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Dog-walkers on the Dorset Heaths: Analysis of questionnaire data collected by wardens on Dorset's Urban Heaths

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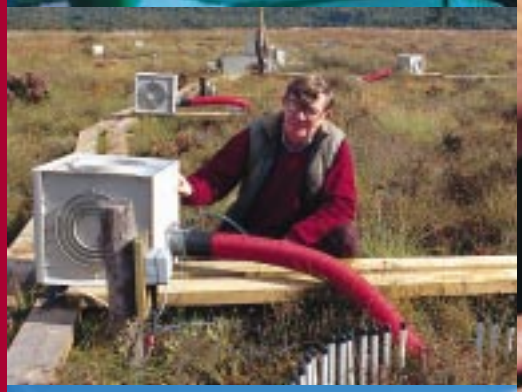

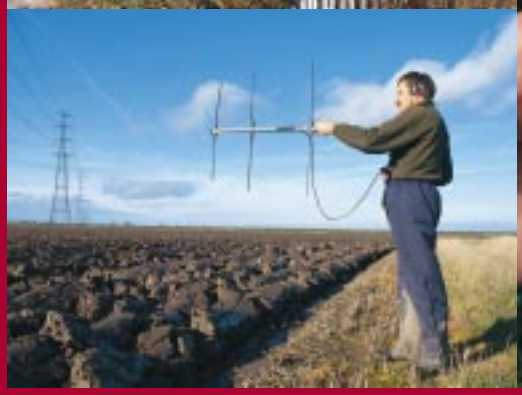

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Dog-walkers on the Dorset Heaths

Analysis of questionnaire data collected by wardens on Dorset's Urban Heaths

Durwyn Liley, John Underhill-Day & Nick Squirrell

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Project officer	Nick Squirrell, Dorset Team Nick.squirrell@english-nature.org.uk
Contractor(s)	Durwyn Liley (Footprint Ecology) John Underhill-Day (RSPB)

From October 2006, English Nature, the Landscape, Access and Recreation division of the Countryside Agency and the environmental land management functions of the Rural Development Service have been brought together to form a new independent body - Natural England. This research report was completed by English Nature, but has been published by Natural England to complete the *English Nature Research Reports* series.

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Summary

This report documents an analysis of visitor questionnaires, conducted on urban heathland sites in Dorset. The study focuses directly on a single user group, dog walkers, and addresses issues relating to dogs and dog walking only. The interviews were conducted at random, as time and opportunity allowed, by wardens on the heaths.

A total of 277 questionnaires were completed, across 18 different sites. One interviewee was questioned within each group of people approached. The mean group size was 1.4 people and 1.4 dogs. Significantly more women than men were recorded and most (68%) people interviewed were above 40 years old. The dog walkers interviewed typically lived locally, with 63% walking to the heath. Those that visited frequently (ie at least daily – 67% of interviewees) tended to live closest to the heath, to walk there and were more likely to visit in the early morning. Most visits were typically fairly short, with no-one visiting for more than 1.5 hours and 56% of visits lasting between 30 minutes and 1 hour. Those who spent longer travelling to get to the site, regardless of the mode of transport, spent longer on the heath once there.

Nearly half (45%) of all the dogs were medium sized (collie equivalent), a figure which matches the national average, suggesting that the heaths are perhaps not preferred by owners with a particular size of dog. The size of dog did not influence the amount of time spent walking the dog, nor the likelihood of the owner clearing up (or not) after their dog. Half of all interviewees stated that they always cleared up after their dog had fouled, and a further third (33%) of interviewees cleared up their dog's mess when it was on the path. Eighty-three percent of those interviewed were aware of dog bins and used them, but nearly one in ten of all interviewees (nine percent) were in some way critical of the dog bins (for example of their placement or frequency with which they were emptied).

Many different reasons were given as to why the people interviewed walked their dog on that particular site, and there was some evidence that the reason varied between sites. Across all sites, 70% of the people interviewed said they visited because of the open nature of the heath and the wildlife. Sixty-two percent also said that they visited because it was the nearest open space where they could exercise the dog freely.

Key findings for Site Managers and access management

Reasons for visiting the heaths, travel to and on the sites

- 68% of the dog-walkers interviewed were over 40 years old.
- 70 % visited because of the open nature of the heath and wildlife.
- 62% said they visited the heath as it was the nearest open space where they could exercise the dog freely.
- Only 3% of dog-walkers travelled from further than 5km to the heath.
- 63% of people interviewed had walked to the heath.
- 66% of those that had walked to the heath had walked less than 5 minutes to reach the heath.
- Significantly more of the dog-walkers interviewed in the early morning had arrived by car.
- For those dog-walkers that had driven to the heath, the distance travelled was significantly greater than those who walked (median of 1.34km compared to 0.32km).
- The number of dogs being walked was not related to the type of transport used.
- 56% of interviewees spent between 30 and 60 minutes on the heath.
- Those who travel a longer time spend longer on the heath once there.
- 79% of dog-walkers indicated they always use the same access point.
- 67% of dog-walkers visited at least daily.
- A higher proportion of those who visited the heaths frequently walked rather than drove to the site.
- Significant factors constraining time on the heath listed include, work, age/energy/capability of dog, size and site character was a factor for only 6%.
- 20% of dog-walkers did not feel time limited.

Behaviour and attitudes of dog-walkers and their dogs

- 83% of dog-walkers stated they were aware of dog bins and used them.
- 88% of dog-walkers felt that not cleaning up after their dogs is not acceptable.
- 53% indicated they always clear up if their dog fouls.
- 33% clear up only when it fouls on a main path.
- No difference in the stated clearing up behaviour was found between small, medium or large dog owners.
- Of the 382 dogs accompanying the people interviewed 45% were medium sized (collie equivalent).
- There were no differences between size of dog and length of time spent on the heath.
- 69% of dog-walkers felt “close control” means a dog returns when called even though the dog might be out of sight.

- 57% of dog-walkers thought only a few owners would keep their dog on a short lead during the bird breeding season if asked.
- 56% of dog-walkers felt being approached by an unknown dog was acceptable.
- 97% of dog-walkers considered dogs fighting with other dogs not acceptable.
- 96% of dog-walkers felt considered that a dog worrying livestock not acceptable.

Contents

1 Introduction

In 2003 there were an estimated 5.2 million dog-owning households within the UK (English Nature, 2001; PFMA, 2006). Dog-walkers typically prefer to exercise their pets where they can let their dogs off the lead (Taylor and others, 2005) and therefore open areas which are near to high human populations are often subject to visits from large numbers of dog walkers. This is typical of many lowland heathland sites, where studies of visitor access patterns have revealed high numbers of visitors, a high proportion of which are visiting to exercise their dog (see Barnard, 2003; Clarke and others, 2006; Liley, Jackson & Underhill-Day, 2006a; Liley, Mallord & Lobley, 2006b).

Questionnaires conducted with visitors to heathland sites (Clarke and others, 2006; Liley and others, 2006a; Liley and others, 2006b; Rose & Clarke, 2005) have revealed that dog walkers typically visit sites very frequently, often daily, and once at the heath, typically walk in the region of 2.5 km. Dog walkers interviewed on heathland sites, when compared to other sites (Liley and others, 2006b) place a greater importance on the ability to let their dogs off the lead, on not having to clear up after their dog and on the absence of livestock on sites, suggesting that heathland sites attract a particular subset of dog-walkers.

While the health benefits of dog walking and the importance of widespread access to the countryside have been recognised (Morris, 2003; Pretty and others, 2005; Taylor and others, 2005) there is also evidence that high visitor pressure, including dog walkers, may conflict with the conservation interest of lowland heathland sites. Southern heathlands have a limited global distribution, and are among the most threatened habitats in Britain and Europe (Noirfalise & Vanese, 1976). Not only do the UK heathlands constitute some 20% of the whole world resource of this habitat, but also hold some of the most extensive surviving remnants of humid and wet heathland and mire (Farrell, 1989; Tucker & Evans, 1997) and as such are recognised as priority habitats for conservation (English Nature, 2001; HMSO, 1994).

