and trampling<sup>3</sup>. Townsend Common is a satellite part of the St Albans Head to Durlston Head SAC a discrete SSSI away from the coast, in Swanage. The site is surrounded by local housing and caravan parks and likely to be used only by people based in Swanage (and hence no need for visitor survey work at this stage).

2.11 The site visits were not intended to be comprehensive surveys of species or habitats, but rather targeted checks to determine whether there were obvious current issues from recreation that could be affecting the qualifying features of the SAC or whether there were vulnerable features that might be impacted were recreation use to increase. As such survey effort was targeted to checking access points and the vicinity of areas where visitor use would be focussed.

---

<sup>3</sup> E.g. unit 045, assessment dated 2011 reports trampling damage to maritime vegetation and restoration works in place  
(<https://designatedsites.naturalengland.org.uk/ReportUnitCondition.aspx?SiteCode=S1000128&ReportTitle=Isle%20of%20Portland%20SSSI> accessed 26/8/2022)

2.12 Signs of impact were mapped (predominantly as point data), and categorised as follows:

- **Damage:** encompassing trampling and vegetation wear, soil compaction and erosion, trampling can cause direct mortality for some fauna;
- **Contamination:** including nutrient enrichment (e.g. dog fouling), litter, invasive species;
- **Disturbance:** relevant to fauna only, and relating to the avoidance of otherwise suitable habitat, direct flushing and direct mortality (e.g. dogs killing wildlife);
- **Fire:** increased incidence and risk of fire, and/or;
- **Other:** all other impacts, including harvesting and activities associated with site management, for example the difficulties in achieving necessary grazing.

2.13 The severity of each mapped impact was assessed:

- **Light impacts** included very highly localised impacts (e.g. bare ground around a bench) or where the vegetation was modified but species characteristic of the habitat were still present (e.g. trampling pressure creating a shorter sward with more annuals and rosette species, and little or no bare ground).
- **Moderate impacts** included vegetation that was modified and no longer characteristic of the habitat (e.g. comprising ruderal or nitrophilous species, such as Common Nettle *Urtica dioica*) or bare ground was more extensive.
- **Severe impacts** included widespread loss of vegetation and compaction along and adjacent to a path and areas of deeper impact, such as where there was extensive bare ground from high levels of visitor footfall, excessive churning from horse hooves and compaction from bike tyres.

2.14 Georeferenced photographs and target notes were taken to evidence the impact. Types of activity that may cause a greater degree of impact were highlighted. For example, dog walking, high friction (wheels, horses' hooves) or large groups (i.e. impact of lots of people together) are of particular concern (Lowen et al., 2008).

2.15 The surveys were therefore not an exhaustive search of the entire study area for every impact and comprise a 'snapshot' of the impacts on the date visited. We supplement the results from the site visits with our experience and local knowledge; Footprint Ecology staff have visited and conducted a range of survey work on the relevant coastal sites over many years.

### 3. Results: Tally counts

- 3.1 Tally data are summarised in Table 3. In total, 1398 groups were noted entering or leaving. These groups contained a total of 3069 people (of which 301 were minors) and 439 dogs. From these totals the mean group size was 2.2 people (of which 0.2 were minors) and 0.3 dogs. There was 1 dog for every 7 people counted.
- 3.2 Portland was the busiest location from the tally data, with 28% of the groups, 29% of the people, 17% of the dogs and 30% of the minors logged entering all sites recorded entering at this location.
- 3.3 Weekends and weekdays are compared in Figure 1. All sites were busier at weekends compared to weekdays (overall, 66% of groups entering were counted at weekends compared to weekdays) and there was a particularly marked differences at Renscombe and Abbotsbury. At most sites the number of dogs entering was higher at the weekend, but not so at Durlston or Ringstead.
- 3.4 At all sites it was the mid-morning survey session where the most groups entering were counted, particularly at the weekend (Figure 2) and the early mornings were the quietest.

## Dorset Coastal Sites Visitor Survey

**Table 3: Summary of tally data. Entering are those starting their visit at the survey point (e.g. parking at given car park); those leaving are those exiting the site at the given location (e.g. returning to cars). Grey shading indicates cells with values at least 20% of column total.**

Site	Entering						Leaving					
	Groups	Total people	Total dogs	Minors	Bikes	Horses	Groups	Total people	Total dogs	Minors	Bikes	Horses
Cogden Beach	69	151	44	11	0	0	78	161	55	14	0	0
Abbotsbury	103	243	12	20	0	0	116	232	10	10	0	0
Langton Herring	42	69	30	0	0	0	0	0	0	0	0	0
Ferrybridge	140	297	28	59	0	0	124	290	24	56	0	0
Portland Bill	209	481	41	50	4	0	132	315	30	32	7	0
Ringstead Bay	23	46	10	2	2	0	24	46	10	3	1	0
Renscombe	98	217	28	21	4	0	92	185	27	18	4	0
Durlston	59	140	51	3	1	0	89	196	39	2	1	0
<b>Total</b>	<b>743</b>	<b>1644</b>	<b>244</b>	<b>166</b>	<b>11</b>	<b>0</b>	<b>655</b>	<b>1425</b>	<b>195</b>	<b>135</b>	<b>13</b>	<b>0</b>

# Dorset Coastal Sites Visitor Survey

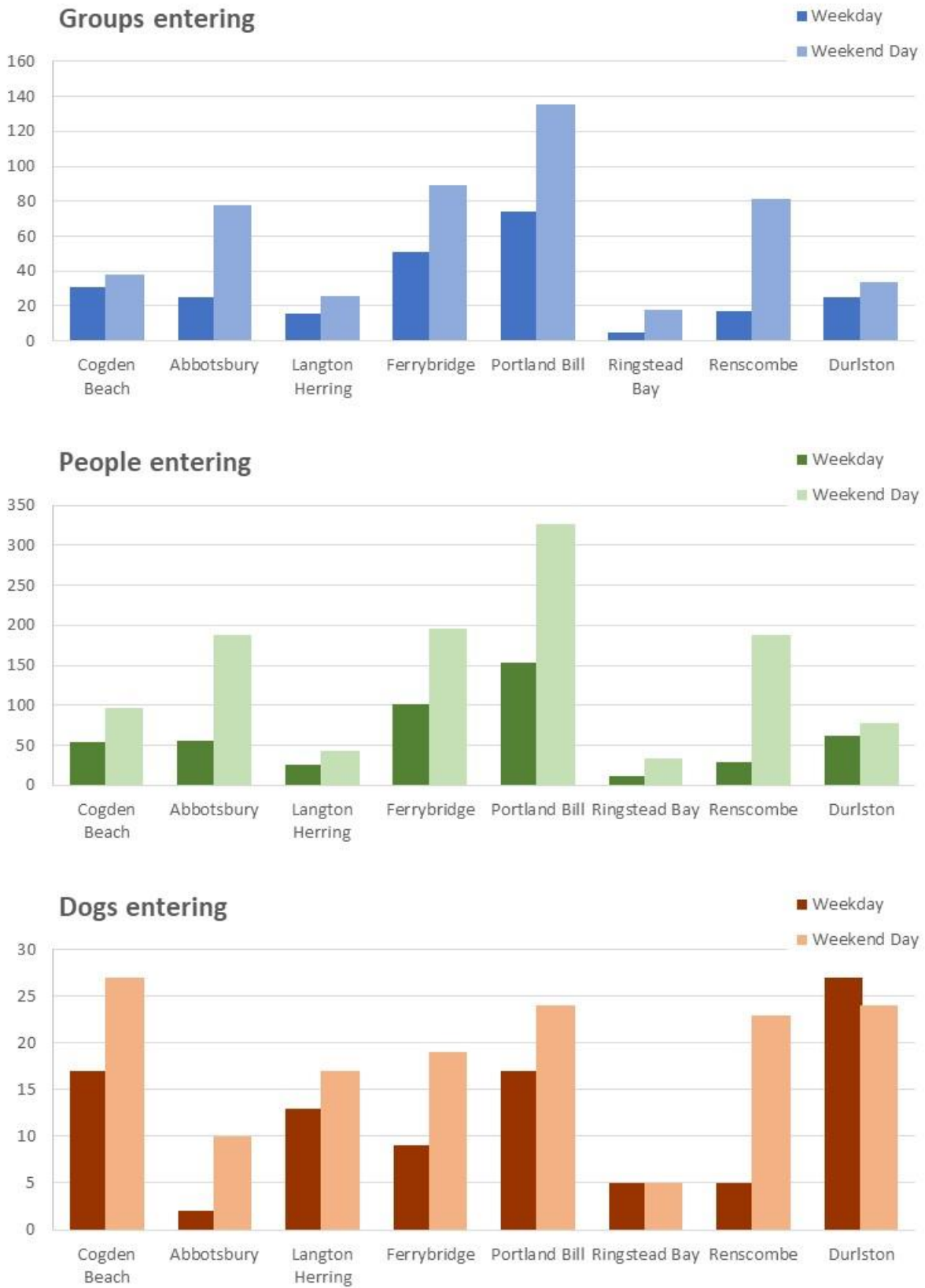


Figure 1: Groups, people and dogs entering each site on weekdays compared to weekends.

# Dorset Coastal Sites Visitor Survey

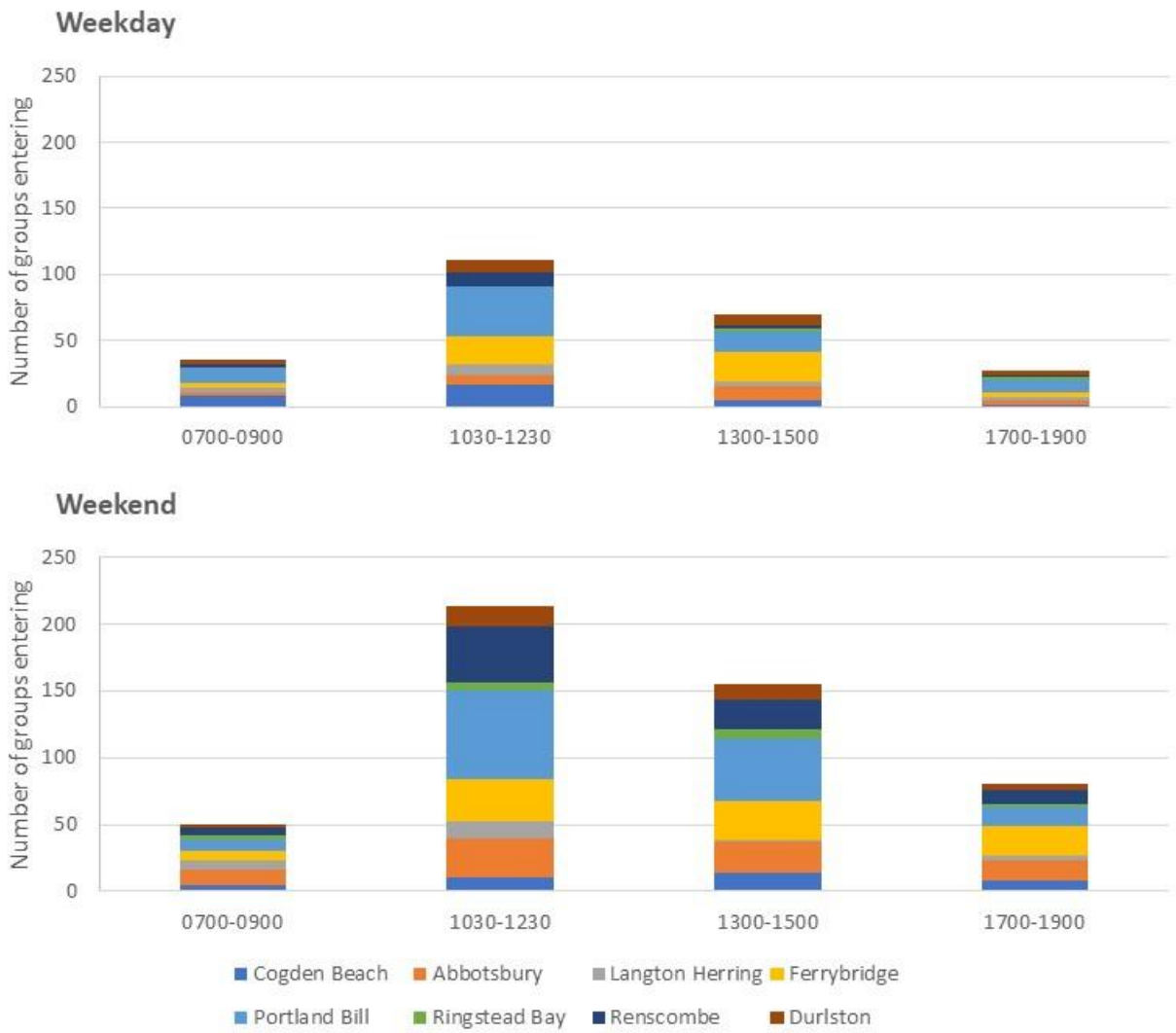


Figure 2: Number of groups entering by time period, type of day and survey point

## 4. Results: Visitor interviews

4.1 This section sets out the results from the visitor interviews.

### Overview of interview data

4.2 A total of 326 interviews were conducted, with just over half (180 interviews, 55%) conducted on a weekend (Table 4). The number of interviews at the weekend was higher compared to the weekday at all of the survey points apart from Durlston, where the weekend survey did coincide with rain.

**Table 4: Number of interviews by survey location. Locations ranked by the number of interviews. Grey shading indicates the weekday or weekend column with the higher value.**

Survey location	Number interviews on a weekday	Number interviews on a weekend day	Total (%) of interviews	Already interviewed	Refusals
Cogden	22	31	53 (16%)	0	12
Abbotsbury	22	29	51 (100%)	1	23
Langton Herring	10	16	26 (100%)	2	4
Ferrybridge	24	30	54 (100%)	0	14
Portland Bill	28	30	58 (100%)	1	13
Ringstead	7	16	23 (100%)	0	4
Renscombe	12	16	28 (100%)	0	48
Durlston	21	12	33 (100%)	1	25
<b>Total</b>	<b>146</b>	<b>180</b>	<b>326 (100%)</b>	<b>5</b>	<b>143</b>

4.3 The interview lasted on average 7.9 minutes. A total of 5 people were approached that had already been interviewed (and were not re-interviewed). A total of 143 people were approached and refused to be interviewed (Table 4). Refusals occurred at all locations but were particularly high at Renscombe, where 48 people were approached that refused to be interviewed.

4.4 Group size<sup>4</sup> in the interviewed groups ranged from 1 to 24 (the latter a group of students from Bournemouth University undertaking butterfly surveys). The interviewed groups totalled 715 people, giving an average group size (for the interviewed groups) of 2.2 people. 115 interviewees had 1 or more dogs

<sup>4</sup> By group size we mean the number of people in the group, including the interviewee. While only one interview was conducted per group or party, the number of people in the group as a whole was logged.

with them, with a total of 165 dogs, roughly 0.4 dogs per interviewee (across all interviewees) and 0.2 dogs per person in the interviewed groups. At least 98 (85%) of the dogs were noted by the surveyor as off the lead at the time of interview.

- 4.5 The majority (181 interviewees, 56%) were on a day trip or short visit and had travelled directly from home that day. 134 interviewees (41%) stated they were on holiday in the area and staying away from home while a further 9 interviewees (3%) were staying with friends or family in the area. Visit types are summarised by survey location in Table 3. It can be seen that holiday makers accounted for 50% or more of interviewees at Abbotsbury and Ferrybridge. Other visit types included someone delivering a yacht and one interviewee who was staying at their second home. In addition, one of the interviewees at Durlston who was staying with friends or family specifically mentioned that it was the friends second home they were staying in.

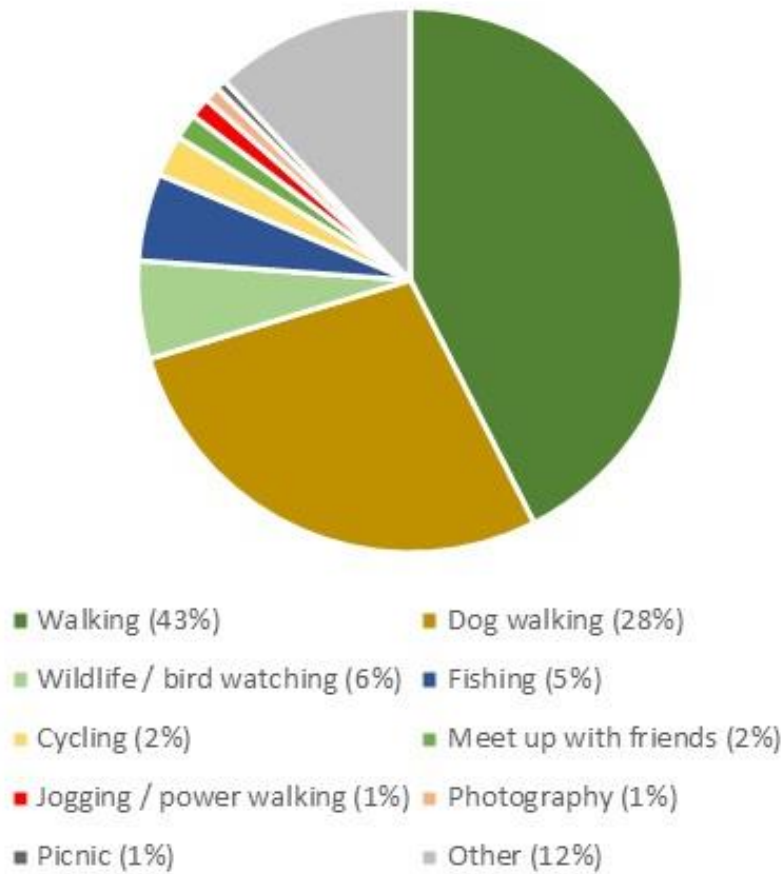
**Table 5: Number (%) of interviewees and visit type, by survey point**

	Day trip/short visit from home	On holiday in the area	Staying with friends or family	Other	Total
Cogden	26 (49)	25 (47)	2 (4)	0 (0)	53 (100)
Abbotsbury	21 (41)	29 (57)	1 (2)	0 (0)	51 (100)
Langton Herring	16 (62)	10 (38)	0 (0)	0 (0)	26 (100)
Ferrybridge	27 (50)	27 (50)	0 (0)	0 (0)	54 (100)
Portland Bill	31 (53)	25 (43)	1 (2)	1 (2)	58 (100)
Ringstead	17 (74)	3 (13)	3 (13)	0 (0)	23 (100)
Durlston	24 (73)	7 (21)	1 (3)	1 (3)	33 (100)
Renscombe	19 (68)	8 (29)	1 (4)	0 (0)	28 (100)
<b>Total</b>	<b>181 (56)</b>	<b>134 (41)</b>	<b>9 (3)</b>	<b>2 (1)</b>	<b>326 (100)</b>

## Activity (Q2 & Q3)

- 4.6 Across all interviewees, walking was the most frequently given main activity (139 interviewees, 43% of interviewees) with dog walking the next most commonly cited activity (91 interviewees, 28%). Together these two activities accounted for 71% of interviewees' main activities (Figure 3). Fishing had not been included on the questionnaire as a pre-determined category, however this was the 4<sup>th</sup> most commonly cited main activity (17 interviewees, 5%) and a further 39 interviewees (12%) gave 'other' activities that did not fit with the

pre-determined categories and these were varied, for example including sightseeing (11 interviewees), eating out (4 interviewees) and litter picking (2 interviewees). .



