FOOTPRINT ECOLOGY

Visitor surveys and recreation impact assessment work to inform the Dorset Council Local Plan: chalk

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Footprint Contract Reference: 658
Date: 9th November 2022
Version: Final
Version: Draft for comment
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: chalk sites. Report by Footprint Ecology.

Summary

This report has been commissioned by Dorset Council and presents the results of a visitor survey and recreation impact assessment conducted in the spring 2022 at two chalk grassland sites. Both the surveyed sites are part of the national site network and are designated as Special Areas of Conservation (SAC), the Cerne and Sydling Downs SAC and the Fontmell and Melbury Downs SAC. As such they 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. The sites are both designated for chalk grassland as well as species associated with chalk grassland. There is a potential risk from increased recreation use associated with local housing growth and this report is therefore necessary to identify the scale of risk and provide the evidence necessary to undertake the HRA.

Visitor survey results

Visitor surveys involved counts of the people seen (tally counts) and face-face interviews with a random sample of people at the main entry point at each site (these were the only locations that were busy enough to warrant visitor survey effort), with 16 hours (covering a weekend day and a weekday) at both locations.

Tally counts

- In total, 161 groups were noted entering or leaving at the survey points.
- These groups contained a total of 283 people (of which 12 were minors) and there were 98 dogs.
- From these totals the typical (mean) group comprised 1.8 people (of which 0.1 were minors) and 0.6 dogs.
- There was 1 dog for every 2.8 people.
- Both sites were very similar in the number of people entering, with 39 groups and 73 people counted entering at Cerne Abbas, compared to 38 groups and 68 people at Fontmell. There were however nearly 3 times as many dogs counted entering at Fontmell (35 compared to 13).

Interviews

- A total of 77 interviews were conducted, 49 at Cerne Abbas and 28 at Fontmell.
- 75% of interviewees were on a day trip or short visit and had travelled directly from home that day and a further 21) stated they were on holiday in the area and staying away from home.
- The percentage of holiday makers was slightly higher (22%) at Cerne Abbas compared to Fontmell (18%).
- Walking was the most frequently cited main activity (56% of interviewees), the only other main activities were dog walking (31%) and wildlife/bird watching (13%).

- 51% of interviewees were accompanied by a dog.
- 75% of interviewees had travelled to the interview location by car and 23% on foot (the latter all at Cerne Abbas).
- Interviewees typically visited for around 83 minutes.
- 31% of interviewees were on their first visit, and first time visitors accounted for a particularly high proportion of the visitors to Cerne Abbas (39% of interviewees there);
- Interviewees had visited the interview location around 97 times on average over the past year.
- 45% of interviewees stated they tended to visit equally all year, particularly so at Fontmell (where 61% visiting equally all year). For those interviewees that did tend to visit at a particular time of year, the summer was the most common response (34% of interviewees).
- The pandemic had affected how frequently 21% of interviewees visited, with 17% of interviewees now visiting less frequently;
- Across all interviewees the median route length (i.e. distance ridden or walked) was 3.0km and ranged from 1.3km to 16.4km; there was little difference in the typical route lengths between survey locations.
- 39% of interviewees had chosen to visit the location where they were interviewed because it was close to home; however this was not the main reason for any of the interviewees on a short visit directly from home.
- The most common single main reason for site choice was the wildlife interest, with interviewees specifically choosing the site for the presence of particular butterfly or plants they wanted to see.
- Interviewees gave a very wide range of alternative locations they also visited (for the same activity) with Duncliffe and Maiden Castle the two most commonly cited sites. Most alternatives were only named by 1 interviewee.
- Interviewee postcodes showed a broad scatter across a wide area of Dorset. Visitors to Fontmell particularly originated from Shaftesbury and North Dorset, while the Cerne Abbas data show a marked cluster from Cerne Abbas village itself and north towards Sherborne and just two interviewees who gave Dorchester postcodes.
- Taking just those on a short visit directly from home, half of interviewees from both locations came from within 7.8km and 75% within 17.0km.

Recreation impacts

Walkover surveys were undertaken to identify any current recreation issues and potential risks to the SAC interest if recreation levels were to grow. The surveys were a simple snapshot and effort was focussed around the main entry points and pinch points.
Some limited evidence of existing recreation impacts was identified, and was generally localised in extent. At Cerne and Sydling SAC moderate to severe recreation impacts from trampling creating some bare ground and vegetation change at Giant Hill were observed. These were focussed around the path at the bottom of the slope and the fence line around the Giant. At Fontmell and Melbury Downs SAC, marked trampling impacts were noted immediately around Melbury Beacon. The walkover surveys did not note significant levels of dog fouling, extensively modified vegetation or signs of fires.

Implications from the visitor survey and walkover surveys are discussed. We suggest there is no evidence of recreation currently being an issue of concern at either site and if visitor patterns remain as they are (and there is no reason to envisage a marked change), it would seem unlikely that Plan-led growth (focussed in the main settlements) could undermine site integrity.

Contents

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 National Trust and other land owners who provided permission to access and undertake the surveys.

The visitor survey work was undertaken by Holly Howells.

1. Introduction

Overview

1.1 This report has been commissioned by Dorset Council and presents the results of a visitor survey at two chalk grassland sites, conducted in the spring 2022. The work has been commissioned to inform the Habitats Regulations Assessment that will accompany the 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[1]) take account of the UKs 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

[1] 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[2] .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 The aim of this report is therefore to provide baseline data on visitor use and an understanding of visitor patterns at the relevant European sites, including the links between where people live and where they go for recreation. Alongside this we have undertaken a series of site visits/checks to record the potential risks from recreation and any evidence of current impacts. These results will then provide the evidence to inform the HRA of the Dorset Council Local Plan.

1.6 This report focusses on the Dorset chalk sites, namely: Cerne and Sydling Downs SAC and Fontmell and Melbury Downs SAC. A separate report provides the results for a series of sites on the coast.

Cerne and Sydling Downs SAC

1.7 The Cerne and Sydling Downs SAC and is located near Cerne Abbas in Dorset (ST670021) and is primarily species-rich chalk grassland. It contains six separate compartments:

- Black Hill Down SSSI
- Court Farm
- Sydling SSSI
- Giant Hill SSSI
- Hog Cliff SSSI (and NNR)
- Sydling Valley Downs SSSI

1.8 The designated features for the SAC include:

- H6210. Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*); Dry grasslands and scrublands on chalk or limestone.

[2] 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 15 June 2022)

- S1065. *Euphydryas* (*Eurodryas, Hypodryas*) *aurinia*; Marsh fritillary butterfly.

1.9 The primary feature of the site is CG2 Sheep's Fescue *Festuca ovina* – Meadow Oat-grass *Helictochloa pratensis*: Devil's-bit Scabious *Succisa pratensis* – Oxeye Daisy *Leucanthemum vulgare* subcommunity, which is almost entirely restricted to parts of Dorset and Wiltshire. A large meta-population of Marsh Fritillary butterfly *Euphydryas aurinia* is present on the SAC, which expands to neighbouring sites in good years. Another butterfly species of interest includes Duke of Burgendy *Hamearis lucina*.

1.10 Giant Hill SSSI also contains the Cerne Abbas Giant, a well-known visitor attraction. The Giant is the focus of much attention, and in the past there has been significant damage to the archaeological feature. A fence was erected to enclose the Giant and visitors are asked not to cross into the enclosure to prevent damage. A viewpoint for the Giant was established close to the A352.

Fontmell and Melbury Downs

1.11 Fontmell and Melbury SAC is primarily species-rich chalk grassland situated near Fontmell Manga in Dorset (ST900193).

1.12 The designated features for the SAC include:

- H6210. Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*); Dry grasslands and scrublands on chalk or limestone.
- S1654. *Gentianella anglica*; Early gentian

1.13 The primary feature of the site is CG2 Sheep's Fescue *Festuca ovina* – Meadow Oat-grass *Helictochloa pratensis*. Frequent grasses of this turf include Quaking-grass *Briza media* and Crested Hair-grass *Koeleria macrantha*, whilst Glaucous Sedge *Carex flacca* and Spring-sedge *C. caryophyllea* are abundant. The many chalk herbs include Horseshoe Vetch *Hippocrepis comosa*, Chalk Milkwort *Polygala calcarea* and Bastard Toadflax *Thesium humifusum*. Orchids are well represented in these swards and the site supports consistently large populations of Early Gentian *Gentianella anglica*, numbering many thousands of plants.

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

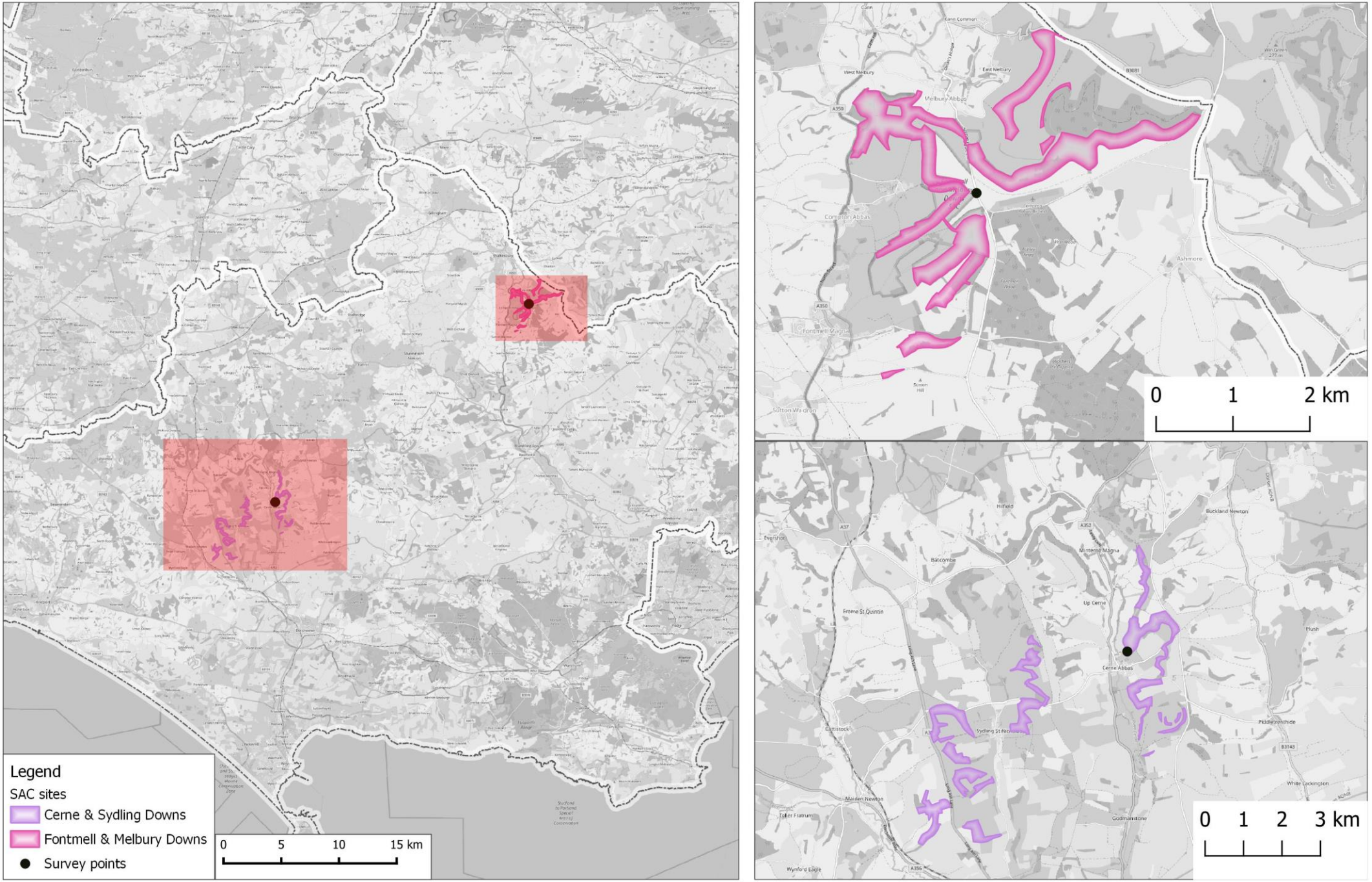
2.1 Surveys took place at 2 survey points which were selected as they are the main access points onto the respective sites. A check of Ordnance Survey maps, online data and an initial visit to the sites indicated there were no other survey points that warranted survey effort (i.e. where it was worth a surveyor being present to interview people and count people).

2.2 The Cerne Abbas location was separated from any parking but was such that people who had parked in the village or were accessing direct from home were likely to be intercepted as well as any using the car park. A review of aerial images and maps revealed little or no other locations where there was easy access onto the sites (e.g. car parks). Survey points are shown in Map 1 and summarised in Table 1.

Table 1: Survey Points

Name	Notes	Grid Reference
Cerne Abbas (steps near Giant)	Not far from the Giant's feet, where a number of paths converge at a gateway and some steps.	ST66630157
Fontmell Down (Parking on Spread Eagle Hill)	Small parking area on east side of road; starting point for a range of walks.	ST88611872

Map 1: Visitor survey locations



Survey logistics

2.3 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.