A review of dogs, access and nature conservation is provided by (Taylor and others, 2005). Disturbance to ground-nesting birds is one of the key causes for concern. Recent studies of nightjar, woodlark and Dartford warbler (all species nesting on or near the ground and listed in Annex 1 of the European Union's Directive on the Conservation of Wild Birds, EC/79/409 as amended), have shown human disturbance to impact on settlement or breeding success (Liley & Clarke, 2002, , 2003; Mallord, 2005; Murison, 2002; Murison and others, 2006). The use of video-cameras on nightjar nests (Woodfield & Langston, 2004) has confirmed that dogs can find nightjar nests and will flush adult nightjars from the nest. Other impacts of dogs include eutrophication as a result of dog fouling (Barnard, 2003; Shaw, Lankey & Hollingham, 1995) and conflicts with livestock grazing (Read & Williams, 1997; Taylor and others, 2005; Taylor and others, 2006).

There is a clear need for a detailed understanding of the behaviour and needs of dog walkers in order to facilitate the management of sites where conflict may occur. The questionnaire work described here was conducted with the aim of furthering our understanding of dog walkers and their behaviour on lowland heathland. The questionnaire work was conducted on urban heaths in Dorset. These are relatively small sites, surrounded by high human populations, and would therefore be expected to have high visitor pressure.

The questionnaire was designed by English Nature staff and other conservation managers and aimed to:

- Determine how far people travel to walk their dog on heathland.
- Determine why they choose to visit particular sites.
- Identify what features might be important in attracting dog walkers to visit alternative locations.
- Explore the perceptions of dog walkers towards different access management issues.
- Probe dog walkers' familiarisation of conservation organisations and conservation initiatives on the heathland sites they were visiting.

Wardens on the heaths, employed to maintain a presence on the sites, talking to visitors, watching for fires etc. were asked to interview dog walkers, using the questionnaire, as time and opportunity allowed. Footprint Ecology were contracted to analyse the results of the work. A copy of the questionnaire is given in Appendix 1.

2 Methods

The questionnaires were conducted between 27/7/2005 and 30/9/2005, on thirty four different dates. Fourteen of these dates were weekends, 19 were weekdays and one was a bank holiday. The questionnaires were conducted at various times of day, usually between 1100 and 1600, as time and opportunity allowed to fit with the warden's other responsibilities allowed. The amount of time spent interviewing people at each site therefore differs. Fourteen different wardens conducted the interviews; each was briefed before the interviewing commenced to ensure consistency of approach and to ensure that the questions were styled in the same manner.

Interviews were conducted randomly at various locations within the sites, not just at access points. The wardens' jobs required them to walk around the whole site, focusing their time on areas with the highest visitor pressure or access management issues. Only those groups walking a dog (ie those seen to be with a dog) were approached. All groups were approached in a standard fashion, and the interview conducted with one member of the group only. This person was selected at random.

Interviewees were asked for their home postcode, and this was subsequently used to calculate the distance travelled to the site, with the distance being expressed as the linear distance between the home postcode and edge of the heath at which they were interviewed.

3 Results

3.1 Summary of total number of interviews, time of day, gender and group size by site

A total of 277 questionnaires were completed, across 18 sites (Table 1 and Figure 1). Only one person per group was interviewed. Therefore the total number of people encountered (390 people) was a larger figure, with the mean group size was 1.4 people per group

(Table 1). There were significantly more females (217) than males (173) in the groups interviewed (X^2_1 with Yates' Correction = 4.74, $p < 0.05$).

Table 1: Summary of totals (number interviewed and total people) per site and across all sites

	No. of interviews	Total people	Males	Females	Mean group size
Bourne Bottom	10	11	6	5	1.1
Canford Heath	14	19	7	12	1.4
Corfe Hills	1	1	0	1	1.0
Dewlands	14	22	11	11	1.6
Dunyeats	2	2	0	2	1.0
Ferndown	52	88	41	47	1.7
Great Ovens	2	2	1	1	1.0
Ham Common	9	13	5	8	1.4
Kinson Common	14	17	4	13	1.2
Parley Common	11	16	8	8	1.5
Sions Hill	1	1	1	0	1.0
Slop Bog	12	16	5	11	1.3
St Catherine's Hill	44	65	29	36	1.5
Stephen's Castle	9	16	7	9	1.8
Talbot Heath	11	12	5	7	1.1
Turbary Common	20	25	12	13	1.3
Uddens	1	1	1	0	1.0
Upton Heath	50	63	30	33	1.3
	279	390	173	217	1.4

The interviews were largely conducted during the middle part of the day. Just four (1%) of the interviews were conducted before 9am and a further 43 (15%) after 6pm.