**Figure 3: Proportion of interviewees by main activity, from responses to Q1.**

4.7 Interviewees were also asked about any other activities they were undertaking during their visit, and these secondary activities are summarised in Table 6. Around half (161 interviewees, 49%) of interviewees gave a secondary activity, with walking the most common (48 interviewees, 15%).

4.8 Including both main and secondary activities, 119 interviewees (37%) were dog walking. It should be noted that 215 interviewees (66%) actually had dogs with them. The difference relates to interviewees that had a dog with them but did not consider that they were out for a dog walk or that their visit did not involve a dog walk. These interviewees predominantly gave walking as their main activity and were undertaking a range of secondary activities that included wildlife / bird watching or visiting the beach.

**Table 6: Number (%) of interviewees undertaking different activities**

Activity	No (%) of interviews, main activity	No (%) of interviews, secondary activity	Total interviewees undertaking activity (%)
Walking	139 (43%)	48 (15%)	187 (57%)
Dog walking	91 (28%)	28 (9%)	119 (37%)
Wildlife / bird watching	19 (6%)	22 (7%)	41 (13%)
Fishing	17 (5%)	2 (1%)	19 (6%)
Cycling	8 (2%)	0 (0%)	8 (2%)
Meet up with friends	5 (2%)	7 (2%)	12 (4%)
Jogging / power walking	4 (1%)	0 (0%)	4 (1%)
Photography	3 (1%)	7 (2%)	10 (3%)
Picnic	2 (1%)	9 (3%)	11 (3%)
Swimming	0 (0%)	4 (1%)	4 (1%)
Other	39 (12%)	34 (10%)	73 (22%)

- 4.9 Looking across survey locations, there were significant differences between locations in the proportions of interviewees that gave dog walking, walking or any other activity as their main activity ( $\chi^2_{14}=72.22$ ,  $p<0.001$ ) (see Figure 4). Walking was the most common main activity at all locations and dog walking the second most common, apart from Cogden and Durlston (where dog walking was the most common and cited as the main activity for over 50% of interviewees). Walking was the main activity for a particularly high percentage of visitors at Renscombe and Langton Herring (57% and 62% respectively).
- 4.10 There were also significant differences between those on holiday and those on a short visit from home and the relative proportions of interviewees undertaking different activities. For those on holiday, 54% gave walking as a main activity, 20% were dog walking and 26% gave a different main activity. For those on a short visit from home the equivalent percentages were 35%, 33% and 32% ( $\chi^2_2=12.06$ ,  $p=0.002$ ).

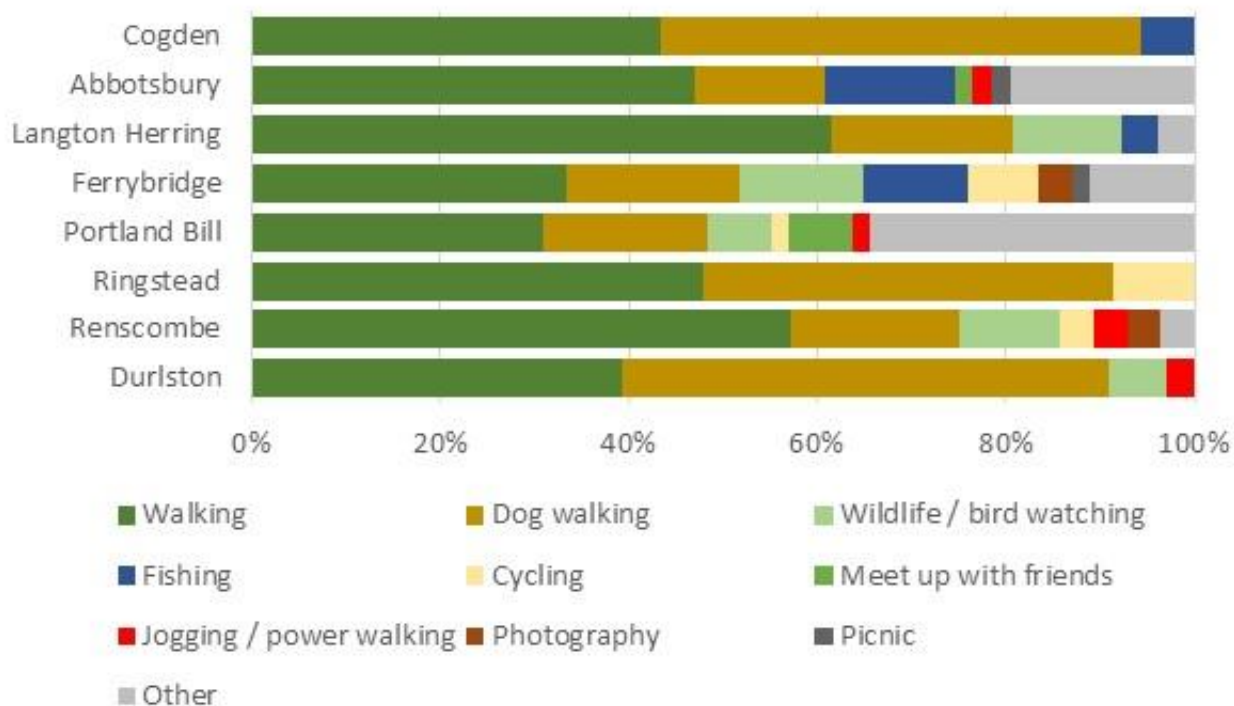


Figure 4: Percentage of interviewees undertaking different main activities by survey location

## Mode of Transport (Q3)

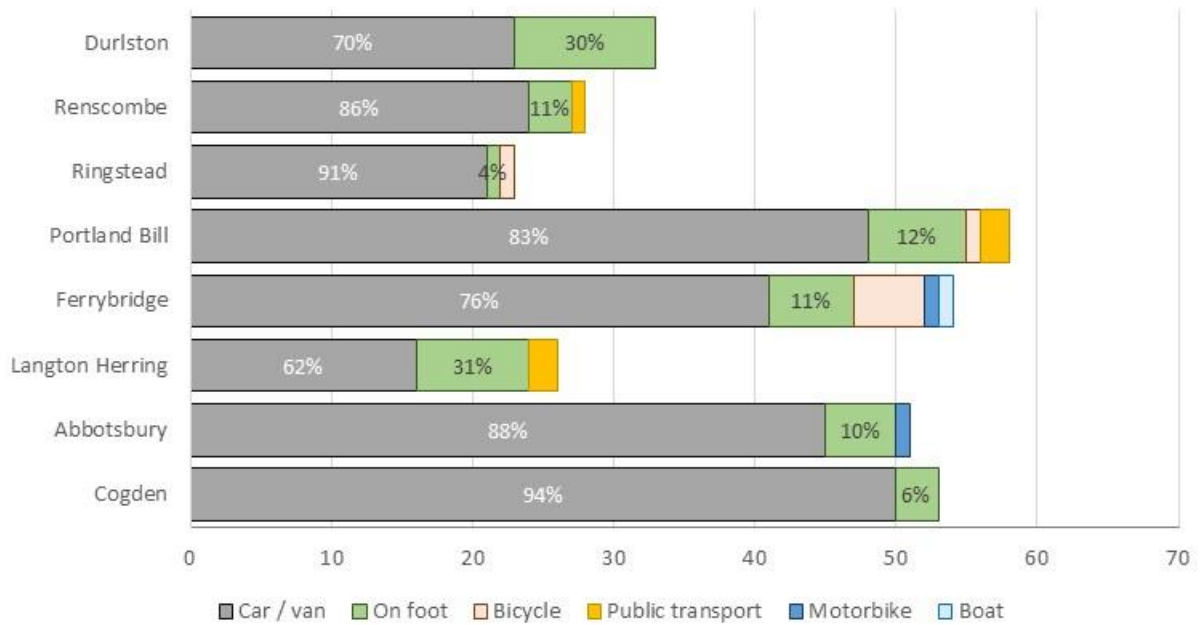
4.11 The majority of interviewees (268 interviewees, 82%) had travelled to the interview location by car or van and a further 43 interviewees (13%) had arrived on foot. A range of other modes of transport were also cited but all accounted for few interviewees (Table 6).

Table 7: Number (%) of interviewees and mode of transport across all survey locations

Mode of transport	No (%) of interviews, main activity
Car / van	268 (82%)
On foot	43 (13%)
Bicycle	7 (2%)
Public transport	5 (2%)
Motorbike	2 (1%)
Boat	1 (0%)
<b>Total</b>	<b>326 (100%)</b>

4.12 Those arriving by car accounted for notably high (above 90%) of the visitors at Ringstead and Cogden (Figure 5).

## Dorset Coastal Sites Visitor Survey



**Figure 5: Number of interviewees by mode of transport and survey point. Data labels give the % of interviewees at each location arriving by car (grey) and on foot (green).**

- 4.13 The mean group size for those who had arrived by car was 2.3 people.
- 4.14 There was no significant difference between those on holiday and those on a short visit from home in the proportion of interviewees that arrived by car, on foot or other modes of transport ( $\chi^2=1.25$ ,  $p=0.535$ ).

## Temporal visit patterns (Q4 – Q7)

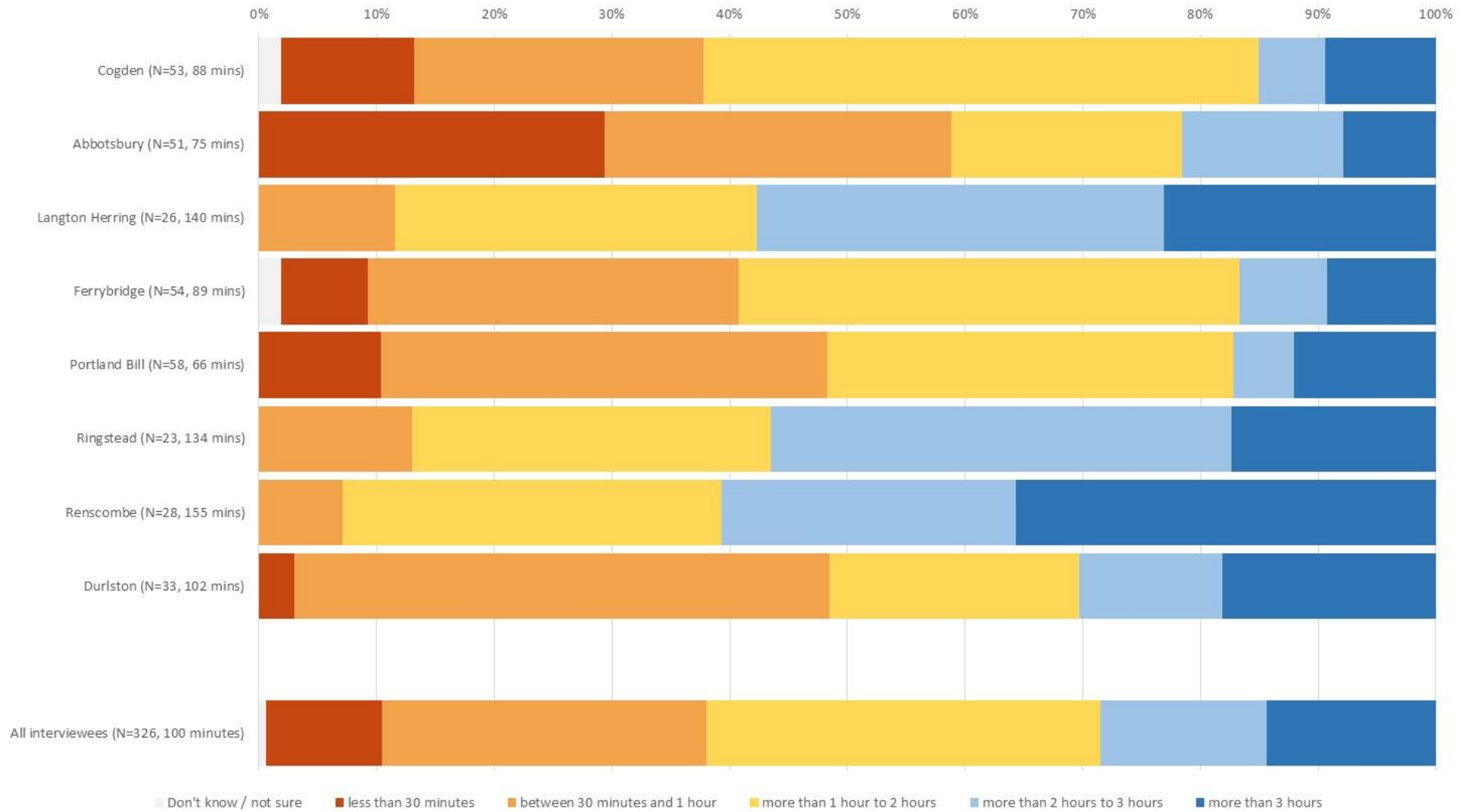
### *Visit duration (Q5)*

4.15 The most commonly cited visit duration (109 interviewees, 33%) was 1-2 hours. Across all sites the average visit duration (derived from the categorical responses) was around 100 minutes<sup>5</sup>. Interviewees at Langton Herring and Renscombe tended to be visiting for the longest duration (Figure 6). There was little evidence of marked differences between those on holiday (133 interviewees, average visit duration 97 minutes) and those on short trip directly from home (180 interviewees, average visit duration 102 minutes).

---

<sup>5</sup> Calculated by assigning an estimate of time to each category: less than 30 minutes = 20mins; 30 minutes - 1hr=45 mins; 1-2 hrs=90 mins; 2-3 hrs=150mins and more than 3 hours=240mins. Typical visit duration is then the average based on the total number of interviewees that gave one of the above categories.

# Dorset Coastal Sites Visitor Survey



**Figure 6: Visit duration for all interviewees (lower) and by activity (top). Numbers in brackets refer to sample size and average visit duration. Data from Q5.**

4.16 There was also little difference in visit duration comparing those interviewed at the weekend (179 interviewees, average duration 103 minutes) compared to those interviewed during the week (145 interviewees, 97 minutes average duration). The data are shown in Figure 7.

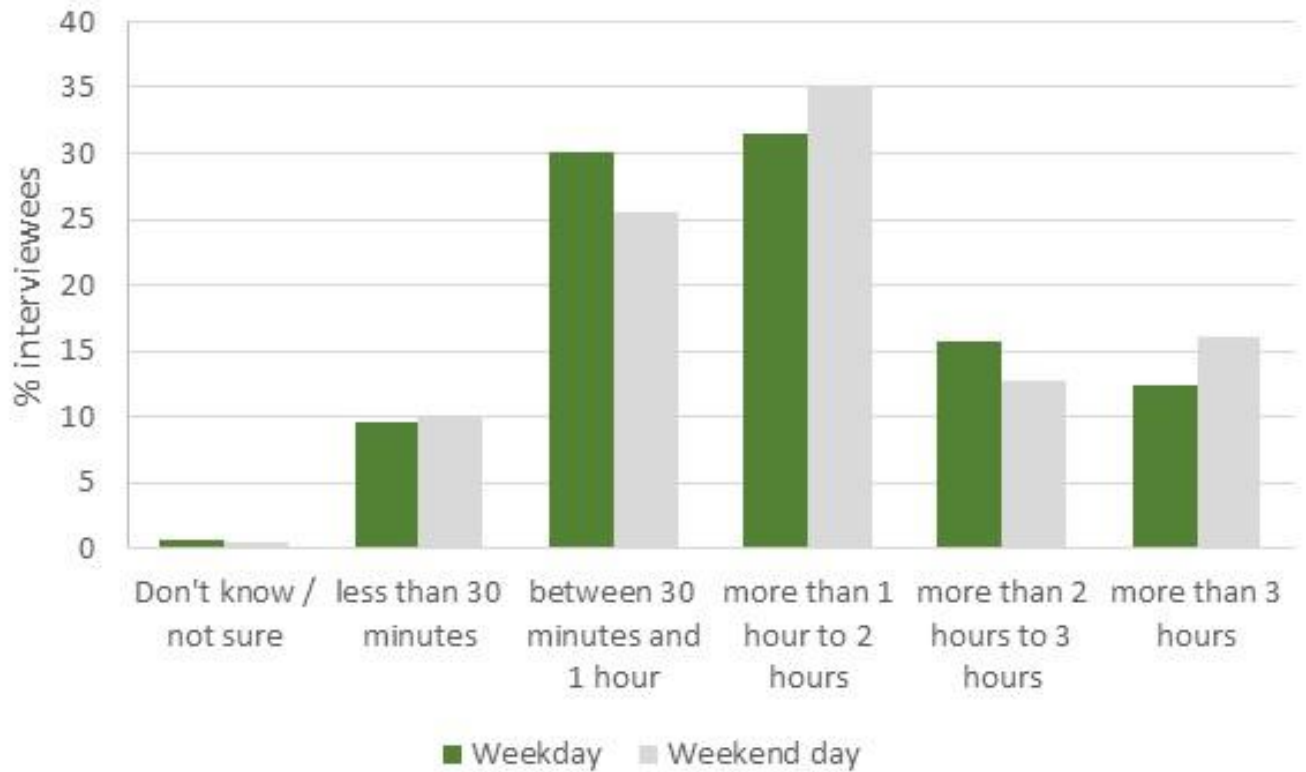
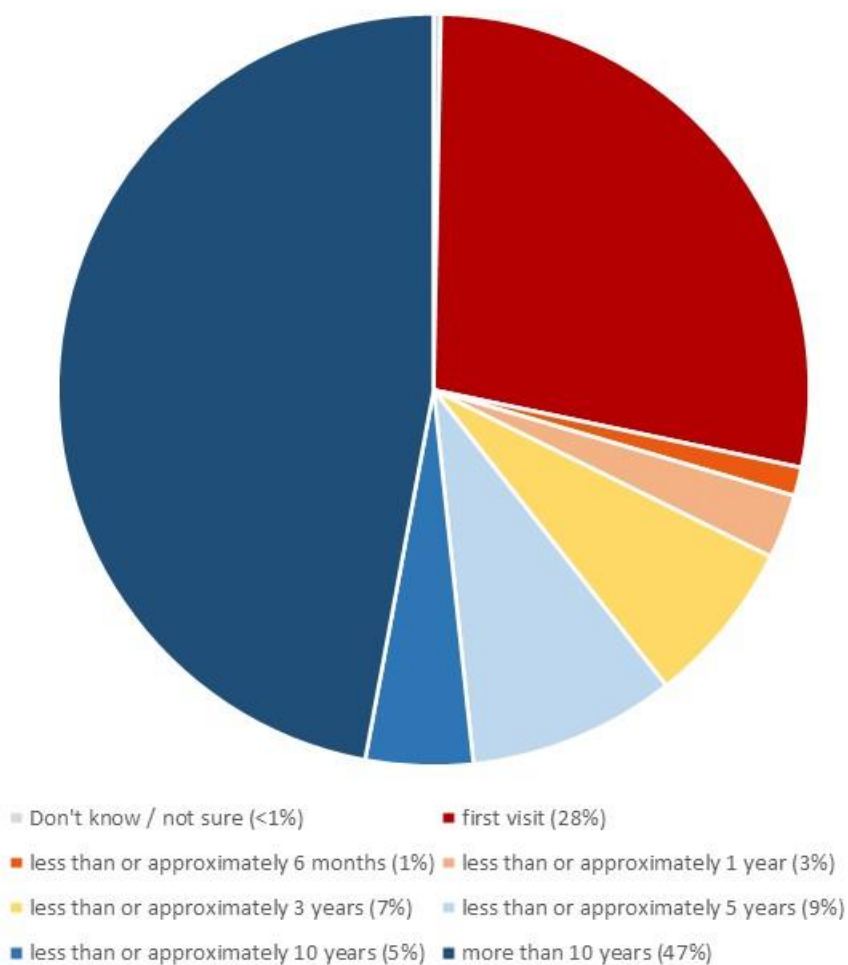


Figure 7: Percentage of interviewees and visit duration by day of the week (from Q5).

