



UHP Annual Monitoring Report 2022

Chris Panter & Zoe Caals

UHP MONITORING: 2022

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



FOOTPRINT
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Summary

Bird data

Woodlark: 62 pairs
 ↑ 14% on 3 yr avg (20 sites)



Dartford Warbler: 563 pairs
 ↑ 49% on 3 yr avg (29 sites)



Nightjar: 494 territories
 ↑ 16% on 3 yr avg (28 sites)



People Counters

54 counters – overall ↓3%,
 but ↑ 29% on heaths.



*Compared to a 5 yr avg
 heaths had ↑ 26%*

Pattern of use peaked in
 Spring, little peak in summer -
possibly due to heatwaves.

Wardening

New recording launched - 640 hrs
 logged, with 250 interactions.

*81% chats due to no specific
 issues. 77% discussed wildlife.*

Only 2.5% were negative



SANG/HIP Sites

1 New SANG; 5 ha. 2% increase in area.

Total SANGs: 18 sites- 245 ha.

2 new HIPs. Total HIP:

8 sites, 94 ha.



Vehicle Counts

11,273 vehicles ↓ 13%
 compared to last 3 yrs.

At heaths reduction was greater

*(↓ 18%). Highest
 count was on the
 August Bank Hol -
 622 more vehicles
 than "typical".*



Engagement

New UHP website launched!

Education – 118 events with 518 people. *No
 large events were held reducing usual reach
 from 10,000+ levels, pre-covid*

Social media – 0.4 million reach, down a
 third on previous year, but values
 incomplete.

Heath week 2022 – nationwide, prominent
 takeovers, ↑ 1300% on Instagram,
 ↑ 98% on Facebook .



Incidents & Fires

143 fires in total. 33.6 ha
 burnt ("typical" is 39 ha)

*4 >1 ha inc. Canford Heath 17
 ha and Studland 5 ha.*

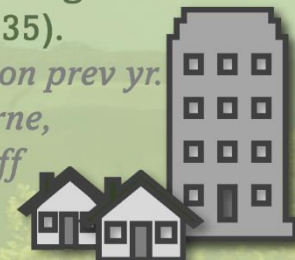


Housing

265,338 new dwellings within the
 5km buffer (+2,435).

Equates to 1% ↑ on prev yr.

*Mostly at Wimborne,
 Canford. West Cliff
 and Parkstone.*
































































































































Dorset Dogs

Onsite events limited –only
 in-person events in
 December, with 103 people.
 487 hrs of K9 Firewise. 34
 new members recruited
 (lowest to date), *but less
 emphasis on getting new
 members*



Table 1: SSSI summary table for percentage change in key datasets in 2022 compared to the previous 5 years. Sizes are sorted alphabetically within 3 size classes (>100 ha, 100-30 ha, >30 ha). White diamonds indicate a change of less than 10%, small arrows a change of 10% to 50% and large arrows of more than 50%. Blanks indicate where there is no recording and therefore no change (in the case of fires, no previous fires).

SSSI	Size	Birds	Fires	Vehicles	Sensors
Arne					
Canford Heath					
Corfe & Barrow Hills					
Cranborne Common					
Hartland Moor					
Holt and West Moors Heaths					
Holton and Sandford Heaths					
Morden Bog and Hyde Heath					
Parley Common					
Poole Harbour: Brownsea					
Povington and Grange Heaths					
Rempstone Heaths					
St Leonards and St Ives Heaths					
Stoborough & Creech Heaths					
Stokeford Heaths					
Studland & Godlingston Heaths					
Town Common					
Turners Puddle Heath					
Upton Heath					
Winfrith Heath					
Black Hill Heath					
Blue Pool and Norden Heaths					
Bourne Valley					
Brenscombe Heath					
Christchurch Harbour					
Corfe Common					
Ferndown Common					
Ham Common					
Hurn Common					
Lions Hill					
Slop Bog and Uddens Heath					
Turbary and Kinson Commons					
Warmwell Heath					
Corfe Mullen Pastures					
Ebblake Bog					
Horton Common					
Oakers Bog					
Poole Harbour: Lytchett Fields					
The Moors					
Thrasher's Heath					
Verwood Heaths					
Wareham Meadows					
Worgret Heath					

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Acknowledgements

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Most of the work collecting the data is down to Chloe Lewis (UHP) and Amy Gallagher (Purbeck and West Dorset Warden), but also wider UHP staff and individual local authority wardens, and our thanks go to all for the data collection.

Bird data are collected by the RSPB for UHP and their own monitoring, and our thanks to Chris Dieck for supplying the bird data to us. Thanks also to Jon Corkill (Dorset Environmental Records Centre) for supplying the incident data.

1. Introduction

- 1.1 This report is produced for the Urban Heaths Partnership (UHP) and is the second in a series of annual reports for the next 5 years. Previous annual monitoring reports have been conducted by Footprint Ecology and reported on a financial year basis (e.g. 1st April 2019 to 31st March 2020). They were becoming increasingly lengthy documents, and monitoring did not cover some important monitoring aspects. Following a large scale review of the UHP mitigation (Panter et al., 2022), this reporting has now evolved to cover a calendar year, produce reports as quickly as possible so that data can be used in the coming season, and changed to cover data such as warden time, housing change and SANG/HIP data, that was previously omitted. This is the first calendar year report to be produced.

The Dorset heaths

- 1.2 Dorset holds some 7,500 ha of heathland (see Rose et al., 2000), and much of this is designated as being of European importance (see Map 1). The designated sites are the Dorset Heathlands Special Protection Area (SPA), the Dorset Heaths Special Area of Conservation (SAC) and the Dorset Heaths (Purbeck & Wareham) and Studland Dunes SAC. The designations at the international and national levels reflect the conservation importance of the sites, which hold internationally important bird species (breeding Nightjar, Woodlark and Dartford Warbler), all six native reptiles, various rare plants and notable rare and regionally distinct invertebrates.
- 1.3 The Dorset heaths are fragmented (Webb, 1989, 1990) and many fragments lie within the increasingly urban landscape adjacent to the conurbations of Poole and Bournemouth. Within the local councils of Dorset and BCP there is continual, increasing pressure for more growth and new housing. Increased development can have a range of impacts on heathland and these are well documented (for reviews see Haskins 2000; Underhill-Day 2005; Liley et al. 2006). Such impacts include numbers of pet cats and increased predation of wildlife, increased fire risk, disturbance impacts, eutrophication from dog fouling, anti-social behaviour, contamination, fly tipping, and the introduction of alien plants and animals.

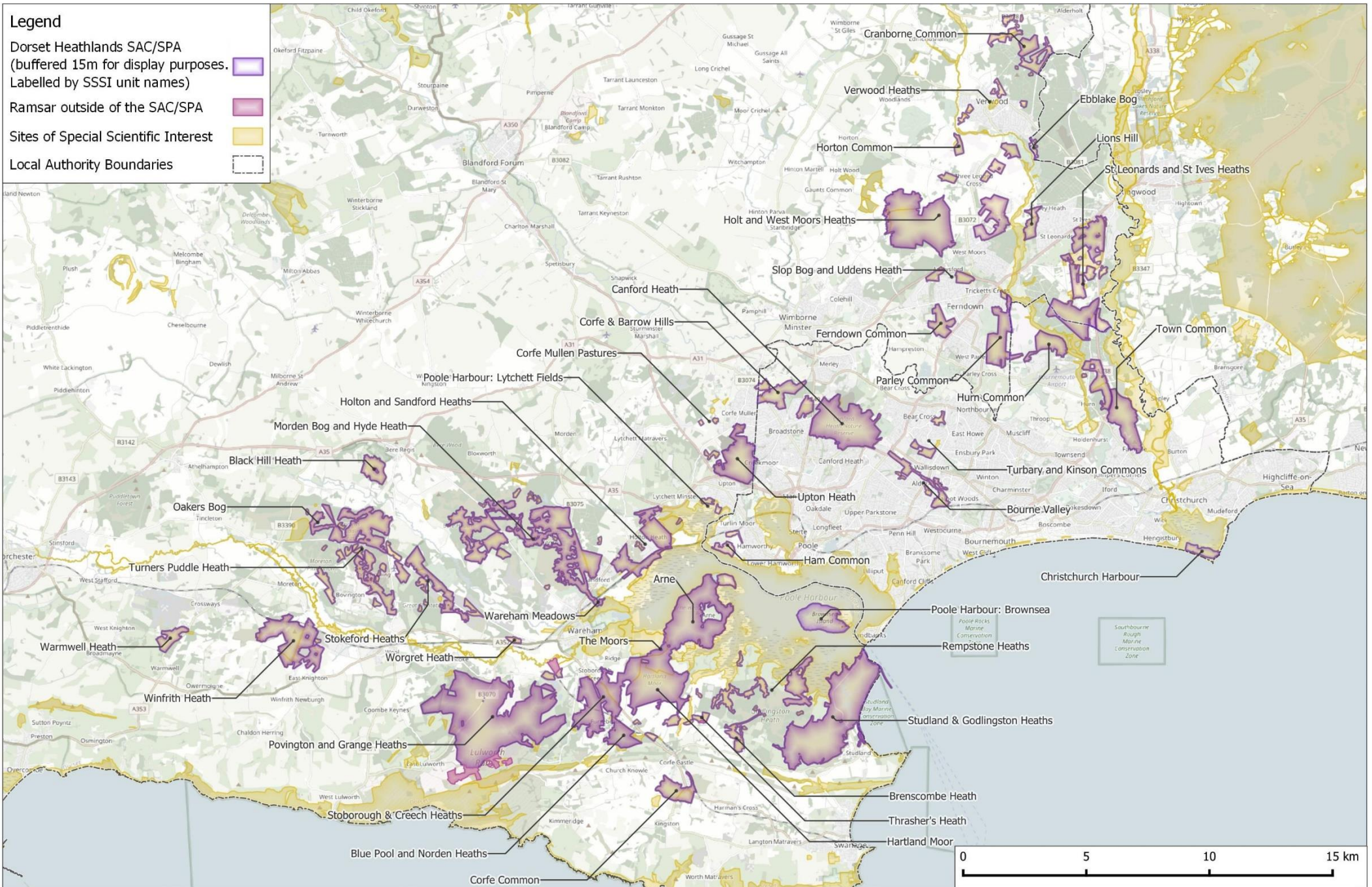
Strategic Access Monitoring and Mitigation

- 1.4 These impacts mean that the Dorset and BCP local authorities are unable to rule out adverse effects on integrity for the relevant European heathland sites as a result of the in-combination effects of new development. However, avoidance or mitigation measures are possible, and these have been established strategically

across the relevant local authorities since 2006, and enshrined in relevant strategic planning policy. Measures include additional infrastructure, both off-site and on-site, and a range of mitigation focused projects. One of the key physical mechanisms is the provision of new greenspaces (Suitable Alternative Natural Greenspaces, SANGs) or more general improvements of existing recreational areas or supporting land (Heathland Infrastructure Projects, HIPs).

- 1.5 The ongoing updates to the monitoring strategy (see Liley 2007; and revisions by Fearnley & Liley 2014; Panter & Liley 2015, 2017) set out the monitoring elements necessary to coincide with the mitigation. The strategy recognised that both the species present and recreational use of the heathlands must be monitored to evaluate the levels of recreational use and distribution of the vulnerable species. With a baseline established, it should be possible to check the effectiveness of measures to mitigate for or avoid additional urban pressures on European Sites.
- 1.6 Monitoring acts as an early warning and allows mitigation measures to be adjusted as necessary to reflect changes in access patterns, types of use and changes in the distribution and abundance of key species. It is important to note that strategies include monitoring of mitigation sites (e.g. non-heathland), as well as heathland.

Map 1: Component SSSIs of the Dorset Heathlands SAC/SPA and labelled site names, as used in report.



2. Bird monitoring

Introduction

- 2.1 Three breeding bird species are interest features of the Dorset Heathlands SPA: Nightjar *Caprimulgus europaeus*, Woodlark *Lullula arborea* and Dartford Warbler *Sylvia undata*. Changes in the distribution and relative abundance of these species are good indicators of the biological status of the heaths, and the three species are vulnerable to impacts from recreation and fire.
- 2.2 The ongoing recording of the numbers and distribution of these three species across sites is an important part of monitoring. Surveying has been undertaken by the RSPB, commissioned through the UHP, and focussed primarily on the urban heaths. A summary and review of trends in the three species in Dorset since the early 1990s is provided in Liley & Fearnley (2014). It is important to note the counts indicate territories, but that these are determined with different survey methodologies as appropriate for the different species (e.g. night-time surveys of churring males for Nightjar).

Results

- 2.3 Results presented in this report are for spring 2022 season. Results for 2021 from the core squares focuses on 31 sites surveyed for the species (see Table 2). Over time the number and composition of the individual sites surveyed for each species has differed. As such a mean number of birds per site is presented (see Table 2). However, this obviously depends on which sites were not surveyed, as shown by later data. Table 2 places the results from 2022 in comparison to the previous survey year (2021) and the short term average from the previous 3 years (2019, 2018 and 2017) based on the simple mean. It is also important to note that no surveys were conducted in 2020 due to the Covid pandemic.
- 2.4 To examine this in more detail we considered only the sites with comparable data between the current year's data and an average number for the site. We consider the mean, median and range in values to express the full variability over time. Again, a short-term average considers the previous 3 years' data (Table 3), while the long-term average considers all UHP data (Table 4), of which the number of years for each species was variable.

Table 2: Summary of the number of birds (i.e. pairs for Dartford Warbler/Woodlark and territories for Nightjar), by species, recorded in 2022. Also shown is a value of the mean birds per site for 2021 and the previous 3 years shown for comparison.

	Woodlark	Dartford	Nightjar
Number of site counts 2022	31	31	31
Total number of birds 2022	62	563	494
Mean birds per site 2022	2.0	18.2	15.9
Number of site counts 2021	29	29	30
Total number of birds 2021	39	461	421
Mean birds per site 2021	1.3	15.9	14.0
Number of site counts previous 3 years	32	32	32
Total number of birds previous 3 years	50	429	423
Mean birds per site previous 3 years	1.6	13.4	13.2

Table 3: Comparison of 2022 data to short term average from the previous 3 years' data using values for each site.

	Woodlark	Dartford Warbler	Nightjar
n	20	31	28
mean % change compared to previous 3 years	116%	67%	27%
median % change compared to previous 3 years	14%	49%	16%
range in % change compared to previous 3 years	-67% to 800%	-40% to 220%	-28% to 200%

Table 4: Comparison of 2022 data to long term average (all previous years' data) using values for each site.

	Woodlark	Dartford Warbler	Nightjar
n	20	31	28
mean % change compared to all previous years	143%	48%	37%
median % change compared to all previous years	30%	34%	35%
range in % change compared to all previous years	-59% to 1100%	-38% to 243%	-23% to 131%

2.5 To examine the change at individual sites, the difference between the number of birds per site in 2022 and the short term 3 year average from the previous year was calculated. From these values, the sites with the top 3 increases and bottom 3 and decreases in the number of birds for each species is given in Table 5

Table 5: Sites with the greatest increase and reduction for each bird species. Values are the difference between the values in 2022 and the 'short term average' (the previous 3 years of data). Blue indicates an increase and red indicates a decrease (maximum 3 sites shown). Note only 2 sites with a reduction for Dartford Warbler.

Woodlark	Dartford Warbler	Nightjar
Top 3		
Avon Heath South +4.3	Upton Heath +19.3	Holt Heath/ Whitesheet +15.7
Barnsfield Heath +3.5	Canford Heath +12.3	Canford Heath +13.7
Winfrith & Tadnoll Heath +3.3	Hyde's Heath +11.0	Avon Heath North +8.3
Bottom 3		
Holt Heath/ Whitesheet -2.0	Grange Heath -3.0	Verwood Forest/ Cranborne Common square -2.7
Avon Heath North -1.3	Bourne Bottom (Valley) -0.7	Barnsfield Heath -2.5
Sandford Heath -1.0		Ferndown Common -2.3

2.6 The results presented in above tables and in Figure 1 below suggest for each species:

Woodlark:

- Woodlark are always the most variable of the three Annex I breeding bird species, due to the low numbers.
- Overall mean **birds per site was higher**, up from 1.3 to 2.0 (following a drop the previous year). However numbers on a subset of 20 **comparable sites was up around 14%** compared to the short term average (median).
- There were quite a few sites with increases, notably at **Avon Heath South, Barnsfield Heath, Winfrith & Tadnoll Heath and Verwood Forest/ Cranborne Common square**. The largest reduction compared to the short term average was Holt Heath/ Whitesheet, with 2 fewer territories than the average for the previous 3 years.