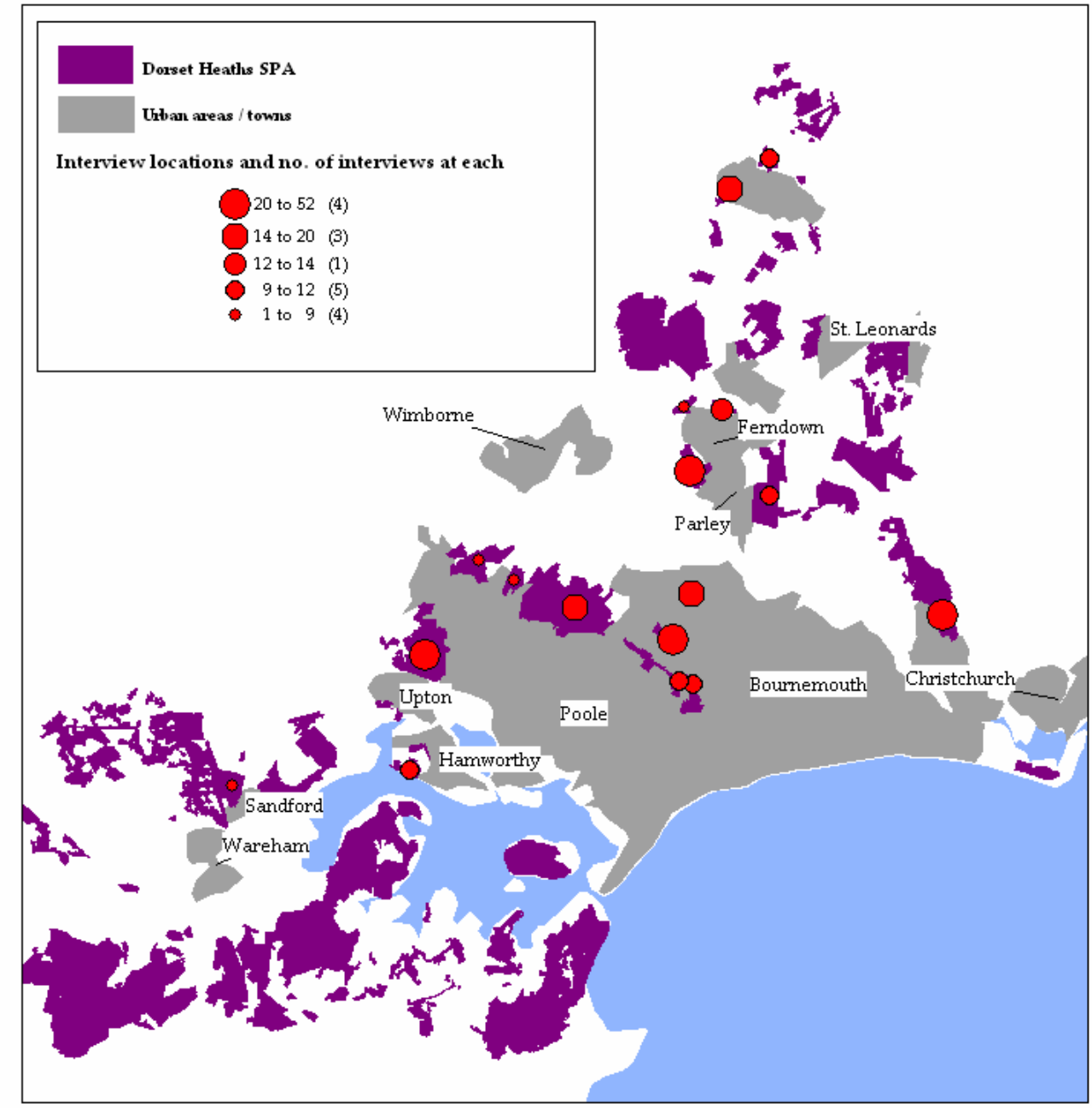


Figure 1: Locations where interviews were conducted. Large urban areas / towns are labelled, rather than the heaths. Dorset Heaths SPA downloaded from the English Nature website © English Nature.

3.2 Age of people interviewed

The ages of all people in each group were recorded in different age classes, (Table 2). Age was not recorded for all people interviewed; there were 18 interviewees who refused to give their age. Of these 362 people, six percent were under 20, and none of these were walking their dog on their own. Sixty-eight percent of people were above 40 years old.

Table 2: Summary of the number of people within each age class, grouped according to the size of the group. The proportion of people within each age class is significantly different from an even distribution ($X^2_6 = 145.9$, $p < 0.01$).

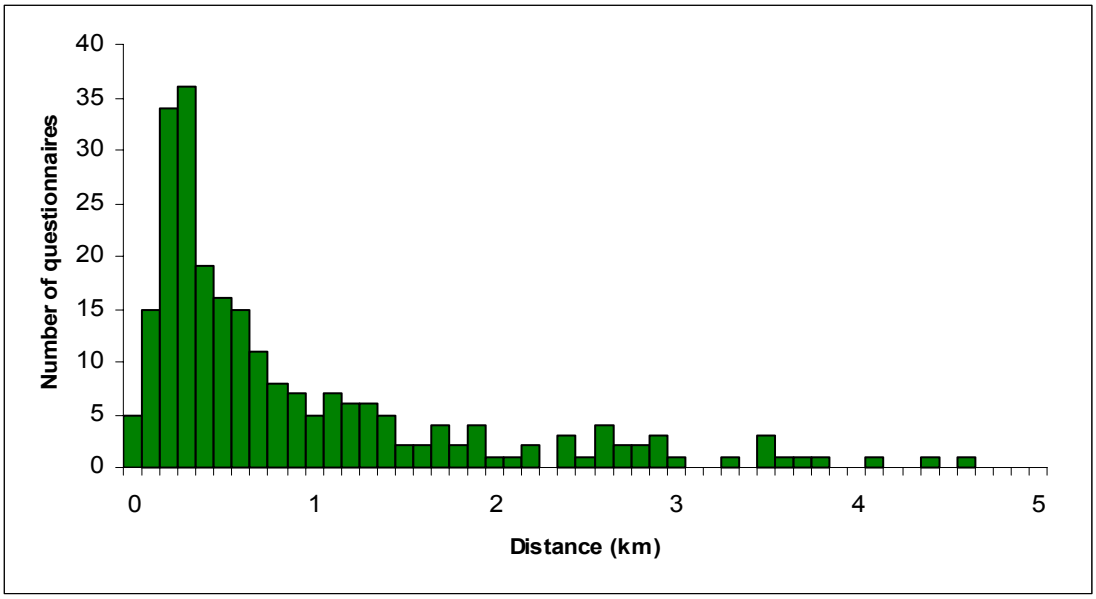
	Age class							
No. people in group	**<10**	**11-20**	**21 - 30**	**31 - 40**	**41 - 50**	**51 - 60**	**> 60**	**Total people**
1	0	0	18	31	54	34	54	191
2	2	5	7	29	26	19	34	122
3	3	3	2	2	6	3	2	21
4	6	2	0	7	1	2	0	18
5	0	1	0	0	7	2	0	10
TOTAL (%)	11 (3)	11 (3)	27 (7)	69 (19)	94 (26)	60 (17)	90 (25)	362 (100)

3.3 Distance travelled to reach the heath and mode of transport

Not all people interviewed were able to, or prepared to, give their full postcode. The distance travelled was calculated as the linear distance from the postcode to the access point, and this was calculated for 247 (89% of interviews). Visitors typically lived locally to the heaths (Figure 2), with all but 8 of the questionnaires from people living within 5km.

The majority of people interviewed (175, 63%) walked to the heath. Ninety-eight interviewees (35%) travelled by car and four people arrived by other means, such as jogging or by bike. Those that drove to the site travelled significantly further (median distance = 1.34 km, n = 86) than those that walked (median distance = 0.32km, n = 157; Mann-Whitney W = 14292, $p < 0.001$).

In comparison to those people that walked to the heath, more of those people who travelled by car tended to visit in the early morning - 42% of car drivers compared to 26% of walkers ($X^2_1 = 6.36$, $p < 0.05$). There was no difference in the number of dogs accompanying people that arrived by car or those that walked (numbers of dogs were grouped as 1 dog per group, 2 dogs per group and 3+ dogs per group: ($X^2_2 = 0.69$, $p > 0.05$).



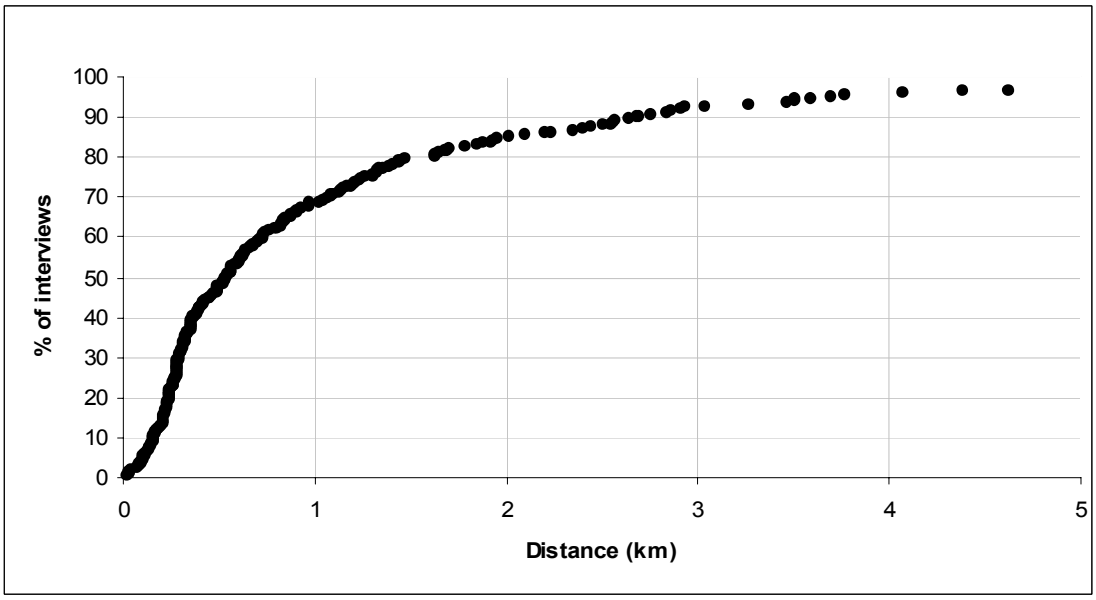


Figure 2: Distance travelled to reach the sites. Graphs show the number (above) and cumulative frequency (%, below) of visitors travelling to the sites interviewed. A further 8 (3% of interviewees who gave full postcodes) home postcodes were greater than 5km from the site where interviewed.