### Length of time visiting (Q4)

4.17 Most interviewees (153 interviewees, 47%) had been visiting the site for at least 10 years (Figure 8). A relatively high proportion were also on their first visit (91 interviewees, 28%). Around two-thirds (63 interviewees, 68%) of those on their first visit were holiday makers. Nearly half (47%) of those on holiday were visiting the site for the first time compared to 25 interviewees (14%) of those who were on a short visit directly from home. Abbotsbury was notable of the different survey points in that a relatively low percentage of interviewees had been visiting for more than 10 years (15 interviewees, 29%) and conversely a relatively high percentage (20 interviewees, 39%) were on a first visit.



**Figure 8: Length of time visiting the coastal site where interviewed (from Q4).**

### Visit frequency (Q8)

4.18 Visit frequencies are summarised in Figure 9. Based on the categorical responses relating to visit frequency, interviewees had visited the interview location around 44 times on average over the past year<sup>6</sup>. Those on holiday had made an average of 2 visits of the past year compared to 77 visits for those on a short visit directly from home that day. Interviewees at Durlston and Langton Herring tended to visit more frequently compared to the other

<sup>6</sup> Calculated by assigning an estimate of time to each category: "Daily" = 350 visits, "Most days (180+ visits)" = 200 visits, "1 to 3 times a week (40-180 visits)" = 110 visits, "2 to 3 times per month (15-40 visits)" = 27.5 visits, "Once a month (6-15 visits)" = 10.5 visits, "Less than once a month (2-5 visits)" = 3 visits and "First visit" = 1. Typical visit frequency is then the average based on the total number of interviewees that gave one of the above categories.

sites whereas at Abbotsbury interviewees tended to visit very infrequently (9 visits per year on average).

- 4.19 A high proportion (136 interviewees, 42%) were categorised as first visits as they were either visiting for the first time or else visited so infrequently that it was equivalent to less than 1 visit per year, for example the first visit they had made in recent years. Therefore, some people who indicated in question 4 that they had visited the site before (often many years previously) were categorised as first visits.

## Dorset Coastal Sites Visitor Survey

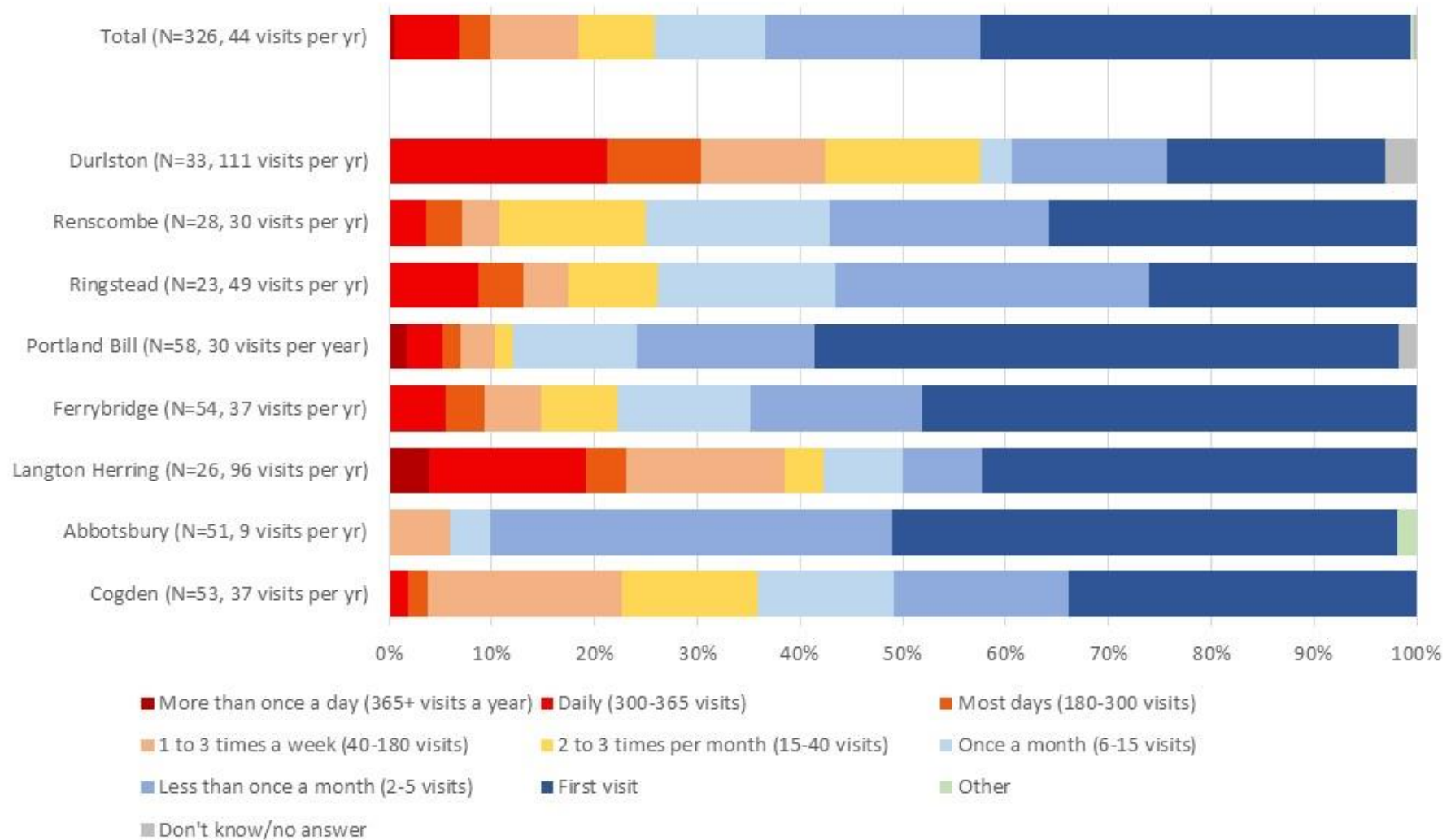


Figure 9: Visit frequency for all interviewees (top) and by activity (lower). Numbers in brackets refer to sample size. Data from Q8.

### Time of year (Q7)

4.20 The majority of interviewees (149 interviewees, 46%) that indicated a time of year they visit stated they tended to visit equally all year (Table 8) and this was the same across sites with the exception of Ferrybridge where the most common response was the spring (19 interviewees, 35% of those interviewed at Ferrybridge).

**Table 8: Number (%) of interviewees and time of year they tend to visit (from Q7). Note that multiple responses were possible (e.g. interviewees could visit more in both the spring and the summer); percentages are calculated based on the total number of interviewees rather than number of responses.**

	Cogden	Abbotsbury	Langton Herring	Ferrybridge	Portland Bill	Ringstead	Renscombe	Durlston	Total
<b>Total no of interviewees</b>	<b>53</b>	<b>51</b>	<b>26</b>	<b>54</b>	<b>58</b>	<b>23</b>	<b>28</b>	<b>33</b>	<b>326</b>
Equally all year	26 (49)	18 (35)	15 (58)	16 (30)	27 (47)	12 (52)	13 (46)	14 (42)	149 (46)
Spring (Mar-May)	9 (17)	8 (16)	5 (19)	19 (35)	13 (22)	3 (13)	4 (14)	9 (27)	66 (20)
Summer (Jun-Aug)	2 (4)	8 (16)	2 (8)	14 (26)	11 (19)	6 (26)	5 (18)	7 (21)	55 (17)
Autumn (Sept-Nov)	8 (15)	4 (8)	1 (4)	5 (9)	5 (9)	0 (0)	3 (11)	6 (18)	23 (7)
Winter (Dec-Feb)	6 (11)	0 (0)	1 (4)	1 (2)	1 (2)	0 (0)	3 (11)	5 (15)	9 (3)
First visit/don't know	16 (30)	19 (37)	6 (23)	17 (31)	15 (26)	4 (17)	6 (21)	6 (18)	103 (32)

### Effects of pandemic on visit patterns (Q9)

4.21 Across all interviewees, 65 interviewees (20%) indicated the coronavirus pandemic had changed how often they visit the location where interviewed, with 32 interviewees (10 %) indicating that they now visit more than before and 33 interviewees (10%) indicating they now visit less. Across all interviewees, 188 (58%) had not changed their how often they visited the location where interviewed. Ringstead was particularly notable in that virtually all interviewees (96%) were visiting the same as before.

**Table 9: Number (%) of interviewees and the effect of the coronavirus pandemic on visit frequency (from Q9).**

	Cogden	Abbotsbury	Langton Herring	Ferrybridge	Portland Bill	Ringstead	Renscombe	Durliston	All interviewees
Visiting the same as before	38 (72)	23 (45)	19 (73)	19 (35)	28 (48)	22 (96)	18 (64)	21 (64)	188 (58)
Visiting less	4 (8)	5 (10)	5 (19)	7 (13)	10 (17)	0 (0)	1 (4)	1 (3)	33 (10)
Visiting more	4 (8)	6 (12)	2 (8)	6 (11)	6 (10)	0 (0)	4 (14)	4 (12)	32 (10)
Unsure/don't know/first visit	7 (13)	17 (33)	0 (0)	22 (41)	14 (24)	1 (4)	5 (18)	7 (21)	73 (22)
<b>All interviewees</b>	<b>53 (100)</b>	<b>51 (100)</b>	<b>26 (100)</b>	<b>54 (100)</b>	<b>58 (100)</b>	<b>23 (100)</b>	<b>28 (100)</b>	<b>33 (100)</b>	<b>326 (100)</b>

## Routes taken on site (Q11-14)

- 4.22 Most interviewees (147, 45%), stated that the route they had followed or intended to follow that day was similar to their usual route. 40 interviewees (12%) stated that the route was much shorter than normal while the route was much longer than normal for 5 (2%). The remaining interviewees were unsure, had no typical visit or were visiting for the first time.
- 4.23 In total 309 routes were mapped as part of the interview. These are shown in Map 2. Across all interviewees the median route length was 3.3km and ranged from 161m to 26.2km (the latter a couple on holiday).
- 4.24 Route length data are summarised by main activity type in Figure 10, by survey location in Figure 11 and by visit type in Figure 12. While the longest route was taken by a walker, cyclists as a group tended to have the longest routes (median 10.6km). For dog walkers the median route length was 3.4km. Comparing across survey locations, the median route lengths were longer at Ringstead (median 7.0km) and Langton Herring (median 6.1km). Those on a short visit directly from home undertook longer routes (median 4km compared to those on holiday (median 2.0km) (Mann-Whitney  $W=27823$ ,  $p=0.003$ ).

# Dorset Coastal Sites Visitor Survey

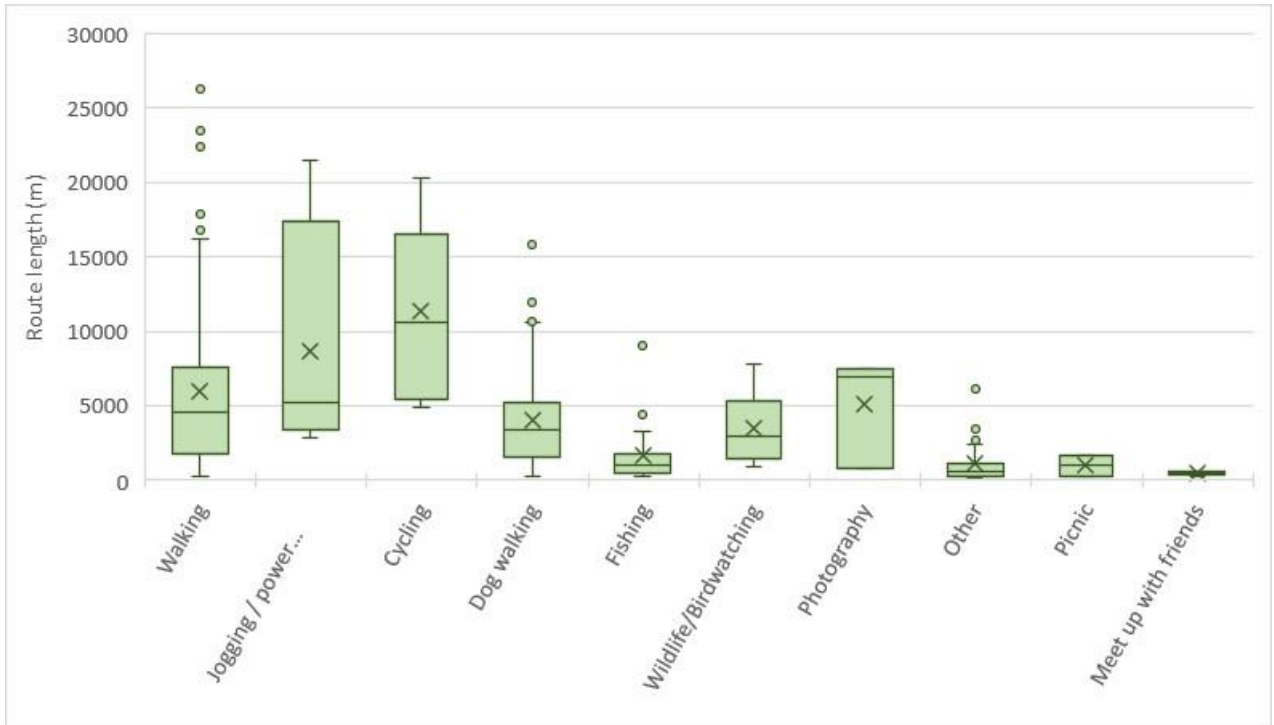


Figure 10: Route lengths by main activity. Horizontal lines show the median, crosses indicate the mean, the boxes show the interquartile range and the whiskers the maximum and minimum values.

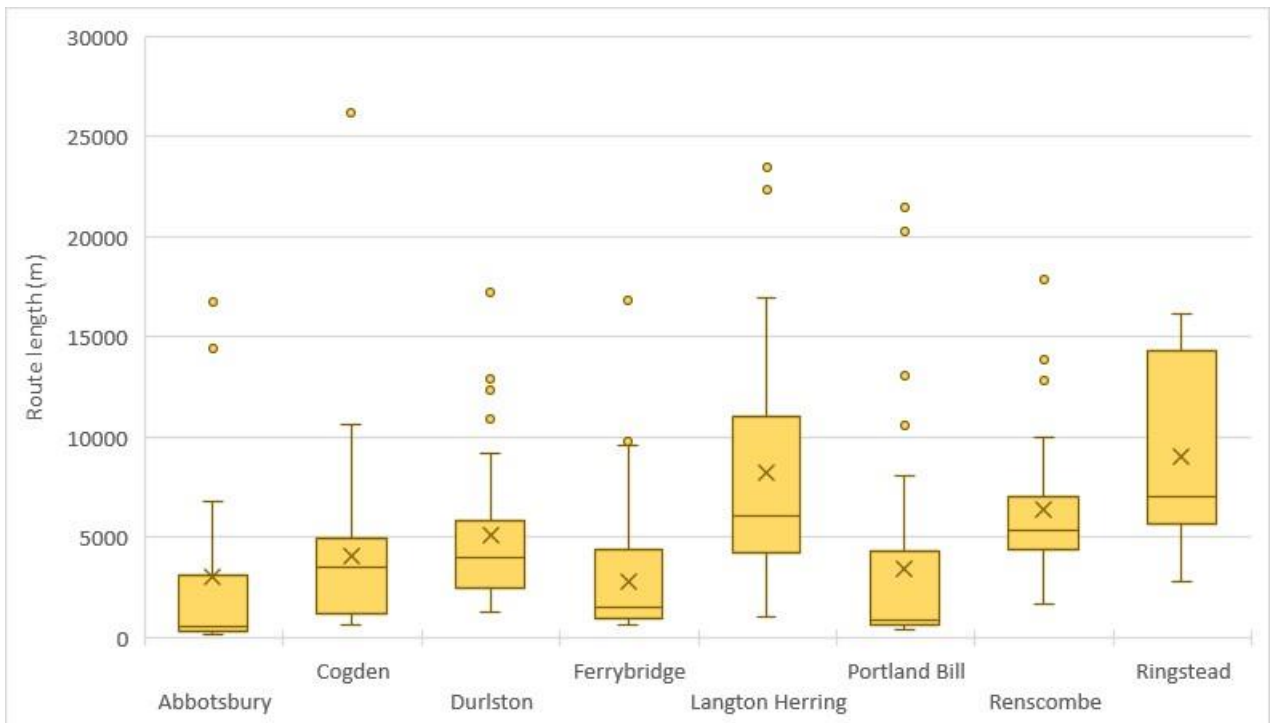
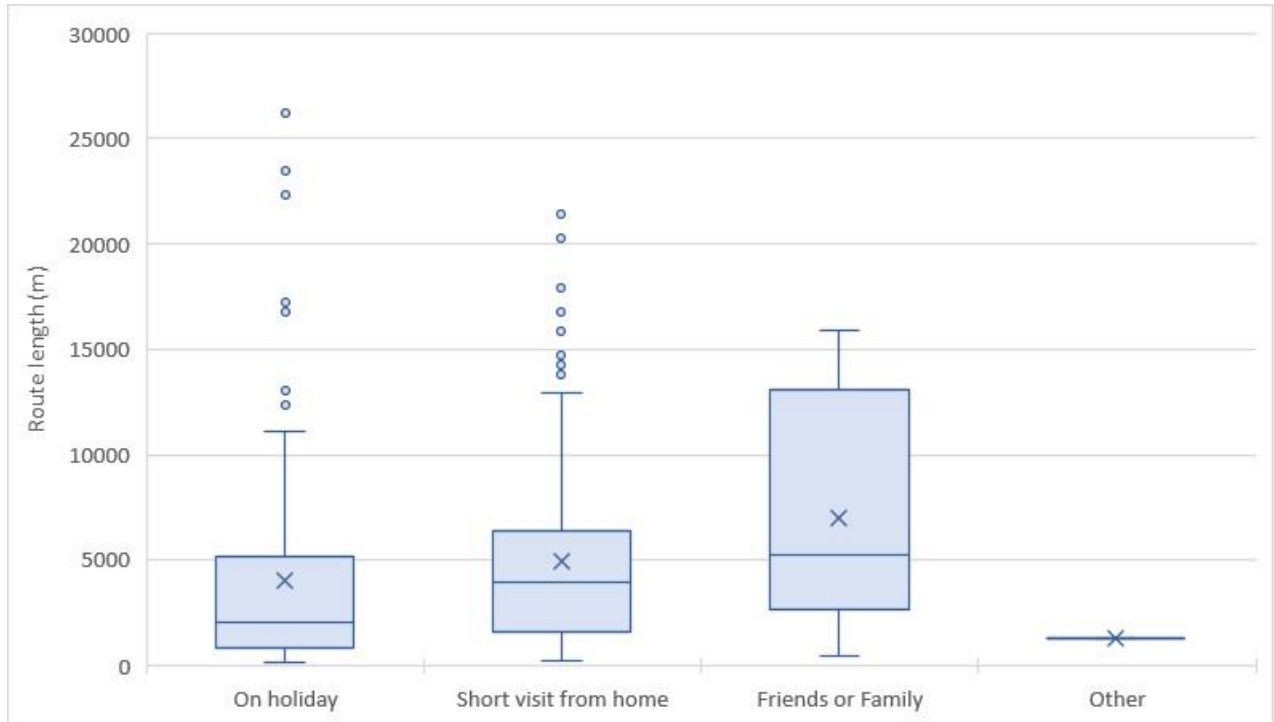