Dartford Warbler:

- Dartford Warbler are also quite variable, influenced particularly by harsh winter weather conditions (i.e. 2014 cold winter and 2018 'Beast from the East') – see Figure 1.
- Overall mean **birds per site was higher**, up from 15.9 to 18.2. The number of pairs recorded on a subset of 31 **comparable sites was up around 49%** compared to the short term average (median).
- There had been some substantial increases at a small number of sites compared to the short term average. Four sites had **increases of more than 10 pairs: Upton Heath, Canford Heath, Hyde's Heath and Arne Heaths** in 2021 compared to the average of the previous 3 years (this equated to between a 16% to 220% increase at these individual sites). Numbers compared to the short term average had **fallen at only two sites: Grange and Bourne Bottom** (a reduction of 38% and 40% respectively compared to the previous 3 years).

Nightjar:

- The number of territories from recorded churring males is often the most stable of the 3 species and also shows general continued upward trends.
- Overall mean **birds per site was higher**, up from 14.0 to 15.9. The number of territories recorded on a subset of 28 **comparable sites was up around 16%** compared to the short term average (median). Increases were consistent with the long term average with a **35% increase compared to all previous years' data**.
- At individual sites, increases of more than 10 churring males, compared to the short term average number, were recorded at **Holt Heath/ Whitesheet, and Canford Heath**. Compared to the short term average for the last 3 previous years there were fewer birds recorded at a number of sites including; Verwood Forest/ Cranborne Common square, Barnsfield Heath and Ferndown Common.

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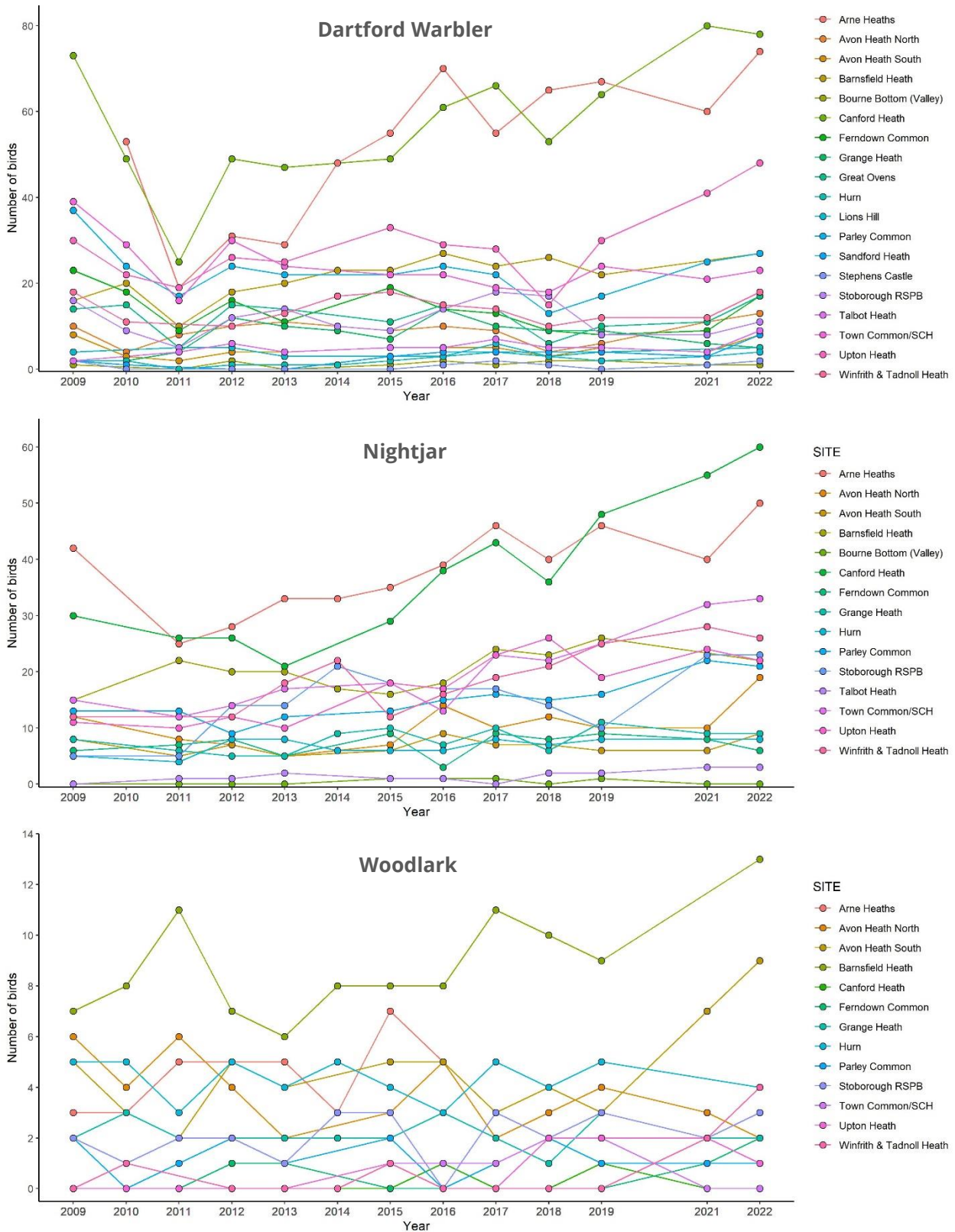
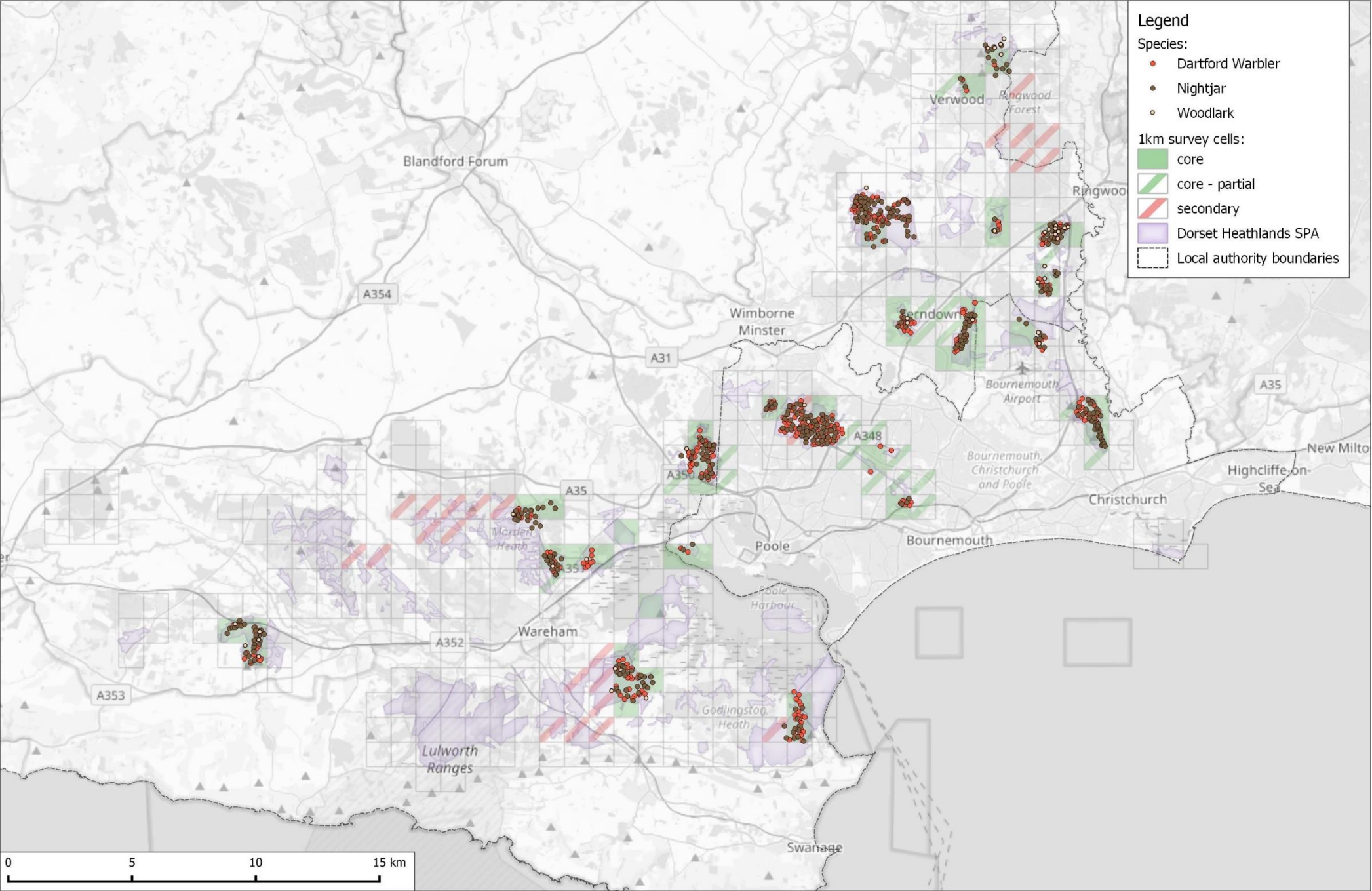


Figure 1: Number of birds recorded (by the differing standard survey methodologies) at each site (or 1km squares which represent a subset of sites). Note that the number of sites presented differs for each species due to different filters applied in order to select sites with the most data (Dartford \geq 12 years, Nightjar \geq 10, Woodlark \geq 12). Data gaps between years are present for all species.

Map 2: Individual territory centres from 2022 monitoring.



3. SANG and HIP site provision

3.1 This section updates the number of mitigation sites - both SANG and HIP sites which have become 'live' during the period. This highlights sites which have opened during the period for sites which had no previous access, or for sites which did already have access at the time that improvements were implemented.

3.2 The following HIP and SANG sites were opened in 2022:

- Stoborough RoW HIP (no area measurement) – Improvements to existing public Rights of Way from Stoborough to Bog Lane SANG as part of Purbeck Access Project
- Slop Bog HIP (0.22 Ha) – Fire access improvements to Slop Bog SSSI to help manage any future fires
- Barrow Hill, Corfe Mullen SANG (5.44 ha) Dorset Wildlife Trust site

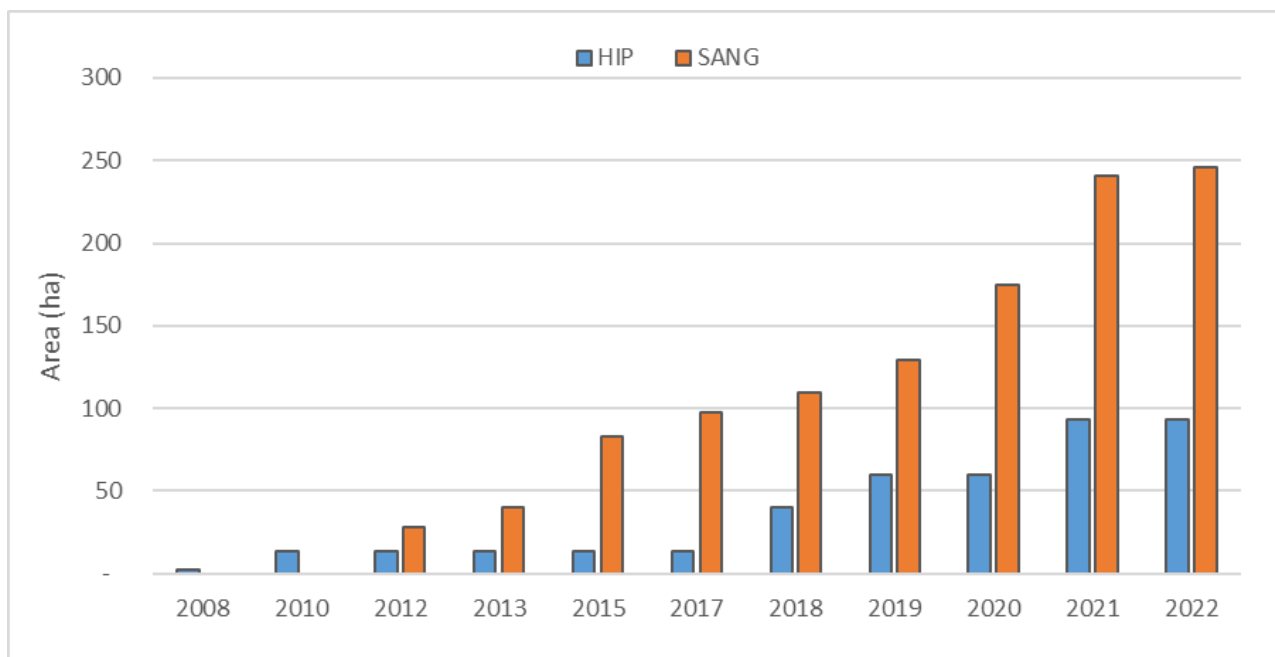


Figure 2: The combined area of all SANG and HIP sites shown over time. (Note some without a year of opening or an area figure).

3.3 The increase in SANG area has been one of the smallest this year to date, with just a 2% increase in area. This small increase relative to continued housing growth, will be in part due to SANGs (particularly strategic SANGs) which were opened one or two years earlier (i.e. SANGs around Wimborne). In addition, there are many more potential SANGs earmarked, but some of these are strategic SANGs which will come forward when local plans progress.

- 3.4 The distribution of SANG and HIP provision is shown in Map 3, but has not been able to be updated since the previous version.

Visitor data

- 3.5 Visitor surveys are conducted occasionally in UHP monitoring, as a way of recording both visitor numbers and visitor behaviours, attitudes and thoughts on sites. Current visitor surveys focus on SANGs, which are usually required to have visitor monitoring. The current timetable for surveying is set out in Table 6, although it should be noted these are not rigid dates and can shift depending on availability of resources, works at sites, or new sites/developments in the wider area.
- 3.6 In 2022 face-to-face interviews were still under a backlog due to the pandemic. However UHP staff conducted interviews over 384 hrs at the following sites:
- UCP Phase 1 round 3 (32 hours)
 - UCP Phase 2 round 2 (32 hours)
 - Bernards Mead HIP (32 hours)
 - Bog Lane round 2 (32 hours)
 - Frenches Farm round 2 (16 hours)
 - Canford Park SANG Phase 1 round 2 (16 hours)
 - Slop Bog¹ (16 hours)
 - Woolslope SANG* (16 hours)
 - Riverside West Moors* (16 hours)
 - Purbeck Park² (96 hours)
 - Riversmeet SANG (32 hours)
 - Dogdean SANG (32 hours)
 - Bytheway SANG round 3 (16 hours)

¹ Surveys at Slop Bog, Woolslope and Riverside were all done together as part of a potential HIP project to improve access between these sites. This project is now on hold (issue with land transfers) and so no repeats are needed for the foreseeable

² This work was done to gain a better understanding of accessibility and use of the area. Linked to HIP project around Purbeck Park. A summary of the visitor data collected from these surveys is given in Table 7, which presents key metrics from visitor profiles for SANG "performance". These metrics for each are presented alongside visitor profiles for Dorset Heaths visitors.

Table 6: Details of completed and future planned surveys at existing or soon to be completed SANGs and HIPs which have visitor survey monitoring. The timing is a requirement of some SANGs, and is not fixed, but forms a useful suggested framework for other sites. Completed surveys are shown in bold, but note many surveys were delayed due to the coronavirus pandemic.