3.4 Time taken to reach the site

Interviewees were asked how long it took them to travel to the site. Those that lived further away did take longer to reach the sites (Figure 3). While this might at first be expected, the distance measurement is a linear distance from the home postcode, and therefore does not measure the actual distance travelled.

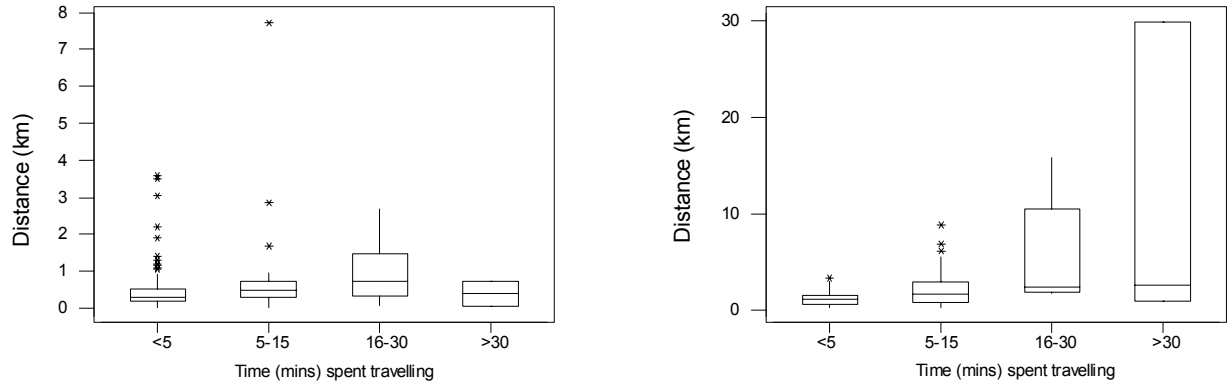


Figure 3: Distance travelled and time taken to reach the heath for walkers (left) and car drivers (right). Distance travelled is calculated as the linear distance to the heath from the home postcode of the interviewee. The time taken was estimated by the interviewee. The differences in the distance travelled are significant for both groups: for walkers Kruskal-Wallis H = 13.88, p = 0.003; for drivers H = 11.65, p = 0.009.

For the majority of people that walked to the heath, the journey was less than five minutes (66% of walkers), whereas only a third of car-drivers had a journey time of less than five minutes (Table 3).

Table 3: Journey time for interviewees according to mode of transport used to reach the heath. Figures give totals (%). The percentages describe the proportion of all (ie all 277) interviewees.

time spent travelling	walk	car	other	Total
< 5 minutes	116 (42)	31 (11)	2 (1)	149 (54)
5-15 minutes	43 (16)	57 (21)	1 (0)	101 (37)
16-30 minutes	13 (5)	6 (2)	1 (0)	20 (7)
>30 minutes	3 (1)	4 (1)	(0)	7 (2)
total	175 (64)	98 (35)	4 (1)	277 (100)

3.5 Time of day

Interviewee's were asked which time of day they tended to visit, and were given the choice of a number of different times of day. They were allowed to indicate more than one time of day. Forty-seven percent of interviewees (129 interviews) gave just a single time of day, and 9% (24 interviews) gave all five time categories, indicating that they did not tend to visit at a particular time. The remaining 44% of people interviewed gave between 2 and 4 different time categories.

People that visited early in the morning typically tended to visit at other times too, suggesting that those people that visited in the early morning would also walk their dog on the same site later in the day (Table 4).

Table 4: Time of visit and likelihood to visit at other times of day

Time of day when usually visit the heath	No. interviewees	Number (%) visiting only at that time and not tending to also visit at another time
visits early am (before 0800)	103	2 (2)
visits late am (0800 – 1200)	92	32 (35)
visits early pm (1200 – 1500)	93	36 (39)
visits late pm (1500 – 1800)	134	40 (30)
visits ppm (after 1800)	92	19 (19)

3.6 Time spent on heath

Over half of all interviewees (156, 56%) visited the heath for between 30 minutes and one hour. Only one of the 27 people who took more than 15 minutes to get to the heath in the first place spent less than 30 minutes on the heath, suggesting that those people with a longer journey time will spend longer once on the heath (Table 5). Seventeen percent of all visitors visited for less than thirty minutes.

Table 5: Time spent on heath and time spent travelling to heath. Table gives the number (%) of interviewees, with percentages calculated separately for each column

	Time spent travelling to heath				
Time spent on the heath	**< 5 minutes**	**5-15 minutes**	**16-30 minutes**	**>30 minutes**	**Total**
Few minutes	4 (3)	1 (1)	0 (0)	0 (0)	5 (2)
<30 minutes	29 (19)	13 (13)	1 (5)	0 (0)	43 (15)
30 minutes - 1 hour	89 (60)	55 (54)	9 (45)	3 (43)	156 (56)
1 hour to 1.5 hours	27 (18)	32 (32)	10 (50)	4 (57)	73 (26)
Total	149 (100)	101 (100)	20 (100)	7 (100)	277 (100)

3.7 Time limitation

People were asked what limited their time when they visited the heath. A wide range of answers were given, many of which were difficult to categorise. Table 6 summarises the range of responses given, work was the reason given by the most people, with 19% of interviewees saying that their visit was limited by work.

Table 6: Reasons given by interviewees as to why their time was limited while visiting the heath. Categories were devised subsequent to the questioning and the categories designed to reflect the range of answers given. Note that some people gave multiple reasons and their were also some people whose time was not limited.

Reason visit time is limited	Number (%) of interviewees
Work	53 (19)
Age, energy and capability of dog	28 (10)
Bad weather	24 (9)
Size and character of site	16 (6)
Age, energy and capability of person	14 (5)
Family Commitments	8 (3)

Reason visit time is limited	Number (%) of interviewees
Boredom / sanity	2 (1)
Problems with other dogs	2 (1)
Day length	2 (1)
Reports of anti-social behaviour	1 (0)
Problems with stock	1 (0)
On holiday	1 (0)
Many different reasons	46 (17)
Time not limited	56 (20)
No reply	23 (9)
Total	277 (100)

Those people whose visit was limited by work were not significantly more likely to visit in the early morning (Table 7).

Table 7: Number (%) of interviewees whose visit was limited by work and the number visiting the heath in the early morning. Percentages are calculated separately for each column. There was no significant difference , between those people whose visit time was limited by work and those whose visit time was not limited by work, in the number of interviewees visiting in the early morning ($X^2_1 = 3.95$, $p > 0.05$)

	Visit limited by work	Visit not limited by work	Total
Tend to visit in early morning	26 (49)	77 (34)	103 (37)
No tendency to visit in the early morning	27 (51)	147 (66)	174 (63)
Total	53 (100)	224 (100)	277 (100)

3.8 Number of dogs and size of dog

The number of dogs accompanying the people interviewed was 382, equating to one dog per person and a mean of 1.4 dogs per group. A significantly higher proportion of dogs were medium sized dogs, around the size of a Collie (Table 8). Most interviewees (74% of groups) had just one dog, and the maximum number of dogs per group was six. There was no evidence that those people with just one dog tended to have bigger dogs (see Table 8), and in fact, there was a higher percentage of large dogs in groups of 4 and 5 dogs (Table 8).