2.4 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

2.5 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

2.6 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.

2.7 Surveys took place between the 12th and 15th of May 2022. This period was chosen to reflect a period when local residents might be expected to be visiting local countryside sites but avoided the main tourist season (high summer) when local residents may be visiting other places further afield and the number of interviews with local residents may be more diluted due to tourist use at the survey locations.

2.8 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 major sporting

events or similar which may have influenced recreation activity. The weather during the survey was changeable and 5 of the 2-hour survey sessions (out of a total of 16 sessions) had some rain (see Appendix 2). In particular the weekend sessions at Fontmell were rainy.

Impact assessment

2.9 Separate to the visitor surveys, a walkover survey was undertaken to check for evidence of recreation impacts (see Table 2 for dates of visits and details). The surveys 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 should recreation use increase. Survey effort was therefore targeted around access points and areas where visitor use is likely to be higher (e.g. features of interest such as the Giant).

Table 2: Summary of impact assessment visits.

Special Area of Conservation (SAC)	Compartment surveyed	Date surveyed
Cerne and Sydling Downs	Giant Hill SSSI Hog Cliff SSSI/NNR	18th May 2022
Fontmell and Melbury Downs	Brandis Down SSSI Fontmell Down SSSI Melbury Beacon SSSI	19th May 2022

2.10 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.

2.11 The severity of each mapped impact was assessed:

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

2.12 Georeferenced photographs and target notes were taken to evidence the impact.

2.13 Note that the walkover survey comprised a 'snapshot' of the impacts on the date visited was not an exhaustive search of the entire study area for every impact feature.

3. Results: Tally counts

3.1 Tally data are summarised in Table 3. In total, 161 groups were noted entering or leaving at the survey point. These groups contained a total of 283 people (of which 23 were minors) and 98 dogs. From these totals the mean group size was 1.8 people (of which 0.1 were minors) and 0.6 dogs. There was 1 dog for every 2.8 people.

3.2 Both sites were very similar in the number of people entering, with 39 groups and 73 people counted entering at Cerne Abbas, compared to 38 groups and 68 people at Fontmell. There were however nearly 3 times as many dogs counted entering at Fontmell (35 compared to 13).

3.3 The number of people entering at each location is shown in Figure 1. It can be seen that Cerne Abbas had more of a peak in visitor numbers at the weekend compared to Fontmell, where the number of groups and number of dogs was broadly similar on the weekend and weekdays (note that the weekend sessions at Fontmell were rainy).

3.4 The number of groups recorded entering by time period and type of day are shown in Figure 2, with the colours reflecting the different survey locations. It can be seen that the mid-morning session was the busiest (combined data across both sites). There were no people counted entering Cerne Abbas on the early session on a weekday morning and at Cerne Abbas visitor numbers were otherwise constant during the day on the weekdays.

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) and passing through are those that pass the surveyor having not started at that location, e.g. a mountain bike or horse rider that passes through a car park.

Site	Entering						Leaving					
	Groups	Total people	Total dogs	Minors	Bikes	Horses	Groups	Total people	Total dogs	Minors	Bikes	Horses
Cerne Abbas	39	73	13	9	0	0	46	85	20	8	0	0
Fontmell Down	38	68	35	2	0	0	38	57	30	4	0	0
	77	**141**	**48**	**11**	**0**	**0**	**84**	**142**	**50**	**12**	**0**	**0**

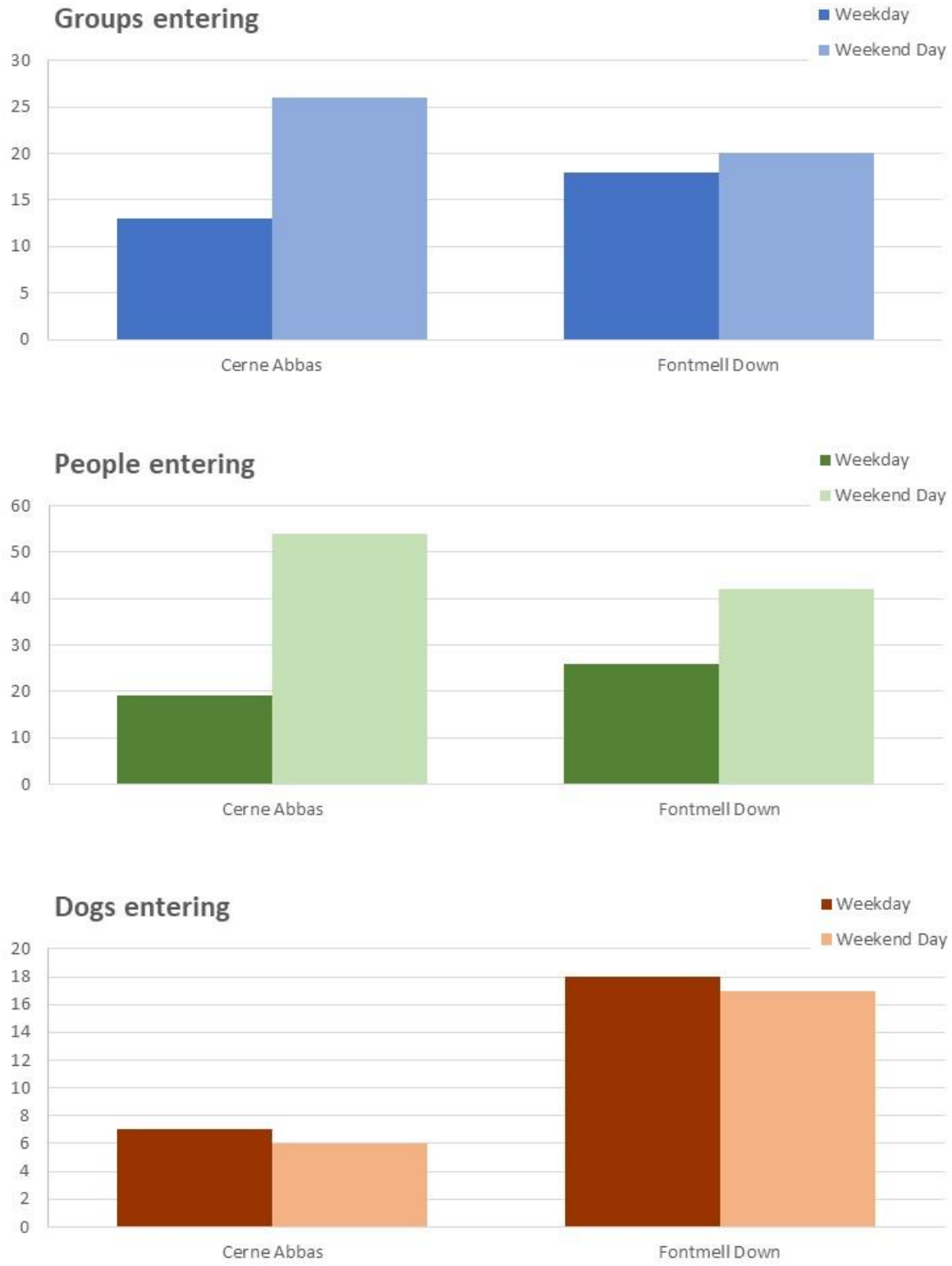


Figure 1: Groups, people and dogs entering each site on weekdays compared to weekends. Only those locations with balanced survey coverage included.

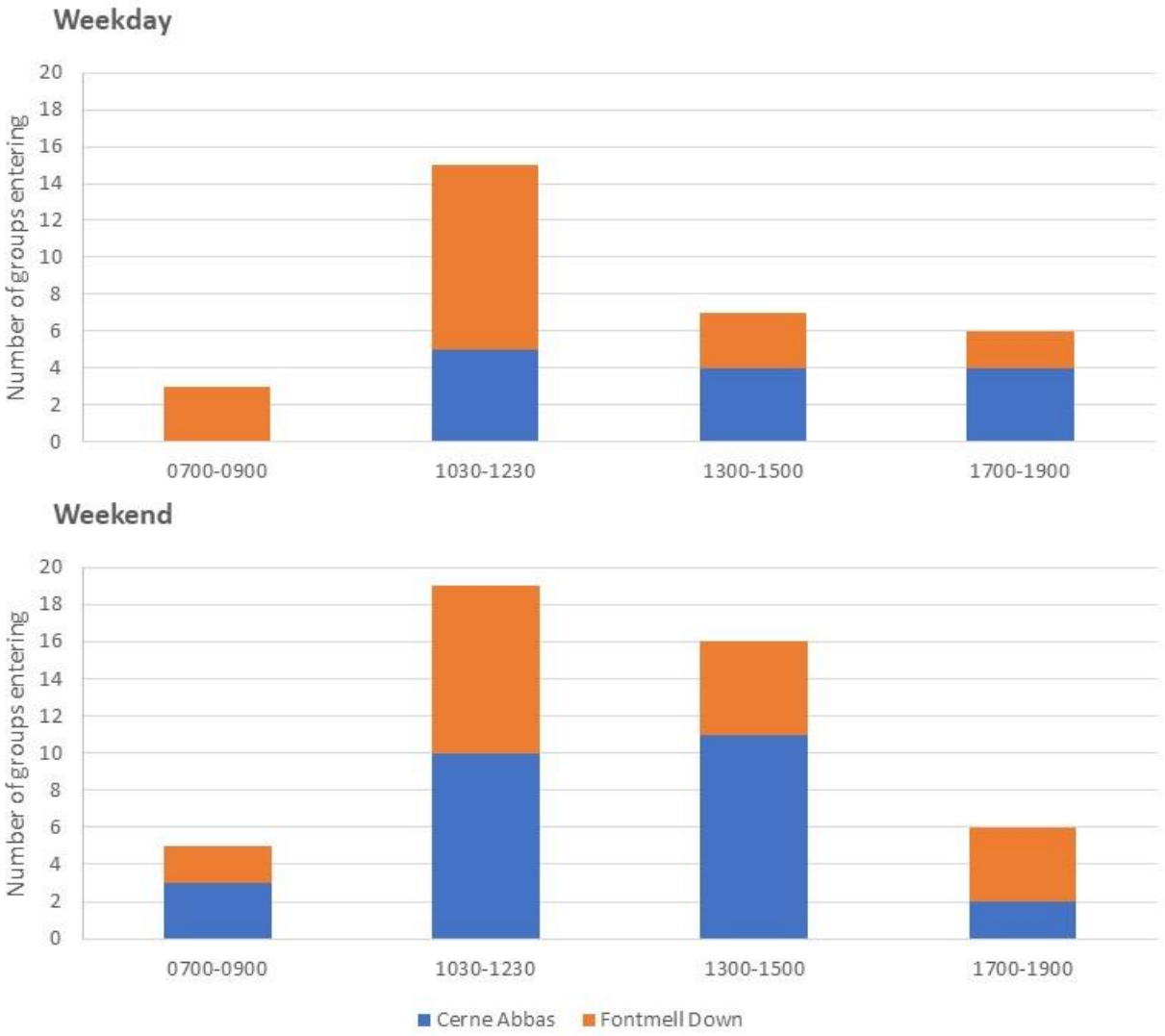


Figure 2: Number of groups entering by time period, type of day and survey point

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 77 interviews were conducted, 49 at Cerne Abbas and 28 at Fontmell. Just over half (42 interviews, 55%) were conducted on a weekend (Table 4). The number of interviews at the weekend was higher compared to the weekday at Cerne Abbas and the weekday and weekend were the same at Fontmell.

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 and with balanced survey effort.

Survey location	Number interviews on a weekday	Number interviews on a weekend day	Total (%) of interviews	Already interviewed	Refusals
Cerne Abbas	21	28	49 (15%)	2	6
Fontmell	14	14	28 (9%)	4	11
Total	**35**	**42**	**77 (24%)**	**6**	**17**

4.3 The interview lasted on average 7.5 minutes. A total of 6 people were approached who had already been interviewed (and were therefore not re-interviewed). A total of 17 people were approached and declined to be interviewed (Table 4).

4.4 Group size[3] in the interviewed groups ranged from 1 to 4. The interviewed groups totalled 133 people, giving an average group size (for the interviewed groups) of 1.7 people. 39 interviewees had 1 or more dogs with them, with a total of 56 dogs, roughly 0.7 dogs per interviewee (across all interviewees) and 0.4 dogs per person in the interviewed groups. At least 29 (52%) of the dogs were noted by the surveyor as off the lead at the time of interview.

4.5 Three-quarters of interviewees (58 interviewees, 75%) were on a day trip or short visit and had travelled directly from home that day. 16 interviewees (21%) stated they were on holiday in the area and staying away from home

[3] 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.

while a further 3 interviewees (4%) were staying with friends or family in the area. The percentage of holiday makers was slightly higher (22%) at Cerne Abbas compared to Fontmell (18%).

Activity (Q2 & Q3)

4.6 Walking was the most frequently given main activity (43 interviewees, 56% of interviewees) with dog walking the next most commonly cited activity (24 interviewees, 31 %). Together these two activities accounted for 87% of interviewees' main activities (Figure 3).