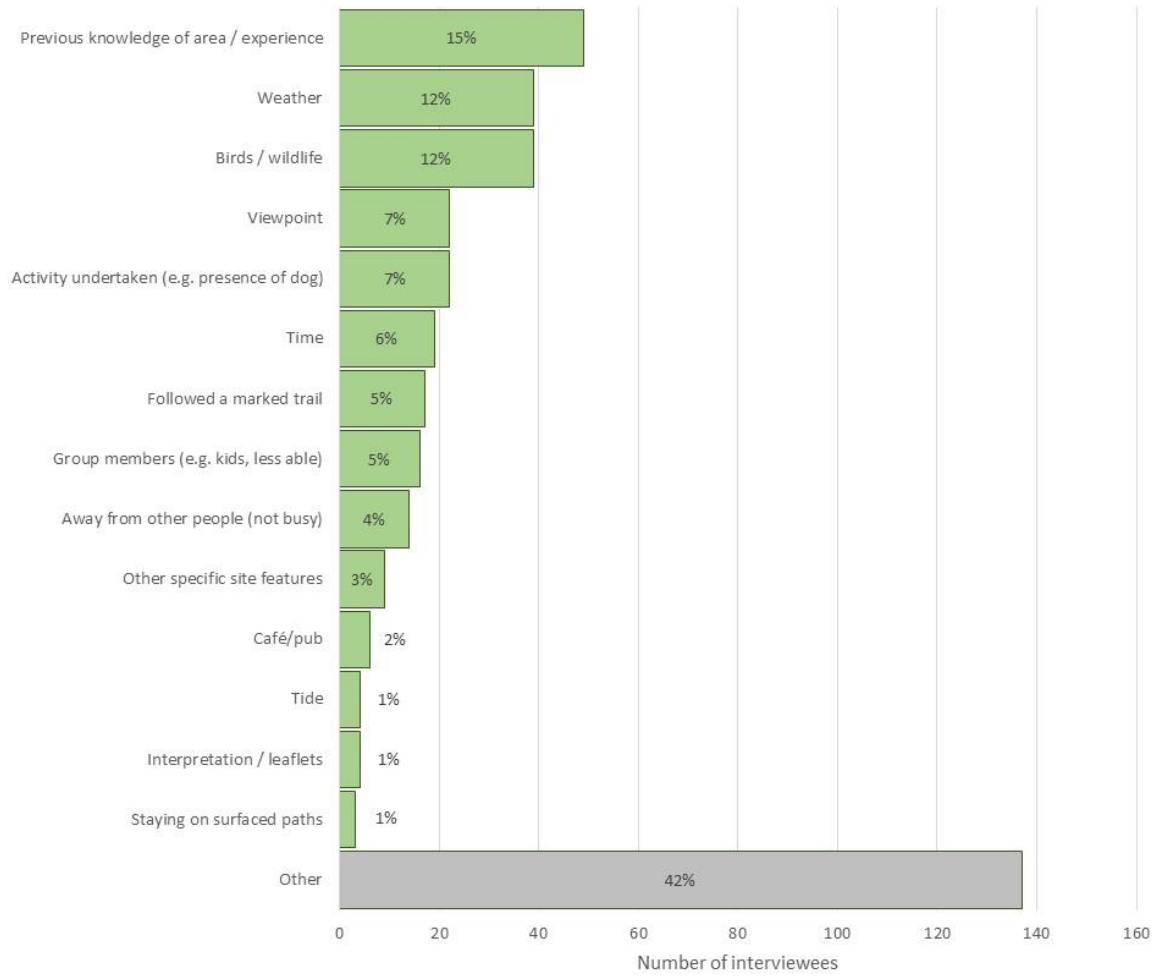
Figure 11: Route lengths by survey location. Horizontal lines show the median, crosses indicate the mean, the boxes show the interquartile range and the whiskers the maximum and minimum values.



**Figure 12: Route lengths by visit type. Horizontal lines show the median, crosses indicate the mean, the boxes show the interquartile range and the whiskers the maximum and minimum values.**

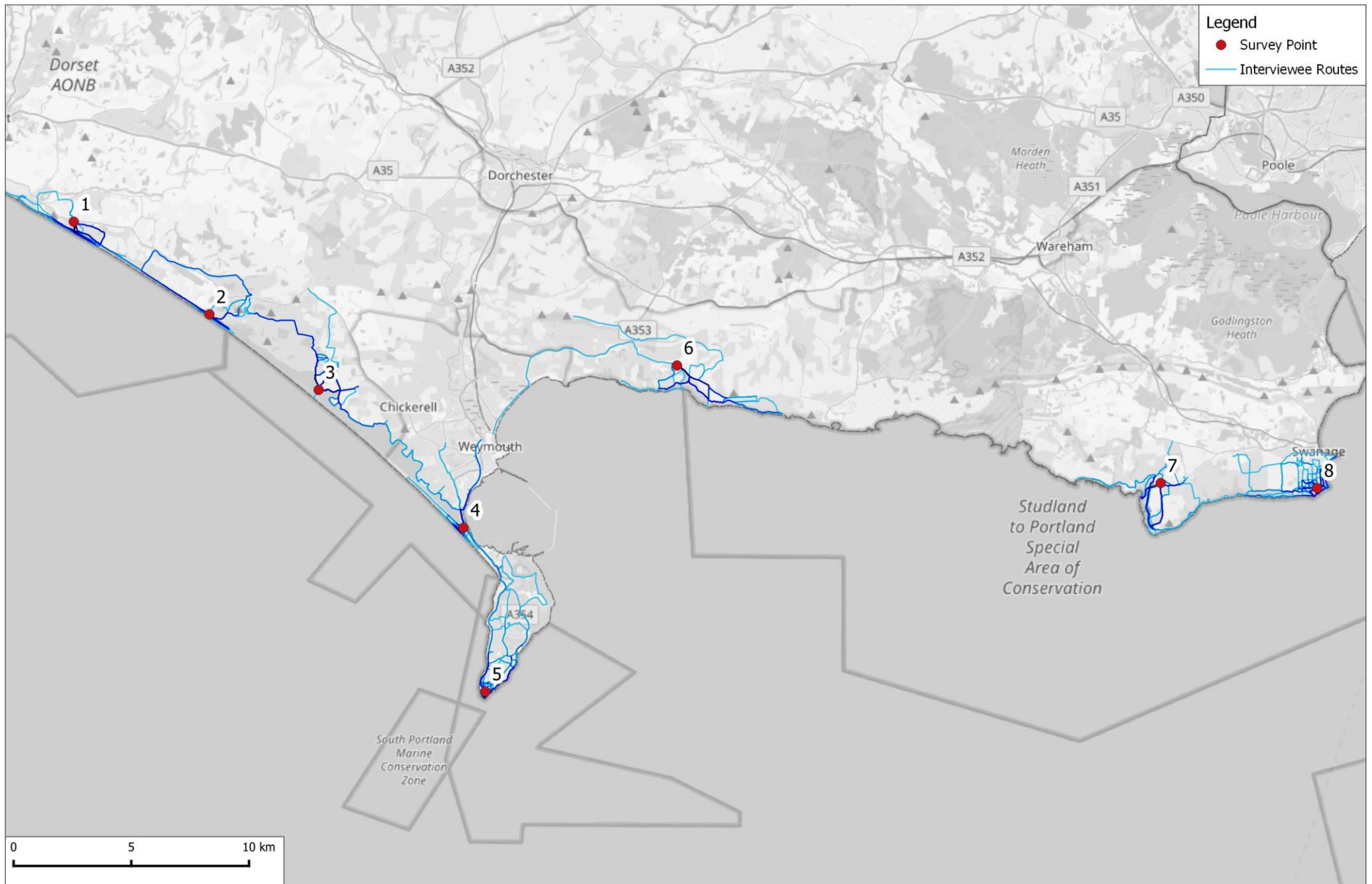
- 4.25 Factors influencing choice of route are summarised in Figure 13. The most common factor was previous knowledge of the area / previous experience, including habit (cited by 49 interviewees, 15%). Previous experience was particularly important at Ringstead, where it was cited by 12 interviewees (52% of those interviewed at the site). Birds and wildlife influenced route choice for 39 interviewees (12%), a relatively high proportion of which were at Ferrybridge, where 14 interviewees (26% of those at Ferrybridge) indicated they had chosen their route due to the wildlife interest present.
- 4.26 The 'other' factors were those that did not fit within the pre-determined categories and these included a diverse range of factors from where the tour bus from the cruise ship dropped them off to foraging for kale. For many of the interviewees the other factors related to access to the sea (13 interviewees, 4%), encompassing being able to see the sea or getting close to the water. 4 interviewees (1%) specifically mentioned selecting areas that were dog friendly.

# Dorset Coastal Sites Visitor Survey



**Figure 13: Factors influencing route choice (from Q11). Value labels give the overall percentage of interviewees who cited given factor. Interviewees could cite more than one factor and therefore percentages exceed 100.**

Map 2: Interviewee routes shown by blue lines, with darker lines representing higher route density.



## Reasons for choice of location (Q14)

4.27 Interviewees gave a wide range of reasons for choosing to visit the location (coastal site) where interviewed, rather than another location (Figure 14); scenery or the variety of views was however the most common reason and cited by nearly a third of interviewees (97 interviewees, 30%). Ringstead was notable in that a particularly high number of interviewees (18, 73% of those interviewed at that location) cited the scenery as the main reason for visiting. Other common responses related to the proximity to home or to the accommodation (84 interviewees, 26%).

4.28 A total of 157 interviewees (48%) gave other reasons and these were highly varied and encompassed a range of different factors. From a review of the free text responses logged during the interview many people were clearly exploring or wanting to visit particular landmarks or features such as Portland Bill or Chesil Beach. Among the responses, particular themes included:

- 11 interviewees (3%) referred to fishing, in terms of particular species (mackerel or bass) or the location being particularly good.
- 7 interviewees (2%) were visiting by chance, saw a place on the map or were visiting on the spur of the moment.
- 7 interviewees (2%) cited particular sentimental reasons, for example childhood memories or particular attachments to places.
- 3 interviews (1%) mentioned the coast path specifically or were following the South-west Coast Path.
- 3 (1%) interviewees were on field courses or had been sent to the location as part of an educational trip
- 2 (1%) interviewees were on a tour
- 2 (1%) interviewees were either undertaking a sponsored event or preparing for a sponsored event

# Dorset Coastal Sites Visitor Survey

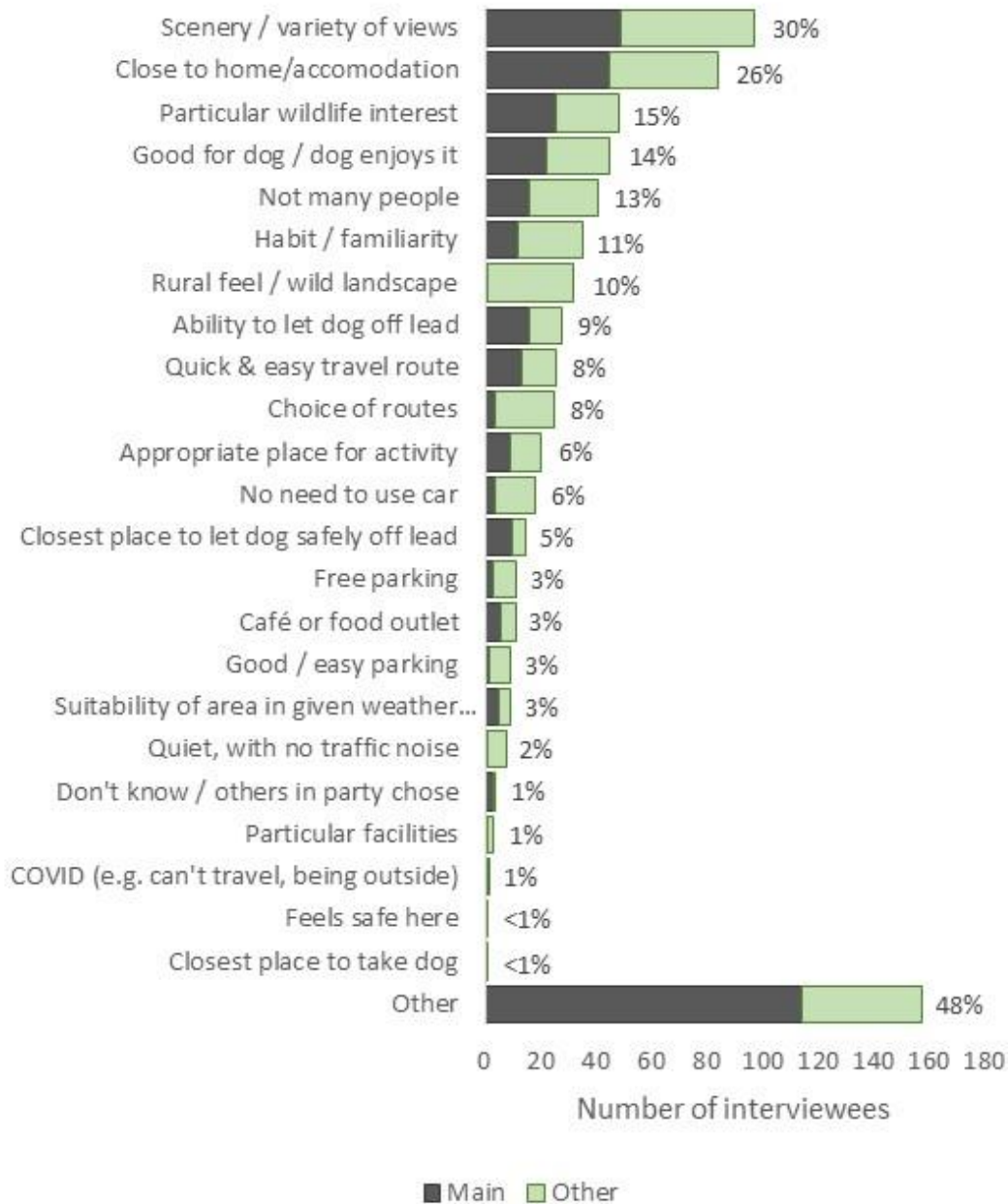
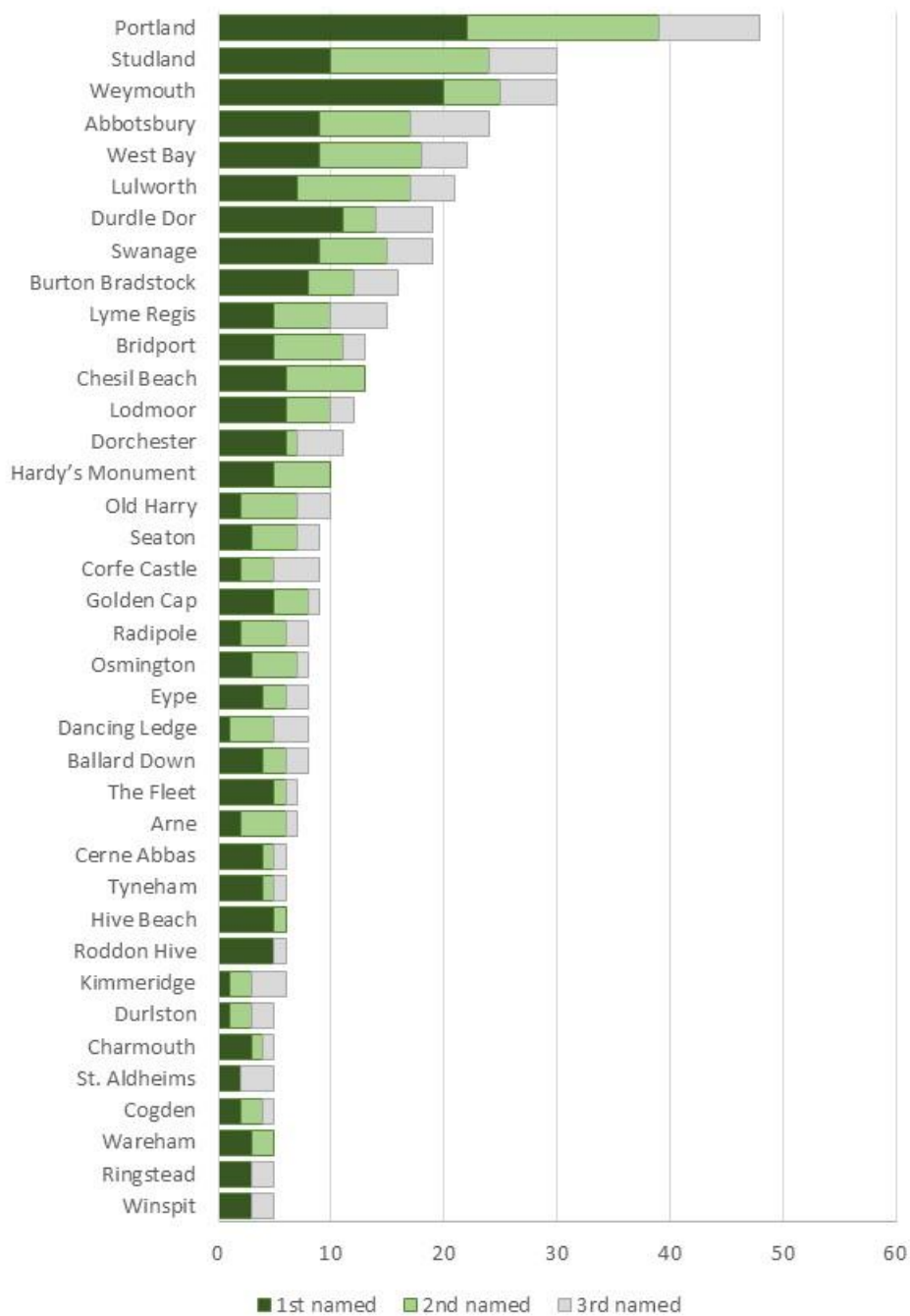


Figure 14: Reasons for visiting the specific location where interviewed that day rather than somewhere else (Q12). Interviewees were asked for one main reason and could give multiple other reasons. Responses categorised by surveyor and additional categories added following a review of free text responses. Value labels give the percentage of all interviewees who cited the reason (main or other).