Table 8: Numbers of dogs within each size category. A significantly higher proportion of dogs were medium sized ($X^2_2 = 24.8$, $p < 0.01$)

Total number of dogs with interviewee	Small (Jack Russell or equivalent)	Medium (collie or equivalent)	Large (doberman or equivalent)	Count (No interviews)
1	55 (27)	100 (49)	49 (24)	204
2	38 (35)	48 (44)	22 (20)	54
3	7 (21)	14 (42)	12 (36)	11
4	3 (19)	5 (31)	8 (50)	4
5	5 (33)	0 (0)	10 (67)	3
6	0 (0)	6 (100)	0 (0)	1
Total	108 (28)	173 (45)	101 (26)	277

There were relatively few people walking a mix of different sized dogs, 254 (92%) of the interviewees were walking with one or more dogs of the same size category, and 22 (8%) interviewees were walking with dogs of different sizes.

Taking just those people walking with dog(s) of a single size class, there were no differences in the length of time spent on the heath and those with big or small dogs (Table 9).

Table 9: Time spent on heath and size of dog. Those interviewees walking with dogs from different size classes are excluded, and just those people walking one or more dogs of a single size class included. Table give the number (%), with the percentages calculated for each column, rather than across all cells

	Interviewees with single size class of dog:		
Time spent on the heath	**small dogs only**	**medium dogs only**	**large dogs only**
Few minutes	2 (3)	3 (2)	0 (0)
<30 minutes	10 (14)	18 (15)	11 (17)
30 minutes - 1 hour	38 (55)	64 (52)	39 (61)
1 hour to 1.5 hours	19 (27)	37 (30)	13 (21)
Total	69 (100)	122 (100)	63 (100)

3.9 Choice of access point

Interviewee's were asked if they always used the same access point. The majority (218 people, 79% of interviewees) answered that they did. There was no significant difference, between those that drove to sites and those that walked, in the number that used different access points. Mode of transport would therefore not seem to influence the likelihood of dog walkers always using the same access point. ($X^2_2 = 1.78$, $p > 0.05$).

3.10 Frequency of visit

Most people interviewed came either daily or more than once a day (67% of people visited at least daily), and less than 10% visited monthly or less (Table 10).

Table 10: Frequency of visit

Frequency of visit	**Total no of interviewees (%)**
unsure / no answer	2 (1)
> 1 day	77 (28)
Daily	109 (39)
Weekly	65 (23)
Monthly	10 (4)
Occasionally (less than monthly)	14 (5)
TOTAL	277

If we consider those people that visit at least on a daily basis as frequent visitors and those visiting weekly, monthly or occasionally as infrequent visitors, there are some clear distinctions between the two groups. Frequent visitors were more likely to visit on foot ($X^2_2 = 44.15$, $p<0.01$), with 77% of frequent visitors walking to the heaths and only 35% of infrequent visitors walking to the heath. As might be expected, those that visited frequently lived closer to the heaths (median distance from heath for those visiting frequently = 0.357 km, n = 169; median distance for those visiting infrequently = 1.245 km, n = 79; Mann-Whitney W = 17544.5, $p < 0.001$). Frequent visitors were also more likely to visit in the early morning, before 8am ($X^2_2 = 9.11$, $p<0.01$), with 43% of interviewees that visited frequently also saying that they tended to visit in the early morning, compared to 25% of interviewee that visited infrequently tending to visit in the early morning.

3.11 Visits to alternative sites

One question addressed whether the interviewee visited different types of site, with interviewees able to indicate whether they visited five different types of alternative site, split further into formal and informal. Sixty-five (23%) of interviewees did not visit any other types of site. For those people that did, 113 interviewees (41%) visited just one other type of site and no one visited six or more types of site. Pine plantations, local parks and footpaths / bridleways would appear to be the most frequently visited other sites (Table 11).

Table 11: Alternative types of sites visited and number (%) of interviewees visiting each type. Interviewees were able to give more than one answer

Alternative types of site	Number (%) of interviewees
also use local park - formal	48 (17)
also use local park - informal	41 (15)
total using local park	86 (31)
also use local oak wood (broadleaved) - formal	9 (3)
also use local oak wood (broadleaved) - informal	36 (13)
total using local oakwood	45 (16)
also use local pine plantation - formal	21 (8)
also use local pine plantation - informal	69 (25)
total using local pine plantation	90 (32)
also use local grassy fields - formal	17 (6)
also use local grassy fields - informal	55 (20)
total using local grassy fields	72 (26)
also use footpaths/bridleways - formal	46 (17)
also use footpaths/bridleways - informal	41 (15)
total using footpaths / bridleways	86 (31)

3.12 Use and attitude towards dog bins and dog fouling

Interviewees were asked about their behaviour when their dog fouls. Most people (146, 53%) replied that they always cleared up after their dog and only 15 interviewees (5%) never cleared up after their dog. A third of all interviewees (83 people, 33% of interviewees) cleared up after their dog only when it fouled on a main path.

Those interviewees with one or more large dogs were not more likely to always clear-up after their dogs ($X^2_2 = 0.87$, $p > 0.05$). Fifty percent (102 interviewees) of those with a small or medium dog answered that they always cleared up after their dog, and 60% (44 interviewees) of those with one or more large dogs always cleared up when their dog had fouled. Similarly those with small dogs were neither more, or less, likely to clear up after their dog, with 99 interviewees (52%) with no small dog saying that they always cleared up after their dog had fouled and 47 interviewees (53%) of those people with one or more small dogs saying they always cleared up when their dog had fouled ($X^2_2 = 0.01$, $p > 0.05$).

Four people declined to answer about their use of dog bins. Of the 273 interviewees that answered, the majority (83%) answered that they were aware of dog bins and used them (Table 12).

Table 12: Responses to questions about dog bins

Responses	Number of replies (%)
Aware of dog bins and use them	227 (83)
Aware of dog bins and do not use them	16 (6)
Not aware and would use if provided	26 (9)
Not aware and would not use anyway	4 (1)

Of those who were aware of the dog bins but did not use them, three interviewees said they took their dog waste home (as did two others, one that answered that they also used bins and another that refused to answer). Other comments by respondents who were aware of the bins but did not use them included: bins were unnecessary; that they did not want to carry the waste around; that they were unable to stop as they could not control the dogs on the lead and that because the dogs were running off the lead and off the paths there was no need to pick up the waste.

There were four people that said they were not aware of bins and would not pick up their dog's waste anyway, one replied that they were not aware that there was a need to pick up dog waste from heaths and another thought that if bins were provided they would be likely to be destroyed by children.

Seventeen respondents said there were not enough dog bins, and four thought that the bins were always full. Three of those that were not aware of the bins and would use them if provided said that there was no available bin at a specific location. Thus of all respondents, 9% were critical of the number, location or maintenance of the dog bins.

3.13 Perception of 'close control'

Interviewees were given a number of options and asked which best fitted their definition of a dog that is under close control. Two-thirds of interviewees selected the option that their dog was "allowed out of the owner's sight, but returns when called" (Table 13).

Table 13: Interviewee's definitions of a dog that is under close control

Option	Number (%)
Dog kept on short lead	4 (1)
Dog kept within owner's sight and returns when called	22 (8)
Dog allowed out of owner's sight but returns when called	192 (69)
Dog kept at heel, within 5m, at all times	41 (15)
Other	18 (6)
Total	277 (100)

3.14 Likelihood of dogs being kept on leads during bird breeding season

Question 13 addressed the whether the interviewee believed dog walkers would be likely to keep their dog on a lead between March 1st and July 31st (this is the timing required on CRoW access land for dog walkers to keep their dogs on a lead). The question asked what proportion of people the interviewee thought would keep their dog on a lead if asked to, and the interviewee was given a number of options, summarised in Table 14. The most commonly given response, given by 57% of interviewees, was that few dog walkers would do as asked.