Site	Pre-works (if existing access)	On opening (i.e. post works)	Second Round (2-5 year)	Third Round (5 -10 year)	Additional surveys (10 year/ linked to other projects)
Year from opening	-1	0	2-3	5-10	10+
Potterne	2010	2011	2012	2015	
Woolslope	2012/13	2013/14	2015-17	2018/19	2022
Bytheway		2012/13	2015/16	2017/18	2022
Stanpit	2015	2016	2018/19	2021	
UCP P1		2015	2018	2022	
UCP P2		2018	2022	2024	
UCP P3		2021	2024	2026	
Bog Lane		2017	2022	2027	
Frenches Farm		2018	2022	2028	
Canford Park SANG P1		2019	2022	2024	
Canford Park SANG P2		2023	2026	2028	
Riversmeet		2019	2022	2024	
Iford		2019	2023	2029	
Stourview	2018	2020	2023	2028	
Holmwood		2021	2024-26	2031	
Dogdean	2020	2022	2025-27	2032	
Edmondsham Rd		2020	2025	2030	
Cherry Tree		2021	2024	2026	
Meridians		2021	2024	2026	
Barrow Hill		2021	2026	2031	
Rivers Edge		2021	2023-26	2031	
Verwood SANG		2023	2026-28	2033	
St Leonards SANG		2023	2026-28	2033	
Bernards Mead HIP		2022	2025	2027	
Purbeck Park (HIP)		2022	2027	2032	
Slop Bog		2022	N/A	N/A	
Riverside		2022	N/A	N/A	
Priests Way (HIP)	2023	TBC			
Silverlake SANG		2023	2026	2028	
Rivers Edge		2021	2023-26	2031	

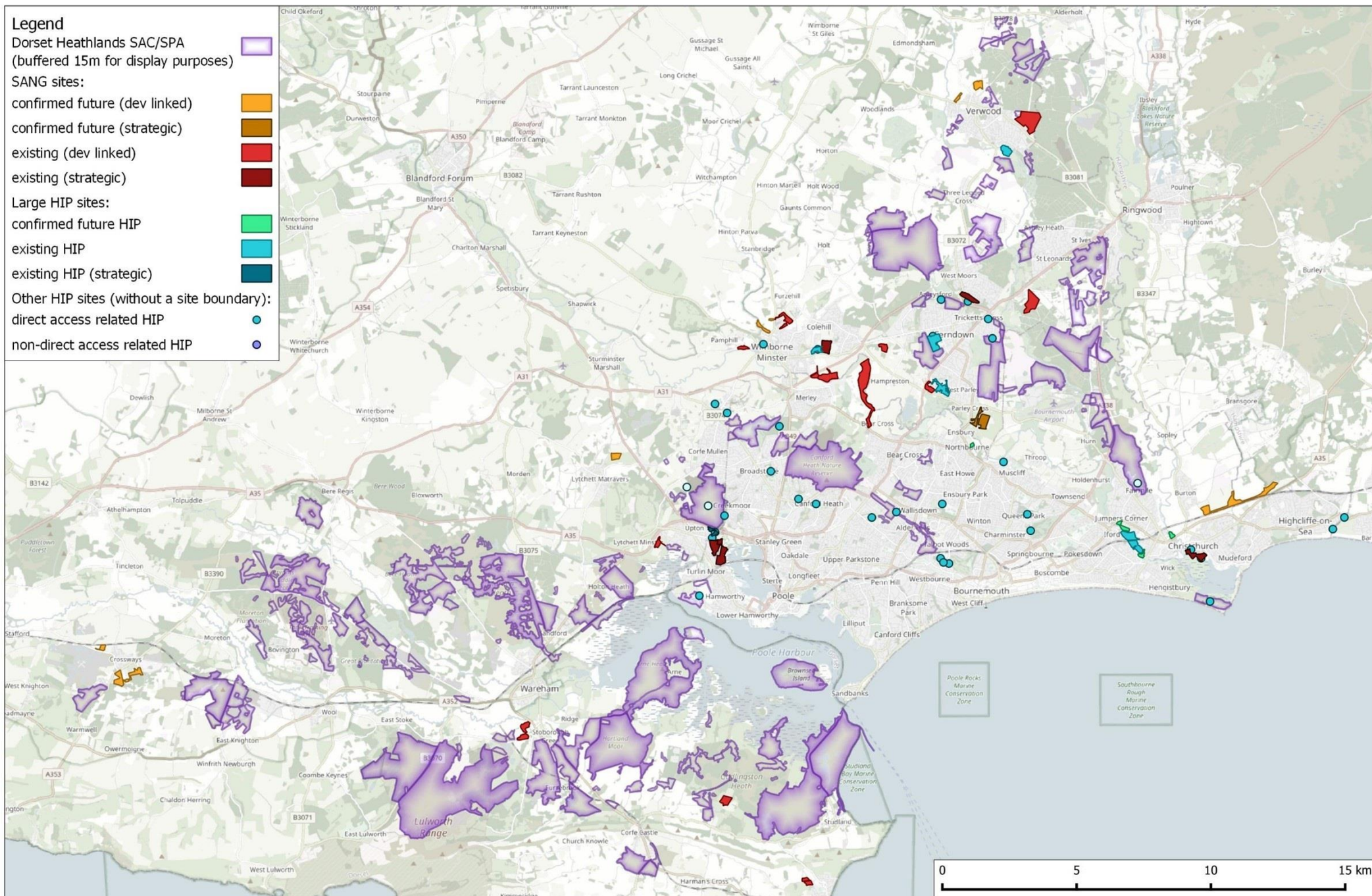
Table 7: Key summary metrics for SANG surveyed, compared to the Dorset Heaths visitor survey in 2019. Asterisk indicates values from tally counts.

Site	Date of survey	Year relative to 'opening'	n	% arriving by car	% visiting daily (or more freq.)	% dog walking	% member of Dorset Dogs	Mean group size*	Number of dogs per person (entering)*	Median route length (km)	Median linear distance from home postcode to survey point	75th percentile (Q3) linear distance from home postcode to survey point
DORSET HEATHS	Summer '19	n/a	946	52%	30%	74%	6%	1.53	0.63	2.3		
Bernards Mead	Spring '22		61	21%	44%	85%	2%	1.5	0.6	-	-	-
Corfe Barrows SANG	Autumn '21	-1	22	9%	68%	86%	0%	1.3	0.6	-	-	-
Meridians HIP	Autumn '21	0	14	21%	50%	57%	0%	1.5	0.5	-	-	-
Cherry Tree HIP	Spring '21	0	40	65%	23%	75%	8%	1.6	0.6	-	-	-
Canford SANG	Summer '19	0	62	87%	15%	87%	15%	1.73	0.9	2.3	2.2	3.8
Iford HIP	Autumn '19	0	70	50%	50%	83%	7%	1.39	0.7	-	0.8	1.3
Riversmeet & Stanpit	Summer '19	0 (/5)		55%	52%	91%		1.33	0.64	2	1	2.8
Upton Country Park -P1	Summer '18	2/3	127	79%	26%	88%	13%	1.88	1.08		2.9	4.6
Frenches Farm	Spring '18	0	44	36%	43%	98%	9%	1.37	0.86	1	0.8	1.5
South of Leigh Road East	Autumn '18	-1	22	45%	23%	55%	9%	1.55	0.53	2.9	3.4	6.1
Upton Country Park -P2	Spring '18	1	101	55%	30%	69%	8%	1.67	0.44		2	4.8
Bytheway	Winter '17/18	5	68	62%	23%	72%	-	5.16	1.33		1.2	1.9
Upton Woods	Summer '18	10	-	-	-	-	-	1.5	0.44			
Bog Lane	Spring '17	0	12	75%	17%	83%	8	1.27	0.84	1.1	5.1	11.6
Stanpit	Winter '16	2/3	53	51%	32%	66%	-	n/a	0.52		0.9	2.1

UHP MONITORING: 2022

Site	Date of survey	Year relative to 'opening'	n	% arriving by car	% visiting daily (or more freq.)	% dog walking	% member of Dorset Dogs	Mean group size*	Number of dogs per person (entering)*	Median route length (km)	Median linear distance from home postcode to survey point	75th percentile (Q3) linear distance from home postcode to survey point
Upton Country Park -P1	Summer '15	1	133	68%	33%	77%	8%	2.34	0.45	2.6	3.4	6.1
Woolslope	Winter '13/14	0	14	7%	64%	64%	-	2.21	0.81		0.4	0.4
Bytheway	Winter '12/13	0	28	18%	32%	79%	-	-	-		0.6	1.1
Woolslope	Winter '12/13	-1	13	15%	-	-	-	-	-		0.3	0.6
Potterne Park	Summer '12	2/3	80	68%	-	-	-	-	-			
Stanpit	Autumn '12	-1	11	64%	-	-	-	-	-		1.1	79.9

Map 3: Distribution of SANG and selected HIP sites.



4. Coordinated vehicle counts

- 4.1 The provision of parking spaces at, or adjacent to, the heaths is an important factor determining the number of visitors interacting with sites. In the 2019 Dorset Heaths visitor survey, over half of the interviewees had arrived by car (Panter & Caals, 2020).
- 4.2 Counts of the number of vehicles parked at access points to the heath can be conducted quickly to provide a good indication of the number of visitors at a site. Meaningful counts require a co-ordinated approach, using a set methodology and surveying period.
- 4.3 The survey aims to cover almost all heathland parking access points, plus a number of other key parking locations at other types of sites such as SANGs, HIPs, key visitor centres and visitor attractions. However, it is important to note that the latter are not exhaustive, and these are included only if they are considered of high importance, or do not add considerably to the length of time for the driven transect.

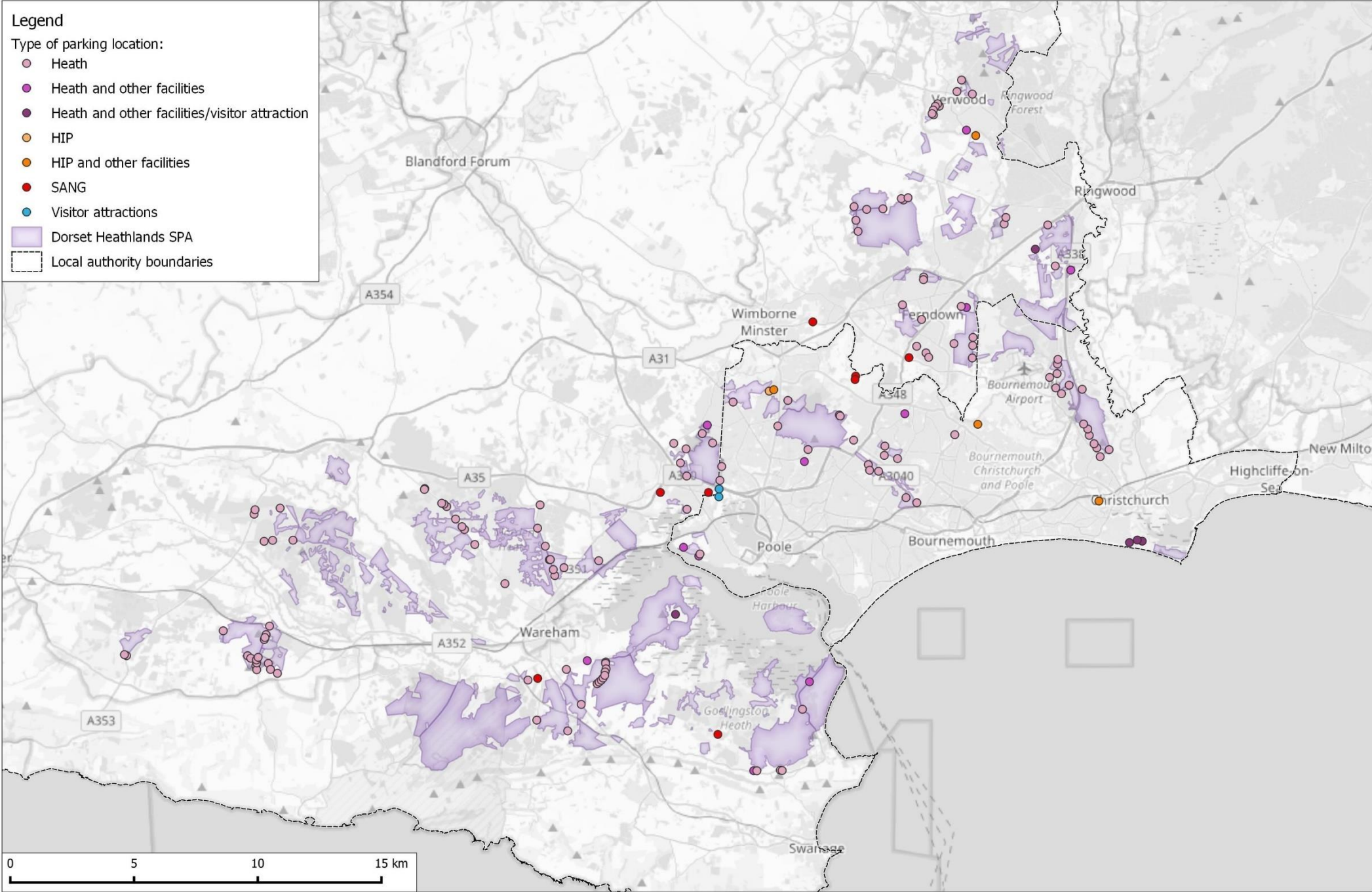
Categorisation of locations

- 4.4 Monitoring increasingly encompasses the range of types of sites, such as SANGs, as well as the protected sites themselves. As such, the parking locations are categorised to reflect this wide variety.
- 4.5 This categorisation is based on how these locations may change over time, the type of site, and the degree to which these values are likely to vary. For example, at the simplest level by categorising sites as heaths or SANG we can determine whether changes are different on the two types of sites. Sites where the car park includes access to other facilities (e.g. football pitches, cafés or other habitats), rather than just a heath or SANG, are likely to be more variable (e.g. due to events) and changes in access can relate to changes in these facilities and are therefore less of a concern. Table 8 details a summary of the different types of categories used.
- 4.6 No new parking locations were added in 2022. The distribution of all the parking locations which were surveyed is shown by location type in Map 4 and summarised in Table 8.

Table 8: Summary of the different types of parking locations counted in 2022.

Type of parking location	Number of parking locations	Example locations
Heath (parking is only used by those visiting heaths)	134	All car parks around Canford Heath, Dewlands Common, Great Ovens
Heath & other facilities (parking provides access to heaths, but also facilities, e.g. visitor centres/cafes, football pitches, or other habitats e.g. coast, support land, viewpoints)	11	Stoborough Heath car park at Sunnyside (providing access onto the grassland as well as the heath), Ham Common car park which is also used by those accessing Poole Harbour, Avon Heath viewpoint car park, Studland Ferry Road
Heath & other facilities/Visitor attractions (locations which provide a clear visitor or tourist attraction, particularly in summer)	5	RSPB Arne car park, Avon Heath visitor centre, Hengistbury Head
HIP (parking is only used by those visiting HIP)	1	Delph Woods 1
HIP & other facilities (parking provides access to HIP, but also facilities, e.g. cricket pitches, support land)	4	Delph Woods 2, Granby Road Barn, Potterne Park
SANG (parking is only used by those visiting SANG)	8	Upton Country Park SANG, Bog Lane SANG, Burnbake
Visitor attractions	2	Upton Country Park (main car park and small car park)
Total	165	

Map 4: Distribution of all parking locations counted.



Survey dates

- 4.7 Target dates for the vehicle counts are calculated by examining the dates used in previous years. This attempts to ensure that dates continue to fall roughly within the same named transect window (e.g. early-mid April), while also remaining on the set type of day (i.e. weekday/weekday), and do not subtly shift year on year. The dates selected for transects in 2022 are shown in Table 9. Some deviation from proposed target dates was forced due to the availability of staff and transect 4 was cancelled entirely due to a lack of staff.

Table 9: Target and actual dates for vehicle counts from April 2020 to December 2021. Rows are coloured by whether the date is a weekday, weekend or bank holiday. Target dates for bank holidays are not applicable as these are fixed dates.

Annual transect number	Time of year and day	Start time	Target date	Actual date
1	Early Feb weekday	10:00	07/02/2022	07/02/2022
2	Late Feb/early March weekday	14:00	07/03/2022	07/03/2022
3	Late March weekend	14:00	27/03/2022	20/03/2022
4	Early-mid April weekend	10:00	17/04/2022	Cancelled
5	Early May bank holiday*	14:00	02/05/2022	02/05/2022
6	Late May/early June weekend	10:00	05/06/2022	29/05/2022
7	Late June weekday	07:00	20/06/2022	20/06/2022
8	Mid-late Aug weekend	14:00	21/08/2022	21/08/2022
9	Early Sep/late Aug weekday	14:00	05/09/2022	05/09/2022
10	Summer bank holiday*	14:00	29/08/2022	29/08/2022
11	Late Sept weekend	10:00	25/09/2022	02/10/2022
12	Early-mid Nov weekday	10:00	14/11/2022	14/11/2022
13	Late Nov weekend	10:00	20/11/2022	20/11/2022
14	Mid Dec weekend	10:00	18/12/2022	11/12/2022

*Target dates for the bank holiday dates are fixed, rather than calculated.

Results

- 4.8 Excluding the one cancelled count on the 17th April, just one parking location did not have full data. This was for RSPB Arne, where on 4 separate dates in 2022 partner data on vehicle numbers was not provided. A total of 39 counts were not counted due to road/parking closures; notable examples include the roads around Godlingston and Studland in the autumn/winter.
- 4.9 Rain was recorded on only three dates, and only two dates (02/10/2022 and 11/12/2022) had rain for all or almost all of the vehicle count transect.

- 4.10 In total, 11,273 parked vehicles were counted in 2022, as shown in Figure 3. The mean number of parked vehicles on each transect was 867.2 although totals varied considerably between dates. In addition, 202 parked bicycles were counted, averaging 16 on each date.
- 4.11 The percentage of parking spaces that were occupied on any given date varied between 17% and 35%, with an average of 27%.
- 4.12 The mean number of vehicles counted at each parking location in this period is shown in Map 5.

Differences between dates

- 4.13 The highest vehicle count during this period was on August Bank Holiday, 29th August 2022, when 1,935 vehicles were counted. This represents 53% of the total number of spaces available, although 12 out of the 165 parking locations were at or over capacity on this date.
- 4.14 The next highest count was 21st August 2022 (1,412 vehicles), a Sunday count in the summer holidays. The lowest count was on 20th June 2022, when only 333 parked vehicles were counted.