## Alternative locations visited (Q15-17)

- 4.29 A total of 17 interviewees (5%) stated that all their weekly visits (for their given activity) took place at the location where interviewed, i.e. that they didn't tend to visit anywhere else for their chosen activity. A further 16 interviewees (5%) stated that most of their visits (around 80% or more) were at the interview location. Around a third of interviewees (96, 29%) stated that only a few of their visits (less than 20%) took place at the interview location.
- 4.30 When asked to name one location outside the coastal site where interviewed that they would have visited that day if they had not visited the location where interviewed, 24 interviewees (7%) stated that they would not have gone anywhere else and a further 23 interviewees (7%) were not sure or didn't know. In total, 265 interviewees (81%) named one or more alternative locations. The list of alternatives – as given by the interviewees – was reviewed and standardised to give a specific site where possible. For example, some responses were clearly the same location but given different names – for example “Lulworth” and “Lulworth Cove” or “Portland”, “Portland Bill” or “the Bill”. Where names reflected a particular specific location – such as the Verne (which is on Portland)– this level of detail was retained rather than the response simplified to just Portland. For some locations, such as “Jurassic Coast” or “beach” no standardised name was assigned.
- 4.31 The standardised locations – given by at 5 or more interviewees – are summarised in Figure 15. Portland was the most commonly cited alternative (48 interviewees, 15%) followed by Studland (30 interviewees, 9%) and Weymouth (30 interviewees, 9%). A further 10 responses related to specific locations on Portland (such as the Verne), highlighting the particular draw of Portland.
- 4.32 The range of named alternatives was varied and while predominantly coastal did encompass inland sites, some towns and even some National Parks (the Lake District, Dartmoor, Yorkshire Dales, North Yorkshire Moors and Wales all featured in the list). 1 interviewee who was visiting to walk their dog at Durlston named Bog Lane at Wareham as their second alternative. This was the only instance that a Suitable Alternative Natural Greenspace ('SANG'), i.e. a dedicated space aimed to provide for recreation away from more sensitive sites featured on the list.

# Dorset Coastal Sites Visitor Survey



**Figure 15: Number of interviewees and named alternative sites (Q15-17). All locations named by at 5 or more interviewees are shown.**

4.33 Alternative sites are summarised by survey point in Table 10, which highlights the geographical variation. At Cogden West Bay, Golden Cap at Abbotsbury were the most frequently cited alternatives while at the most easterly survey point (Durlston), Studland, Swanage and Ballard Down were

the most frequently cited alternatives. Portland was the most commonly cited alternative at 4 different survey points.

**Table 10: Top three alternative sites named by interviewees at each survey location. Named alternatives from pooled results (i.e. up to 3 sites named per interviewee). Percentages indicate the percentage of interviewees that named the alternative at each survey point.**

	Cogden	Abbotsbury	Langton Herring	Ferrybridge	Portland Bill	Ringstead	Renscombe	Durlston
<b>No. of interviews</b>	<b>53</b>	<b>51</b>	<b>26</b>	<b>54</b>	<b>58</b>	<b>33</b>	<b>28</b>	<b>33</b>
	West Bay (28%)	Portland (16%)	Portland (27%)	Portland (35%)	Chesil Beach (17%)	Portland (15%)	Studland (25%)	Studland (39%)
	Golden Cap (15%)	Weymouth (12%)	Weymouth (19%)	Weymouth (11%)	Lulworth (12%)	Studland (9%)	Lulworth (21%)	Swanage (30%)
	Abbotsbury (15%)	Burton Bradstock (12%)	Hardy's Monument (15%)	Durdle Dor (9%)	Weymouth (12%)	Weymouth (9%)	Old Harry (18%)	Ballard Down (18%)
	Bridport (15%)		Abbotsbury (15%)	Lodmoor (9%)	Durdle Dor (12%)	Hardy's Monument (9%)	Durlston (18%)	

## Visitor origins (home postcodes) (Q18-20)

- 4.34 A total of 304 interviewees (93%) gave full valid postcodes that could be plotted in GIS. The data are summarised by main settlements in Table 11. Weymouth was the most common home town (27 interviewees, 9%), but notably 11 interviewees (4%) had come from London and there were at least 5 interviewees from Bristol, Swindon and Reading, highlighting the draw of the coast and range of locations visitors originate from.

**Table 11: Number of interviewee postcodes by built-up area as defined by 2011 census data (only built up areas with 5 or more interviewees listed)**

NAME	Number (%) of interviewee postcodes
Weymouth	27 (9)
Swanage	17 (6)
Bournemouth/Poole	13 (4)
Greater London	11 (4)
Dorchester	9 (3)
Fortuneswell	6 (2)
Bridport	6 (2)
Bristol	6 (2)
Weston	6 (2)
Swindon	6 (2)
Reading	5 (2)

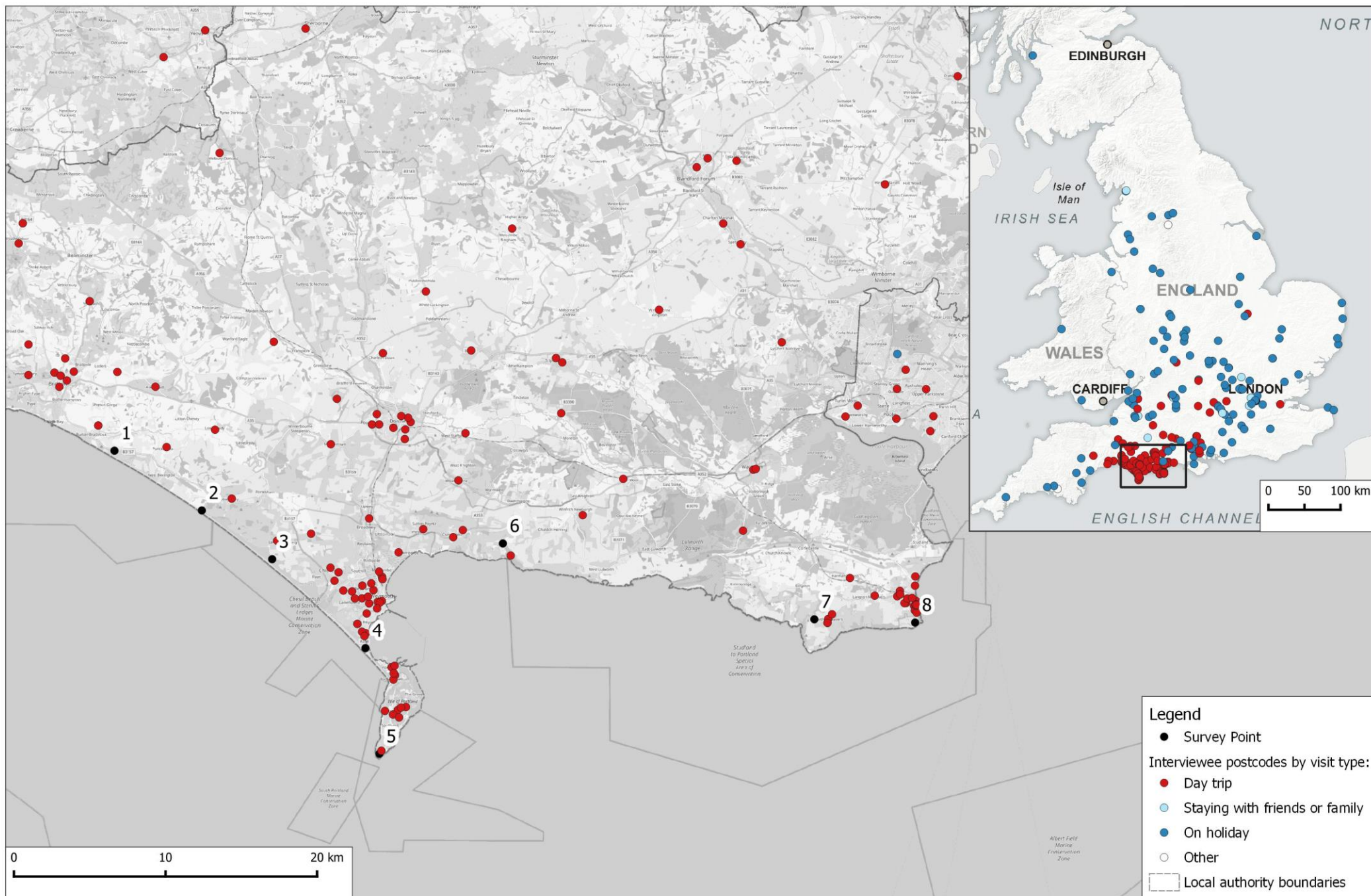
- 4.35 Overall, there were 130 interviewees (43%) who were residents of Dorset, virtually all (128 interviewees) on a short visit directly from home.
- 4.36 Maps 3-6 show the postcode data – by visit type (Map 3), by main activity (Map 4), by survey location (Map 5) and by frequency of visit (Map 6). It can be seen that the postcodes span a wide swathe of England, with day visitors coming from across southern England.
- 4.37 For each interviewee postcode the linear distance was calculated in GIS, measuring from the home postcode to the survey point at which the interview took place. Data are summarised for different types of visitor in Table 12. The distances range from 250m to over 800km, with half of all interviewees giving home postcodes within 55.23km of the survey location and 75% lived within 151.95km. Taking just those on a short visit directly from home, half came from within 11.97km and 75% within 32.8km.

Dorset Coastal Sites Visitor Survey

**Table 12: Summary statistics for different groups of interviewees and the distance from the survey point to home postcode (km).**

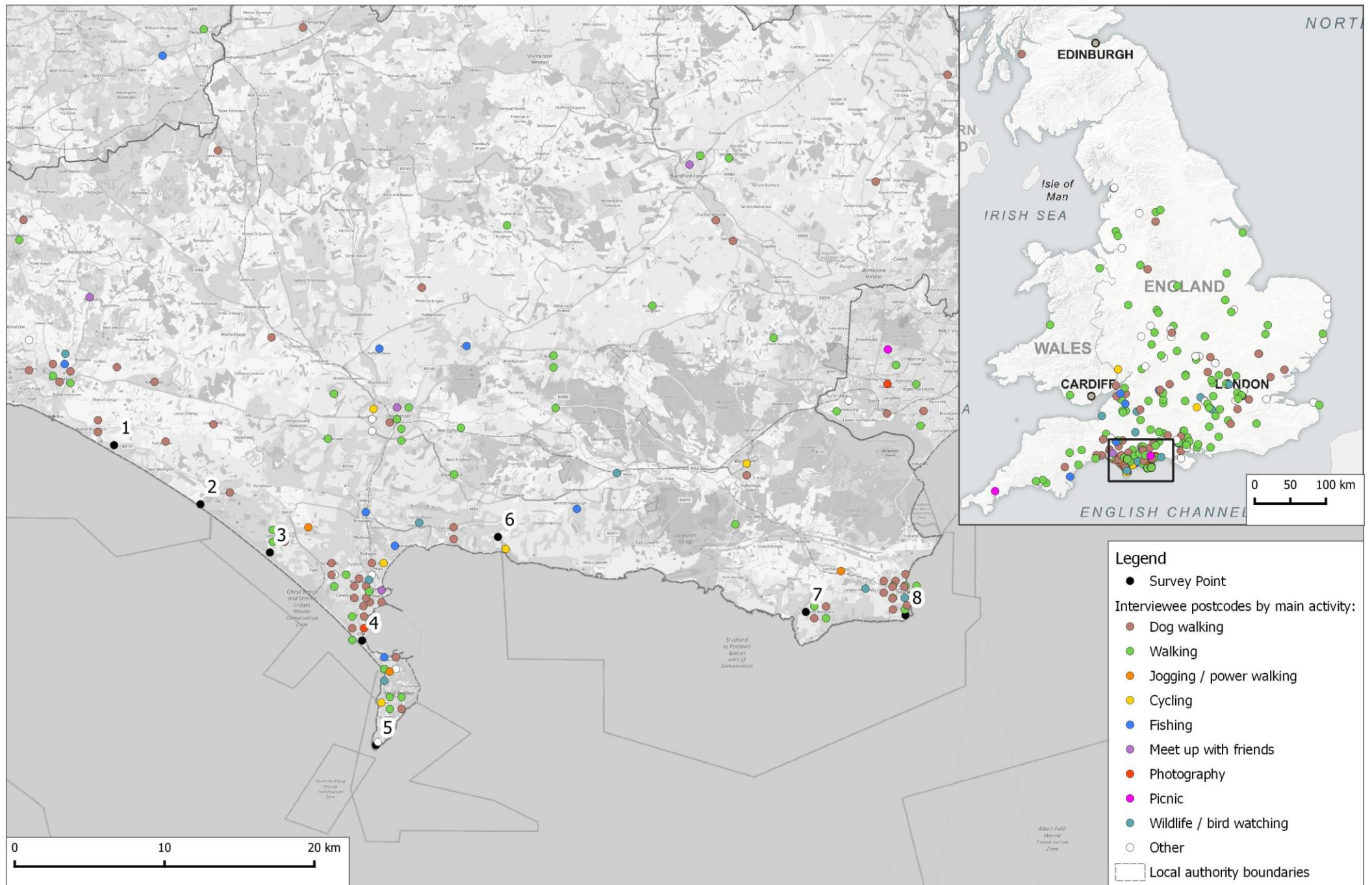
	Category	N	Mean ( $\pm$ 1 SE)	Range	Median	Q3
	All interviewees	304	95.83+6.36	0.25-822.17	55.23	151.95
Visit type	Day trip/short visit from home	174	28.29+3.23	0.25-276.23	11.97	32.76
	On holiday	120	187.34+10.06	39.01-822.17	173.80	226.06
Activity type	Walking	132	109.15+8.47	0.8-366.96	89.13	170.53
	Dog walking	85	64.98+11.43	0.66-607.53	12.69	95.75
	Wildlife / bird	16	109.12+49.79	3.86-822.17	57.66	131.87
	Fishing	15	52.37+11.33	2.14-117.36	30	93.98
Visit frequency	Daily	20	2.21+0.39	0.66-5.86	1.38	3.16
	Most days	10	2.36+0.41	0.92-5.01	2.59	3.1
	1 to 3 times a week	26	6.31+0.89	1.17-19.02	5.16	7.24
	2 to 3 times per month	23	35.65+15.18	0.81-305.91	9.41	18.38
	Once a month	35	55.12+11.42	1.68-202.38	25.2	83.39
	Less than once a month	63	80.13+9.13	6.09-345.94	55.64	117.85
Survey location	Cogden	45	92.47+14.27	1.98-366.96	71.29	171.36
	Abbotsbury	48	103.44+12.24	2.12-386.16	89.57	151.6
	Langton Herring	26	96.37+35	1.26-822.17	28.14	92.63
	Ferrybridge	49	96.54+14.91	0.8-394.56	82.2	162.94
	Portland Bill	55	132.44+16.94	0.25-607.53	112.82	202.98
	Ringstead	22	59.53+18.93	0.95-321.41	18.1	88.06
	Renscombe	28	70.18+13.2	0.9-260.24	53.78	141.5
	Durlston	31	71.31+19.99	0.66-345.94	3.04	120.74

Map 3: Interviewee postcodes categorised by visit type.