Table 14: Proportion of dog walkers believed likely to keep their dog on a short lead between 1 March and 31 July, if asked to do so

Response	Number (%)
all dog walkers	5 (2)
most dog walkers	50 (18)
a few dog walkers	158 (57)
no dog walkers	48 (17)
no opinion/don't know	16 (6)
Total	277 (100)

3.15 Reason for visiting the site

Interviewees were given a number of options as to why they visited the particular site at which they were interviewed. Seven interviewees gave no answer. Some interviewees gave multiple responses, with one interviewee giving seven different reasons as to why they visited the site. The average number of reasons, per interviewee, was 2.3. The most common reason, of those offered in the questionnaire, was a liking for "the open nature of the heath and wildlife" (Table 15). "Nearest open space to exercise dog freely" was also a popular choice.

Table 15: Reasons for visiting the heath. Table gives number (%) of interviewees that selected the options, which were suggested to them by the interviewer. Interviewees were able to select more than one reason

Reason for visiting the heath	Number (%) of interviewees that selected the reason
Like open nature of heath and wildlife	194 (70)
Getting away from hurly burly for a quiet walk on heath	118 (43)
Nearest area of open space to exercise dog freely	172 (62)
Can get to heath by car and exercise dog quickly	56 (20)
Less restricted to keeping dog on lead and cleaning up	51 (18)
Know other dog users by sight & feel more secure	54 (19)
None of the above	6 (2)

There were some differences in the reasons given by interviewees at different sites (Figure 4). There were significant differences between sites in the number of people saying they visited the site to "get away from the hurly burly for a quiet walk on the heath" ($X^2_{10} = 25.21$, $p < 0.01$). Notably few people seem to select this as a reason for their visit to Canford Heath and to Kinson Common. There were also clear differences between sites in the number of people who visited the site because they "knew other dog users by sight and felt more secure" ($X^2_{10} = 28.68$, $p < 0.01$). A particularly high number of visitors visited Slop Bog for this reason. With the other reasons, there was either no significant difference between sites, or the expected number of people below 5 (meaning a chi-squared test would not be appropriate).

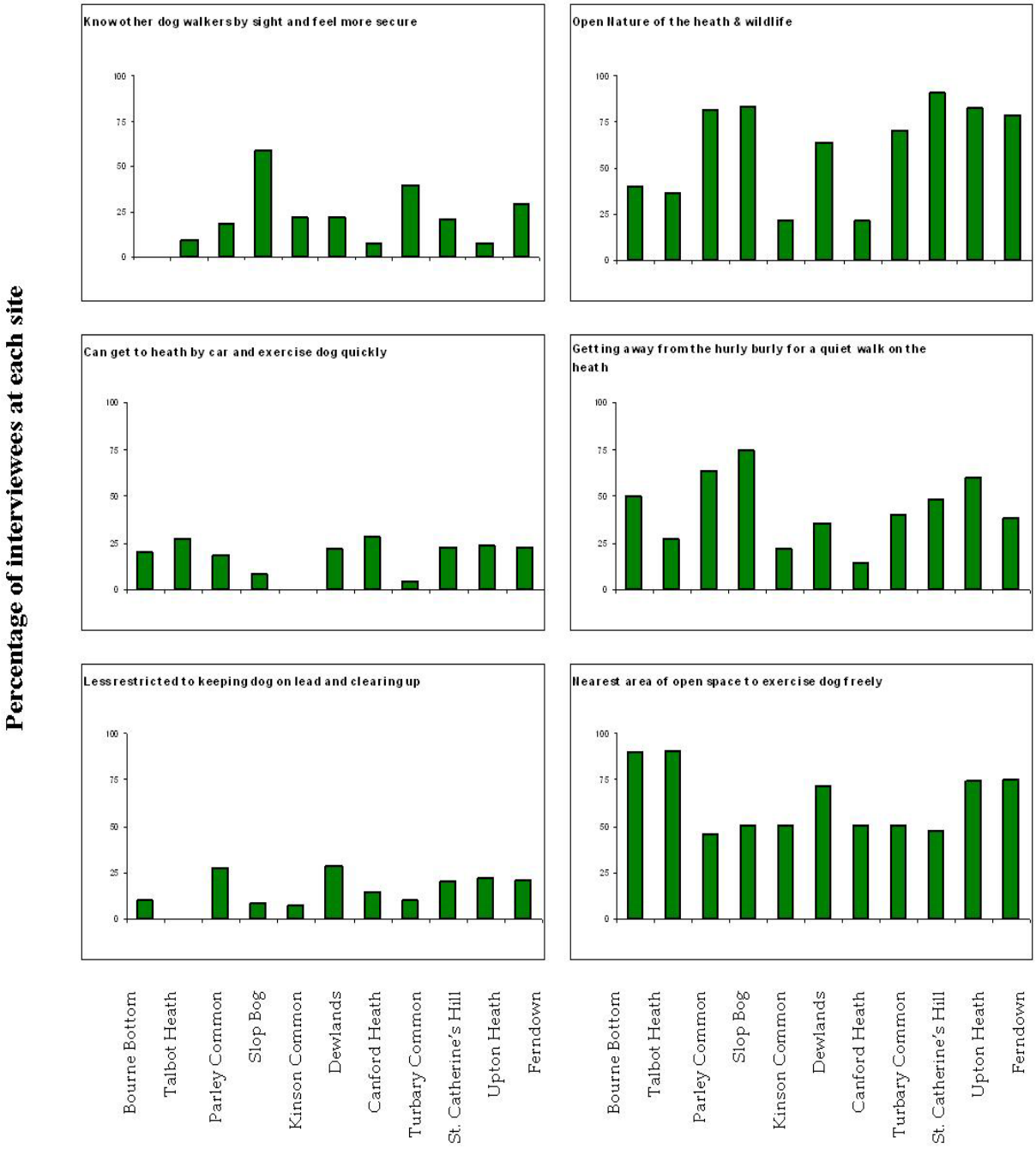


Figure 4: Percentage of people giving reasons for visiting the site, by site. Only sites where at least 10 people were interviewed are included.

The questionnaire design also allowed space for any other reasons to be recorded. A might be expected, a wide range of reasons were given, with a total of 43 questionnaires having some 'free text' element as to why people chose to visit the site at which they were interviewed. A selection of these reasons are summarised / grouped in Table 16.

Table 16: Some of the additional reasons for visiting the heath given by the 43 interviewees who gave additional reasons to the options given in Table 15. The reasons given were difficult to categorise, and only those that did fall neatly into groups are summarised below.

Reason given	Number of interviewees
Beauty / attractiveness of site	10
Proximity to home / ease of access	8
wildlife / nature	2
Long personal history of use	2
Good for dog walking (safe for dogs, familiar to dog etc)	5
Like walking on different sites / variety of sites	2

3.16 Acceptable behaviour by dog walkers

Each interviewee was asked whether they considered different behaviours by other dog walkers acceptable or not. These behaviours included not clearing up after the dog, the dog fighting with other dogs, dogs worrying livestock and being approached by an unknown dog. The results are summarised in Table 17. Not clearing up, dogs fighting and dogs worrying livestock are clearly considered unacceptable by the majority, whereas just over half the people interviewed did not consider being approached by an unknown dog unacceptable.

Table 17: The number (%) of people finding different behaviours acceptable. Percentages are calculated separately for each row.