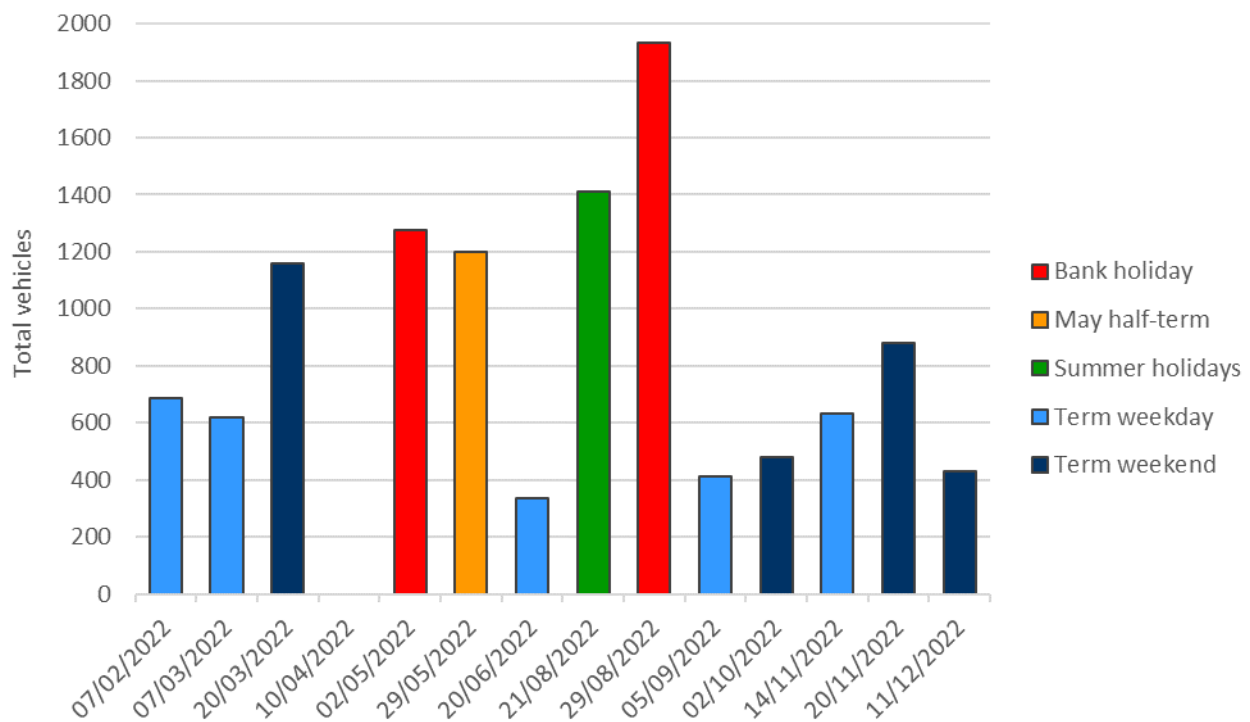
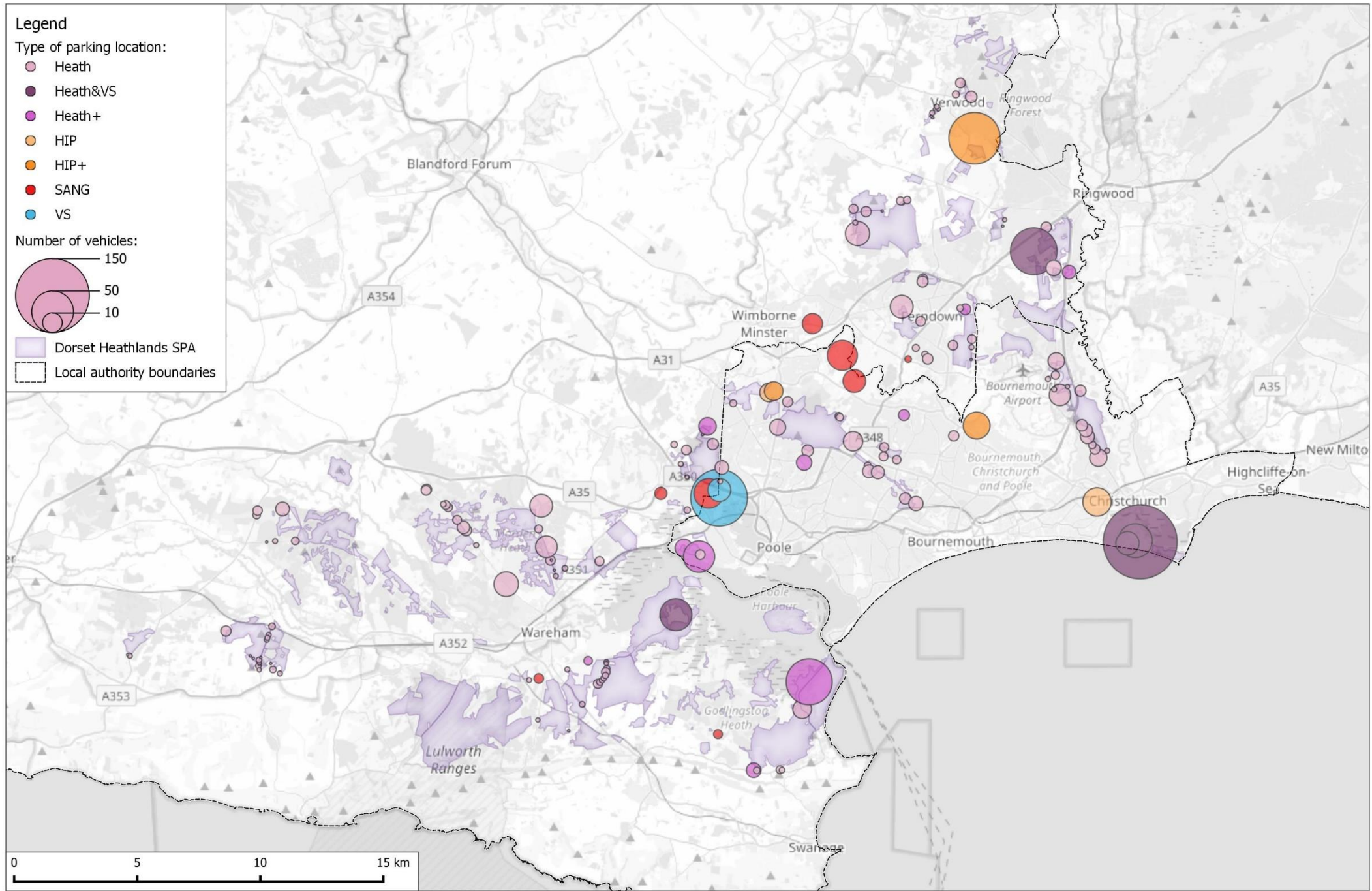


Figure 3: Total number of parked vehicles counted on each date, coloured by the type of day.

Map 5: Distribution of all parking locations counted in 2022 sized by the average number of vehicles.



Comparison with previous years

- 4.15 Examination of individual transect dates over time is shown in Table 10. The totals for each date are compared to the average from the previous 3 years of data. The peak count on two bank holidays was very high, with both totals more than 600 vehicles greater than the average from the last 3 years.
- 4.16 Counts are always variable depending on weather conditions, but the variation in both extremely high and low values in Table 10 from the short-term average was very noticeable. The exceptionally hot summer in 2022 may explain some of the reduced values in August.

Table 10: Dates for vehicle counts during 2022. Rows are coloured by whether the date is a weekday, weekend or bank holiday

Annual transect number	Time of year and day	Vehicle count 2022	Average of last 3 years	Difference between 2022 and last 3 year average
1	Early Feb weekday	681	493.7	187.3
2	Late Feb/early March weekday	621	573.0	48.0
3	Late March weekend	1,158	1,021.7	136.3
4	Early-mid April weekend	n/a	816.3	n/a
5	Early May bank holiday*	1,277	626.0	651.0
6	Late May/early June weekend	1,199	1,494.0	-295.0
7	Late June weekday	333	221.7	111.3
8	Mid-late Aug weekend	1,412	1,633.3	-221.3
9	Early Sep/late Aug weekday	413	1,275.0	-862.0
10	Summer bank holiday*	1,935	1,313.0	622.0
11	Late Sept weekend	481	929.7	-448.7
12	Early-mid Nov weekday	634	628.7	5.3
13	Late Nov weekend	881	657.3	223.7
14	Mid Dec weekend	428	1,110.7	-682.7

- 4.17 Overall, the average (mean) number of vehicles per transect at heath locations was 587.2 – see Figure 4. This represents a decrease of 21% on the last year and a decrease of 18% compared to the average for the last 3 years. However, this decrease was fairly typically, being also observed at other location types, with the exception of SANGs and HIPs, which showed a slight increase in use compared to the average for the last 3 years.

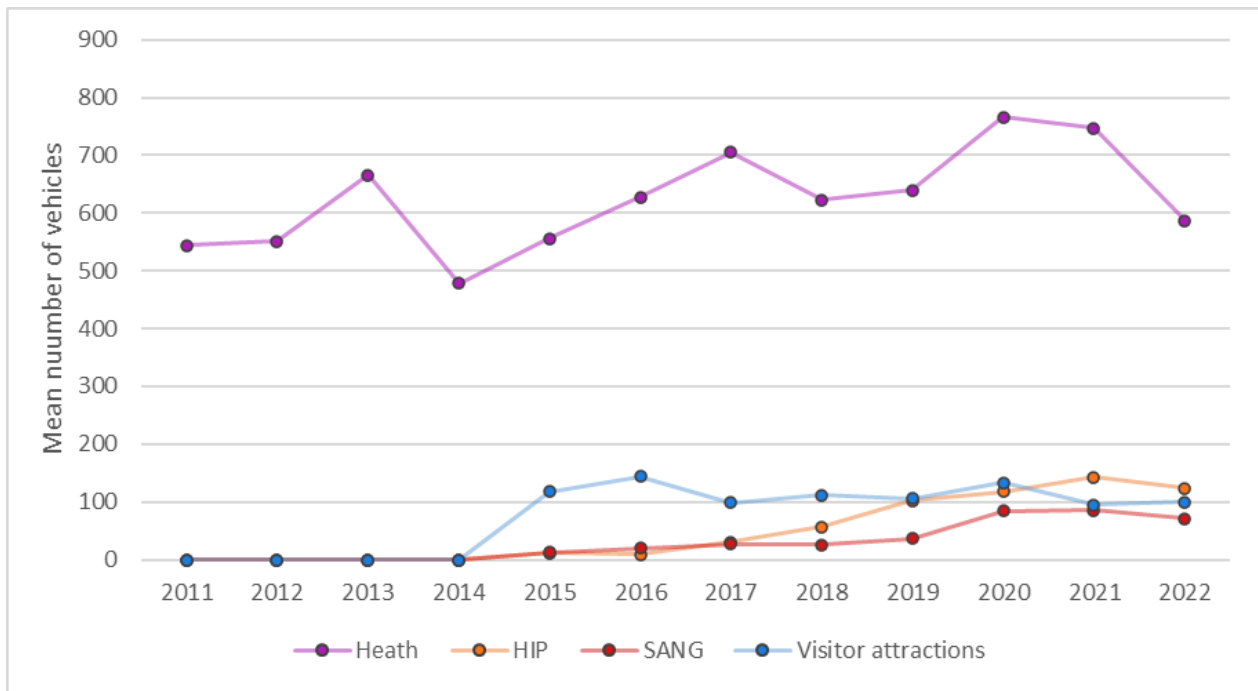













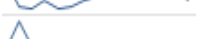














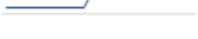



Figure 4: Mean number of vehicles counted on each transect, by calendar year, for heath locations (including those with other facilities or visitor attractions), HIPs, SANGs and visitor attractions. The number of locations varies year on year, and therefore a mean is presented, but in 2022, the number of heath location was 134 and other locations 31.

- 4.18 Individual parking locations were assigned to sites based on SSSI groupings as shown in Table 11. The relative fullness (i.e. percentage of occupied spaces) of parking locations at several sites had shown slight increases, with the largest increases at: Ferndown Common, Arne, and Slop Bog and Uddens Heath. Locations with the largest decreases include Canford Heath, Christchurch Harbour (i.e. Hengistbury Head), and Slop Bog and Uddens Heath.

Future counts

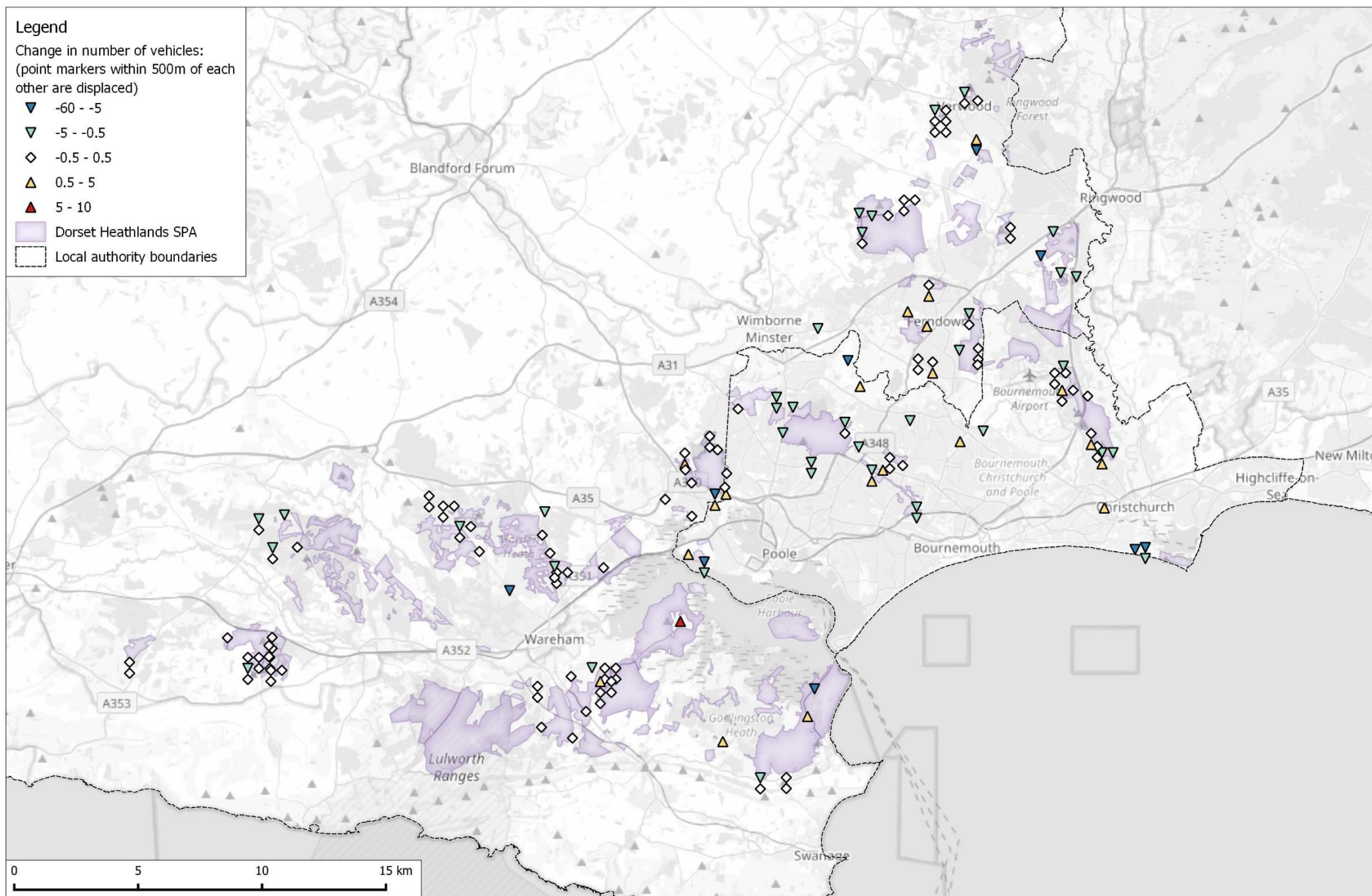
- 4.19 Data collected from the vehicle counts is proving very useful for monitoring long-term trends in visitor patterns, so efforts should be made to ensure that future counts are as complete and consistent as possible.
- 4.20 The list of parking locations included in the counts should be reviewed regularly to confirm that it is accurate and that any changes in parking (for example at new SANGs) are promptly recorded. Other information relating to the parking locations could also be reviewed, for example checking the capacity estimates of each location.

Table 11: Average percentage fullness of parking locations at locations grouped into sites (based on SSSIs). Table presents the average for the last 3 years and the current year (n showing the number of counts, including at multiple locations), with the difference between these shown in a column with red to blue colour shading for high to low values. A plot line also shows the variation in the annual average.