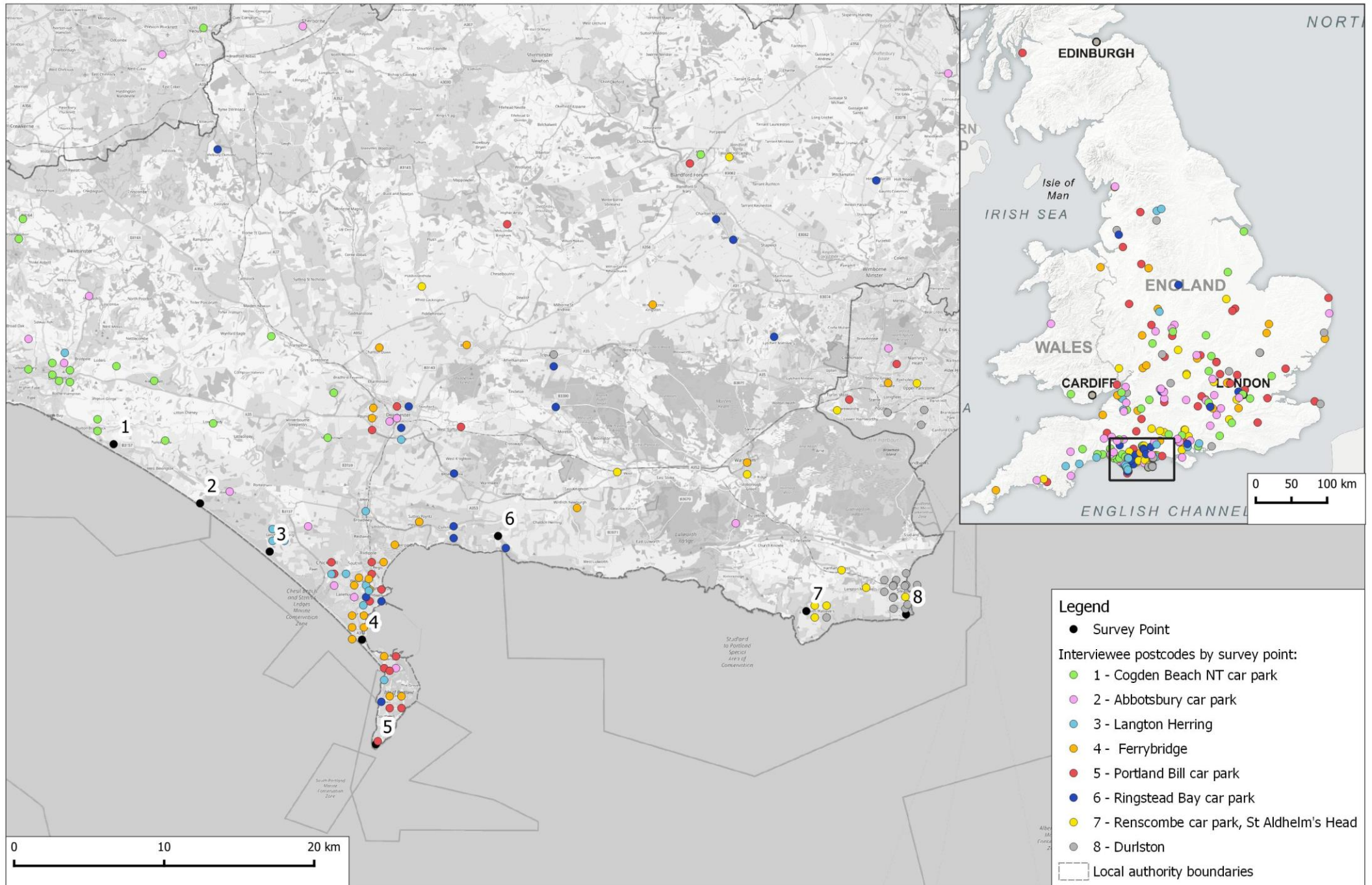


Contains Ordnance Survey data © Crown copyright and Database Right 2020. Contains map data © OpenStreetMap contributors. Terms: [www.openstreetmap.org/copyright](http://www.openstreetmap.org/copyright) Designated site boundaries download from the Natural England website © Natural England.

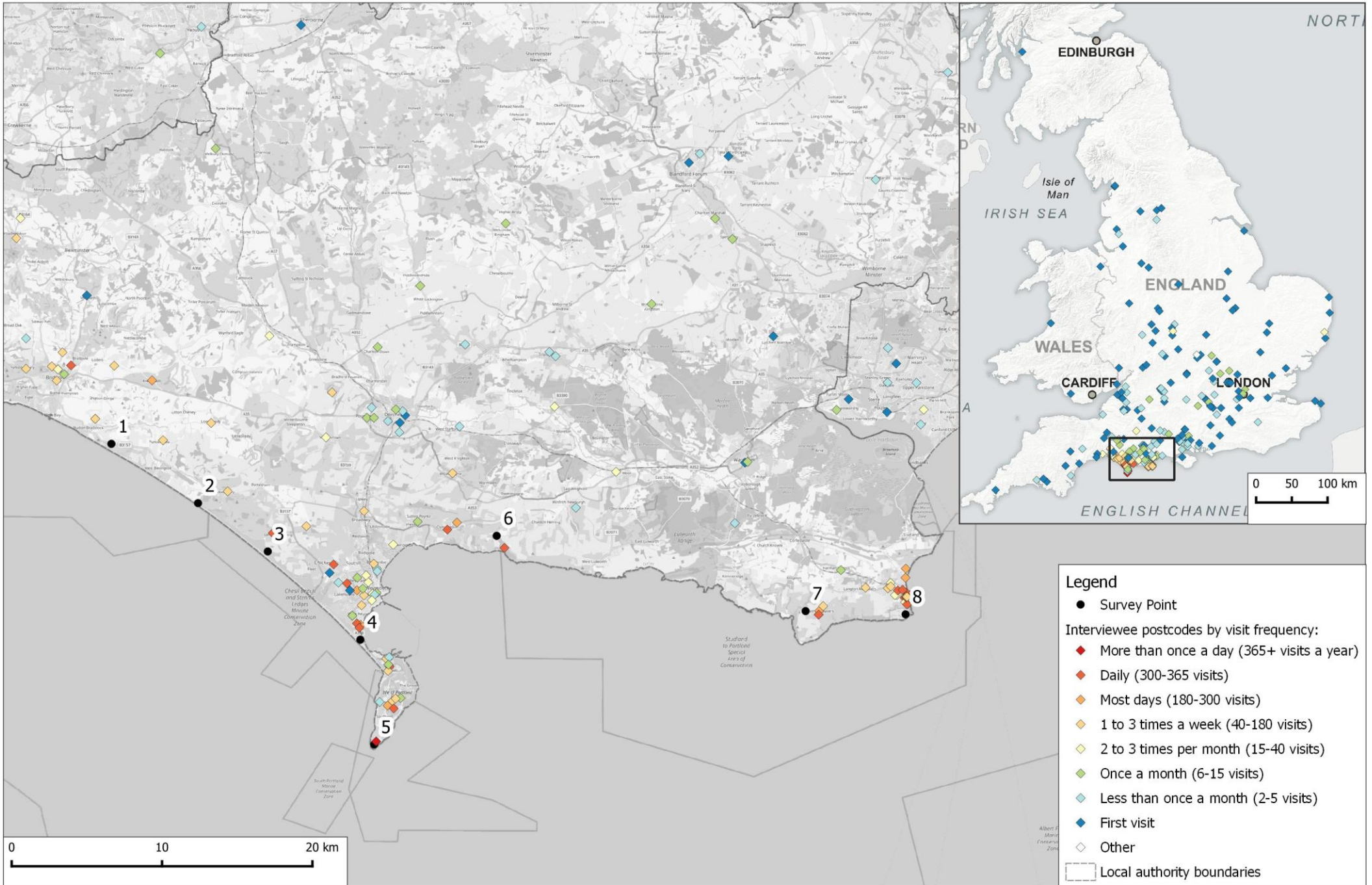
**Map 4: Interviewee postcodes categorised by main activity undertaken, overlapping postcodes are offset by a grid.**



Map 5: Interviewee postcodes categorised by survey point location, overlapping postcodes are offset by a grid.



**Map 6: Interviewee postcodes categorised by visit frequency.**



## 5. Impacts of Recreation

- 5.1 In terms of the Local Plan HRA, likely significant effects are triggered from recreation if there is a possible significant effect – one whose occurrence cannot be excluded on the basis of objective information – alone or in combination with other plans or projects. Increases in local housing have the potential to increase the number of people living in a general area and therefore a knock-on implication in terms of recreational use of countryside sites. Increased recreation can lead to a range of nature conservation impacts and these are well documented for coastal sites (e.g. Davenport and Davenport, 2006; Liley et al., 2010; Lowen et al., 2008; Saunders et al., 2000) and there is therefore clearly an impact pathway.
- 5.2 Once likely significant effects are identified, the competent authority must rule out adverse affects to site integrity (the appropriate assessment stage of the HRA) or meet exceptional circumstances before the Plan can go ahead.
- 5.3 The qualifying features for Portland to Studland Cliffs SAC and St Albans Head to Durlston Head SAC include annual vegetation of drift lines, vegetated sea cliffs, calcareous (chalk) grassland as well as Early Gentian and Greater Horseshoe Bat. Table 13 lists some of the conservation objectives for these qualifying features and provides some examples of how recreational activities could undermine the integrity of the sites.

**Table 13: Examples of how recreation might undermine site integrity at the relevant European sites**

Attributes from supplementary conservation advice	Examples of how recreational impacts could undermine site integrity
Extent and distribution of H6210. Semi-natural dry grasslands and scrubland facies: on calcareous substrates ( <i>Festuco-Brometalia</i> )	<p><b>Damage:</b> The extent of the designated habitat (i.e. calcareous grassland) could be reduced through trampling and heavy footfall, which if spread over a wide area could modify the flora and denude vegetation. Trampling can impact footpaths, cycleways and bridleways, but may also take the form of desire lines to favoured areas such as viewpoints, memorials and features. Trampling affects the presence of species, modifying flora with species that are more resilient to trampling present, such as those with longer tap roots or forming rosettes, and can even in areas with light trampling affect the size of plants. Trampling can also denude rocks of lichens. However, light trampling may also be beneficial for some species, for example Early Gentian which requires short turf.</p> <p><b>Contamination:</b> Dog walking can lead to modified vegetation along paths, particularly entering a site from car parks, and at pinch-points around styles or</p>

Attributes from supplementary conservation advice	Examples of how recreational impacts could undermine site integrity
	seating where eutrophication can result in modified vegetation with more nitrophilous species present, such as Common Nettle.
Structure and function of H6210. Semi-natural dry grasslands and scrubland facies: on calcareous substrates ( <i>Festuco-Brometalia</i> ) – undesirable species	<b>Contamination: Supplementary conservation advice for both SACs identifies undesirable species</b> These may include invasive non-natives such as <i>Cotoneaster</i> spp, or coarse and aggressive native species which may uncharacteristically dominate the composition of the feature. Recreation use directly result in the spread of non-native species (e.g. on pets and clothing or through deliberate planting) and also indirectly through impact on vegetation structure and soil conditions allowing certain species to take hold.
Supporting processes: Vegetated sea cliffs	<b>Damage:</b> control and minimise human access to the cliffs identified as a target in supplementary conservation advice for both SACs. Advice highlights that access for mountaineering and coasteering may have reached levels at which a negative impact on the SAC feature may be occurring. Climbing activity can damage ledges and the vegetation growing on them and scuffing impact lichens and bryophytes. Climbing, camping etc can impact not only the cliff face but also the area of cliff-top immediately adjacent to the cliff.
Structure and function of H6210. Semi-natural dry grasslands and scrubland facies: on calcareous substrates ( <i>Festuco-Brometalia</i> ) – vegetation community composition	<b>Contamination:</b> Vegetation community and herbaceous cover could be affected by dog fouling which will modify the flora with a higher proportion of nitrophilous species present and fewer constant and preferential species of the constituent communities (for example the calcareous grassland at Townsend). Dog fouling can also affect the presence of food plants of invertebrates, such as Horseshoe Vetch which is the food plant of Adonis Blue which is a notable species on the Portland to Studland Cliffs SAC. Horse dung may bring additional nutrients and possibly seeds from outside the SAC. <b>Fire:</b> Scorch damage can destroy vegetation and the mycelia present within the soil, reducing the ability of plants and fungi to grow in these areas. Burnt vegetation can also create a surge of nutrients. This can lead to the development of ruderal vegetation, i.e. Willowherb sp., Thistles, Cleavers etc., that can take advantage of the available nutrients. Fires may not destroy all species, and can aid and exacerbate problem species, such as Tor-grass which has a rhizomatous root systems and thrives on the additional potassium present in ash, supporting quick regeneration and shading out other developing chalk grassland flora (including constant and preferential plant species that are less competitive) following a fire. Lulworth Skipper, which is also a notable species within the Portland to Studland Cliffs SAC requires Tor-grass and there is a fine balance between species-rich examples of CG3 grassland and areas where Tor-grass dominates, such as following a fire.
Transition vegetation from bare chalk through the vegetation heights to scrub	<b>Damage:</b> Moderate to high levels of trampling can result in areas of bare ground with shorter turf either side that is unable to recover and develop the transitional vegetation as repeated pressure prevents species from recovering. <b>Fire:</b> Damage through fire can affect the transition from bare chalk through the vegetation heights to scrub, by scorching the ground and removing all of the

Attributes from supplementary conservation advice	Examples of how recreational impacts could undermine site integrity
	chalk grassland vegetation present and can encourage ruderal vegetation which the less competitive chalk grassland flora is not able to compete against.
Conservation measures necessary to maintain the designated features of the site (i.e. H1230 Vegetated sea cliffs and H6210 Semi-natural grassland on calcareous substrates, Early Gentian and Greater Horseshoe Bat)	<b>Other:</b> Grazing management is key to maintaining the designated habitats and species present at both coastal SACs. The ability to graze a site can be affected by recreational activity with livestock owners less willing to put animals onto heavily visited sites where they may be affected by the recreational use. The result may be sites lacking or losing appropriate management and a decline in the vegetation flora composition, such as an increase in Tor-grass, and population sizes of the species present. It may also result in a decline of invertebrates important as food sources for Greater Horseshoe Bats, such as beetles, moths and craneflies, as this species feeds over grazed pasture like the grassland at Townsend.

## Portland Bill

- 5.4 The site visit encompassed the tip of the Bill, the coastal strip and raised rock seashore and the calcareous grassland (see Map 8). This area is managed as a continuous unit and although some parts fall outside of the SAC boundary, the Bill Quarry and Bill Common (south) were included as they are considered to support SAC quality habitat (Edwards, 2021).
- 5.5 Map 8 shows the locations where impacts were observed during the visit. The greatest impact was trampling (Figure 16), and the assessment also identified issues from contamination in the form of dog fouling, horse dung and litter at various locations across the site.
- 5.6 Some of the areas that are most denuded of vegetation towards the southern tip of the Bill do not fall within the SAC, however a recent report by Edwards (2021) indicates there is SAC quality habitat, for example in the quarry spoil between the lighthouse and Pulpit Rock which supports vegetated sea cliff communities (although it is noted that areas near the coasts are prone to erosion due to visitor pressure). Similarly, Bill Common (north of the Lobster Pot café) supports both vegetated sea cliff communities and semi-natural dry grassland and scrubland facies on calcareous substrates, although again trampling pressure is noted (unlike the Bill Quarries, this area falls within the SSSI).

- 5.7 The coastal route appears to be used by horse riders, cyclists and walkers and heavy trampling along the entire coastline has resulted in severe loss of vegetation and exposure of bare ground with loose earth above many of the raised seashore rock ledges (much of this is clearly visible in the aerial imagery in Map 8 and in Figure 16 and Figure 17). This has resulted in the loss of maritime vegetation and may be impacting the geological interest of the site. It does however provide conditions suitable for species of note such as Curved Hard-grass *Parapholis incurva* (Edwards, 2021). Crevices among the spoil heaps still support Rock Samphire *Crithmum maritimum*, Thrift *Armeria maritima* and Wild Carrot *Daucus carota*, but this vegetation is lost elsewhere.
- 5.8 We have overlaid the route data from the visitor survey in Map 8, which shows how visitors spread out from the survey point (the main car park), the darker red lines indicating higher levels of footfall. The rocks were also heavily trampled with areas worn away by footfall, which is likely to affect the lichens present (points 2, 5, 6, 7, 9 and 12 on Map 8; Figure 16iii). This corresponds with the heavily used areas identified through the visitor survey (see Map 2).
- 5.9 There was also severe to moderate trampling across the calcareous grassland (points 1, 3, 14, 15 and 16). This has resulted in modified vegetation with shortened turf and rosette or deeply rooted species. In addition, there are numerous desire lines as well as the main Southwest Coast path that crosses the site, particularly within the grassland to the north of the Qinetiq Compound (Figure 16i and ii). Where there was less trampling on the calcareous grassland, a closed, and sometimes tufted, sward has developed which is typical of this type of habitat.
- 5.10 Grassland restoration trials have been undertaken near the Lighthouse by roping-off sections to divert people around the edge and facilitate the re-establishment of maritime vegetation (points 9 and 10; Figure 16iv). This has been successful with plants associated with coastal areas present within the exclosures. Some repair work is required to the fence posts. Large stones have also been placed around other areas, which has been less successful as there are numerous trampled desire lines between the stone bollards (points 11, 12 and 13).
- 5.11 In general, there was very little evidence of dog fouling on the grassland. Dog faeces were not recorded, and the dog bins were well kept. Litter was observed close to the café (point 7) and car park (point 15) but, considering

the heavy use of these areas, there was surprisingly little present in the grassland and on the rock sea ledges.

- 5.12 Conservation management of the grassland is compromised by recreational activity. Ideally the grassland would be grazed to maintain a varied sward and reduce scrub encroachment; however, the potential for sheep grazing is reduced by the use of the site by dog walking (there are also issues around stock containment on common land).