Behaviour	Acceptable behaviour ?			Total
	Yes	No	Not sure	
Dog walkers not cleaning up after their dogs foul	13 (5)	245 (88)	19 (7)	277 (100)
Dog that is fighting with other dogs	2 (1)	269 (97)	6 (2)	277 (100)
Dog that is worrying the livestock	2 (1)	267 (96)	8 (3)	277 (100)
Being approached by an unknown dog	155 (56)	60 (22)	62 (22)	277 (100)

3.17 Awareness of conservation initiatives

One question asked whether the interviewee had heard of various conservation initiatives on the Dorset Heaths. Few people had heard of the Hardy's Egdon Heath Project compared to the RSPB Dorset Heathland Project and the Urban Heaths Life Project (Table 18). The Urban Heaths Life Project was the best known of the three

Table 18: Number (%) of interviewees aware of different heathland conservation projects in Dorset

	Conservation project		
	Hardy's Egdon Heath - *Tomorrow's heathland heritage*	RSPB Dorset Heathlands Project	Urban Heaths Partnership
Number (%) of interviewees that have heard of project	37 (13)	99 (36)	133 (48)

4 Discussion

The high visitor pressure on many southern heathlands, and the potential conflict with the conservation of these sites, has been the subject of much interest (see Underhill-Day, 2005 for a review), and English Nature has commissioned a number of recent studies of visitor access patterns to lowland heaths (Clarkeand others, 2006; Liley and others, 2006a; Rose and others, 2005). While these studies have resulted in a much better understanding of visitor use and visitor pressure, they have necessarily been generalist in their approach. Two of the studies (Clarke and others, 2006; Liley and others, 2006a) have sampled people at standard time periods, allowing direct comparisons between sites and between times of day. They have shown that dog walkers make up the highest proportion of visitors (80% of people visiting the Dorset Heaths). The questionnaire data detailed here specifically focus on dog walkers, and also focuson a particular suite of sites, the more urban heaths on the fringe of Bournemouth and Poole. As such this work adds important extra information to our understanding of visitor access patterns to lowland heathlands.

Interviews were conducted at a wide range of sites, all of them relatively 'urban' in character, but reflecting a good geographical spread. As the interviewing was done in an ad hoc fashion, the questionnaires must not be considered a random sample, and in particular relatively few early morning walkers were interviewed. This may explain why a relatively high proportion of people interviewed were over 60 (25% of interviewees, section 3.2, Table 2). These people will be more likely to be retired and therefore are able to visit during the day.

A high proportion (62%) of the people interviewed visited because the heath was their nearest available open space where they could exercise their dog freely (section 3.15, Table 15). This suggests that the heaths are fulfilling an "open space" role for the local communities involved. As might be expected, given that the heathland sites where the questionnaires were conducted were mostly quite small and with a high density of housing in the immediate vicinity, a high proportion of visitors walked to the heaths and all visitors were very local. About one-third (31%) of the people interviewed also visited urban parks to walk their dog (Section 3.11, Table 11), perhaps reflecting the urban context within which many of these sites lies. The proportion of visitors arriving on foot is higher than the 36% found across the Dorset Heaths as a whole in the study by (Clarke and others, 2006). As the Clarke study included both rural and urban heaths, the high proportion of people walking could be feature of more urban sites, and is to be expected where there are more houses close to the heath (Clarke and others, 2006; Liley and others, 2006a). Alternatively the difference could be due to the sampling method used in this study, as the sample of dog walkers interviewed is biased towards those visiting during the middle of the day.

There seemed to be relatively little variation in the times people tended to visit (section 3.5, Table 4). Late afternoon was the time period indicated by most interviewees, but there was relatively little variation between the time periods. Early morning was also a popular time, with 37% (from table 4) normally visiting before 8am. This was despite the fact that most interviews were conducted during the middle of the day and only one interview was actually conducted before 8am.

Early morning and late afternoon would fit with people walking before and after work, but may also reflect the needs of the dogs, in terms of exercise requirements. The fact that there was so little variation between time periods may be a function of the interviewing protocol (ie

the time periods when the wardens were on the heath) or the fact that a high proportion of the dog walkers interviewed were of retirement age and therefore able to walk during the day.

Medium sized dogs were the most popular (section 3.8, Table 8), and are also the most popular across the nation. Using five size classes (including toy and giant), 41% of the nation's dogs are classed as medium (PFMA, 2006), compared with the 45% found in this study (using three size classes). This is some indication that the heaths are not favoured by the owners of particular sizes of dogs (which may have different exercise requirements).

The question that addressed the interviewee's behaviour when their dog fouls (see section 3.12) evoked answers which may not always reflect the actual situation. Such a question is likely to be answered so that the interviewee is not compromised, and therefore the proportion of people that claim to clear up after their dog should perhaps be treated with caution. Approximately half (53%) of all people interviewed claimed to clear up after their dog. Dog bins are known to be effective in reducing the amount of dog waste on paths (Bull, 1998; Taylor and others, 2005), though the reduction in waste on the paths is not always proportional to the amount of waster in the bins, suggesting that users may move their dog's waste off paths, but not necessarily place it in dog waste bins. It is perhaps revealing that although 83% of people claimed to always clear up after their dog, or to clear up when their dog fouled on a path (section 3.12), 69% defined close control as the dog being out of sight, but returning when called section 3.13, Table 13). Clearly if a dog is out of sight it is unlikely that the owner can be confident of always clearing up its mess.

The Urban Heaths Life Project was the conservation initiative that the most people had heard of, with nearly half (48%) of interviewees stating that they were aware of the Project (section 3.17, Table 18). Of the three conservation initiatives named, the Life Project employs the most people and employs wardens to provide a visual presence on the heaths and to talk to people. The higher percentage of interviewees that had heard of the Project may be an indication of the success of this strategy, although there may be some bias due to the fact that the interviewer was employed by the Life Project (and therefore was wearing identification relating to the Project).

The analysis provides some key points for access management on the sites where the questionnaires were conducted:

1. A high proportion of dog walkers are middle aged – mature (over 40), and therefore any interpretation or access management initiatives might be best aimed at this age group.

2. Visitors are very local to the heaths, with a large proportion walking to the sites. There is the possibility that there are strong local connections with the sites, which could mean that people will have an interest in the management of the site.

3. Sixty-two percent of people visited because it was their nearest open space, therefore if alternative locations / sites were created, these might be used as an alternative if they were closer than the heathland.

4. The perception of close control for most dog walkers was of a dog out of sight and that returned when called. Most people interviewed thought that, if asked to do so, few dog walkers would keep their dog on a lead if requested to. This would suggest that some

proactive measures would be required to ensure dogs were kept on a short lead during the bird breeding season, as is required under the CRoW Act.

Some additional work would be of interest regarding dogs and dog walking on these sites. We would recommend the following:

1. Spatial analysis across the area of sites used by dog walkers. Such a study would involve interviewing dog walkers at different sites and identifying all the sites where they walk. This could even be done through an interactive web site. The work would provide a strategic assessment of dog walking sites within a landscape area and answer questions such as which non-heathland sites are also used ? Are heathland sites the only choices? What are the minimum site sizes? How far will people actually travel to reach sites where they can walk their dog?

2. Robust comparisons between sites as to the effectiveness of measures to reduce dog fouling. Measures such as wardening, sign-posts, leaflets, provision of dog bins etc. could be tried at different sites, and the behaviour of dog walkers compared.

3. As above, measures to keep dogs on leads during the breeding season could be compared between sites. Measures such as signs, wardens and the introduction of livestock could be implemented on different sites and the dog walking behaviour compared, providing robust experimental evidence of the effectiveness of the different measures.

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Appendix 1: Questionnaire

How many in the user group?

Number	1	2	3	4	**5 +**
Male					
Female					

How many dogs in the group?