Site	Last 3 years (2019-2021)		2022		Differences in fullness current year compared to last 3	Annual line plot
	n	Average % fullness vehicles	n	Average % fullness vehicles		
Arne	40	11	19	24	13	
Bourne Valley	190	37	60	33	-4	
Canford Heath	228	47	72	35	-12	
Christchurch Harbour	108	20	36	15	-5	
Corfe & Barrow Hills	38	11	12	15	4	
Ferndown Common	76	42	24	63	21	
Ham Common	114	15	36	11	-4	
Hartland Moor	304	18	96	21	3	
Holt and West Moors Heaths	304	50	96	45	-5	
Holton and Sandford Heaths	38	27	12	26	-1	
Lions Hill	76	5	24	1	-4	
Morden Bog and Hyde Heath	682	40	216	33	-7	
Oakers Bog	189	9	60	6	-3	
Parley Common	228	36	72	27	-8	
Poole Harbour: Lytchett Fields	38	14	12	8	-6	
Povington and Grange Heaths	38	7	12	4	-3	
Slop Bog and Uddens Heath	76	29	24	37	8	
St Leonards and St Ives Heaths	148	37	48	32	-5	
Stoborough & Creech Heaths	188	7	59	5	-1	
Studland & Godlingston Heaths	228	27	54	16	-11	
Town Common	570	45	180	47	1	
Turbary and Kinson Commons	143	34	48	31	-3	
Turners Puddle Heath	38	42	12	42	0	
Upton Heath	342	22	106	23	1	
Verwood Heaths	341	19	107	14	-5	
Warmwell Heath	76	5	24	2	-3	
Winfrith Heath	561	6	174	5	-1	
SANG*	254	44	94	38	-6	
Visitor attractions*	76	47	24	42	-4	
HIP*	163	43	60	40	-3	

*not recorded prior to 2014

Map 6: Change in the average number of vehicles record in 2022 compared to average for the 3 previous years.



5. Sensor data

Introduction

- 5.1 Automated counters represent an effective way to gather large, long-term datasets. They can be used to remotely monitor subtle access patterns at a range of sites, including increasing use at SANG or HIP sites. The counters are usually in the form of buried pressure slabs or invisible beams located on the access points to sites. The resulting count data provide a good approximation of the number of people passing and directly accessing sites.
- 5.2 Such long-term monitoring data collected by sensors is key to detecting gradual changes in visitor pressures. The monitoring strategy recommended that on heathland sites, sensors need to be in place for consistent long-term data, while on mitigation project sites (e.g. SANGs, HIPs) sensors should be installed to establish a baseline in visitor counts prior to any site improvements. Over time these can be left in situ, or removed but reinstalled at a later date, or removed and supplemented with infrequent on-site visitor counts to determine any changes in access patterns.
- 5.3 Sensors require a proportion of UHP time for regular upkeep. This includes regular checks, any repairs or replacements (due to vandalism and theft), and regular (approximately every four/five months) downloading of the data from sensors.
- 5.4 Since 2007 a total of 166 sensors have been placed on the SPA or at SANG/HIP sites (including replacements at slightly different locations). Sensors have been installed and some subsequently removed over this period, but the total data amounts to 866 years of recording.

Categorisation of data

- 5.5 As already stated for the car parking data, the nature of the different locations will greatly affect visitor use and whether any changes in access are viewed as a cause for concern or not. The same categorisation of locations as applied for car park count data, has been applied to the sensor data.
- 5.6 The number of sensors for each location type are given in Table 12 and shown in Map 7.

Table 12: The number of sensors collecting data in the current period [54] and in the entire dataset to date [166].

Type of site	Number of sensors in current period	Number of sensors to date
Heath (only used by those visiting heaths)	18	1
Heath & other locations* (provides access to heaths, but also other habitats e.g. woodlands and some other facilities e.g. schools)	0	72
Heath & other / visitor attractions (provides access to heath habitats, but other habitats or visitor attraction facilities; e.g. Moors Valley Country Park)	4	2
HIP (only used by those visiting HIP – may be accessing other greenspaces e.g. Stour Valley. Includes sites that were not named as 'HIP')	11	8
HIP & other facilities (people not using the site or non-related activity) (could provide access to heath/SSSI, but also facilities e.g. cricket pitches, support land)	3	24
HIP & heathland* HIP projects which are adjacent to heathland sites (e.g. Stoborough Heath)	0	5
Other access types (Castleman Trailway)*	0	6
SANG (only used by those visiting SANG)	12	21
Visitor attractions (e.g. Upton Country Park, Avon Country Park main car park – may include commuters)	6	18

*no sensors currently in these categories, but these were present in previous years.

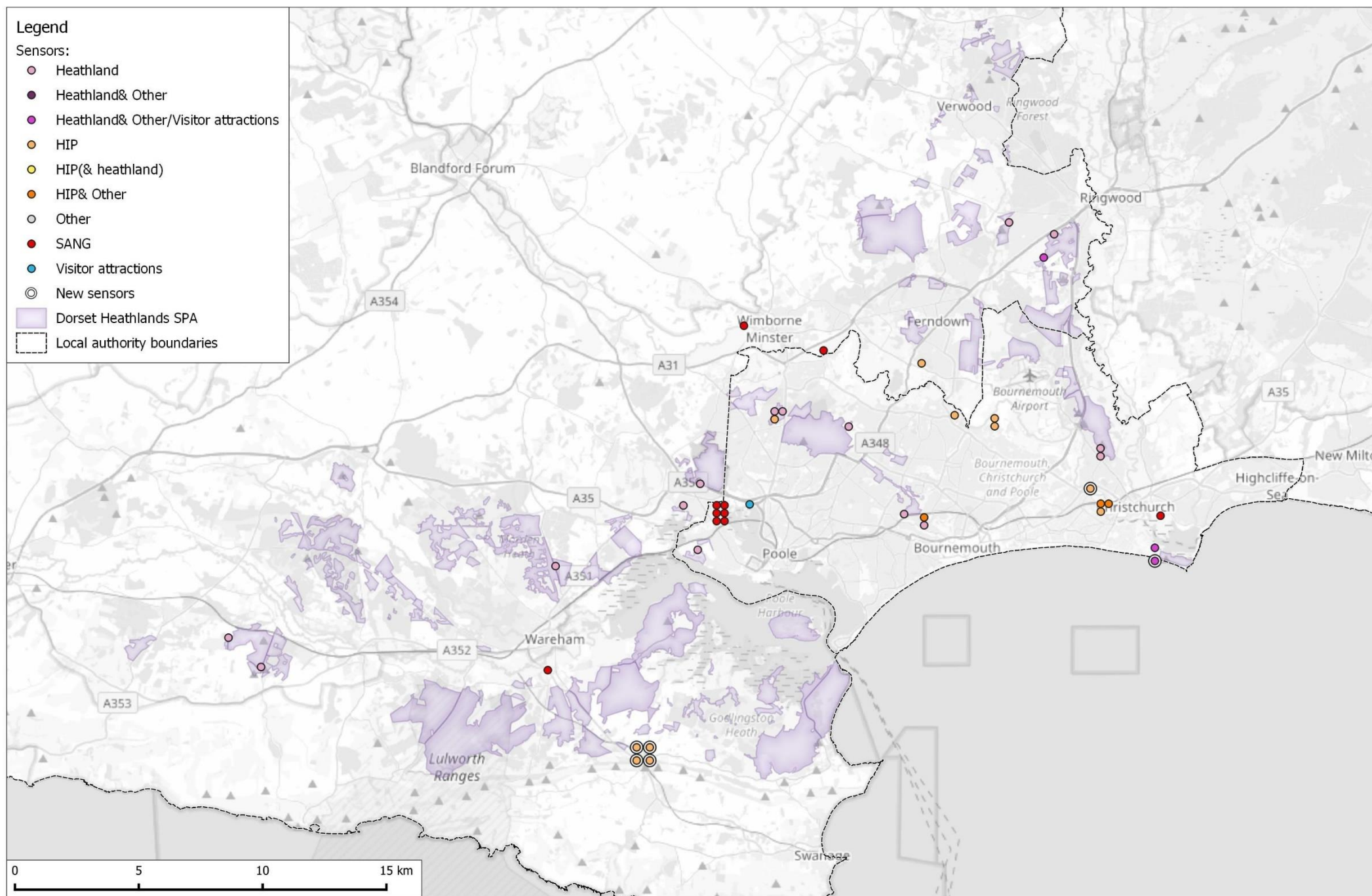
2022 data

- 5.7 Over 2022, 51 sensors have been collecting data at some point, roughly around the target level of sensors for maintaining in the long term. The locations of these sensors are given in Map 7.
- 5.8 A small number of new sensors were installed in the period. A list of 4 new sensors is given below:
- BHH5 – Long range pyro at Hengistbury Head located near the visitor sensor. Working alongside the other sensor on siteS and re-establishing sensor data monitoring at Hengistbury after historic sensors had been removed. Data was also being shared with the Hengistbury Head dog project.

- CBM1 – Long range pyro installed at Bernards Mead HIP as part of the monitoring strategy for this site. Position for this sensor was decided using route data from the visitor surveys and is located along the mown path alongside the river.
- PHUB1 and PHUB2 – Directional pyros installed on site to monitor footfall along the main footpath that passes through the park and ride. One positioned to catch those walking towards/from Corfe Castle and the other to capture those walking towards/from Hartland. Linked to potential HIP projects nearby.

- 5.9 The sensor data is complex, and there are a large number of factors to be accounted for, such as the number of sensors in use as sensors are installed/removed, and the patchiness of data as sensors malfunction. In the data presented here, we have conducted preliminary cleaning to remove data which is clearly incorrect. This removes extremely large values, but is not a complete examination of values, as this would require significantly more time than is set aside for annual reporting. It is envisaged that robust cleaning would examine the whole dataset to conduct automated checking to remove anomalies which are outside usual ranges or patterns.
- 5.10 Furthermore, values between sensor types are not directly compared. The raw averages shown depend on the number and composition of different types of locations, and types of sensor. All values would require stricter data cleaning and calibration before values can be compared in this way with confidence.
- 5.11 This year, the separation of sensors into much smaller groups means the effect of the addition and removal of sensors is magnified. As such presenting certain results using solely cleaned data for the year is often not meaningful due to data gaps. This was particularly notable in the examination of monthly sensor values, which show large variations. Robust examination would require greater data cleaning and averaging or interpolation based on using the previous year's data.

Map 7: Location of sensors collecting data in 2022 shown by the type of site. The location of new sensors are highlighted.



2022 results

- 5.12 The period examined after the simple cleaning process provides a total of 3,507,297 passes from 54 sensors. The sensor data, of all datasets presented in this report, are the most difficult to present simply and accurately. The data require more detailed processing (for example incorporating calibration results to give number of people rather than raw passes) before robust results are produced, but a simple overview of average monthly number of raw passes is presented by each location in Map 8.
- 5.13 Variation across the year is shown in Figure 5. All site types showed a peak in access in May, as was noted last year, but the summer was lower than expected. Heathland sites in May recorded around a 280% increase in access in this month relative to the average from all data, but the overall monthly average was only 57% higher. Compared to the pre-2022 average, the monthly average in 2022 was 28% higher at SANGs (Figure 5). However, August and September in 2022 were exceptionally hot and may explain the sharp dip in access, particularly at SANG sites.

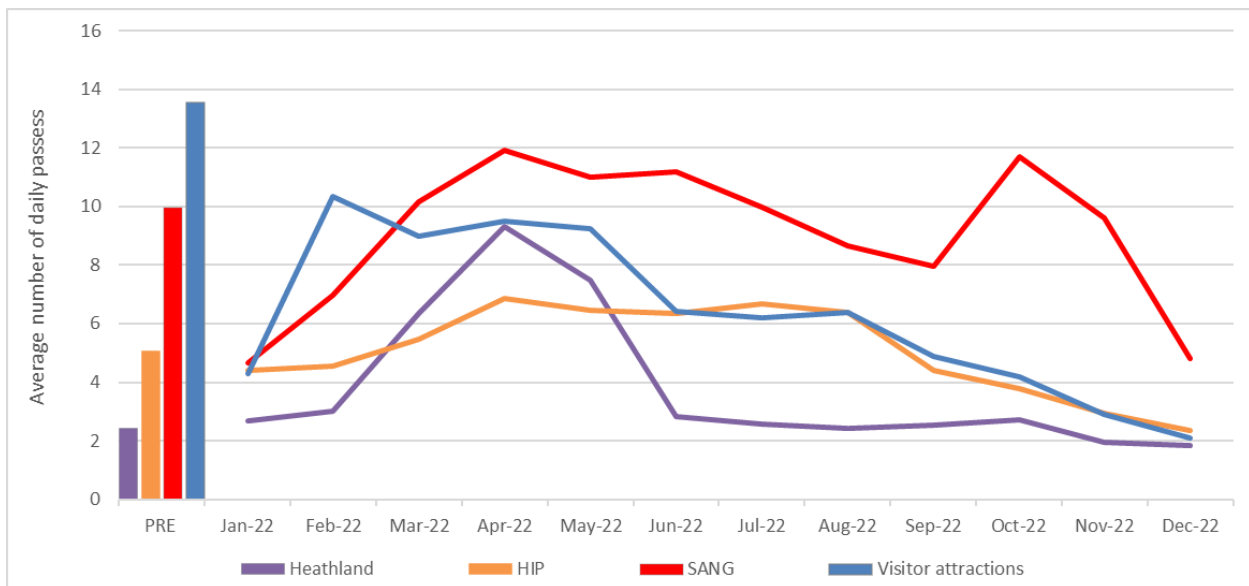


Figure 5: The monthly average number of passes recorded at sensor types, shown heathland sites [n=18], HIP sites [6], and HIP & other sites [3] SANG [12], and Visitor attractions [3]. These are shown in comparison to an average figure for the sensor type based on all previous data.

- 5.14 Monthly patterns, while interesting, can provide a misleading picture and should be viewed with some caution, due to the low sample sizes considered for the single year, patchiness of data, and addition/removal of sensors to the database.

- 5.15 The average daily passes in 2022 across all sensors were 3% lower than 2021 (see Table 13), and for broad sensor types, the heathland sites were 29% higher in 2022 compared to 2021, due to the unusually high peak in spring. Visitor attractions showed a similar level of increase compared to the previous year, while all other sensor types showed a decrease.

Table 13: Summary of percentage change in access between 2021 and 2022, categorised by the site type.

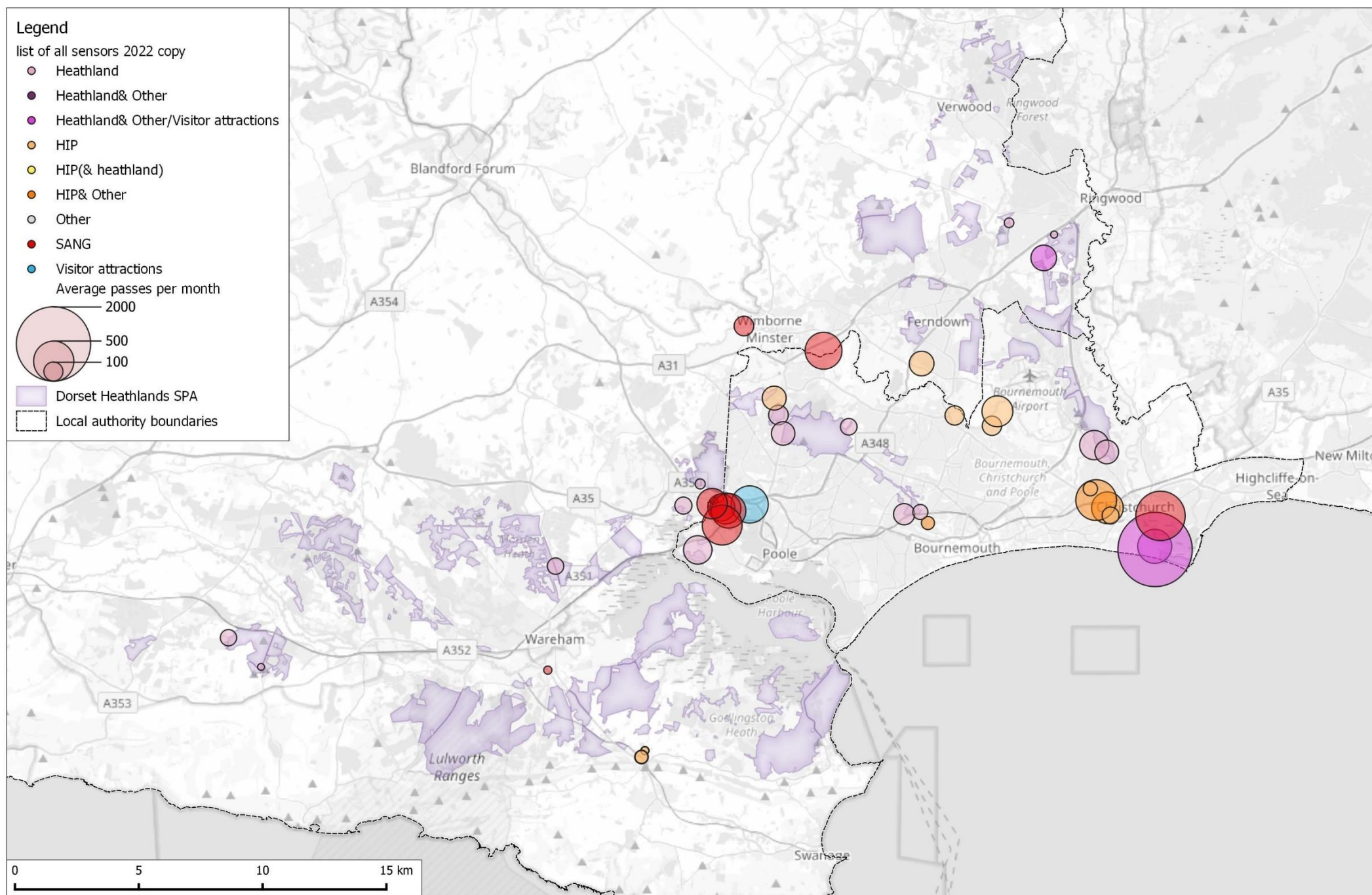
Site type	n	Average daily passes in 2021	Average daily passes in 2022	Percentage change between 2021 and 2022
Heathland	18	3.0	3.9	29%
Heathland& Other/Visitor attractions	2	11.7	9.1	-23%
HIP	6	5.8	5.0	-12%
HIP& Other	3	9.6	9.4	-2%
SANG	11	12.8	11.0	-14%
Visitor Attractions	2	9.3	11.8	27%
Total	42	7.2	6.9	-3%

- 5.16 Table 14 gives the change between 2022 and the previous year for sensors grouped by SSSI. The same comparison to the 5-year mean is used the summary section table and overall recorded a 23% increase in passes in 2022 at heathland sensors. Largest increase was a 153% increase for the two sensors at St Leonards and St Ives Heaths, while the largest decrease was of 48% for the sensor at Upton Heath.