**Figure 16: Trampled areas at Portland Bill. i) and ii) denuded and trampled desire lines through the coastal grassland, iii) erosion and soil slumping onto the raised sea shore rock shelves, and iv) roped-areas near the Obelisk to re-establish coastal plants.**



**Figure 17: View from Portland lighthouse looking north along the east side of the Bill. Image from early September 2022. The SAC boundary is just to the right of the café in the foreground.**

Map 8: Impacts logged during site visit and aerial imagery of Portland Bill



## Townsend

- 5.13 The site was accessed from Panorama Road and the walk-over encompassed whole SSSI.
- 5.14 Map 9 shows the location where impacts were logged. Impacts from recreation were light to moderate and were mostly due to trampling from visitors (point 4; Figure 17i). Dog faeces were observed in two locations (points 1 and 14) suggesting there was some contamination.
- 5.15 Upon entering the site, light impacts from trampling were mostly evident along surface paths, which were slightly widened and showed floristic modification (point 1). Species present on paths included Perennial Rye-grass *Lolium perenne*, Crested Dog's-tail *Cynosurus cristatus* and Broadleaved Plantain *Plantago major* (Figure 17i and ii). Away from the paths, in areas where there was less trampling, the sward contained Pyramidal Orchid *Anacamptis pyramidalis*, Common Birds-foot-trefoil *Lotus corniculatus*, Kidney Vetch *Anthyllis vulneria*, Yellow-wort *Blackstonia perfoliata* and Bastard Toadflax *Thesium humifusum* (points 2 and 3). The calcareous grassland contained some desire lines in addition to the public footpaths. Numerous undamaged ant hills were present (point 9).
- 5.16 Areas of moderate trampling were mostly concentrated at the north and east sections of the site. Here, there were numerous patches of bare ground along slopes and across the top of banks (points 11 and 12; Figure 17iii). There was little path widening in these areas, but footfall created braided paths (points 15 and 16; Figure 17iv). The impact of this trampling may be due to recreational activities, but in places it could also be partly attributed to cattle grazing.
- 5.17 Where there is less trampling, ranker areas of grassland have developed which contain species such as False Oat-grass *Arrhenatherum elatius*, Bramble *Rubus fruticosus*, occasional Broadleaved Dock *Rumex obtusifolius* and Burdock *Arctium lappa*. There were numerous scrub patches dispersed across the site which included species typical of this type of habitat. The northeast corner of the site contained an area of woodland and scrub which was largely shaded and had multiple bare paths and banks. However, there was evidence that this area was mostly used by cattle.
- 5.18 Dog faeces were observed along the edge of the footpaths leading from the west and north west entrance to the SSSI (points 1 and 14). As both of these entrances provide direct access from the neighbouring caravan park, it

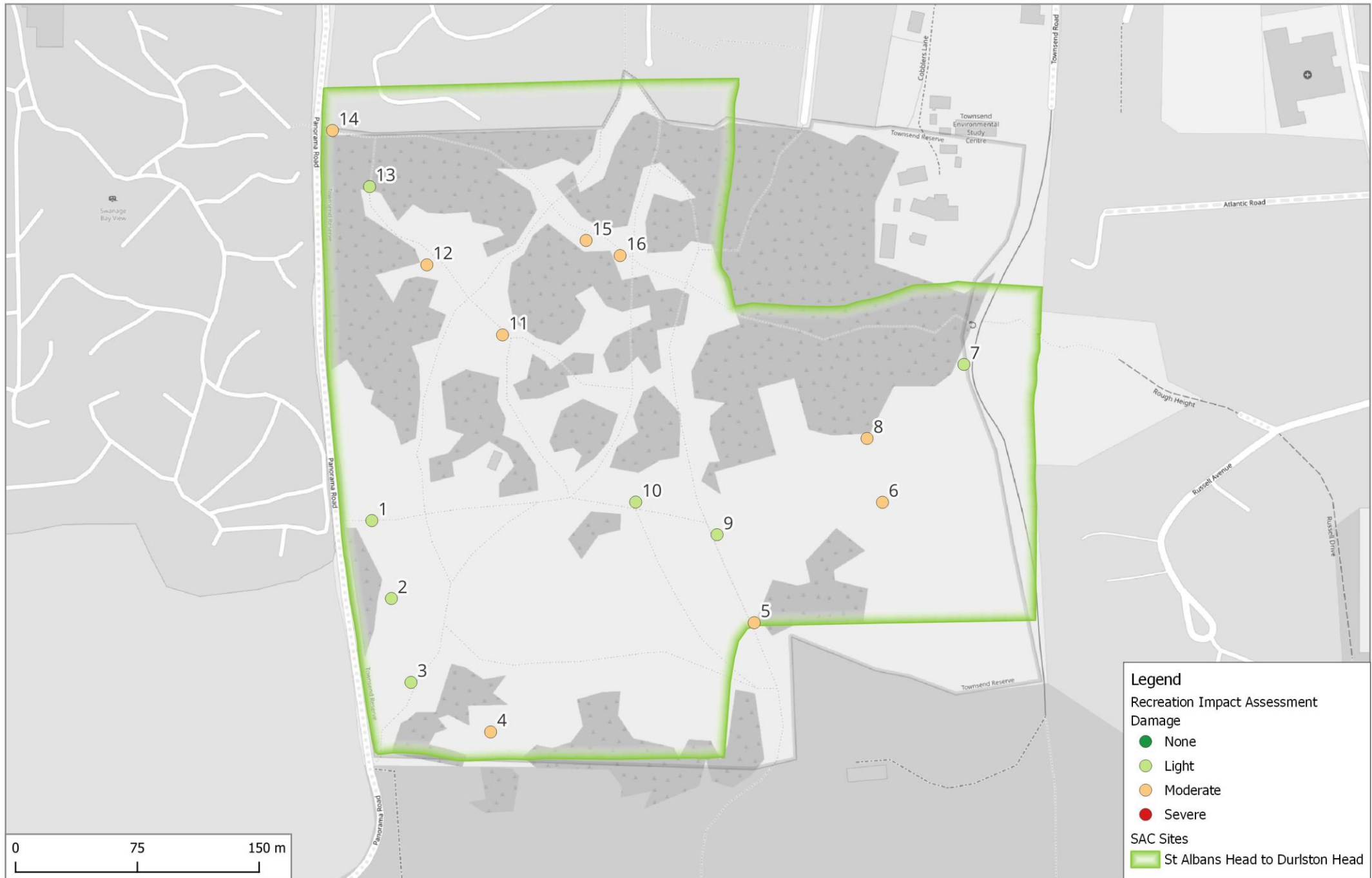
suggests there could be recreational pressure from adjacent holiday accommodation.

- 5.19 Recreation impacts did not appear to affect the management of the site as there were both cattle and horses present. In addition, there was evidence of scrub management in central areas of the site (point 10).



Figure 18: Trampled areas at Townsend SSSI; i) Footpaths and desire lines from the south entrance of the site, ii) modified vegetation on paths resulting from trampling, iii) localised bare ground erosion on paths, and iv) braided paths showing bare ground along slopes of banks.

# Map 9: Townsend Recreation Impact Assessment



## Wider context and other parts of the coast

5.20 While the site visits targeted two locations, the coastline between Portland and Studland is well known to the Footprint Ecology team, as they are based locally and have undertaken a range of ecological surveys in the area. The results from the two site visits can be placed into wider context.

### *Overall numbers of visitors*

5.21 Impacts from access can occur even at when levels of access are very low. Concerns partly relate to the sheer volume of feet and trampling damage. In many parts of the coast the strip around the coast path is heavily worn and trampled and on sections of steep slope (e.g, Figure 19, i) braided path sections and extensive bare ground can occur. Heavy and chronic trampling effects the sward as is clearly evident in Figure 19, ii) where bright green strips define the path routes across the limestone grassland and the coast path is very clear.

5.22 The short turf and thin soils are important for some species (such as Early Spider Orchid (Figure 19, iii) and Early Gentian and bare ground is important for many invertebrate species. Good habitat can therefore occur on the steeper slopes and areas with some trampling. Complete loss of vegetation cover will degrade the habitat, but there are few examples of very severe trampling damage that we are aware of within the SAC – we highlight Portland Bill, Old Harry, some of the paths near Lulworth Cove/Stair Hole, some of the Purbeck coastal quarries and parts of Durlston (e.g the gully near the lighthouse). It should however be noted that the latter area (around the lighthouse) can support good numbers of Early Gentian in some years, even in the heavily trampled areas.

5.23 The sheer volume of visitors could also influence the ability to achieve the relevant conservation management, particularly grazing (Figure 19, iv) which is challenging to implement in areas with cliffs and high levels of access. Livestock may avoid areas with high levels of use and dog attacks are a health and safety risk that can have lasting implications in terms of how livestock behave and how willing graziers may be to have their livestock in areas with access. Where there are cliffs, dog attacks can be particularly dangerous to livestock.

5.24 The edge of the cliff is fenced out of the grazed area along the coast from Durlston to St Aldhelm's and the sites are currently grazed, therefore

challenges along this stretch. At Portland the practicalities and issues with fencing the Commons are likely to be the main issue limiting wider grazing, and while access levels might make fencing more challenging to implement, it is not the key issue. For much of the remaining coastline there is a lack of suitable grassland habitat along the cliffs and or fencing in place, and therefore risks to the implementation of grazing due to access seem currently limited.

### Specific activities

5.25 While the overall visitor volume and high levels of footfall (throughout the year) are of concern, some particular activities are associated with other more specific risks. If visitor use were solely confined to foot access along the coast path and use of the beaches (Figure 20 v), then risks would be much more limited. However, the range of activities and the locations that these take place in (e.g. Figure 20 i-iv) bring further risks, which are summarised in Table 14.

**Table 14: Types of access of particular concern. Note that we have included disturbance to seabirds in the risks, these are not an SAC interest.**

Activity	Particular risks	Relevant locations
Wild camping	Litter, fire, trampling on ledges and nutrient enrichment	Whole coast, particularly Portland, St Aldhelm's, Winspit – Durlston. We have noted an increase in camping at these locations during and following Covid and an increase in human waste and trampling damage to the vegetation.
Dog walking	Dog fouling resulting in eutrophication and risks to livestock from dog attacks and chasing	All. Clearly widespread from the visitor survey results.
Mountain biking	Wear and erosion	Coast path is not a bridleway but mountain bikes are seen in all areas
Fishing	Discarded tackle and lines, some trampling damage accessing foreshore	Portland, Durlston, Ringstead.
Climbing	Trampling damage to ledges, cliff slope and rock faces, disturbance to seabirds	Winspit – Durlston, Portland. Climbing groups may also camp out, increasing pressure around ledges and quarries.
Bouldering	Trampling damage and issues for lower plants on boulder community of undercliff	Portland.
Coasteering	Trampling damage to ledges and cliff slope where accessing lower shore, disturbance to seabirds	Winspit - Durlston
Caving/exploring caves and quarrs	Disturbance to bats	Winspit - Durlston
Jet skis and fast boats around cliff	Disturbance to seabirds	Winspit – Durlston, Portland
Kayaks	Disturbance to seabirds, trampling and fire risks if accessing coves and other areas not otherwise accessible	Winspit – Durlston, Portland

Dorset Coastal Sites Visitor Survey

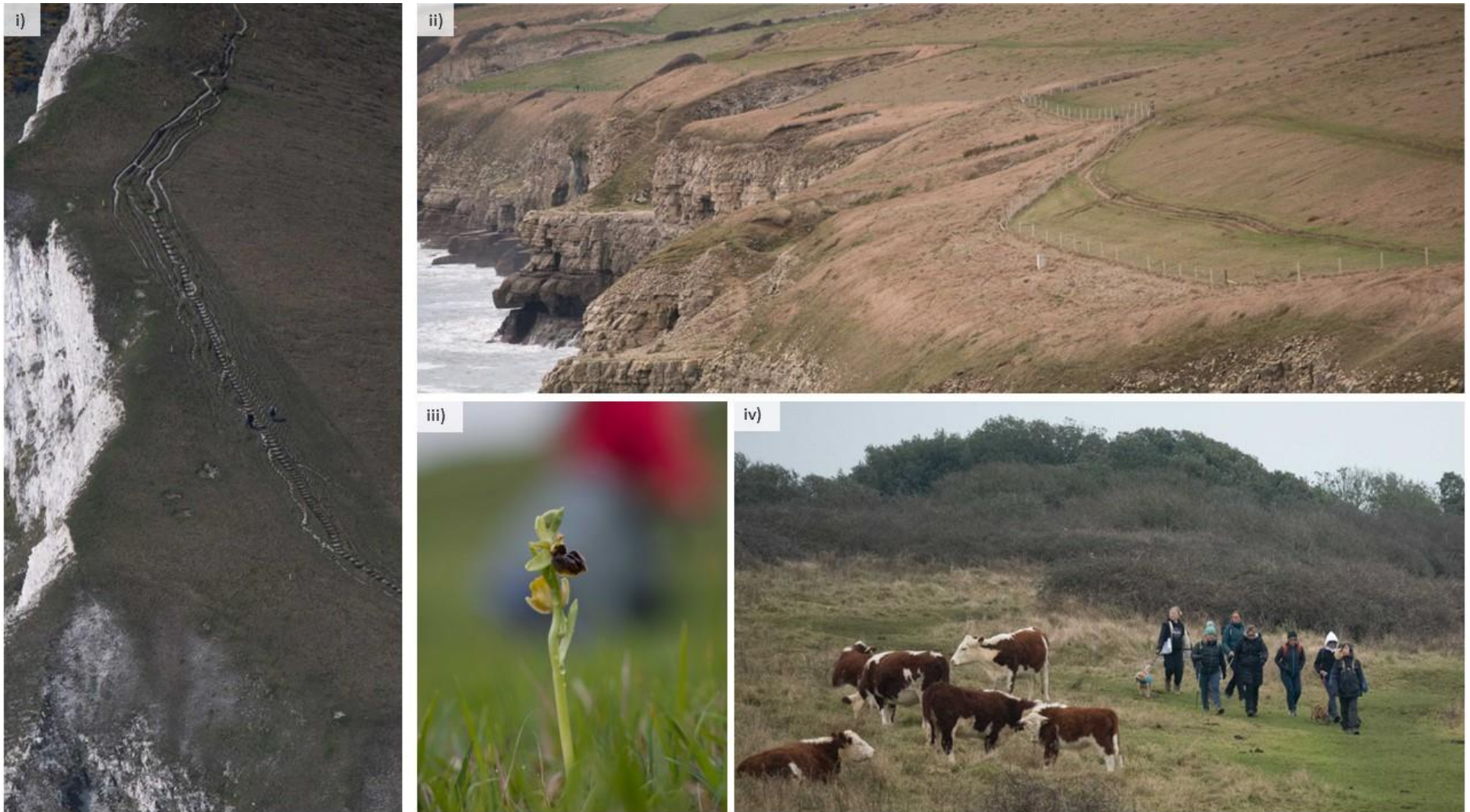


Figure 19: Footpath erosion at Arish Mell; ii) limestone grassland near Seacombe; iii) Early spider Orchid; iv) Walkers with dogs near livestock at Durlston

Dorset Coastal Sites Visitor Survey



Figure 20: Dog walkers at Durlson; ii) climbing near Winspit; iv) Kayak entering sea cave near Dancing Ledge; iv) Coasteering at Dancing Ledge; iv) view of St Oswalds looking towards Durdle Door.

## 6. Discussion

### Key findings

- 6.1 Visitor survey results provide a snapshot from the spring and show the coastal sites surveyed are visited for a range of recreational activities, often involving a walk and more often than not accompanied by a dog. Visitors included a mix of local residents, day trippers (some coming from far afield for a day out on the coast) and holiday-makers. Those on a short visit directly from home that day typically made around 77 visits a year to the location where interviewed. Around 43% of interviewees were residents of Dorset. The scenery is a key motivation for site choice and visits typically last around 100 minutes and involve a route of around 3.3km. Those on a short visit from home walk further (median 4km).
- 6.2 Key metrics from the survey are given in Table 15. The table provides a split between the Chesil survey points and the Portland-Durlston points and also highlights key metrics for interviews with Dorset residents.

**Table 15: Selected metrics from the survey. 'Home only' indicates the metric is extracted only for those on a short visit/day trip directly from home.**

Metric	All interviewees	Chesil survey points	Portland – Durlston survey points	Dorset residents (all sites)
Number of survey points (comparable)	8	4	4	8
Number of interviews	326	184	142	130
Number of interviews (home only)	181	90	91	128
Average group size (interview data, home only)	1.7	1.7	2.2	1.7
% of interviewees visiting on their own	31	30	32	48
% dog walking stated main activity (home only)	35	31	35	41
% walking stated main activity (home only)	33	33	36	30
% visiting daily (home only)	12	10	14	17
% visiting at least weekly (home only)	33	37	30	45
% on first visit (home only)	18	16	21	8
% arriving by car (home only)	80	80	80	74
Median route length	3.1	2.3	4.6	4.4
% stating close to home as main reason for site choice (home only)	15	18	12	19
Median distance survey point to home postcode (km) (home only)	12.0	12.5	11.6	6.4

Metric	All interviewees	Chesil survey points	Portland – Durlston survey points	Dorset residents (all sites)
75th percentile survey point to home postcode (km) (home only)	32.8	29.7	35.4	14.7
% visiting who live within 1.5km	7	4	10	16
% visiting who live within 5km	16	12	21	38

## Implications for the HRA of the Dorset Council Local Plan

- 6.3 The results provide a snapshot in terms visitor use and recreation impacts.
- 6.4 We suggest there are localised areas along the coastal grassland where recreational pressure is having a marked impact in terms of trampling damage and erosion: and these will be at the key focal points/landmarks such as the tip of the Bill, Stair Hole at Lulworth, Old Harry and near Durlston lighthouse. These impacts are largely associated with the sheer volume of feet and numbers of visitors. Other types of impact are more specifically related to particular activities and harder to record, for example the impact of climbing on the cliff ledges.
- 6.5 Visitor interviews highlight a complex mix of visitors including Dorset residents, day trippers from wide area extending to settlements such as Bristol, Swindon, Reading and Greater London and staying tourists from across the UK. Use clearly varies temporally (higher at weekends) and represents a wide range of activities. Teasing apart the relative impact from local residents as opposed to day visitors from further afield and tourists is clearly complicated and difficult. The heavy trampling impacts are focussed around the more tourist hotspots and features that draw visitors, such as the end of Portland Bill. Even at Portland Bill 33% of interviewees were Dorset residents, so impacts are not solely attributable to tourists. The data show that Dorset residents tend to undertake long routes (median 4.4km) and some are frequent visitors (45% visiting at least weekly).
- 6.6 The coastline is a World Heritage Site, National Trail (the South West Coast Path), is well promoted and clearly has a huge draw for visitors. There are a wide range of recreation opportunities and well-established management of access in place. Sites such as Durlston and Lulworth have a ranger team and greeting facilities for visitors, there are signs and interpretation directing visitors and some of the more sensitive areas are fenced out. There are dog bins in some locations and parking provision is, in many areas, clearly

defined, well managed and restricted in sensitive locations. There is a permit system in place for Coasteering groups on the National Trust land in Purbeck and restrictions on some areas for climbing. Many of these measures, while perhaps more weighted towards tourists, help to reduce the pressure on the more sensitive areas.

- 6.7 No one was interviewed who was visiting to go climbing, coasteering or any of the more niche activities, and it is therefore difficult to identify how much these might be undertaken by local residents as opposed to tourists. Two-thirds of all interviewees had a dog with them during the visit and for Dorset residents dog walking was the main activity for 41%. There are particular issues with dog walking (nutrient enrichment and implications re grazing management) and these clearly are relevant to Dorset residents.
- 6.8 The postcode data show dog walkers and those visiting at all frequently to live in relative proximity to the coast and to include the main settlements of Weymouth and Swanage. Those visiting from further afield are much more occasional visitors – for example the 9 interviewees from Dorchester all visited one a month or less and 2 were on their first visit. As such the impacts of new housing further afield are likely to be much reduced. The use of the 75<sup>th</sup> percentile from postcode data is an established means to identify a zone of influence and where new housing might trigger increased recreation use (Liley, et al., 2021). For the Portland to Durlston survey points the 75<sup>th</sup> percentile (those visiting from home only) was 35.4km, reflecting a very wide area – yet within this use is occasional and the risks (as summarised above are diluted by the tourism and visitor management in place).
- 6.9 In terms of the Local Plan HRA, we would suggest that it should be possible to rule out adverse effects on integrity from recreation and the Portland to Studland Cliffs SAC and the St Albans Head to Durlston Head SAC with respect to the overall quantum of growth and much of the housing growth across Dorset – away from the coast. Based on the results presented here and our knowledge of the coast, we would flag risks from housing development in the coastal strip, including marked increases within the settlements, villages and towns (including Weymouth and Swanage) that are close to the SACs or where there is easy access onto the SAC (for example direct footpath links or a very short drive to local parking etc). Such locations are likely to be attractive to people who are drawn to living close to the coast and likely to visit regularly, potentially avoiding the busier locations.