	1	2	3	No.
Small (Jack Russell)				
Medium (Collie)				
Large (Doberman)				

Age of walker	1	2	3	4	5
>10					
11-20					
21-30					
31-40					
41-50					
51-60					
<60					

1. **What is your postcode?**

2. **How do you travel to the site?**

   Walk ☐ Bus ☐ Car ☐ Other ☐

3. **What time of day do you normally visit?**

   Early morning (before 8am) ☐

   Late morning (8-12.00 am) ☐

   Early afternoon (12- 3.00 pm) ☐

   Late afternoon (3.00 – 6.00) ☐

   Evening 6.00 pm onwards ☐

4. **To help us contact users like yourself, do you always use the same access point onto the heathland?**

   Yes ☐ No ☐

5. **How often do you visit the site?**

More than once a day ☐
Daily ☐
Weekly ☐
Monthly ☐
Occasionally (less than monthly) ☐

6. **We are interested in improving on the areas for available for exercising your dog/s. What other kind of areas do you walk your dog on now and would you say they are?**

Formal/Informal ☐
Local park ☐
Local oak wood (broadleaved) ☐
Local pine plantation ☐
Local grassy fields ☐
Only generally stay on footpaths/bridleways in countryside ☐

7. **How long do you usually spend going to and from your house and walking on the heath?**

Travelling to the site

> 5 min ☐
5-15 mins ☐
16 – 30 mins ☐
< 30 mins ☐

On the heathland site

Few minutes ☐
< 30 mins ☐
30 mins – 1 hour ☐
I hour – 1 ½ hours ☐
Over 1½ hours ☐
Total time ☐

8. **What most limits how long you are able to walk on the heath?**

9. **If your dog fouls whilst walking this site, would you…**

Clean up on the main common ☐

Clean up on the paths ☐

Clean up on other areas ☐

Always clean up ☐

Never clean up ☐

10. **Which of the following best describes your awareness and use of dog bins at this site?**

I am aware of them and use them ☐

I am aware of them and do not use them (please specify why below) ☐

I an not aware of them but would use them if provided ☐

I am not aware of them and would not use them anyway (please specify why below) ☐

Reason for not using the dog bins

11. **Which reason best describes why you visit this site to walk you dog? (Please give your top three answers)**

I like the open nature of the heath and its wildlife ☐

I enjoy getting away from the hurly burly of modern life for a quiet walk on the heath ☐

The heath is the nearest area of open space where I can exercise my dog freely ☐

I can get to the heath by car and quickly exercise my dog ☐

I feel less restricted to keeping my dog on a lead and picking up after my dog

I know the other users/dog walkers by sight and feel more secure ☐

None of the above ☐

Other reasons (please state):

12. **Which of the following statements best fits your definition of a dog that is under 'effective control'**

A dog that is kept on a 'short' lead ☐

A dog that is kept within the owners sight and returns to the owner when called ☐

A dog that is allowed out of its owners sight but returns to the owner when called ☐

A dog that is kept at heel (within five metres of the owner) at all times ☐

Other (please specify)

13. **Many areas of heath are now formally recognised as open countryside. How do you feel about being asked to keep your dog on a short lead from 1 March to 31 July. To protect nesting birds and wildlife Do you feel this likely to be done by?**

By all dog walkers ☐

By most dog walkers ☐

By a few dog walkers ☐

By no dog walkers ☐

No opinion/Don't know ☐

14. **Do you find the following behaviour acceptable on this site?**

	Yes	No	Not sure
Dog walkers that do not clean up after their dogs foul	☐	☐	☐
A dog that is fighting with other dogs	☐	☐	☐
A dog that is worrying the livestock	☐	☐	☐
Being approached by a dog you don't know	☐	☐	☐

15. **Have you heard of any of these heathland projects?**

Hardy's Egdon Heath –*Tomorrows heathland heritage* ☐

RSPB Dorset Heathlands Project ☐

Urban Heaths Partnership ☐

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Research Information Note

English Nature Research Reports, No. 713

Dog-walkers on the Dorset Heaths: Analysis of questionnaire data collected by wardens on Dorset's Urban Heaths

Report Authors: Liley.D, Underhill-Day. J & Squirrell, N.

Date: 2006

Keywords: Conservation, access, attitude, heathland, heath, dog-walker, dog, disturbance, Dorset, Special Protection Area, Special Area of Conservation, Ramsar, urban

Introduction

The south east corner of the county of Dorset holds some 17% of the UK lowland heathland, of which over 90% has been designated Sites of Special Scientific Interest (Michael 1996). Over 7950ha of the Dorset heathland has been designated as Special Areas of Conservation and nearly 8170 ha classified as a Special Protection Area under the EC Birds and Habitats Directives. Within the same area of south east Dorset there is also one of the largest conurbations in the south west of England, Bournemouth and Poole, with a population of 400,000, as well as 4.5 million tourists visiting the Isle of Purbeck annually. This generates considerable pressures on the nearby heaths from both residents and visitors. This pressure varies between the more rural heaths and those located close to the residential areas.

Public access to lowland heathland has been found to lead to an increase in wild fires, the introduction of alien plants and animals amongst a number of other pressures. Dog walkers and their pets are associated with the following effects: the deposition of nutrients, loss of vegetation and soil erosion and disturbance to birds, all of which harm the flora and fauna.

What was done

The purpose of the work is to analyse and comment on dog-walker survey data collected during the summer of 2005 the Urban Heaths Partnership (UHP). The questionnaire survey of 15 questions was conducted over a total of 18 heathland sites (all of which have European and or international recognition as a Special Protection Area for birds (SPA), Special area of Conservation(SAC) and/or Ramsar) during the summer of 2005. The survey was conducted between 27 July and 30 September. In total 277 questionnaires covering a total of 390 individuals were completed by visitors walking dogs on UHP sites in 2005. Dorset Environmental Records Centre compiled the questionnaire data into a Microsoft Access database and the results analysed by Footprint Ecology for English Nature.

Results and conclusions

1. 77% of dog-walkers who visited frequently (at least daily) were more likely to arrive on foot, 63% of all dog-walkers arrive on foot.
2. Only 3% of dog-walkers travelled from further than 5km to walk on the heath.
3. 56% of dog-walkers spend between 30 and 60 minutes walking on the heath, the further they have travelled the longer they tend to stay on the heath.

continued

4. 62% said they visited the heathland as it was the nearest open space where they could exercise the dog freely
5. 83% of dog-walkers stated they were aware of dog bins and used them and 88% of dog-walkers felt not cleaning up after their dogs is not acceptable, however only 53% indicated they always clear up if their dog fouls.
6. 69% of dog-walkers felt "close control" means that their dog returns when called even though out of sight.
7. 57% of dog-walkers thought only a few owners would keep their dog on a short lead during the CRoW bird breeding season if asked.
8. 97% of dog-walkers felt dogs fighting with other dogs is not acceptable and 96% of dog-walkers felt a dog worrying livestock is not acceptable.

English Nature's viewpoint

The effects of visitor pressure on heathland are of conservation concern. Previous research has focussed particularly on impacts due to arson as well as disturbance of nightjars, woodlark etc. This report is aimed at improving the current understanding of how users of the urban heaths, dog-walkers in this case, access and use the sites. The research supports the growing body of evidence demonstrating the link between local users and their adverse effects on heathland habitats and wildlife. The research supports nature conservation aims to reduce urban related impacts by providing important evidence about the behaviour and attitudes of dog-walkers which will facilitate the development of policy aimed at changing regular users' attitudes and behaviour and diverting pressures onto alternative sites to be refined and assessed. The dog-walking community are seen shown as already having largely positive and responsible attitude towards nature conservation issues and as local users of habit are particularly suited to ongoing education initiatives designed to improve or redirect undesirable behaviours.

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Top left: Using a home-made moth trap.
Peter Wakely/English Nature 17,396
Middle left: Co_2 experiment at Roudsea Wood and Mosses NNR, Lancashire.
Peter Wakely/English Nature 21,792
Bottom left: Radio tracking a hare on Pawlett Hams, Somerset.
Paul Glendell/English Nature 23,020
Main: Identifying moths caught in a moth trap at Ham Wall NNR, Somerset.
Paul Glendell/English Nature 24,888