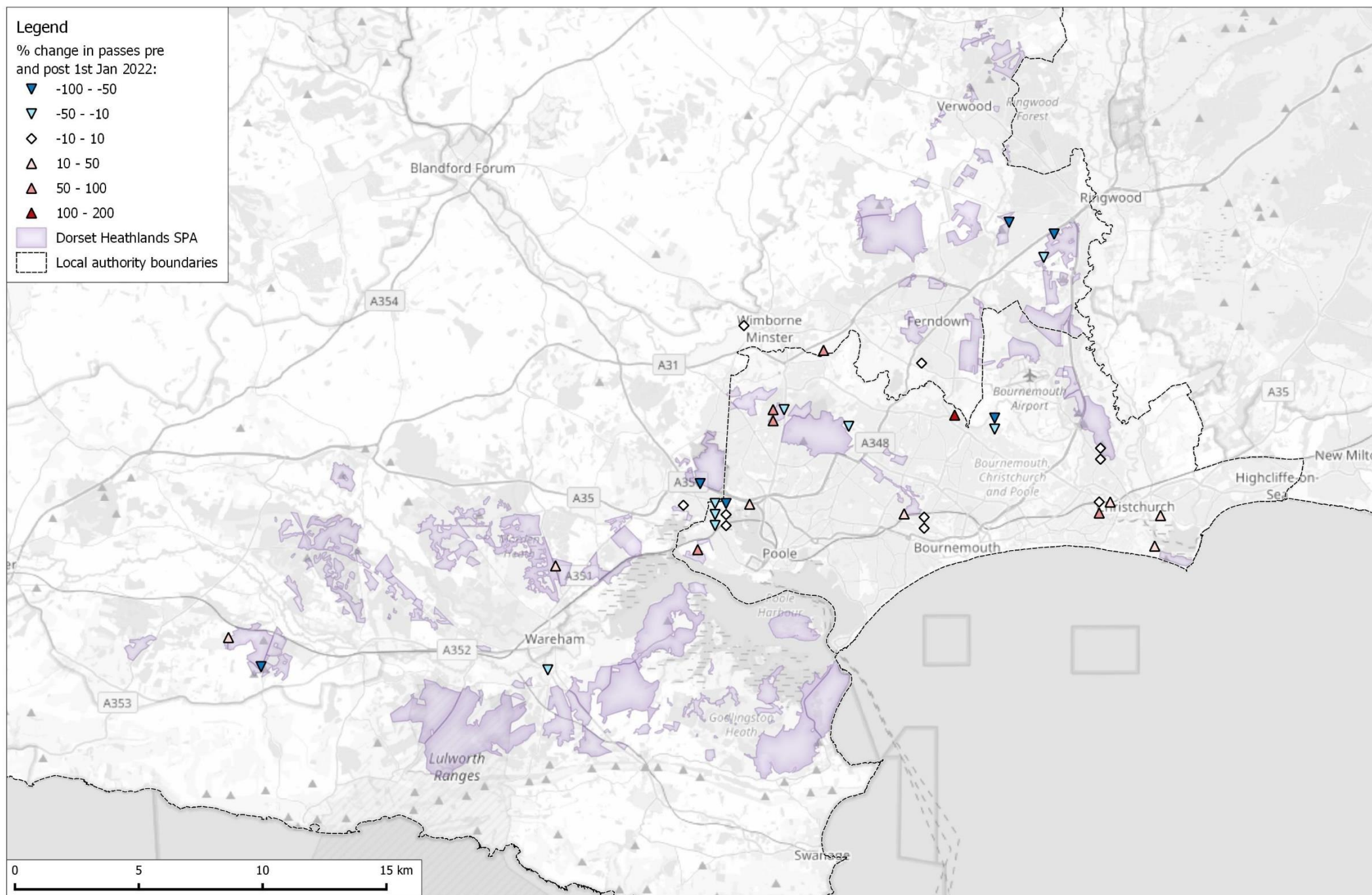
Table 14: Summary of percentage change in access between 2021 and 2022 for heathland only sensors, categorised by the SSSI.

SSSI	n	Average daily passes in 2021	Average daily passes in 2022	Percentage change between 2021 and 2022
Bourne Valley	2	3.7	3.0	-18%
Canford Heath	4	3.3	3.1	-5%
Ham Common	2	3.4	5.1	51%
Lions Hill	1	0.5	0.5	6%
Morden Bog and Hyde Heath	1	1.9	2.3	18%
Poole Harbour: Lytchett Fields	1	2.9	2.5	-13%
St Leonards and St Ives Heaths	2	2.3	9.6	309%
Town Common	2	7.1	7.0	-1%
Upton Heath	1	1.0	0.6	-44%
Winfrith Heath	2	1.1	1.2	10%
Total	18	3.0	3.9	29%

Map 8: Location of sensors , with markers sized by the average number of passes per month in 2022.



Map 9: Sensor locations categorised by the percentage change in access from all data pre 2022 and all data in 2022.



6. Incident data

Introduction

- 6.1 The Urban Heaths Partnership coordinates the reporting and recording of any illegal, antisocial or potentially destructive activities which will impact on the heaths. These 'incidents' are recorded by the individual local authority mitigation officers (formerly UHP wardens) or other individuals from the partnership organisations on the Dorset / BCP (Bournemouth Christchurch and Poole) Council's 'Dorset Explorer' mapping system. Incidents cover a range of activities including: fires, motorcycles / off-roading, fly tipping (including green waste), cyclists (off designated paths), horse-riders (off bridleways etc.), vandalism, abandoned vehicles, antisocial behaviours and a wide range of other incidents (e.g. harassment, wildlife crime, firearms, catapults, dens/camping).
- 6.2 Incidents relating to fires on the heath are considered the most robust of all the incident data. The importance of such events means these are much more reliably recorded. The recording of fires is based upon the logged callouts by Dorset and Wiltshire Fire and Rescue, with additional reporting by wardens, which covers any other burnt areas or small campfires, which are otherwise missed in formal Fire and Rescue callout data. As such it is important to state that continued efforts by partners are needed to record these robustly.

Fires

- 6.3 Incidents categorised as "fire" or "barbecue" are examined here. Barbecue incidents refer to recording of a barbecue without an area burnt, however barbecues or campfires are also recorded in the fires category, not always with an area figure or often a nominal 0.5m² area. For this reason both are combined in the analysis.
- 6.4 In 2022, there were a total of 143 fires, amounting to 33.6 ha burnt. Most fires were, as usual, small campfires and barbecues that lead to a very small area affected. Around three-quarters of fire incidents (107 incidents, 75%) covered an area of less than 10m². However, there were also several significant fires in 2022, with 4 fires of over 1 ha, these were:
- A probable human caused fire at Canford Heath, 23rd April (16.7 ha)
 - Fire caused by embers from the Steam Train at Corfe Common, 6th August (5.6 ha)

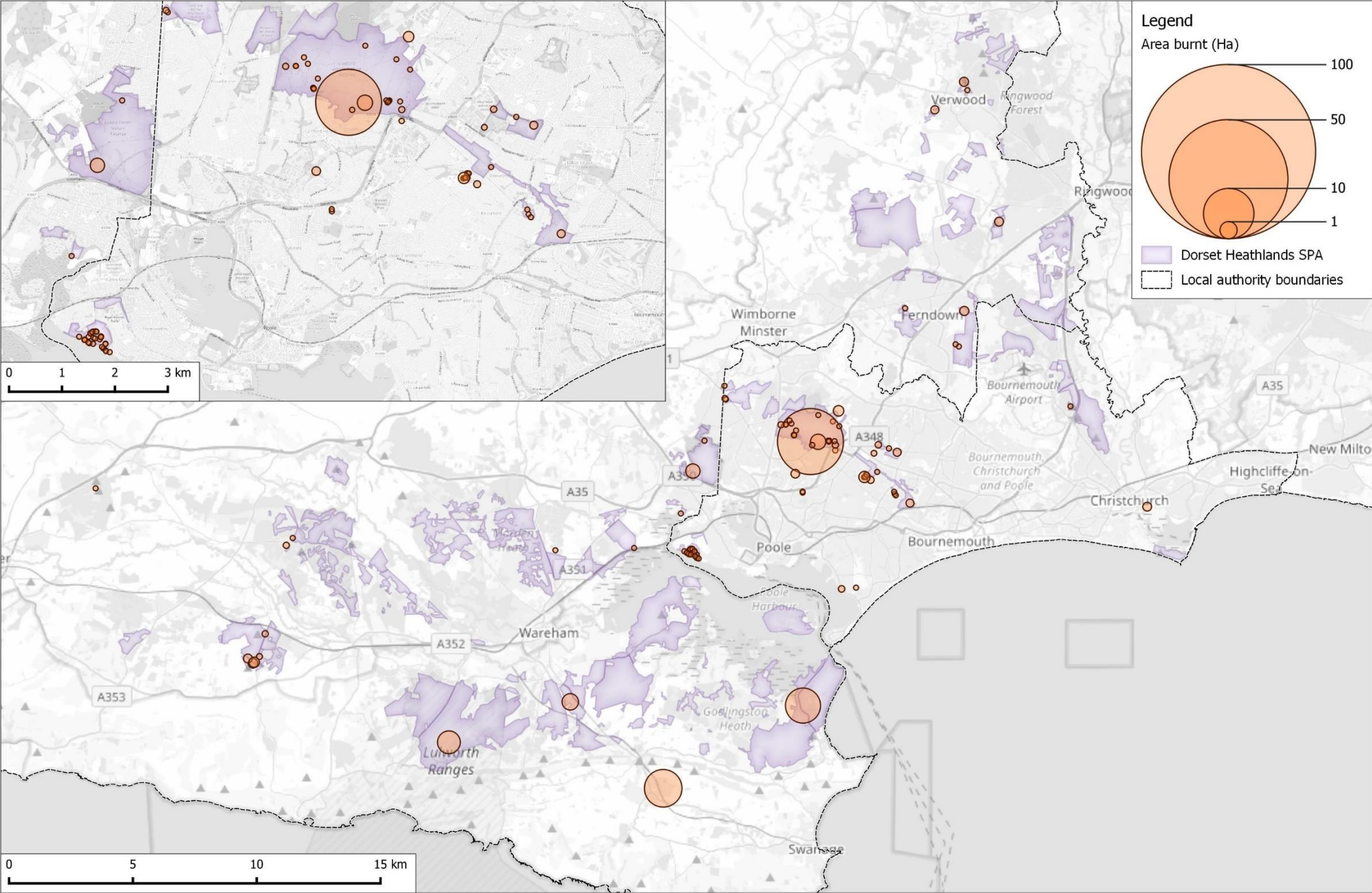
- A deliberate fire at Studland & Godlingston Heaths, 12th August (4.8 ha burnt).
- An MOD fire caused by a flare during live training, 8th May at Five Tips Ranges (1.9 ha)

6.5 The distribution of the fires is shown in Map 10 and presented by sites in Table 15. The most fires were recorded at Ham Common, followed by Canford Heath – but many more at Ham Common than usually recorded. Turbary Heath had many fewer than typically recorded.

Table 15: Breakdown of the number of fire incidents (fires and barbeques) recorded at each site in 2022. Fires separated by size (m2) and site names are as recorded in Dorset Explorer.

Site name	0 to 10	10 to 100	100 to 1000	1000 to 10000	10000+	Total
No named site	5	1	1	3	2	12
Ham Common	52					52
Canford Heath	24	1	2	1	1	29
Bourne Valley	10	3	1	1		15
Winfrith Heath			2	3		5
Turbary Common		2	2			4
Alder Hills	3					3
Parley Common	2			1		3
Corfe Hill	1		1			2
Stephens Castle	1			1		2
Upton Heath	1			1		2
Barrow Hill (Rushcombe Bottom)	1					1
Briantspuddle	1					1
Dewlands Common			1			1
Ferndown Common	1					1
Gore Heath	1					1
Holton and Sandford Heaths	1					1
Lions Hill				1		1
Lytchett	1					1
Moreton			1			1
Puddletown	1					1
Ramsdown	1					1
Stoborough & Creech Heaths				1		1
Studland & Godlingston Heaths					1	1
Talbot Heath			1			1

Map 10: Distribution of fire incidents recorded in 2022, categorised by the size of the area burnt. Inset map for the Poole area.



6.6 Most fires were recorded in June, see Figure 6 and Table 16, but were regularly recorded at least once a week throughout mid March to early September. The largest area burnt was recorded in April, closely followed by August.

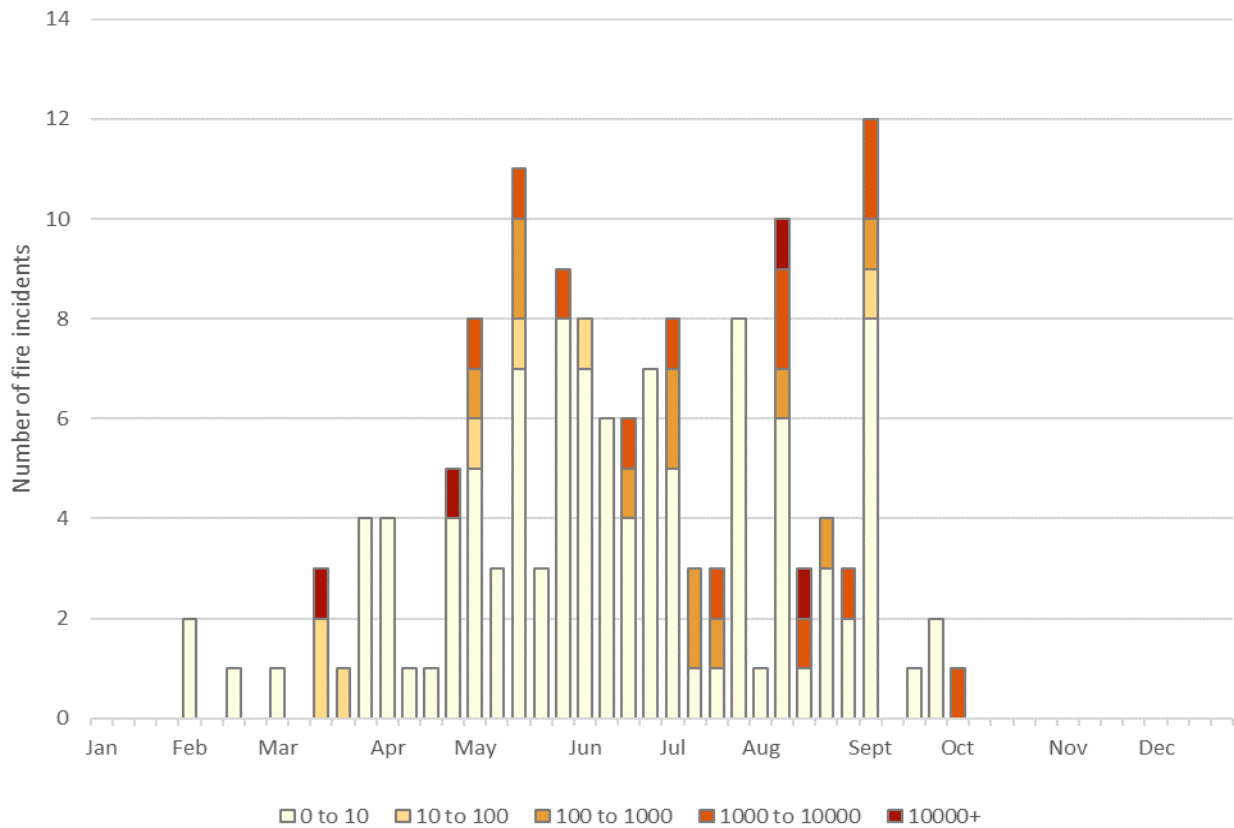


Figure 6: Number of fires per week, categorised by the size of the area burnt (m²).