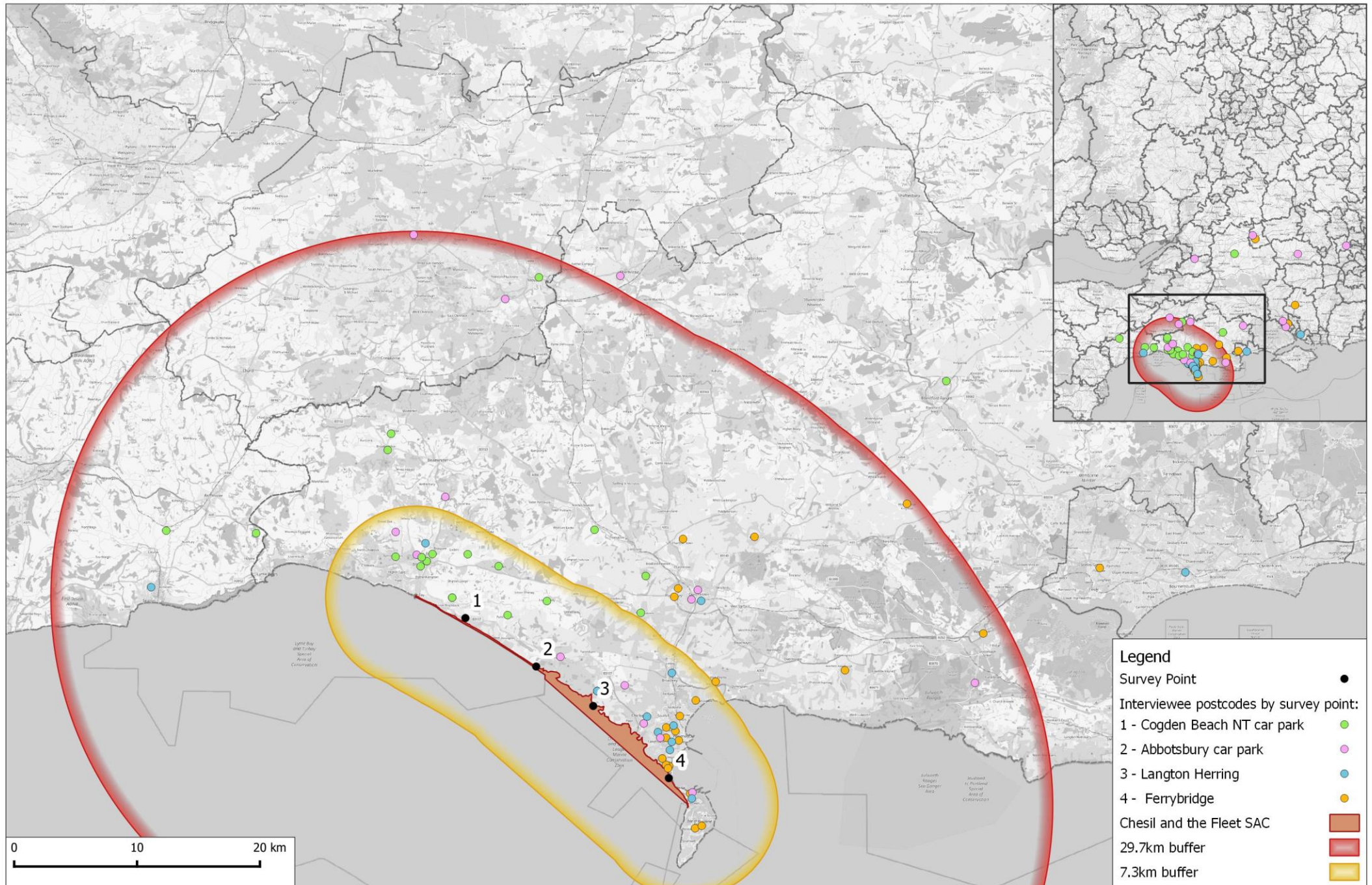
- 6.10 Any such cases would need to be considered on a case-by-case basis, checking the access provision and vulnerability of the SAC around the specific locations. Mitigation measures, where required could include measures such as dog bins, parking restrictions, increased ranger provision and/or signage interpretation and would need to be tailored to the specific circumstance and flagged within any allocation-specific policy wording.
- 6.11 For tourism development, risks will relate to tourist accommodation in new locations (i.e. new campsites, glamping, self-catering etc) that has direct or easy access onto the SACs or any that have the potential to change the distribution of visitor use (new provision or attractions) linked to the SAC sites. Tourism policies could identify the relevant issues and necessary restrictions in place.

### *Chesil & the Fleet data combined*

- 6.12 One particular consideration for this study is how far people travel to visit Chesil and the Fleet and the broad area where plan-led growth might be expected to have an impact. A mitigation strategy is already in place to address recreation impacts but the HRA will need to ensure that mitigation is sufficient to address the scale of growth coming forward.
- 6.13 The combined data for the Chesil and the Fleet survey points (Cogden, Abbotsbury, Langton Herring and Ferrybridge) are shown in Map 7. The map shows postcode data only for those travelling directly from home (i.e. excluding holiday-makers). Taking those on a short visit from home only, for those 4 survey locations the median distance from home postcode to survey point was 12.50km (86 interviewees) and 75% of interviewees lived with 29.7km. This third quartile value is the standard approach used to describe a zone of influence from postcode data (Liley, et al., 2021), and we have therefore drawn a buffer of 29.7km from the SAC boundary in Map 7, to illustrate the extent such a buffer covers. The buffer extends as far east as Wareham, however it is interesting to note that there are relatively few postcodes from Purbeck – the relatively large 75<sup>th</sup> percentile is driven by day visitors who have travelled from Southampton, Bristol and even towards London. This reflects the particular draw of the coast in this area. There is therefore perhaps scope to consider shorter buffer distances. If the data are filtered to just include those interviewees who were visiting the 4 Chesil survey locations, had travelled directly from home that day and stated they visited the location where interviewed more than once a month (i.e. the more frequent visitors) then the median is 5.4km (from 40 interviewees) and

the 75<sup>th</sup> percentile is 7.3km. The 7.3km buffer is also shown on Map 7 and it can be seen it includes Weymouth but does not extend to Dorchester, suggesting even those visiting from Dorchester are less frequent visitors. The implications will need to be considered in any further updates to the Chesil mitigation strategy and the HRA for the Dorset Council Local Plan. There is clear evidence of visits to Chesil from Dorchester (as the postcode dots show) and significant growth there could have implications in terms of more occasional visitors, however such growth would be different in impact to settlements such as Weymouth and Bridport which are well within the 7.3km.

Map 7: Interviewee postcodes from Chesil and the Fleet



## 7. References

- Clarke, R.T., Sharp, J., Liley, D., 2008. Access patterns in south-east Dorset. The Dorset household survey: consequences for future housing and greenspace provision. Footprint Ecology / Poole Borough Council.
- Davenport, J., Davenport, J.L., 2006. The impact of tourism and personal leisure transport on coastal environments: A review. *Estuarine Coastal and Shelf Science* 67, 280–292. <https://doi.org/doi:10.1016/j.ecss.2005.11.026>
- Edwards, B., 2021. Distribution of SAC and SAC supporting habitats on the Isle of Portland. DERC.
- Liley, D., Lake, S., Underhill-Day, J., Sharp, J., White, J., Hoskin, R., Cruickshanks, K., Fearnley, H., 2010. Welsh Seasonal Habitat Vulnerability Review. Footprint Ecology / CCW.
- Liley, D., Panter, C., Chapman, C., 2021. Zones of influence for strategic housing growth and recreation impacts: review and best practice. *Habitats Regulations Assessment Journal* 20–22.
- Liley, D., Sharp, J., Clarke, R.T., 2008. Access patterns in south-east Dorset. Dorset household survey and predictions of visitor use of potential greenspace sites. Dorset Heathlands Development Plan Document. Footprint Ecology / Poole Borough Council.
- Lowen, J., Liley, D., Underhill-Day, J., Whitehouse, A.T., 2008. Access and Nature Conservation Reconciliation: supplementary guidance for England.
- Ross, K., Liley, D., Austin, G., Clarke, R.T., Burton, N.H., Stillman, R.A., Cruickshanks, K., Underhill-Day, J., 2014. Housing development and estuaries in England: developing methodologies for assessing the impacts of disturbance to non-breeding waterfowl. Footprint Ecology, unpublished report for Natural England.
- Saunders, C., Selwyn, J., Richardson, S., May, V., Heeps, C., 2000. A review of the effects of recreational interactions within UK European marine sites. UK CEED & Bournemouth University.
- Underhill-Day, J.C., 2005. A literature review of urban effects on lowland heaths and their wildlife. English Nature, Peterborough.

## Appendix 1: Questionnaire



### Dorset Countryside Sites, Visitor Survey

Good morning/afternoon. I am undertaking a survey on behalf of Dorset Council to better understand recreational use of different countryside sites. Can you spare me a few minutes please?

Q1 Firstly I'd like to ask about your visit today.

- Are you on a day trip/short visit and travelled from home ... *if no*
- Are you on a short trip & staying with friends or family ... *if no*
- On holiday in the area, staying away from home... *if no*
- If none of the above, **How would you describe your visit today?**

Details

**Q2 What is the main activity you are undertaking today?** *Tick closest answer. Do not prompt. Single response only. Ensure activity recorded rather than the reason for undertaking (e.g. not "health", "relaxing" etc.)*

- Dog walking
- Walking
- Jogging / power walking
- Picnic
- Cycling
- Wildlife / bird watching
- Photography
- Meet up with friends
- Swimming
- Other, please detail:

Further details

**Q3 Are there any other activities you or the people with you will be undertaking today?** *Tick closest answers. Do not prompt. Multiple responses possible. Ensure activity rather than reason for undertaking (e.g. not "health", "relaxing" etc.)*

- Dog walking
- Walking
- Jogging / power walking
- Picnic
- Cycling
- Wildlife / bird watching
- Photography
- Meet up with friends
- Swimming
- Other, please detail:

Further details

Q4 **How did you get here today?** *What form of transport did you use? Single response only.*

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

Further details (and if multiple modes of transport mentioned, record main one and note others below):

Q5 **How long have you spent / will you spend here today?** *Single response only. Do not prompt.*

- less than 30 minutes
- between 30 minutes and 1 hour
- more than 1 hour to 2 hours
- more than 2 hours to 3 hours
- more than 3 hours
- Don't know / not sure

Further details:

Q6 **How long have you been visiting this location?** *Single response only. Do not prompt.*

- first visit
- less than or approximately 6 months
- less than or approximately 1 year
- less than or approximately 3 years
- less than or approximately 5 years
- less than or approximately 10 years
- more than 10 years
- Don't know / not sure

Further details:

**Q7 Do you tend to visit this area more at a particular time of year for [insert given activity]? Multiple answers ok.**

- Spring (Mar-May)
- Summer (Jun-Aug)
- Autumn (Sept-Nov)
- Winter (Dec-Feb)
- Equally all year
- Don't know
- First visit

Further details:

**Q8 Over the past year, roughly how often have you visited this location? Tick closest answer, single response only. Only prompt if interviewee struggles.**

- More than once a day (365+ visits a year)
- Daily (300-365 visits)
- Most days (180-300 visits)
- 1 to 3 times a week (40-180 visits)
- 2 to 3 times per month (15-40 visits)
- Once a month (6-15 visits)
- Less than once a month (2-5 visits)
- Don't know
- First visit
- Other, please detail

Further details:

**Q9 Has the coronavirus pandemic changed how often you visit this location? Await answer and if yes follow with Have your visits increased or decreased? Do not prompt. Single response only.**

- No, visiting the same as before
- Don't know
- Yes, visiting more
- Yes, visiting less

Further details:

Now I'd like to ask you about your route today. Looking at the area shown on this map, can you show me where you started your visit today, the finish point and your route please? Probe to ensure route is accurately documented. Use **P** to indicate where the visitor parked, **E** to indicate the start point and **X** to indicate the exit. Mark the route with a line; a solid line for the actual route and a dotted line for the expected or remaining route. If they have followed a particular route please note this in free text at end of interview.

Q10 **Is / was your route today similar to your usual route when you visit here for [insert given activity]?** Tick closest answer, do not prompt. Single response only.

- Yes, normal
- Much longer than normal
- Much shorter than normal
- Not sure / no typical visit
- First visit

Q11 **What, if anything, influenced your choice of route here today?** Tick closest answers, do not prompt. Multiple responses ok.

- Weather
- Tide
- Daylight
- Time
- Viewpoint
- Away from other people (not busy)
- Group members (e.g. kids, less able)
- Avoiding muddy tracks / paths
- Staying on surfaced paths
- Followed a marked trail
- Previous knowledge of area / experience
- Activity undertaken (e.g. presence of dog)
- Other specific site features (viewpoint, lake etc.)
- Birds / wildlife
- Interpretation / leaflets
- Other, please detail

Further details:

**Q12 Why did you choose to visit this location today, rather than somewhere else?** *Tick all responses given by visitor in the 'other' column. Do not prompt, tick closest answers. Then ask Of these, which single reason would you say had the most influence over your choice to visit here today? Tick only one main reason. Use text box for answers that cannot be categorised and for further information.*

	Other	Main
Don't know / others in party chose	<input type="radio"/>	<input type="radio"/>
Close to home	<input type="radio"/>	<input type="radio"/>
No need to use car	<input type="radio"/>	<input type="radio"/>
Quick & easy travel route	<input type="radio"/>	<input type="radio"/>
Good / easy parking	<input type="radio"/>	<input type="radio"/>
Free parking	<input type="radio"/>	<input type="radio"/>
Particular facilities	<input type="radio"/>	<input type="radio"/>
Choice of routes	<input type="radio"/>	<input type="radio"/>
Feels safe here	<input type="radio"/>	<input type="radio"/>
Quiet, with no traffic noise	<input type="radio"/>	<input type="radio"/>
Not many people	<input type="radio"/>	<input type="radio"/>
Scenery / variety of views	<input type="radio"/>	<input type="radio"/>
Rural feel / wild landscape	<input type="radio"/>	<input type="radio"/>
Habit / familiarity	<input type="radio"/>	<input type="radio"/>
Particular wildlife interest	<input type="radio"/>	<input type="radio"/>
Good for dog / dog enjoys it	<input type="radio"/>	<input type="radio"/>
Ability to let dog off lead	<input type="radio"/>	<input type="radio"/>
Closest place to take dog	<input type="radio"/>	<input type="radio"/>
Closest place to let dog safely off lead	<input type="radio"/>	<input type="radio"/>
Appropriate place for activity	<input type="radio"/>	<input type="radio"/>
Suitability of area in given weather conditions	<input type="radio"/>	<input type="radio"/>
COVID (e.g. can't travel, being outside)	<input type="radio"/>	<input type="radio"/>
Other, please detail	<input type="radio"/>	<input type="radio"/>

Further details:

Q13 **What proportion of your weekly visits for [their given activity] take place here, compared to other sites. Can you give a rough percentage? Do not prompt - fill in the closest response based on the percentage or a comment (i.e. 'almost all')**

- 100 % i.e. 'All take place here' / 'I don't go anywhere else'
- 80 % or more i.e. 'Most of the visits' / 'almost all' / '4/5 visits' / '6/7 visits'
- 60 - 80 % i.e. 'Around three quarters' / '3/4 visits' / '5/7 visits'
- 40 - 60 % i.e. 'Half' / '3/7 visits'
- 20 - 40 % i.e. 'Less than half' / '1/7 visits'
- less than 20% i.e. 'only a few', 'rarely'
- Not sure / Don't know
- First visit

Q14 **Where else would you have visited today for [insert given activity] if you could not have visited here? Do not prompt.**

- Nowhere / wouldn't have visited anywhere
- Not sure / Don't know
- Site named - record site name as Site 1 below

Q15 **Name of Site 1** Ask for spelling if necessary

**Please can you name up to 2 other locations you also visit for [given activity]?**

Q16 **Name of Site 2** Ask for spelling if necessary

Q17 **Name of Site 3** Ask for spelling if necessary

Dorset Coastal Sites Visitor Survey

Q18 **Finally, what is your full home postcode?** *This is an important piece of information, please make every effort to record full postcode correctly. If necessary add: This will only be used to tell us roughly how far you have travelled today.*

Q19 *If visitor is unable or refuses to give postcode:* **What is the name of the nearest town or village?**

Q20 *If visitor is on holiday ask:* **Which town / village are you staying in?**

Q21 **That is the end of the survey. Thank you very much for your time. Do you have any comments or thoughts you wish to add?** *Free text*

**To be completed by surveyor after interview**

Q22 Survey details

Surveyor initials	<input type="text"/>
Survey location code	<input type="text"/>
Map ref for route	<input type="text"/>
Sex of respondent	<input type="text"/>
Total number in interviewed group	<input type="text"/>
Total males	<input type="text"/>
Total females	<input type="text"/>
Total number of dogs	<input type="text"/>
Number of dogs off lead	<input type="text"/>

Q23 **Surveyor comments.** *Note anything that may be relevant to the survey, including any changes to the survey entry that are necessary, e.g. changes to answers.*

## Appendix 2: Summary rainfall during visitor interview/tally sessions

This appendix summarises the dates each location was surveyed (visitor interviews and counts), showing the dates each time period was covered (all points were surveyed on a weekend day and weekend day with all four time periods covered on both types of day). Values in the table reflect the amount of rain during each survey period: blank cells mean no coverage, 0=survey undertaken, no rain; 1=survey undertaken, rain for less than 30 minutes during two-hour period; 2 = survey undertaken, rain for less than 1 hour during two-hour period; 3 = survey undertaken, rain for less than 1 hour and 30 minutes during two-hour period; 4 = survey undertaken, rain for more than 1 hour and 30 minutes during two-hour period. Grey shading reflects survey periods with rain.

Location name	Date	0700-0900	1030-1230	1400-1600	1700-1900
Cogden	09/05/2022	0	0	0	0
	21/05/2022	0	0	0	0
Abbotsbury	16/05/2022	1	2	0	0
	22/05/2022	0	0	0	0
Langton Herring	15/05/2022	0	2	3	3
	23/05/2022	0	0	2	3
Ferrybridge	05/05/2022	0	0	0	0
	07/05/2022	0	0	0	0
Portland	06/05/2022	0	0	0	0
	08/05/2022	0	0	0	0
Ringstead	20/05/2022	4	3	0	0
	21/05/2022	0	0	0	0
Renscombe	14/05/2022	0	0	0	0
	17/05/2022	0	0	0	4
Durstun	15/05/2022	3	3	3	0
	18/05/2022	1	0	1	1