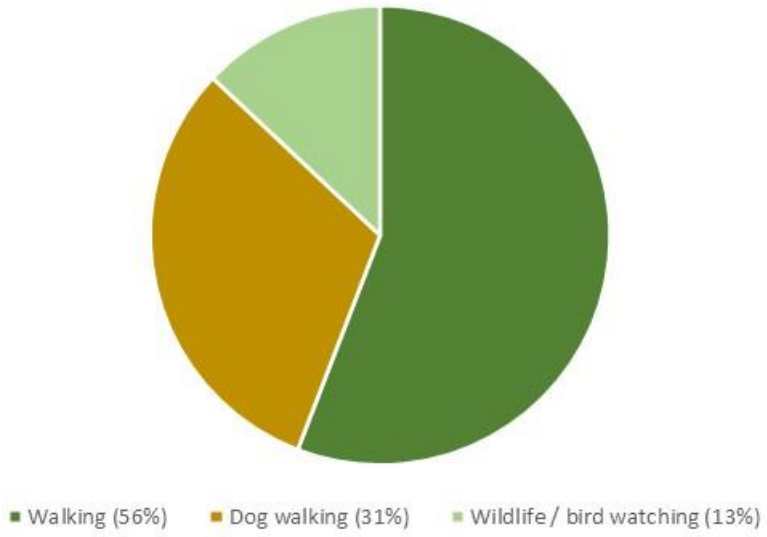


Figure 3: Proportion of interviewees by main activity, from responses to Q1.

4.7 There was relatively little difference between the two survey points with walking the most common activity at both (61% of interviewees at Cerne Abbas and 46% at Fontmell).

4.8 Interviewees were also asked about any other activities they were undertaking during their visit, and these secondary activities are summarised in Table 5. Less than half (29, 38%) of interviewees gave a secondary activity.

4.9 Including both main and secondary activities, 54 interviewees (70%) were walking and 29 interviewees (38%) were dog walking. It should be noted that 39 interviewees (51%) 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 all gave walking as their main activity.

Table 5: Number (%) of interviewees and activities they stated they were undertaking

Activity	No (%) of interviews, main activity	No (%) of interviews, secondary activity	Total interviewees undertakng activity (%)
Walking	43 (56%)	11 (14%)	54 (70%)
Dog walking	24 (31%)	5 (6%)	29 (38%)
Wildlife / bird watching	10 (13%)	7 (9%)	17 (22%)
Picnic	0 (0%)	3 (4%)	3 (4%)
Photography	0 (0%)	2 (3%)	2 (3%)
Meet up with friends	0 (0%)	1 (1%)	1 (1%)

Mode of Transport (Q3)

4.10 The majority of interviewees (58 interviewees, 75%) had travelled to the interview location by car or van and a further 18 interviewees (23%) had arrived on foot (Table 6). All of those who arrived on foot were interviewed at Cerne Abbas and all interviewees at Fontmell had arrived by motor vehicle.

Table 6: Number (%) of interviewees and mode of transport across both survey locations

Mode of transport	No (%) of interviews, main activity
Car / van	58 (75%)
On foot	18 (23%)
Motorbike	1 (1%)
Total	**77 (100%)**

4.11 The mean group size for those who had arrived by car was 1.8 people.

Temporal visit patterns (Q4 – Q7)

Visit duration (Q5)

4.12 The most commonly cited visit duration was 1-2 hours (29 interviewees, 38%) and the average visit duration was around 83 minutes[4] (Figure 4). Notably at Fontmell, none of the interviewees had visited or planned to visit for more than 2 hours.

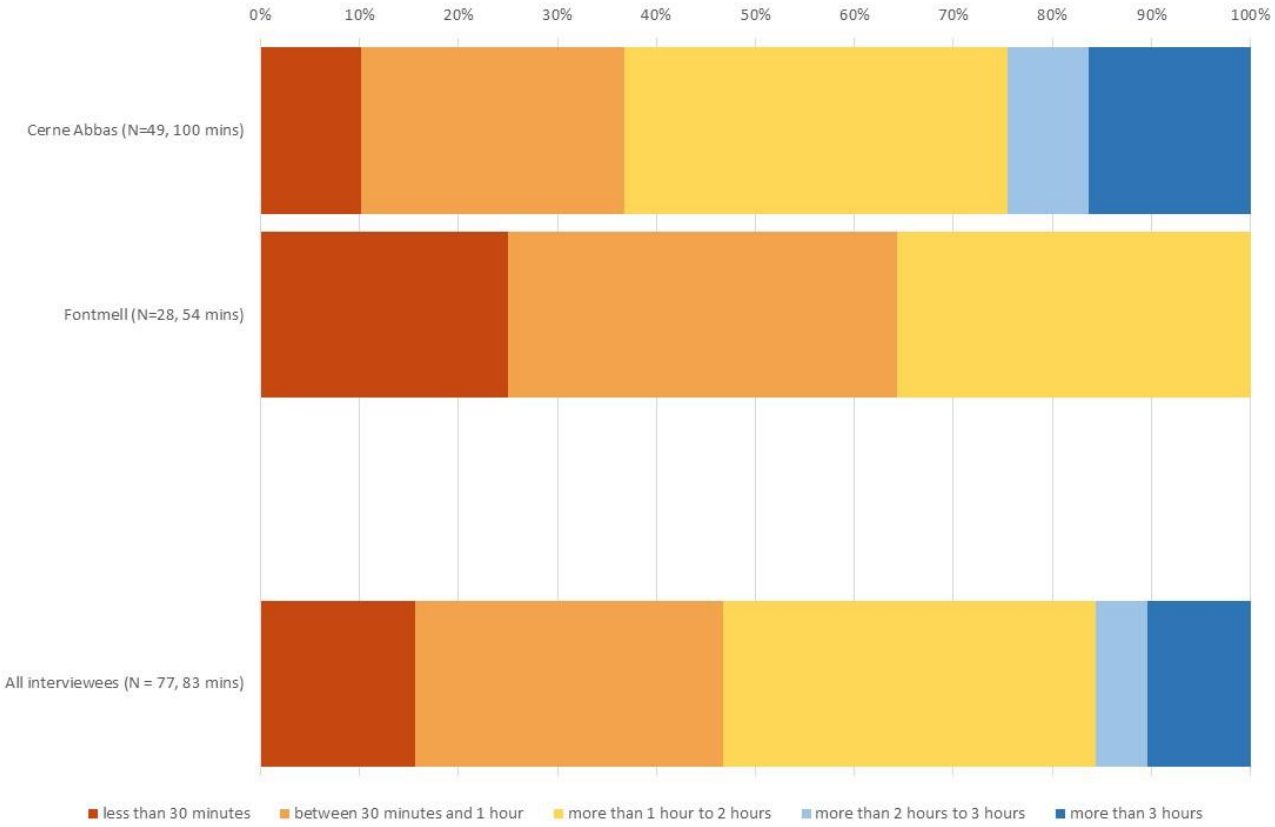


Figure 4: Visit duration for all interviewees (top) and by activity (lower). Numbers in brackets refer to sample size and average visit duration. Data from Q5.

Length of time visiting (Q6)

4.13 Across both sites, nearly a third of interviewees were on their first visit (24 interviewees, 31%) to the interview location and a similar number estimated they had been visiting for at least 10 years (23 interviewees, 30%), see Figure

[4] 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.

5. First time visitors accounted for a particularly high proportion of the visitors to Cerne Abbas, where 19 interviewees (39%) were on their first visit.

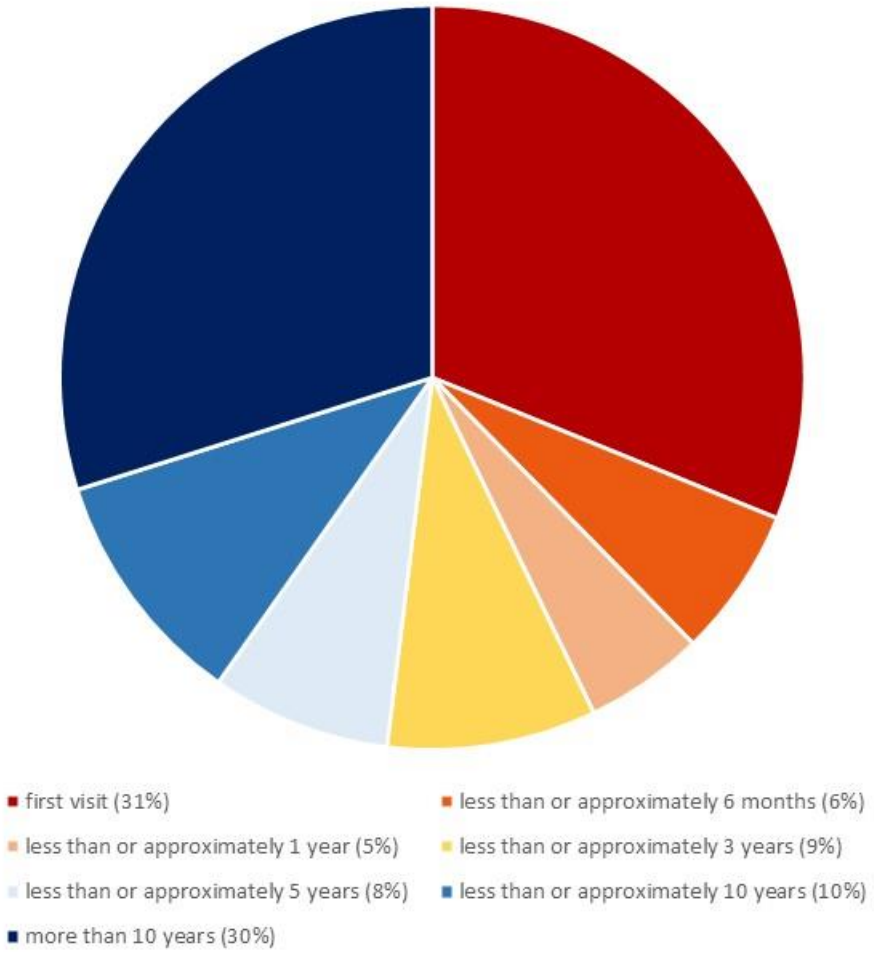


Figure 5: Length of time visiting the relevant chalk site (from Q6).

Visit frequency (Q8)

4.14 Visit frequencies are summarised in Figure 6. Based on the categorical responses relating to visit frequency, interviewees had visited the interview location around 97 times on average over the past year[5]. The most commonly cited visit frequency was first visit, with around a third of

[5] 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.

interviewees (25, 32%) indicating it was their first visit (or they had visited less than twice over the past year).

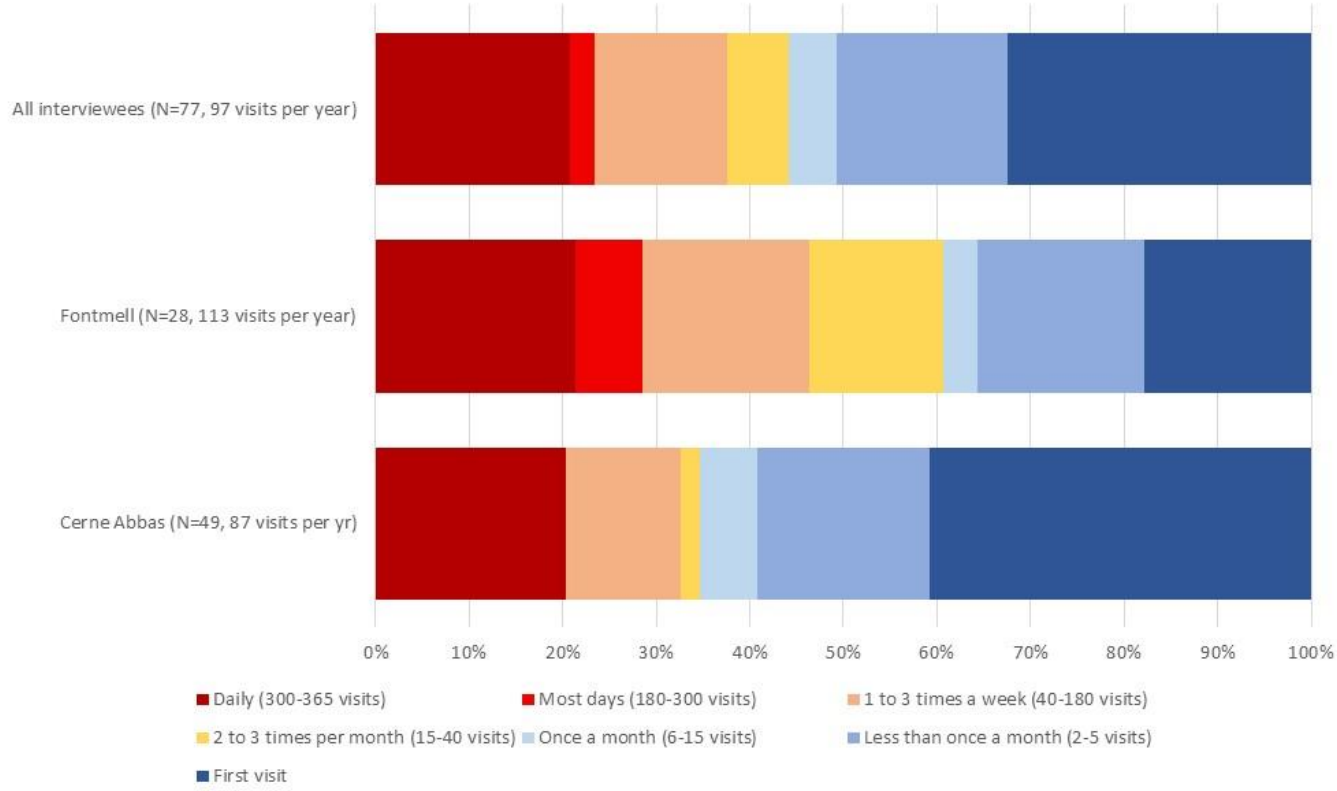


Figure 6: Visit frequency for all interviewees (top) and by activity (lower). Numbers in brackets refer to sample size. Data from Q8.