Table 16: Average annual burn area per month (m²).

	Number of fires	Total area burnt in current year	Annual area in all previous years	Annual area in last 3 years
Jan	2	1.0	183.7	3.8
Feb	2	0.5	4,655.3	4.8
Mar	12	19,359.2	102,982.0	13,046.9
Apr	15	169,254.3	80,948.8	41,333.6
May	27	9,148.2	130,353.0	682,087.7
Jun	32	11,722.8	35,500.3	8,390.8
Jul	20	3,404.7	25,926.9	59,730.8
Aug	25	121,362.2	9,379.5	23,386.9
Sep	7	2.5	3,405.8	2,901.0
Oct	1	1,523.0	3,719.7	2.0
Nov	-	0	16,452.0	1.8
Dec	-	0	74.5	0.5
Annual Total	143	335,778.4	388,874.3	830,890.7

- 6.7 Table 17 compares the number and scale of fires over the calendar years. This shows that in 2022, the number of fire incidents recorded (143) was the highest it had been for several years, after 2021. The total area burnt in 2022 was 33.6 ha, which is around the typical annual total (long-term average annual area burnt is estimated at 39 ha).
- 6.8 Data from Table 17 is also summarised in Figure 7. Examination of the number of fires over time suggests a decline, but is influenced by variable numbers of very small fires (i.e. campsites and BBQs around 1 to 2 m²). Within all other individual categories of fire in Table 17 there is an apparent decline over time, except for in the very largest fires. The pattern of fewer ignitions, but more larger fires is mirrored in national and international data trends (pers. comm. Andy Elliot; Wildfire Training and Consultancy).

Table 17: Summary of the number of fires and area of fires that have been recorded in each calendar year.

Year	Number of fires, by size					Total number of fires	Total area burnt (ha)
	Up to 10m ²	10m ² to 100m ²	100m ² to 1,000m ²	1,000m ² to 10,000 m ²	Over 10,000 m ²		
2022	107	7	12	13	4	143	33.6
2021	65	6	10	8	4	93	26.5
2020	78	11	11	10	5	115	204.6
2019	46	10	13	5	1	75	18.1
2018	76	6	12	8	11	113	59.2
2017	41	3	16	7	5	72	21.8
2016	25	2	14	10	2	53	10.1
2015	31	2	7	10	7	57	87.7
2014	78	4	12	4	2	100	8.9
2013	59	15	21	13	3	111	12.8
2012	60	3	12	6	3	84	6.9
2011	91	18	36	14	4	163	71.1
2010	80	20	37	17	8	162	41.3
2009	79	37	41	11	6	174	18.7
2008	56	16	23	7	1	103	4.6
2007	29	17	8	5	2	61	5.9
2006	69	27	38	20	2	156	54.3
2005	47	82	57	16	2	204	24.1
2005	47	82	57	16	2	204	4.3
2004	71	37	39	11	0	158	31.7
2003	334	45	46	23	4	452	64.9
2002	72	18	11	4	2	107	33.6

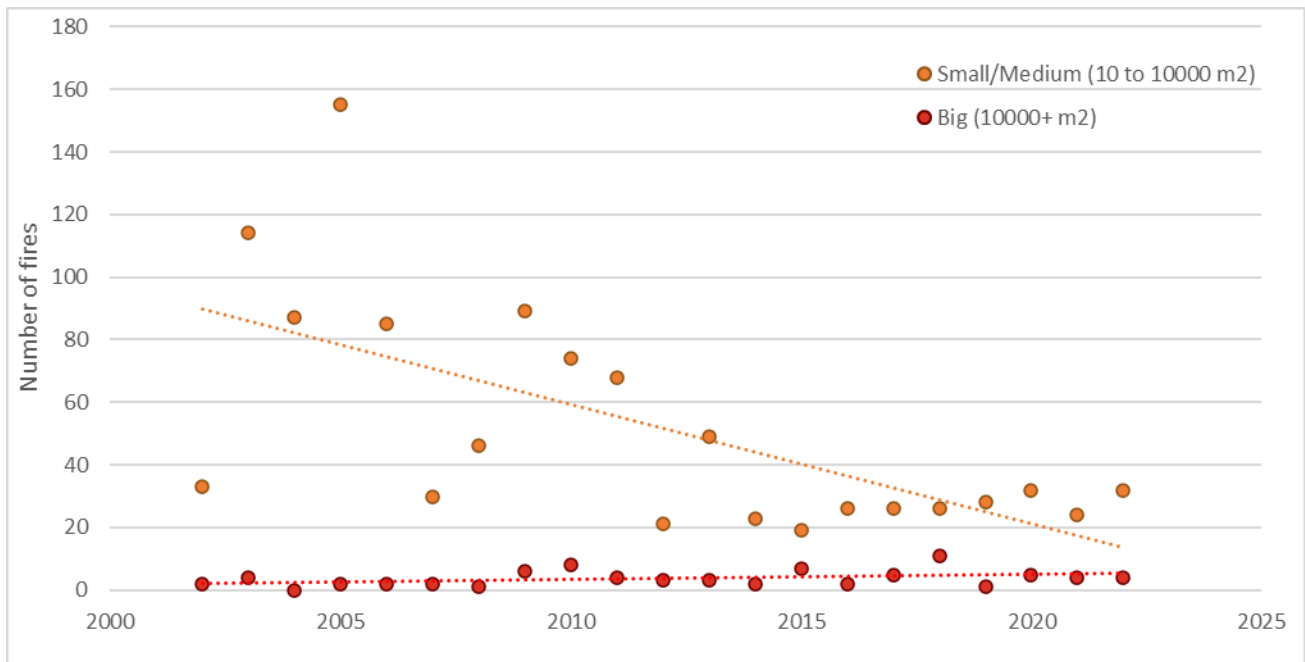


Figure 7: Number of fires over time separated into small to medium fires and very big fires.

Other incidents

- 6.9 In 2022, a total of 182 incidents were reported. The most common incident type was motorcyclists on the heaths, which accounted for 62 incidents. The next most common incident type was the combined “other” category (42 incidents) followed by den building (22 incidents).
- 6.10 Those categorised as “other” includes a wide range of incidents, including: vandalism (7), e-scooters (6), quad bikes (4), camping (4) and fireworks (2). For 5 incidents there were no details to accompany in the incident log. In addition, many of the incidents recorded as ‘dens’ also had large amounts of litter associated with them, and sometimes evidence of fire pits. September had the highest number of incidents, with lots of den building, fly tipping, motorcyclists and “other” incidents (see Figure 8).
- 6.11 As always, the number of incidents recorded at each site will depend on several factors, and it is quite possible that incidents occurred at sites other than those listed, which were either not observed or not recorded. The number of incidents has continued to be higher following Covid and it is unclear if this is solely due to increased engagement with the outdoors, or increased warden time and focus on issues.

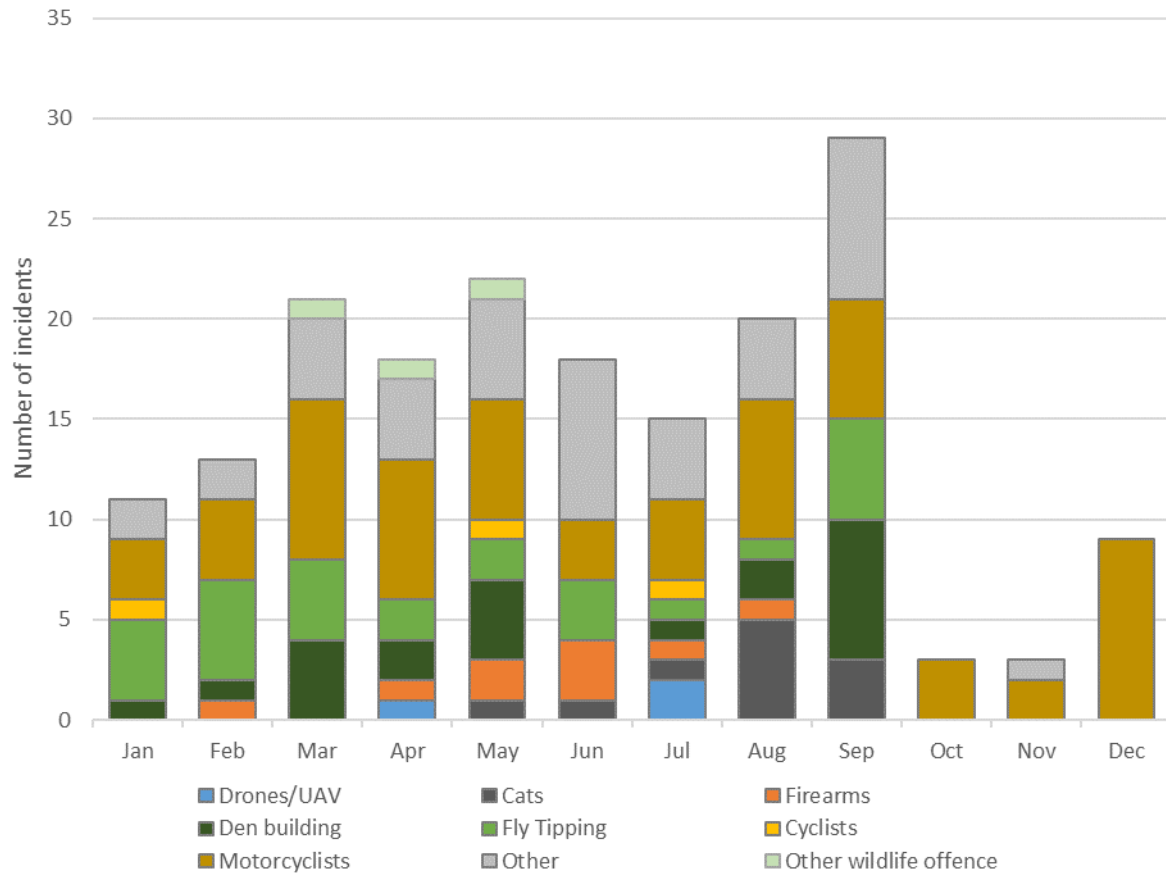
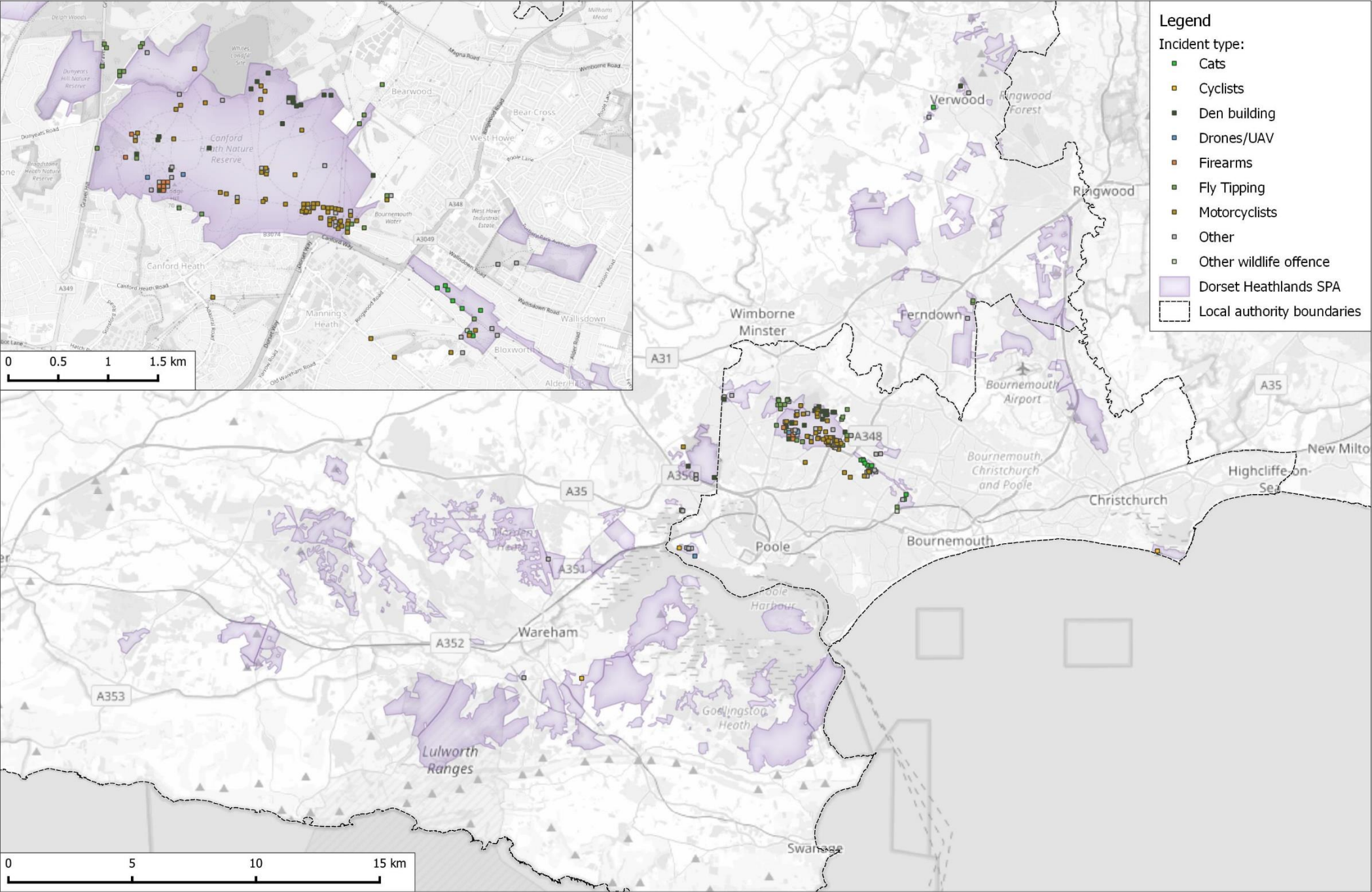


Figure 8: Monthly number of incidents, categorised by the nature of the incident.

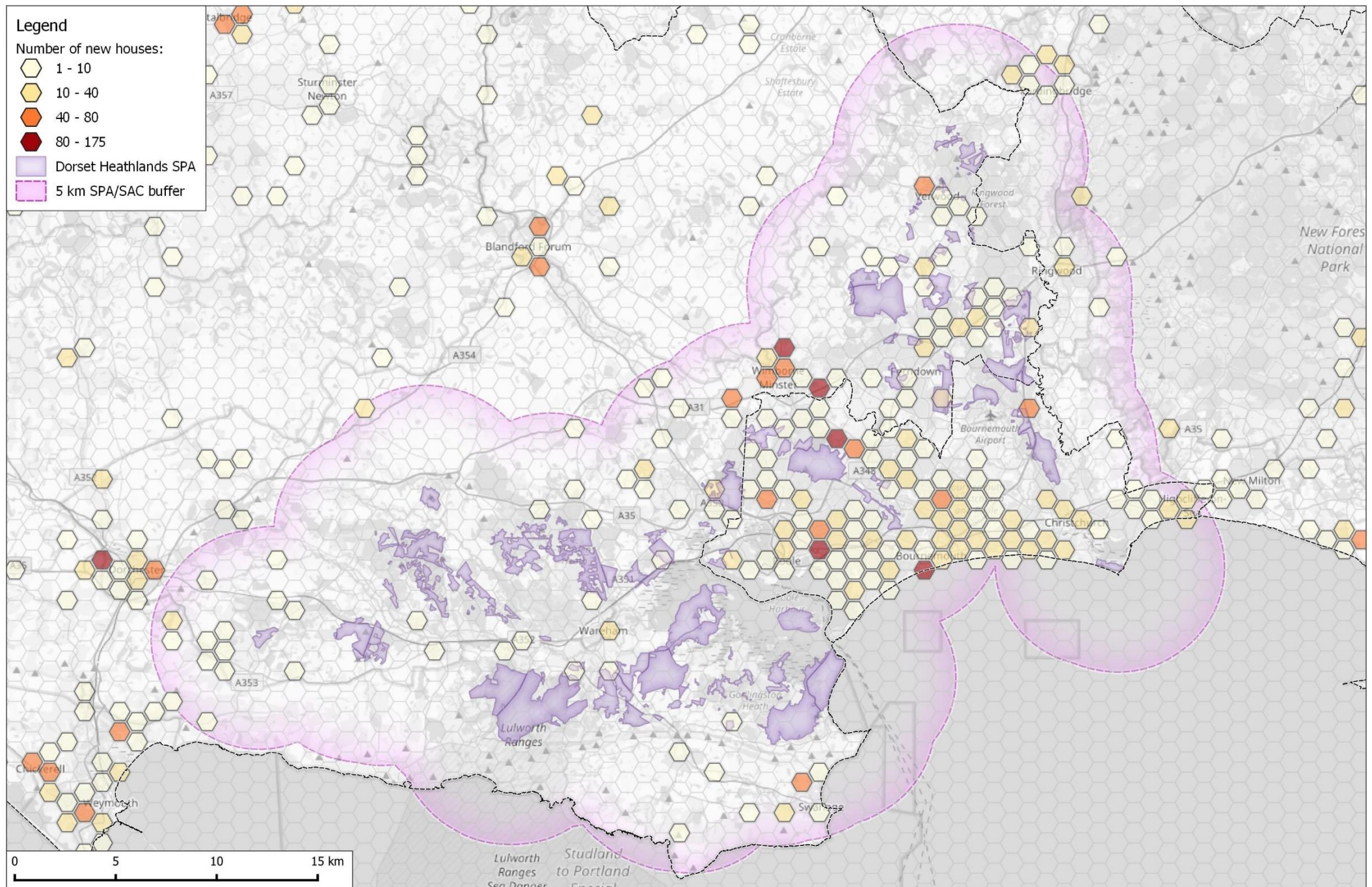
Map 11: Distribution of incidents (excluding fires) recorded in 2022. Inset map for Canford Heath/Bourne Valley.