Time of year (Q7)

4.15 The majority of interviewees (35 interviewees, 45%) stated they tended to visit equally all year (Table 7), and this was particularly the case at Fontmell (17 interviewees, 61% visiting equally all year). For those interviewees that did tend to visit at a particular time of year, the summer was the most common response (26 interviewees, 34%).

Table 7: 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.

	Cerne Abbas	Fontmell	Total
Total number of interviewees	**49**	**28**	**77**
Equally all year	18 (37)	17 (61)	35 (45)
Spring (Mar-May)	7 (14)	2 (7)	9 (12)
Summer (Jun-Aug)	6 (12)	6 (21)	12 (16)
Autumn (Sept-Nov)	0 (0)	0 (0)	0 (0)
Winter (Dec-Feb)	0 (0)	0 (0)	0 (0)
First visit/don't know	21 (43)	5 (18)	26 (34)

Effects of pandemic on visit patterns

4.16 Across all interviewees, 16 interviewees (21%) indicated the coronavirus pandemic had changed how often they visit the location where interviewed (Table 8), with 3 interviewees (4%) indicating that they now visit more than before and 13 interviewees (17%) indicating they now visit less.

Table 8: Number (%) of interviewees and the effect of the coronavirus pandemic on visit frequency (from Q9).

	Cerne Abbas	Fontmell	All interviewees
Visiting the same as before	19 (39)	13 (46)	32 (42)
Visiting less	8 (16)	5 (18)	13 (17)
Visiting more	1 (2)	2 (7)	3 (4)
Unsure/don't know/first visit	21 (43)	8 (29)	29 (38)
All interviewees	**49 (100)**	**28 (100)**	**77 (100)**

Routes taken on site (Q11-14)

4.17 Most interviewees (45, 35%), stated that the route they had followed or intended to follow that day was similar to their usual route. 11 interviewees (14%) stated that the route was much shorter than normal while the route was much longer than normal for 1 (1%). The remaining interviewees were unsure, had no typical visit or were visiting for the first time.

4.18 In total 75 routes were mapped as part of the interview. These are shown in Maps 2. Across all interviewees the median route length was 3.0km and ranged from 1.3km to 16.4km (the latter from Cerne Abbas, a walker on

holiday). Route length data are summarised by main activity type in Figure 7, by survey location in Figure 8 and by visit type in Figure 9.

4.19 Those who gave walking as their main activity tended to have the longest routes (median 3.0km). For dog walkers the median route length was 2.9km. There was little difference between survey locations (median for all routes at Cerne Abbas: 3.0km, at Fontmell: 2.9km) however there was a greater range in the route data from Cerne Abbas, with some interviewees undertaking very short walks at that site and also a few very long walks.

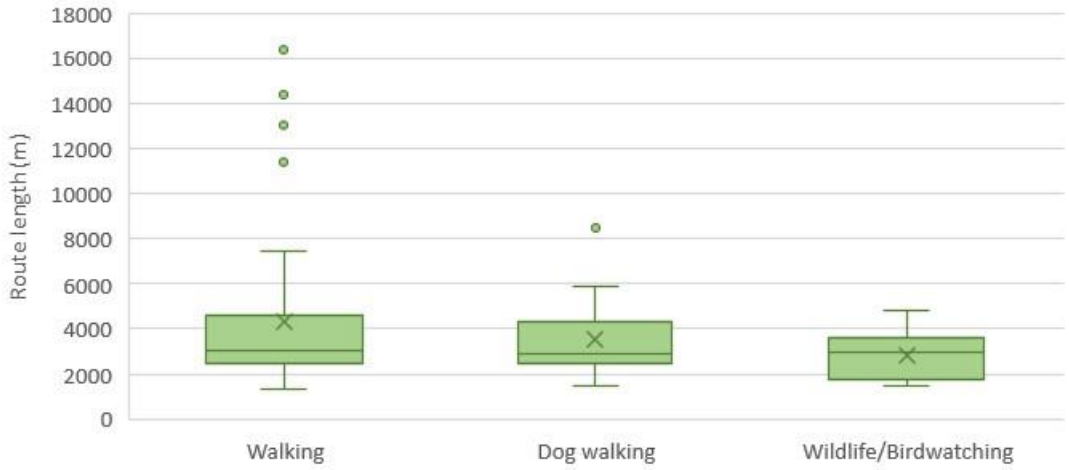


Figure 7: Route lengths by main activity. Horizontal lines show the median, crosses indicate the mean, the boxes show the interquartile range and the whiskers the maximum and minimum values.

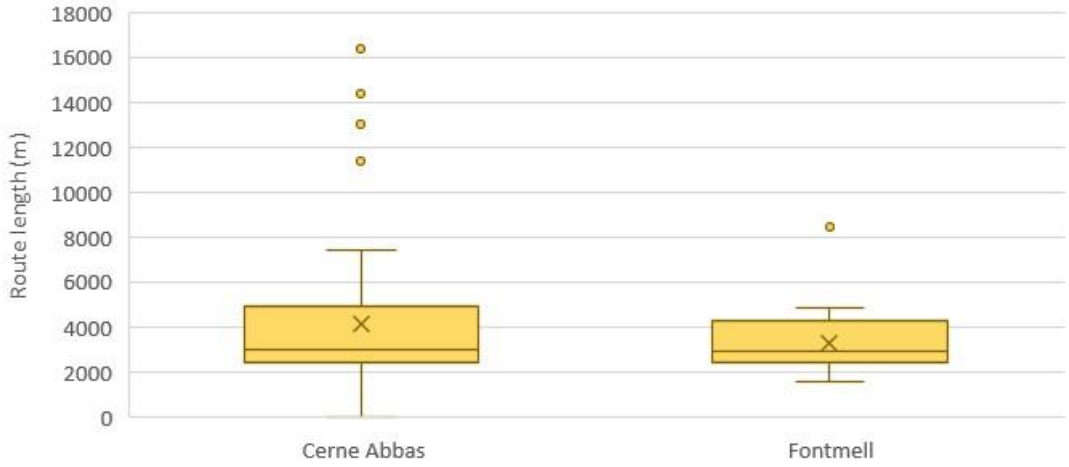


Figure 8: Route lengths by survey location. Horizontal lines show the median, crosses indicate the mean, the boxes show the interquartile range and the whiskers the maximum and minimum values.

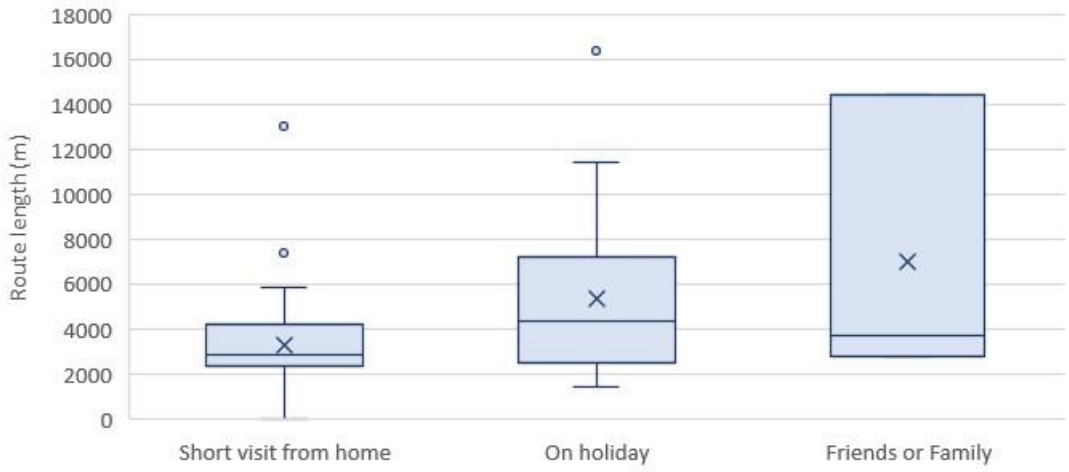


Figure 9: Route lengths by visit type. Horizontal lines show the median, crosses indicate the mean, the boxes show the interquartile range and the whiskers the maximum and minimum values.

4.20 Factors influencing choice of route are summarised in Figure 10. The most common factor (by some margin) was birds and wildlife cited by 17% of interviewees overall. This was the most commonly cited factor at both locations (cited by 9 interviewees at Cerne Abbas and 4 interviewees at Fontmell). Interviewees specifically commented that they had chosen the route to see orchids or butterflies and some mentioned specific species that they wanted to see such as Duke of Burgundy at Cerne Abbas. Reaching a viewpoint was also a key factor at Fontmell (4 interviewees). Other site specific features were identified by 6 interviewees at Cerne Abbas (12% of the interviewees there), all of which were wanting to get close to the Giant.

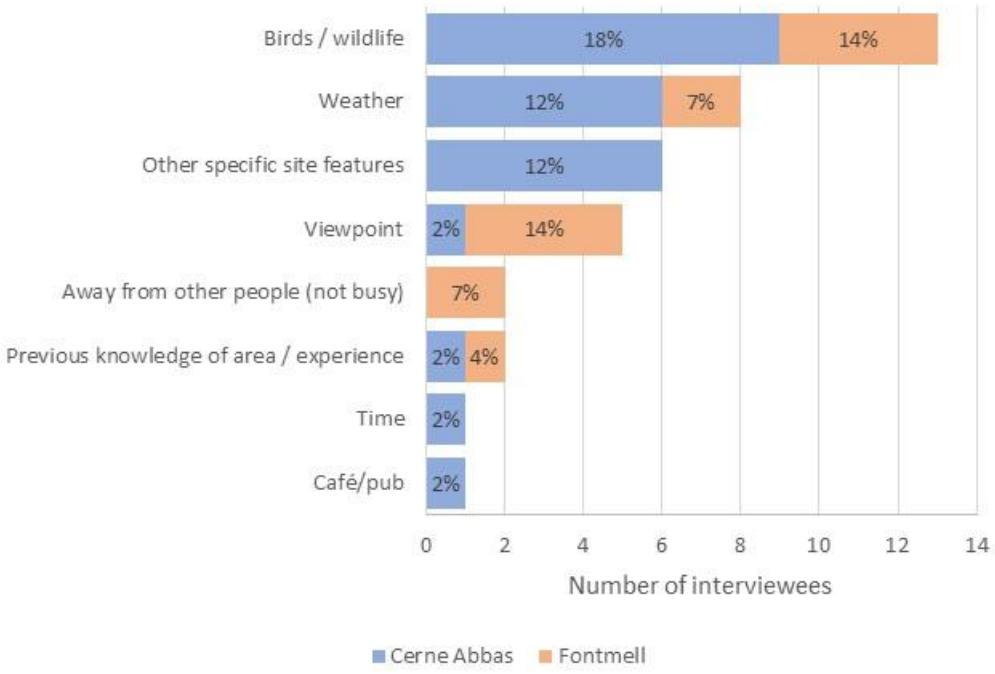
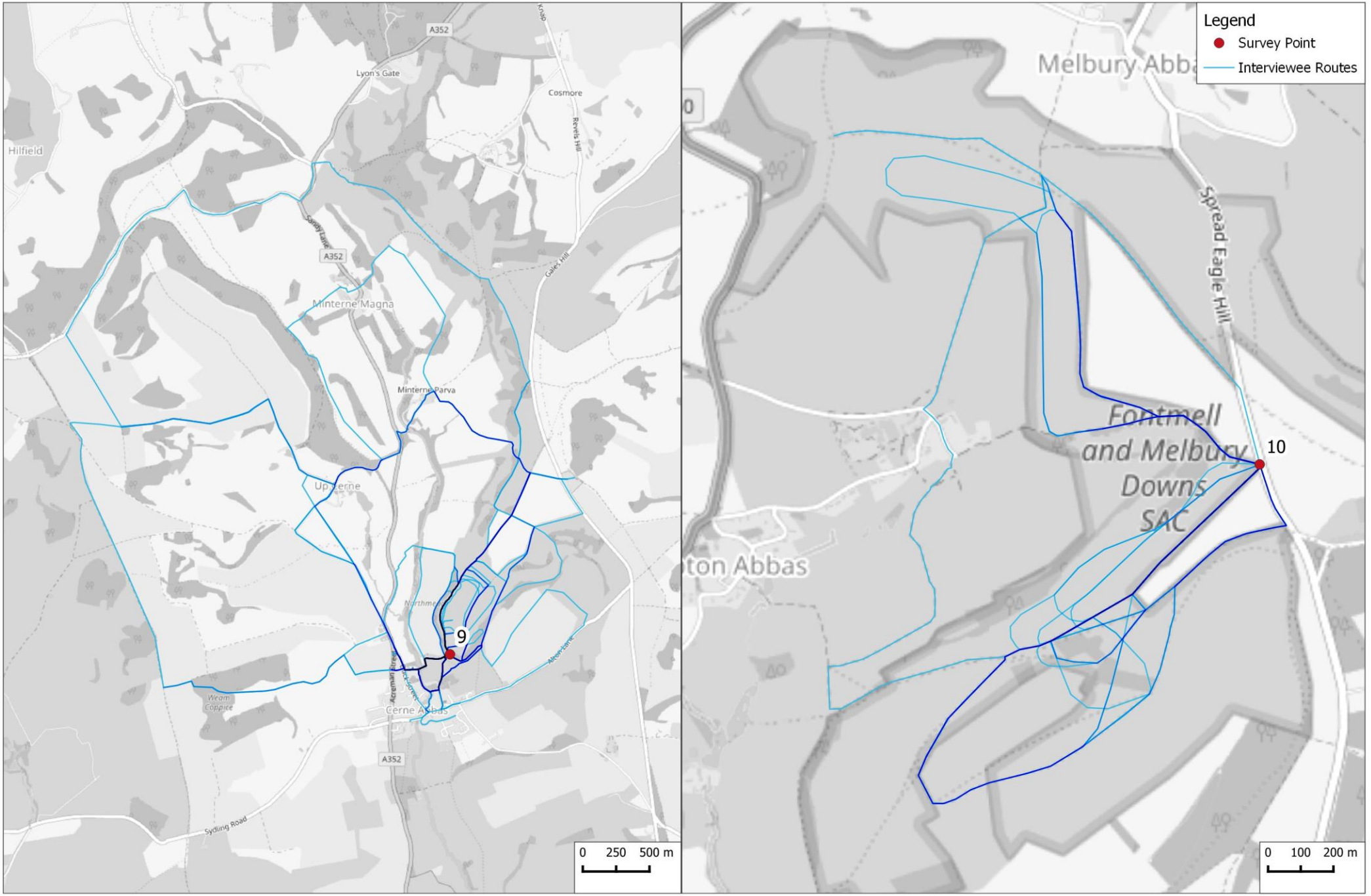


Figure 10: Factors influencing route choice (from Q11). The bars show the number of interviewees who cited particular factors, with the value labels giving the percentage of interviewees at each survey location. Interviewees could cite more than one factor.

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



Reasons for choice of location (Q14)

4.21 Interviewees gave a wide range of reasons for choosing to visit the location (chalk grassland) where interviewed, rather than another location (Figure 11). As part of the survey interviewees could give multiple reasons for their site choice and they were also asked to single out one, 'main' reason.

4.22 Close to home (or close to the accommodation they were staying at) was the most common reason by some margin and cited by well over a third of interviewees (30 interviewees, 39%). Close to home/accommodation was frequently cited at Cerne Abbas (where the survey point was close to the village); here it was given as a secondary or main reason by 20 interviewees (41% of those interviewed at Cerne Abbas). It should be noted the close to home (or accommodation) was however mostly cited as a secondary (rather than main) reason and only 4 interviewees (5%) gave close to home/accommodation as the main reason for site choice however and none of these were local residents (all were on holiday).

4.23 The most commonly cited main reason for site choice, and second common overall was the particular wildlife interest, cited by 15 interviewees (19%) overall. These interviewees had clearly chosen to visit to see particular species (Glanville Fritillary was mentioned for Fontmell, Duke of Burgundy at Cerne Abbas, as well as general comments regarding orchids and butterflies). Other common responses related to the scenery and views (8 interviewees, 10%) and quick and easy travel route (5 interviewees, 6%).

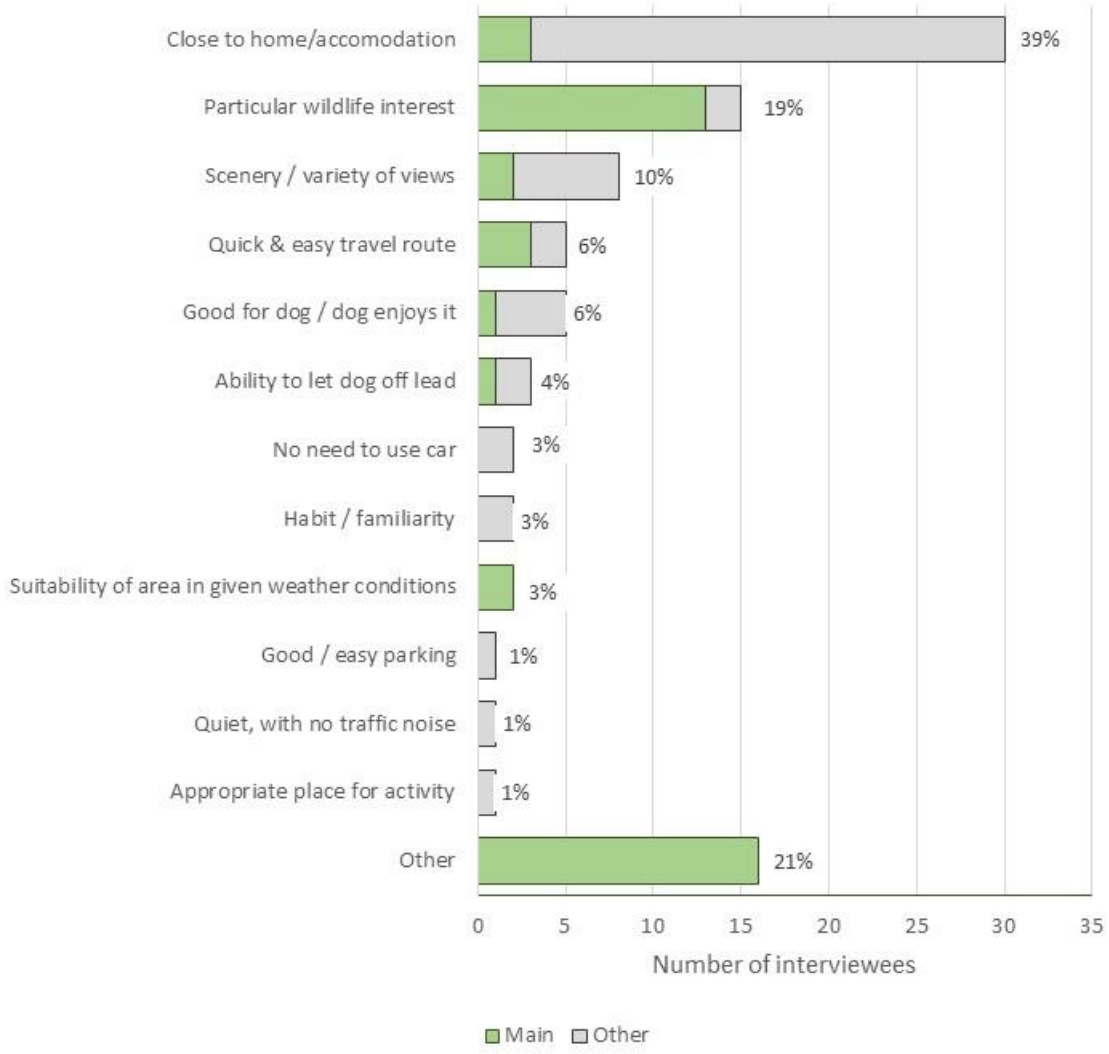


Figure 11: Reasons for visiting the specific location where interviewed that day rather than somewhere else (Q12). Interviewees were asked for one main reason and could give multiple other reasons. Responses categorised by surveyor and additional categories added following a review of free text responses. Value labels give the percentage of all interviewees who cited the reason (main or other).

Alternative locations visited (Q15-17)

4.24 When asked to name one location outside the chalk grassland where interviewed that they would have visited that day if they had not visited the chalk grassland, 2 interviewees (3%) stated that they would not have gone anywhere else and a further 8 interviewees (10%) were not sure or didn't know. In total, 65 interviewees (84%) named an alternative location, and some named two alternatives (but despite the option being available, none of the interviewees gave 3 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 "Duncliffe" and "Duncliffe Woods".

4.25 The standardised locations produced a long and varied list of 53 locations, most (38 of the 53) were cited by just one interviewee. This suggests a wide scatter of alternatives with little in the way of a consistent alternative. Those sites mentioned at least twice are summarised in Figure 12. Duncliffe was the most commonly cited alternative (5 interviewees, 6%).

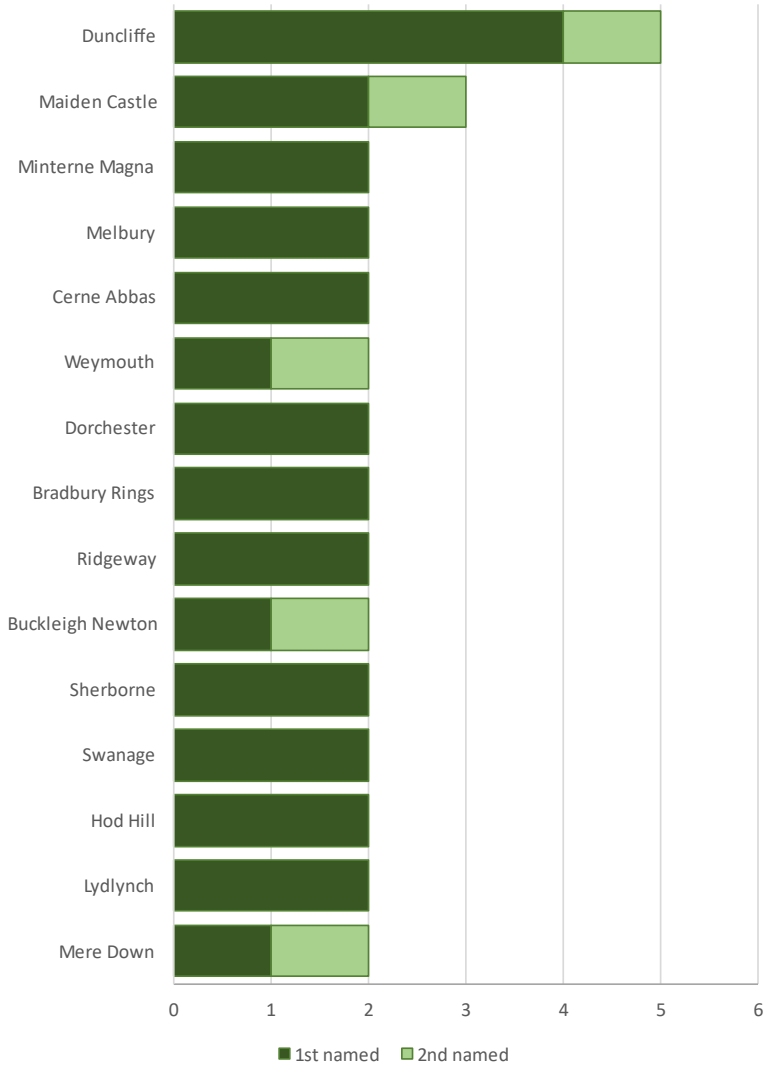


Figure 12: Number of interviewees and named alternative sites (Q15-17). All locations named by at least 2 interviewees are shown.

4.26 The alternatives are summarised by survey location in Table 9. Maiden Castle was the most commonly cited alternative for those interviewed at Cerne Abbas and Duncliffe the most common alternative for those at Fontmell.

Table 9: Top three alternative sites named by interviewees at each survey location. Named alternatives from pooled results (i.e. up to 2 sites named per interviewee). Percentages indicate the percentage of interviewees that named the alternative at each survey point.

	Cerne Abbas	Fontmell
No. of interviews	**49**	**28**
	Maiden Castle (6%)	Duncliffe (14%)
	Ridgeway (2%)	Hod Hill (7%)
	Weymouth (2%)	Mere Down (7%)
	Buckleigh Newton (2%)	Melbury (7%)
	Minterne Magna (2%)	Windgreen (7%)
	Dorchester (2%)	
	Swanage (2%)	
	Sherborne (2%)	

Visitor origins (home postcodes) (Q18-20)

4.27 A total of 66 interviewees (86%) gave full valid postcodes that could be plotted in GIS.

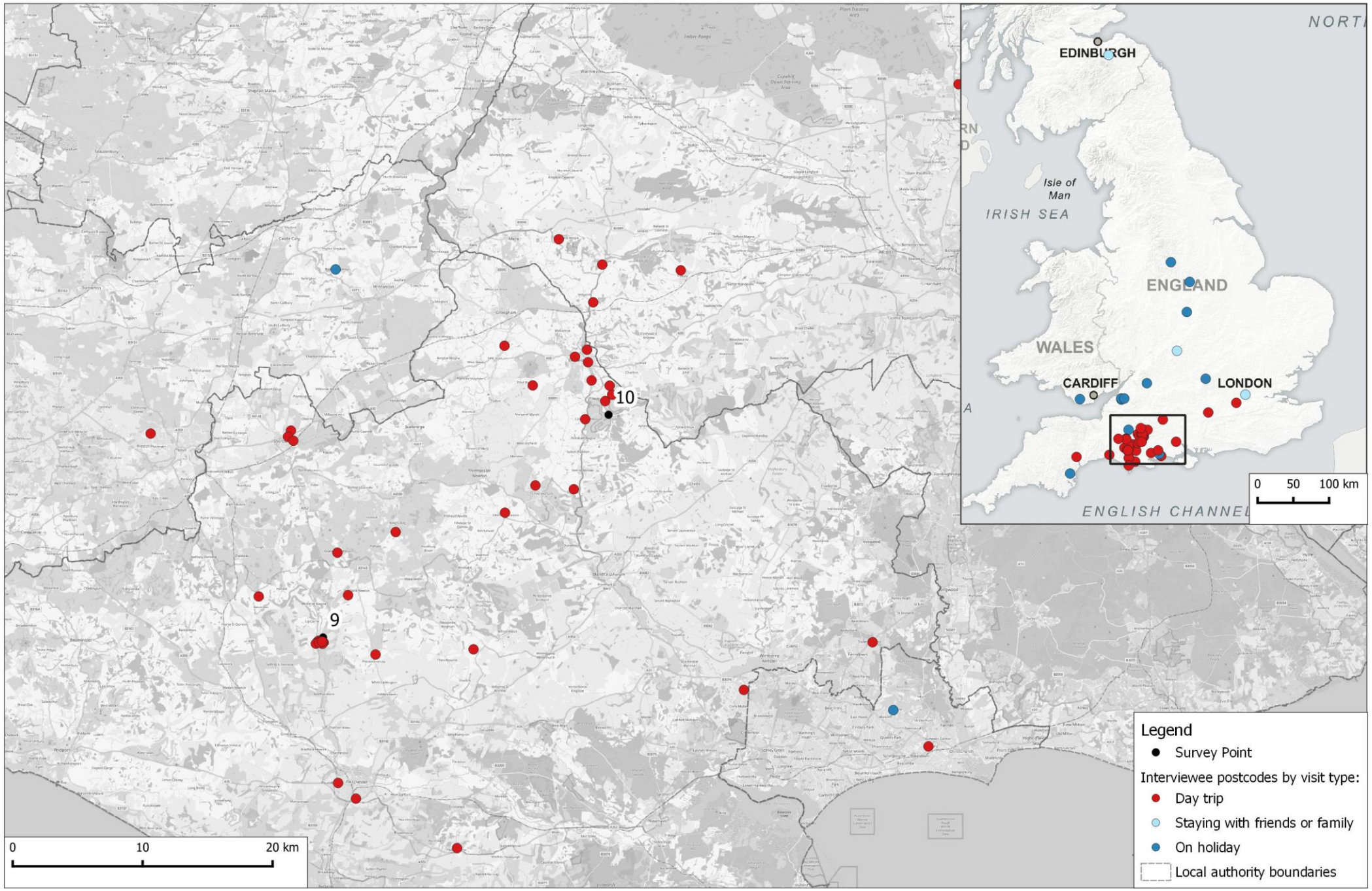
4.28 Maps 3-6 show the postcode data – by visit type (Map 3), by main activity (Map 4), by survey location (Map 5) and by frequency of visit (Map 6). It can be seen that the postcodes show a broad scatter across a wide area of Dorset. Visitors to Fontmell particularly originate from Shaftesbury and North Dorset, while the Cerne Abbas data show a marked cluster from Cerne Abbas village itself and north towards Sherborne (3 postcodes from Sherborne). There were just two interviewees at Cerne Abbas who gave Dorchester postcodes.

4.29 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 10. The distances range from 0.3to 553.6km, with half of all interviewees giving home postcodes within 12.6km of the survey location and 75% originated within 63.8km. Taking just those on a short visit directly from home, half came from within 7.8km and 75% within 17.0km.

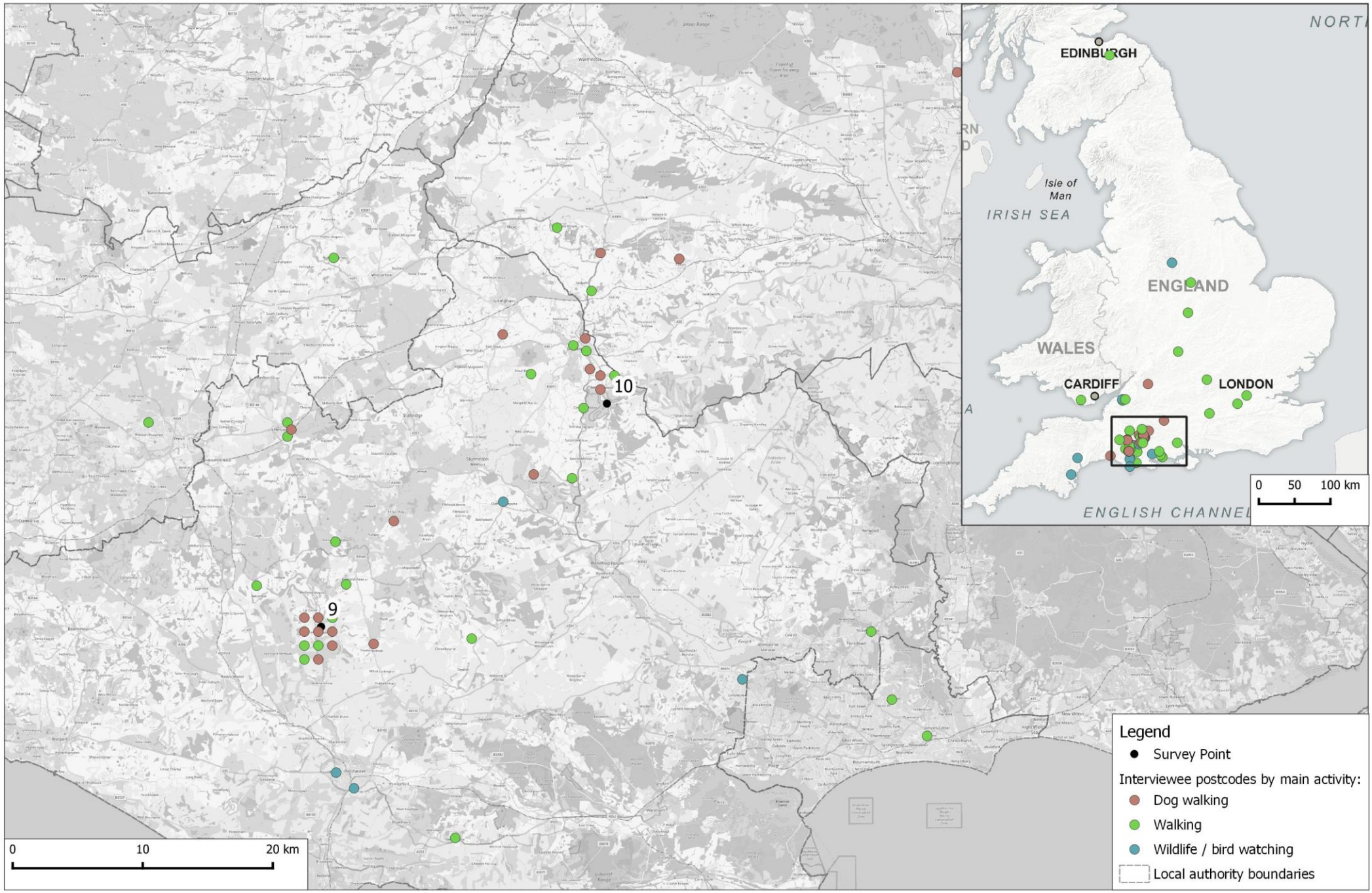
Table 10: Summary statistics for different groups of interviewees and the distance from the survey point to home postcode (km).

	Category	N	Mean (± 1 SE)	Range	Median	Q3
	All interviewees	66	48.25±10.80	0.31-553.63	12.55	63.75
Visit type	Day trip/short visit from home	51	18.35±4.45	0.31-165.43	7.83	16.98
	On holiday	12	113.18±22.83	28.36-250.77	81.89	187.54
Main activity	Walking (without a dog)	36	65.23±17.91	0.39-553.631	17.67	91.52
	Dog walking	21	12.04±4.52	0.31-76.56	4.25	12.01
	Wildlife / Bird watching	9	64.80±25.52	11.28-248.81	23.61	92.30
Survey location	Cerne Abbas	42	56.57±15.60	0.31-553.63	15.91	71.53
	Fontmell	24	33.69±11.50	1.09-248.81	9.18	42.27

Map 3: Interviewee postcodes categorised by visit type.

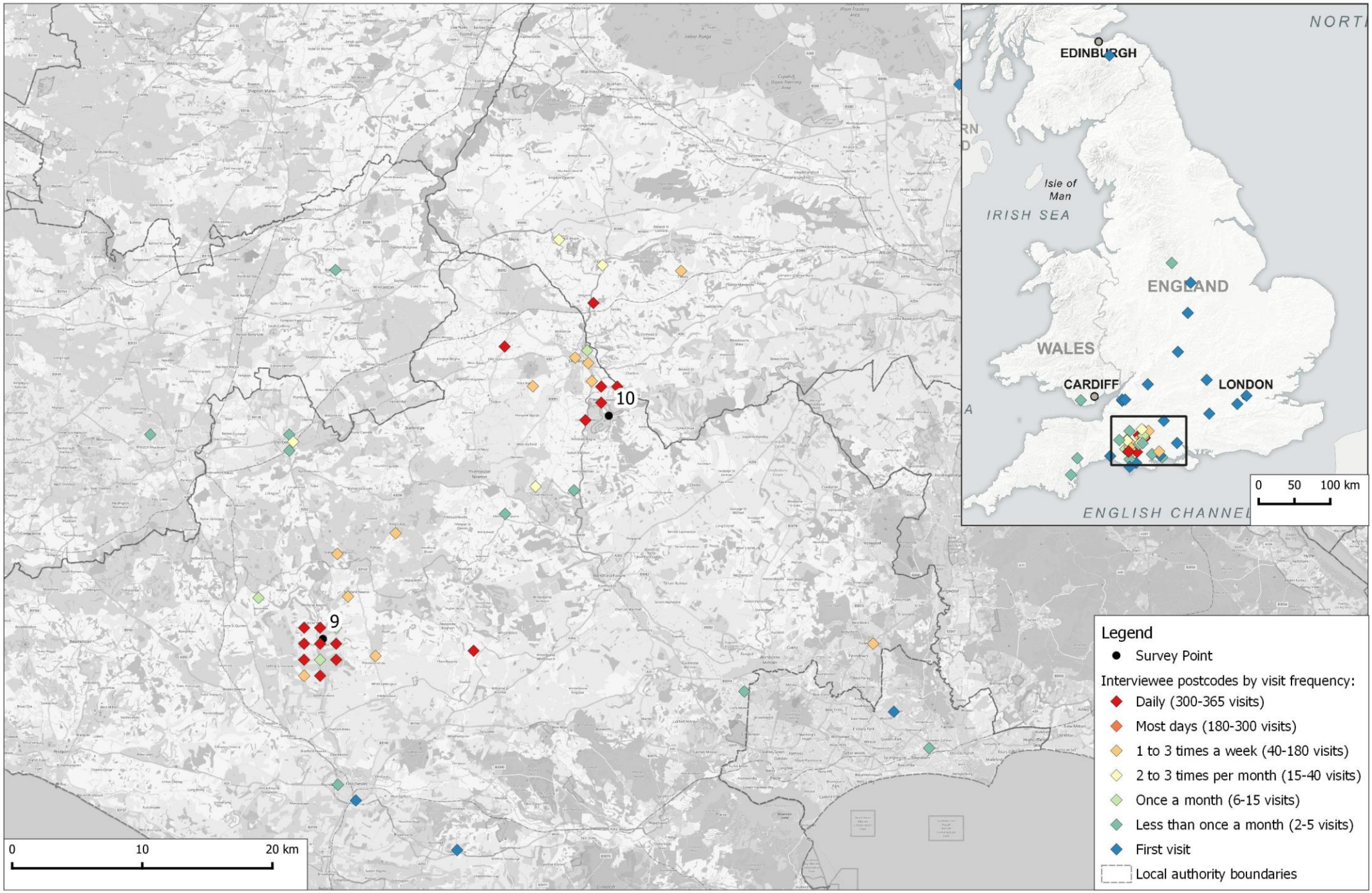


Map 4: Interviewee postcodes categorised by main activity, overlapping postcodes are offset by a grid.



Map 5: Interviewee postcodes categorised by survey point location.

Map 6: Interviewee postcodes categorised by visit frequency, overlapping postcodes are offset by a grid.



5. Impacts of Recreation

Introduction to impacts of recreation on SACs

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 have 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 chalk grassland sites (e.g. Liley et al., 2010; Lowen et al., 2008) 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 Cerne and Sydling Downs SAC and Fontmell and Melbury Downs SAC include calcareous (chalk) grassland, Early Gentian and Marsh Fritillary. Table 11 provides some examples of how recreational activities could undermine the conservation objectives for these sites.

Table 11: Examples of how recreation might undermine site integrity at Cerne and Sydling Downs SAC and Fontmell and Melbury Downs SAC

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 (*Festuco-Brometalia*)	**Damage**: The extent of the designated habitat (i.e. calcareous grassland) could be reduced through trampling outside of designated footpaths as this may 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. However, light trampling may also be beneficial for some species, for example Early Gentian which requires short turf and is present at Fontmell and Melbury Downs SAC.

Attributes from supplementary conservation advice	Examples of how recreational impacts could undermine site integrity
Structure and function of H6210. Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*) – undesirable species	**Contamination**: Dog walking can lead to modified vegetation along paths, particularly entering a site from car parks, and at pinch-points around styles or 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 (*Festuco-Brometalia*) – Vegetation community composition (for CG2 and CG6 chalk grasslands), proportion of herbs, key structural, influential and/or distinctive species	**Contamination**: Vegetation community type and herbaceous cover could be affected by dog and horse faeces and urine which will modify the flora leading to a higher proportion of nitrophilous species and fewer characteristic species of the constituent communities This may affect the presence of food plants of invertebrates, such as Devil's-bit Scabious, which is the food plant of Marsh Fritillary, a notable species at Cerne and Sydling. **Fire**: 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, e.g.. Willowherb Epilobium spp., Thistles *Cirsium* spp, Cleavers *Galium aparine* etc., that can take advantage of the available nutrients. Fire may not destroy all species, and can aid and exacerbate problem species, such as Tor-grass *Brachypodium sylvaticum* which has rhizomatous root system and thrives on the additional potassium present in ash, supporting quick regeneration and shading out other developing chalk grassland flora (including charactersitic plant species that are less competitive) following a fire.
Structure and function of H6210. Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*) – vegetation community transitions	**Damage**: 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. **Fire**: 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 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. H6210 Semi-natural grassland on calcareous substrates, Early Gentian and Marsh Fritillary butterfly)	**Other**: Grazing management is key to maintaining the designated habitats and species present at both chalk grassland 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

Attributes from supplementary conservation advice	Examples of how recreational impacts could undermine site integrity
	the vegetation flora composition and population sizes of the species present.

Cerne and Sydling Downs

5.4 Two routes were taken to assess different areas of Cerne and Sydling Downs SAC, focussing on areas that were accessible and where any impacts from recreation use might be anticipated:

- at Giant Hill, from the village up to the footpath around the base of the chalk grassland, past the main entrance to Giant Hill and along the footpath underneath the chalk Giant enclosure. The surveyors continued up through the grassland to the adjacent north compartment to assess any recreational pressures present in this area, and then walked over the hill and back around to the original entry point.
- There is very limited parking at Hog Cliff Down NNR, at a layby on the busy A37. The route taken here was from the farm entrance over the stile into the chalk grassland and down towards the valley and back up the main farm track to the farm / A37.

5.5 Map 7 shows the location where impacts were identified.

5.6 Most recreation impacts observed along the footpaths at Giant Hill (see Map 7) were of moderate intensity and were all considered to be caused by trampling.

5.7 The most signficant impacts were seen at the main entrance to Giant Hill where the footpath was significantly widened with a large area of bare ground underneath the tree canopy (point 2 on Map 7). There was moderate trampling along the footpath around the base of Giant Hill and along the fence line of the Cerne Giant enclosure which had bare earth and modified flora, including the loss of calcicole species like Salad Burnet *Poterium sanguisorba* alongside the footpaths (points 1, 3 and 8; Figure 13). There were also desire lines present around the edge of the Giant enclosure which was stepped on the steeper slopes by repeated footfall (points 3 and 4). These had modified flora with Daisy *Bellis perennis* and Ribwort Plantain *Plantago lanceolata* and a lack of desirable calcicole indicators, such as Horseshoe Vetch *Hippocrepis comosa*. The high level of trampling in this area

corresponds with the more heavily used routes identified during the visitor interviews (see Map 2).

5.8 The Giant Way footpath that links to some of the other SAC compartments was also trampled with bare ground in the centre and modified vegetation along the edge, particularly Common Nettle *Urtica dioica* (point 6).

5.9 Outside of the area immediately around the Giant, there were few other observed impacts on and off footpaths (points 5 and 7). The flora on the paths was in places modified, particularly in areas that were slightly steeper, with more rosette forming plants, such as Daisy *Bellis perennis* (that are more resilient to trampling) present compared to the chalk grassland vegetation either side of the path.

5.10 No dog faeces were seen within the SAC boundaries. There were dog faeces present and modified flora consistent with eutrophication along the verges between the main visitor car park and entrance to Giant Hill. However, the path was adjacent to a farmyard and there may have been some eutrophication from livestock and forage brought into this area enriching the verge soils.

5.11 There were no observed recreation impacts at Hog Cliff SSSI / NNR at any of the pinch-points, such as styles and gateways or along footpaths visible from these locations (points 9 to 12 on Map 7). The limited availability of parking and distance from residential areas may reduce recreational impacts on this SAC compartment.

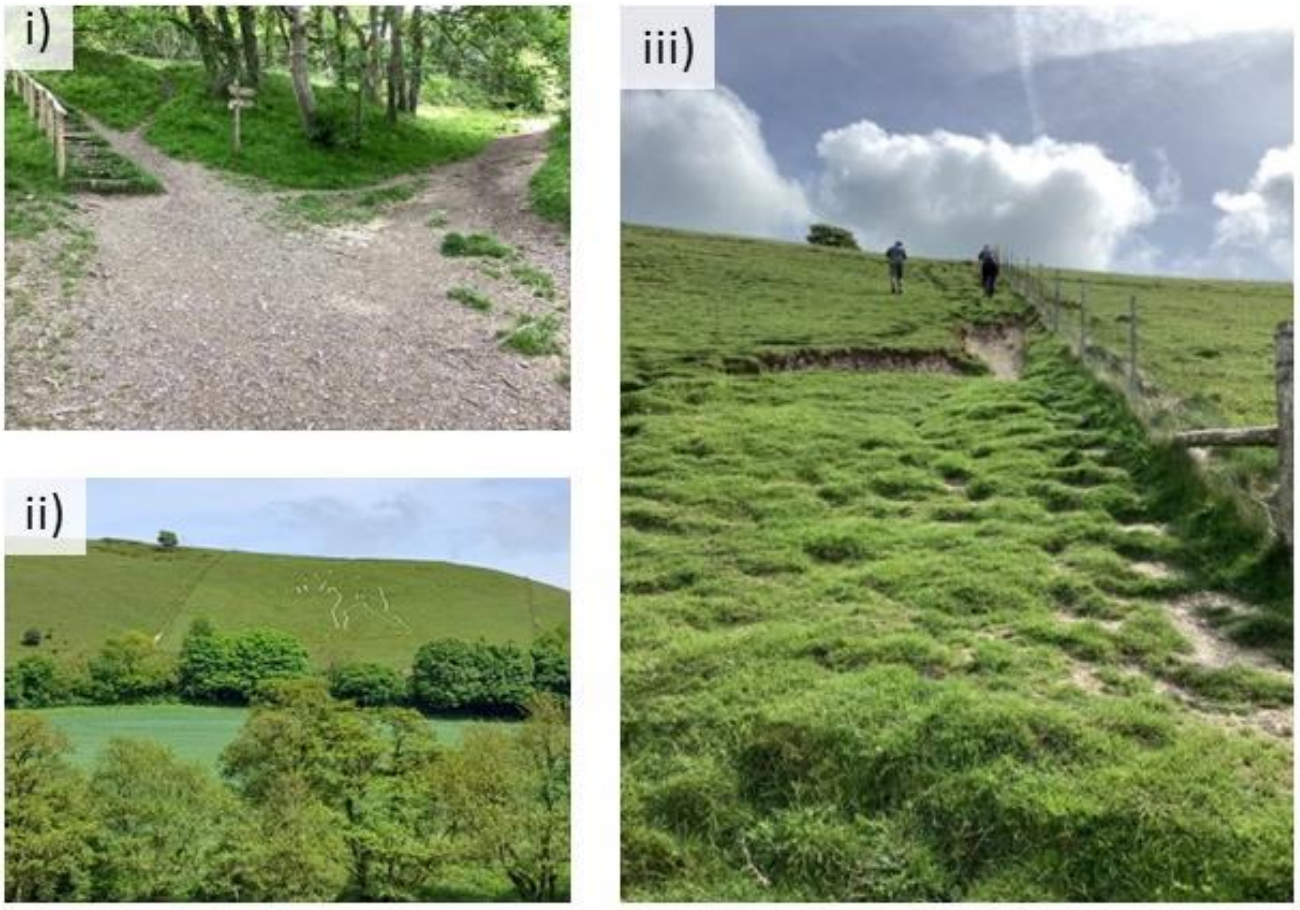
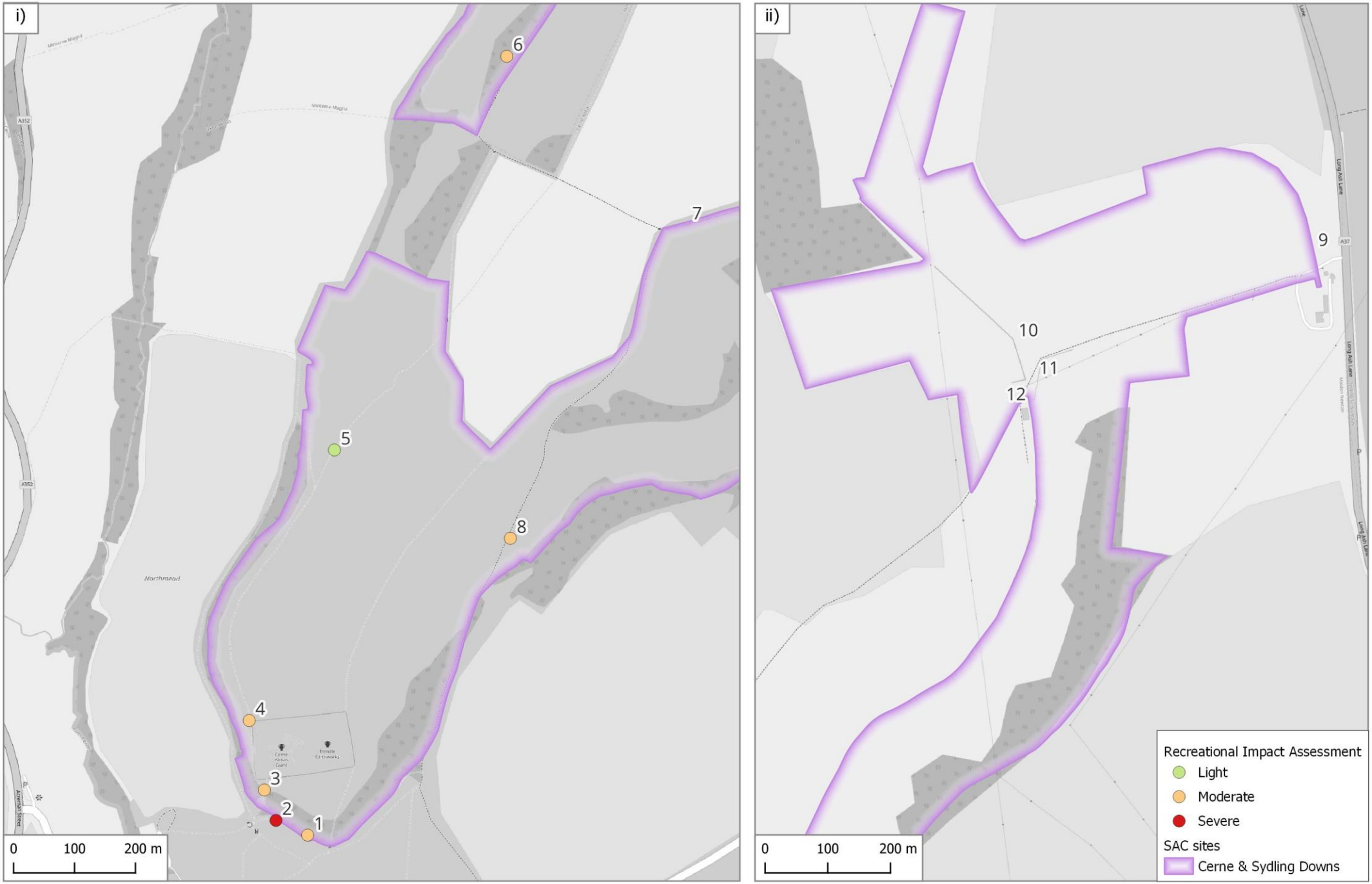


Figure 13: Trampling impacts. i) The main entrance to Giant Hill from the car park, and; ii) and iii) Desire lines around the Cerne Giant enclosure.

Map 7: Cerne and Sydling Downs Recreation Impact Assessment; i) Giant Hill and ii) Hog Cliff Down (see text for description of target locations on map).



Fontmell and Melbury Downs

5.12 Three areas of Fontmell and Melbury Downs were visited:

- Brandis Down walking into the nature reserve along the top track looping down through an area of mesotrophic grassland and woodland onto the chalk grassland back around to the car park using the same access gate.
- Fontmell Down, walking along the track to the footpath into the chalk grassland. From here, a route was followed down the slope, following the footpath and through into the western compartment of the downland. To return to the car park, the main horseshoe shaped compartment was followed, using the waymarked trail up and along the slope to return via the main track.
- Melbury Down, accessing from the central National Trust car park (where the visitor interviews had taken place; see Map 1) and through the Compton Down chalk grassland to Melbury Beacon and back along the ridge path to the road, which was about 50m north of the car park along a roadside footpath.

5.13 Map 8 shows the location where impacts were observed. We focussed on pinch-points where there was likely to be a concentration of activity, for example at entrances to sites or features such as the Melbury Beacon, and at viewpoints where stretches of foot paths and visitor routes could be observed.

5.14 Light to moderate recreation impacts were recorded along the track at the top of Brandis Down (points 1 and 2 on Map 8). Bare ground with vehicle tyres is unlikely to be attributable to recreation pressure, although there may be some footfall, particularly adjacent to the car park. There minor floristic modification close to the entrance underneath the woodland canopy. A lightly trampled footpath within the mesotrophic grassland supported shorter turf, but without any significant modification of the flora. There was no trampling or modification of flora observed within the chalk grassland at Brandis Down. No other impacts were observed within this compartment.

5.15 The walk from the car park at Brandis Down to Fontmell Down is approximately 500m. No dog faeces were recorded along the track or verge grassland which had a mixture of mesotrophic and chalk grassland species. There were moderate recreational impacts along the footpath throughout Fontmell Down. This was particularly evident along footpaths running vertically up and down-slope which had shorter turf, with small patches of bare ground and stepped turf on the very steep sections where footfall had

compacted the ground. At these locations, there was a modified flora comprisng rosette and deeply-rooted species like Daisy and Ribwort Plantain (points 4 and 5).

5.16 The steep slope of the horseshoe compartment at Fontmell Downs appears to corrall visitors along contour lines. Although this minimised path widening, it did create braided footpaths(Figure 14i). However, livestock have created similar paths around the main chalk grassland compartment and the extent to which these paths are due to creational pressure is not clear.

5.17 Light trampling may also be beneficial for Early Gentian, for example where this was identified in the western compartment at Fontmell Downs (point 6 on Map 8). This species prefers short turf with slight disturbance, and this type of habitat is supported in the areas bordering the some of the less used footpaths.

Figure 14: Trampling at i) Fontmell Downs showing the bare, sometimes braided path through the steep grassland and ii) Compton Down with the path denuded of vegetation and a wider trampled zone.

5.18 The track from the central National Trust Car Park through Compton Down was approximately 1-1.5m wide with a small path of bare ground presumably caused by footfall. Close to the bare ground, the flora was modified and including Ribwort Plantain and Daisy, but further away from the denuded path there was Common Bird's-foot-trefoil *Lotus corniculatus* and Horseshoe Vetch present within the more lightly trampled shorter turf (point 7; Figure 14ii). This was one of the more heavily used routes according to the visitor interviews (see Map 2).

5.19 The area of greatest trampling was immediately around Melbury Beacon (point 9). The soil was severely impacted and denuded of vegetation with the Beacon footings standing proud of the surrounding ground. There were four paths running from the beacon in different directions, and they were all trampled with modified vegetation but no areas of bare ground.

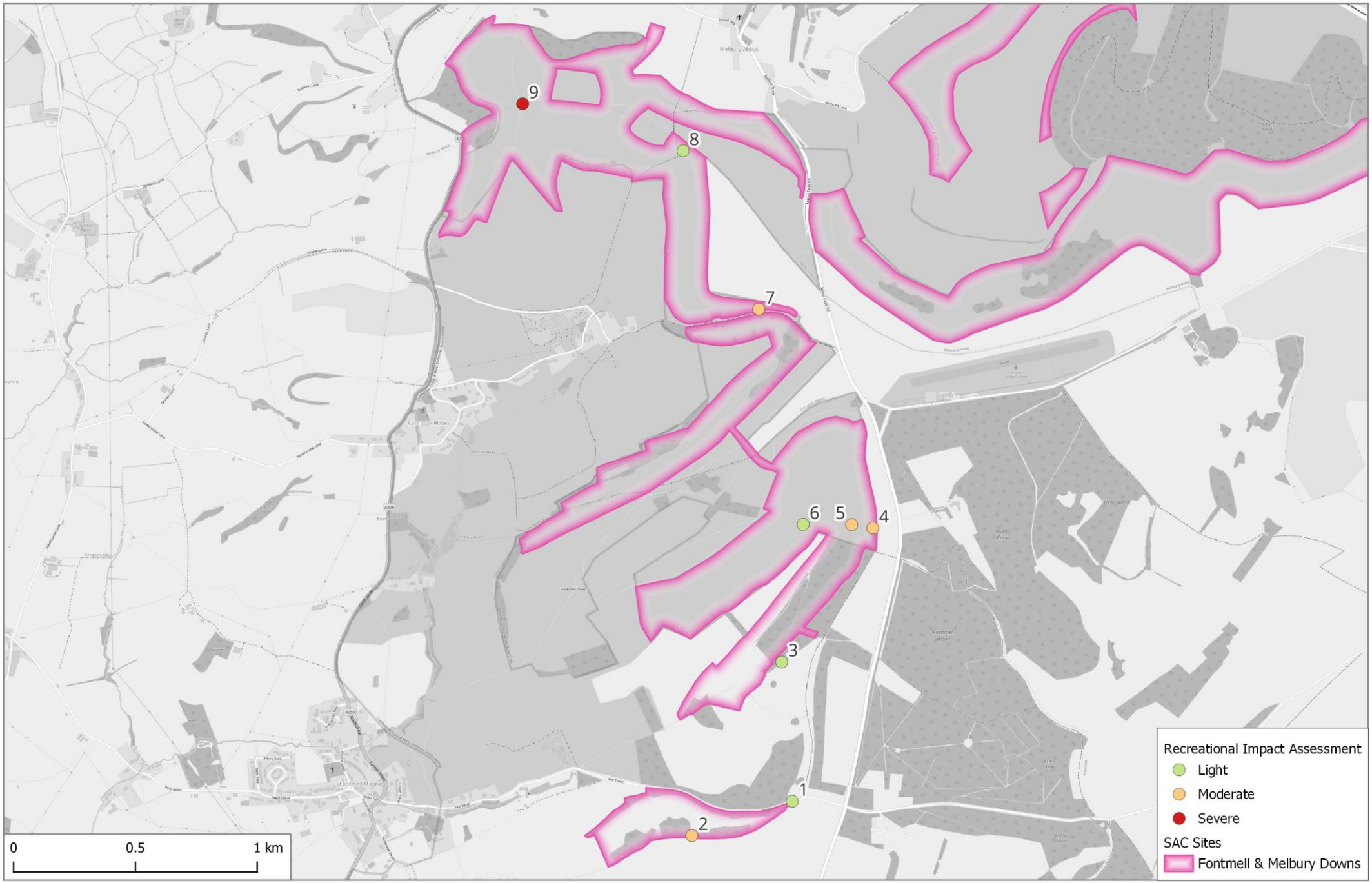
5.20 The ridge route back to the car park was one of the more heavily used routes according to the visitor interviews (see Map 2). Although this path was trampled, the terrain enabled people to spread across the chalk grassland and, apart from pinch points around gateways and at the Beacon, there was only light trampling across an area of approximately 2-3m along most of the routes (point 8). The vegetation was not severely impacted.

5.21 No dog faeces were recorded within the SAC compartments but there were dog faeces along track leading to the stile onto Compton Down, and the footpath between the car park and gate onto the SAC adjacent to the road.

5.22 The other main path used by interviewees passes from the central National Trust car park along the Ridge towards the village of Fontmell. This was not surveyed for recreation impacts, but could be subject to trampling on a similar scale and potentially dog faeces and urine as it is accessed directly from the car park via a kissing-gate.

5.23 The level of use did not appear likely to affect the management of the site and there were cattle grazing at Melbury and Fontmell. Dorset Wildlife Trust site managers confirmed that the management of both Brandis Down and Fontmell Down was not currently affected by recreational activities.

Map 8: Fontmell and Melbury Downs Recreation Impact Assessment (see text for description of target locations on map).



6. Discussion

Key findings

6.1 Visitor survey results from May show the two chalk grassland sites are primarily visited by people for walking (56%) with around a third (31%) of interviewees visiting to walk their dog. A proportion (21%) are holiday makers and nearly a third (31%) of interviewees were on their first visit. Visits are typically short (average duration 83 minutes). Visitors typically arrive by car (particularly so at Fontmell compared to Cerne Abbas).

6.2 The data suggest a mix of visitor use, encompassing tourists, people visiting for a day trip from reasonably far afield (including some visiting specifically for the wildlife interest), and more local people visiting regularly for activities such as dog walking.

6.3 Key metrics from the survey are given in Table 12.

Table 12: Selected metrics from the visitor survey. 'Home only' indicates the metric is extracted only for those on a short visit/day trip directly from home.

Metric	Both sites combined	Cerne Abbas	Fontmell
Number of survey points	2	1	1
Survey effort (hours of visitor survey work)	32	16	16
People entering site per hour (tally data)	4.5	4.6	4.3
Dogs entering site per hour (tally data)	1.5	0.8	2.2
Number of interviews	77	49	28
Number (%) of interviews (home only)	58 (75)	35 (71)	23 (82)
Average group size (interview data, home only)	1.7	1.5	1.8
% of interviewees visiting on their own	43	45	39
% dog walking stated main activity (home only)	38	37	39
% walking stated main activity (home only)	50	51	48
% visiting at least daily (home only)	28	29	26
% visiting at least weekly (home only)	50	46	57
% on first visit (home only)	17	26	4
% arriving by car (home only)	74	60	96
Median route length (km)	3.0	3.0	2.9
% stating close to home as main reason for site choice (home only)	0	0	0
median distance survey point to home postcode (km) (home only)	7.8	10.6	6.3
75th percentile survey point to home postcode (km) (home only)	17.0	20.2	12.4
% visiting who live within 1.5km	16	22	4

% visiting who live within 5km	25	27	21

Implications for the HRA of the Dorset Council Local Plan

6.4 The impact assessment found few signs of recreation impact. There was localised trampling at Giant Hill at Cerne Abbas, focused around the Giant's enclosure, and at the pinch points entering Giant Hill from the main visitors car park and around the bottom footpath underneath the tree canopy. This corresponds with the more heavily used routes walked by the interviewees. There was also trampling recorded along the main route from the central National Trust car park at Melbury Down towards the Beacon which also corresponds with a heavily used route identified by the interviewees.

6.5 The trampling damage was confined to paths and did not involve extensive vegetation loss, habitat damage or signs of erosion except on steeper slopes around the Giant enclosure and Fontmell where some turf stepping had occurred. Contamination (such as enrichment from dog fouling) appeared limited.

6.6 The management of the sites through livestock grazing does not appear to have been impeded by current recreation use.

6.7 Natural England's site improvement plans for Cerne & Sydling Downs[6] and for Fontmell and Melbury Downs[7] do not identify public access or disturbance as a current threat or pressure. While public access at these sites could have the potential to undermine the conservation objectives (for example in relation to targets relating to structure and function such as amounts of bare ground), this does not appear to be a current risk or likely risk in the long term. Marked changes in housing growth close to the respective sites are not a feature of the Dorset Council Local Plan and even large-scale growth in major towns would seem unlikely to have implications in terms of recreation impact. There were just 2 interviewees from Dorchester interviewed at Cerne Abbas (i.e. 4% of interviewees at Cerne Abbas) and neither were regular visitors. At Fontmell there were 3 interviewees from Shaftesbury (i.e. 14% of the interviewees at Fontmell) and none from Blandford Forum.

[6] http://publications.naturalengland.org.uk/file/5213405533175808
[7] http://publications.naturalengland.org.uk/publication/4927257646727168

6.8 Drawing on the visitor results and impact assessment we suggest there is no evidence of recreation currently being an issue of concern at either site and if visitor patterns remain as they are (and there is no reason to envisage a marked change), it would seem unlikely that Plan-led growth (focussed in the main settlements) could undermine site integrity. Plan-level HRA will need to check for allocations in close proximity to the sites (which could result in an increase in very regular use and dog walking), but otherwise it should be straight-forward to reach a conclusion of no likely significant effects for recreation with respect to Cerne and Sydling Downs SAC and Fontmell and Melbury Downs SAC.

7. References

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

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 reponse 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*

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	
Survey location code	
Map ref for route	
Sex of respondent	
Total number in interviewed group	
Total males	
Total females	
Total number of dogs	
Number of dogs off lead	

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
Cerne Abbas	12/05/2022	0	1	0	0
	14/05/2022	0	0	0	0
Fontmell	13/05/2022	0	0	0	0
	15/05/2022	1	3	4	4