7. Housing data

- 7.1 Between January 2022 and January 2023 there were an additional 2,435 dwellings registered in our residential postcode database within 5km of the SPA/SAC boundary. This equates to a 0.9% increase – the same level of increase as last year – with the current total estimated at 265,338 residential properties within 5km.
- 7.2 Within the 5km buffer, 5 cells are highlighted with over 80 new dwellings (see Map 12). Two are associated with ongoing development at Wimborne Minister; both major developments north and south of the town (as noted last year). Large development has also continued off Magna Road, Bearwood. Final large increases are in Bournemouth (West Cliff) and Poole (Parkstone).
- 7.3 As in previous recent years, there has been continued growth in Poundbury - although this is outside the 5km zone of influence of the Dorset Heaths. Similar increases have also been seen in Weymouth and Blandford Forum.
- 7.4 This section could also include the locations of individual developments completed within the period to more specifically target new housing and residents. However, this would require the provision of more detailed GIS data from both Local Authorities.

Map 12: Housing growth between January 2022 and January 2023.



8. Wardening

- 8.1 This year UHP wardens have started to record time on site for their engagement with members of the public over the summer months (May to September). This provides an excellent way to understand the wardening effort and more information on people's behaviours and the interactions with wardens.

Time on sites

- 8.2 A total of 640 hours of warden time had been logged in 2022. Time on site is shown in Table 19 and ranged from just 1.3 hours at Potterne Hill to 95.8 hours at Upton Heath.

Interactions

- 8.3 Wardens recorded interactions with members of the public. A total of 520 interactions with approximately 863 people³ were recorded. Interactions were also grouped by sites⁴. Number of interactions varied greatly based on the busyness of the sites and interactions per hour ranged from 1.2 interactions per hour at Upton to 0.26 at Black Hill.
- 8.4 During the interactions the reason for initiating the conversation, and the topics addressed were recorded. Table 18 gives the issue/s which started the interaction. Overall most interactions were started for no particular issue, but due to a "general visitor interaction"; this was the case in 81% of interactions (419). This was followed by: interactions instigated because of dogs off lead, 37% (193), and all other reasons accounted for less than 6% of interactions.
- 8.4.1. Interactions were assessed by the wardens as positive, negative or neutral. Just 13 interactions were negative (2.5%), mostly with those whose reason for being engaged with was about cycling/horse riding off bridleways and for a dog/s being off lead, but these still were in the minority within these groups.
- 8.5 In the issues which instigated the conversation, multiple issues were able to be given, and for this reason, we selected the first response to examine these further. The first responses are given in Table 18 and used in **Error! Reference source not found.** to assign interactions to a single response. **Error! Reference source not found.** examines the positive, neutral and negative interactions that were had with

³ Groups larger than 5 are recorded as "5+", with an exact figure only occasionally given. As such an exact number of people is not always known.

⁴ Note Lytchett Central and East were merged, as they were not separated in the time recording sheet.

each of these people. Only one interaction was had regarding motorcycling, which was negative, while multiple interactions were had around cycling/horse riding off bridleway, with 7 of these being negative.

- 8.6 A total of 13 interactions were with commercial dog walkers, and of these 10 were positive and just 2 neutral.
- 8.7 The topics discussed in the interaction were broad and often multiple topics were covered in the single interaction. The most common topic was “wildlife”, with 77% of interactions discussing this topic (402), followed by responsible dog ownership (41%, 214) and ground nesting birds (40%, 207).

Table 18: Summary of issues the wardens were initially engaged to discuss (separated into all responses and the first response given) and topics covered in the discussion that followed with the group.

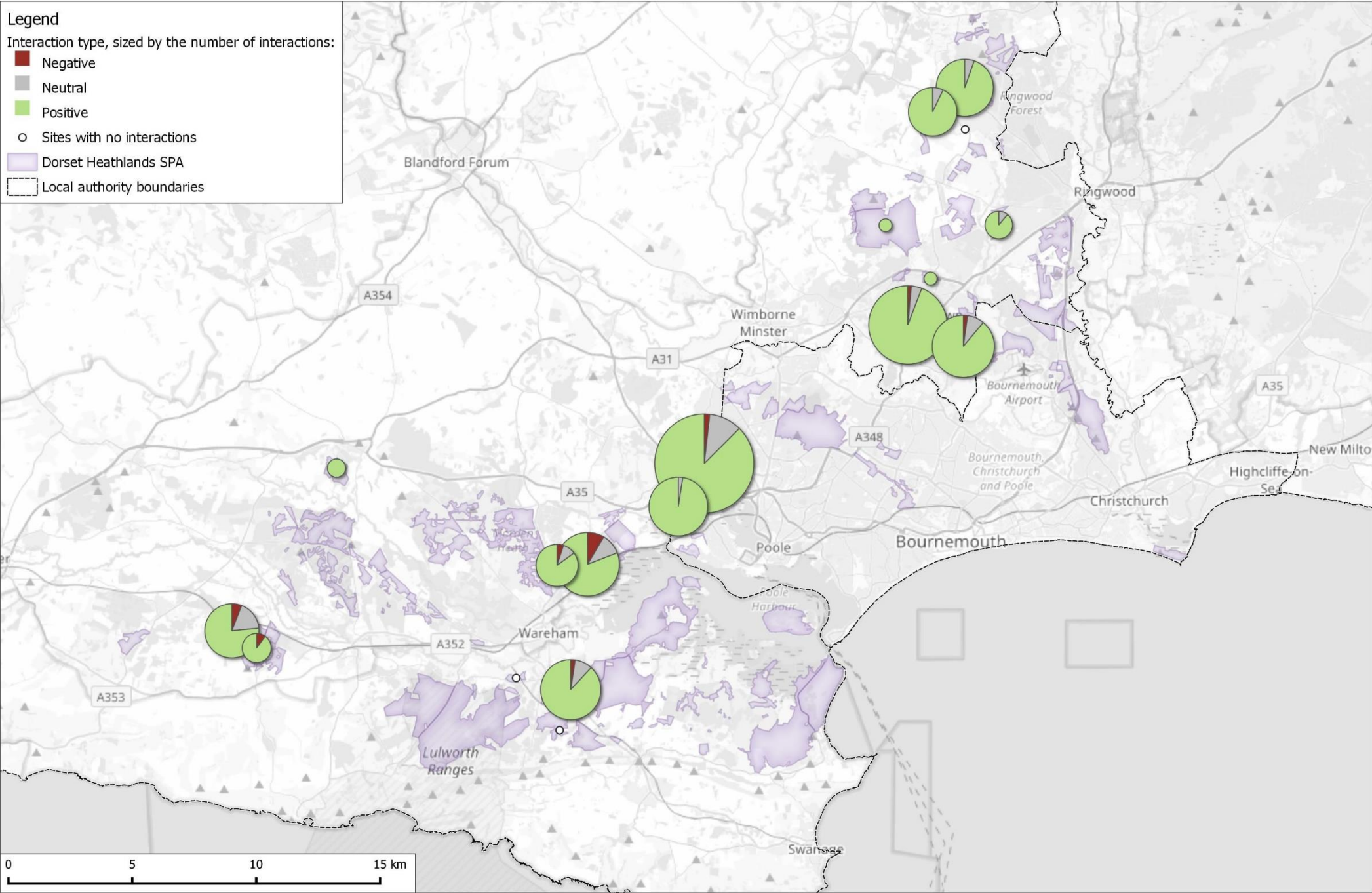
Issue/ Topic	All responses	First response	Topic discussed in interaction
General visitor interaction	419 (81%)	279 (54%)	-
Dog off lead	193 (37%)	139 (27%)	-
Cycling/horse riding off bridleway	31 (6%)	30 (6%)	56 (11%)
Visitor approached Warden	29 (6%)	25 (5%)	-
Other	21 (4%)	18 (3%)	18 (3%)
Jump use/digging	16 (3%)	13 (3%)	16 (3%)
Dog fouling	10 (2%)	9 (2%)	161 (31%)
Camping	3 (1%)	2 (0%)	12 (2%)
Den building	2 (0%)	2 (0%)	3 (1%)
Fishing	2 (0%)	2 (0%)	3 (1%)
Motorbike use	1 (0%)	1 (0%)	8 (2%)
Wildlife	-	-	402 (77%)
Responsible dog ownership	-	-	214 (41%)
Ground nesting birds	-	-	207 (40%)
SANGs	-	-	104 (20%)
BBQs/Campfires/fires	-	-	100 (19%)
Litter	-	-	16 (3%)

- 8.8 Dogs present in the interacted group were recorded as to whether the dogs were on or off lead. Overall 56% of dogs were off lead from a total of 87 dogs present.

Table 19: Summary of warden interaction and engagement. Where necessary highest and lowest values in each column are highlighted in red or blue respectively.

Site	Hours	Total people spoken to	Interactions per hour	Issue: Cycling/horse riding off bridleway	Issue: Dog fouling	Issue: Dog off lead	Issue: General visitor interaction	Issue: Jump use /digging	Issue: Motorbike use	Issue: Other	Issue: Visitor approached warden	% negative interactions	% positive interactions
Black Hill	15.5	4	0.3			1	3					0%	100%
Creech	7.0	0	0.0									n/a	n/a
Dewlands	38.5	54	0.7	1		6	19			1	1	0%	93%
East Holme	10.7	0	0.0									n/a	n/a
Ferndown	67.5	135	1.1	8	2	18	35	2		3	5	1%	94%
Great Ovens	39.0	38	0.5	1		3	13			3	1	5%	85%
Holt	8.3	3	0.2				2					0%	100%
Lion's Hill	20.0	11	0.5		1	1	4			3		0%	89%
Lytchetts	50.2	71	0.8		1	8	23			3	6	0%	98%
Parley	62.9	65	0.7	5	1	11	24			4	1	2%	89%
Potterne Hill	1.3	0	0.0									n/a	n/a
Sandford	46.0	72	1.0	6		19	18			2	3	9%	81%
Slop Bog	1.8	3	1.1			1	1					0%	100%
Stephen's Castle	47.7	78	0.8			4	34			1		0%	95%
Stoborough	37.7	64	1.1	4		11	28					2%	88%
Tadnoll	49.8	52	0.7	2	1	8	21			2	1	6%	76%
Upton	95.8	193	1.2	3	3	45	48	11	1	2	4	2%	88%
Winfrith	37.1	18	0.3			3	6				1	10%	90%

Map 13: Summary of wardening interactions.



9. Engagement

9.1 This section covers the engagement with the public as part of all aspects of the mitigation including wardening, education, Dorset Dogs work, social media and public events.

Events

9.2 February 2022 saw the launch of the new Urban Heaths Partnership website. The site features news and events pages to list and promote all public events by UHP and partners.

Education events

9.3 A total of 118 educational events were held in 2022, engaging with a total of 4,518 people – see Figure 9. Around three-quarters of persons engaged in education were children, as has been typical in recent years. No large events were again held this year which has greatly reduced engagement, relative to pre-Covid figures.

9.4 Only around a third of events were at target schools, which always varies from year to year. The location of education events and target schools is shown in Map 14.

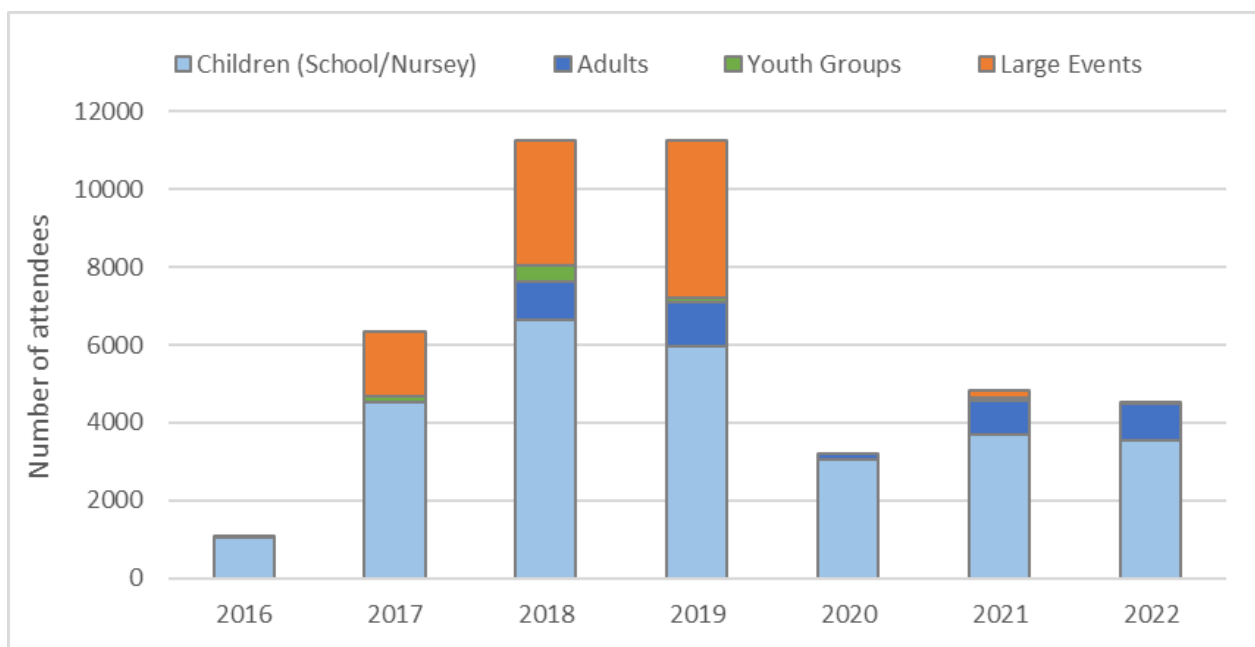


Figure 9: Total number of people attending events – small events record the exact number of people separated into adults and children, but larger events do not make this distinction.

Heath Week 2022

- 9.5 Heath Week 2022 ran from 25th - 31st July, and for the second year running was a coordinated week of events including other mitigation projects such as Thames Basin Heaths and the Pebblebed Heaths. This included numerous face-to-face and online events by UHP and partner organisations.
- 9.6 As in previous years, the social media takeovers by prominent natural history communicators - Lucy Hodson and Leif Bersweden, increased the engagement on social media, including a 1,300% increase in profile visits on Instagram and a 98% increase in page visits on Facebook.
- 9.7 Total estimated engagement was 297 face-to-face engagements and from social media a total reach of 40,248. This includes direct UHP accounts, but not associated partner accounts (BCP, ARC, FE etc.) which will have also had a reach locally.

Dorset Dogs events

- 9.8 K9 Firewise patrols are undertaken by volunteers and in 2022 there were a total of 465 events, amounting to 486.5 hours of person time. The most commonly visited site was Upton Heath, with 177 hours on site, accounting for 36% of all K9 Firewise time. Next most common were: West Moors Plantation, St Catherine's Hill Nature Reserve and Corfe Barrows Nature Park, all with around 33 hours.
- 9.9 Self-reported effectiveness of the engagement suggests time at Upton Heath was very useful, with an average score of 4.2 out of 5 (where 5 is very effective). The sites with the most time at, but viewed as least effective were West Moors Plantation (average score of 1.1) and Avon Heath (1.8).
- 9.10 In 2022, there was a decreased level of Dorset Dogs events related to decreased capacity due to staff changes. The only events relating to the heaths were in December, with: 2 Pit-stops, engaging with 28 people and 5 Park and patrols, engaging with 51 people.

Social media

- 9.11 In 2022, the social media account was closed on Instagram for Dorset Heaths Education and in the autumn there was an embargo on posts due to the Queen's death. In addition, Insights data on Facebook had changed which makes comparison of key metrics with previous years difficult. As such previous tables could not be updated, but a new table is presented in Table 20.

- 9.12 Different social media channels have varied in the level of engagement they have received and continually Heath Week provides a surge of engagement on at least one platform.

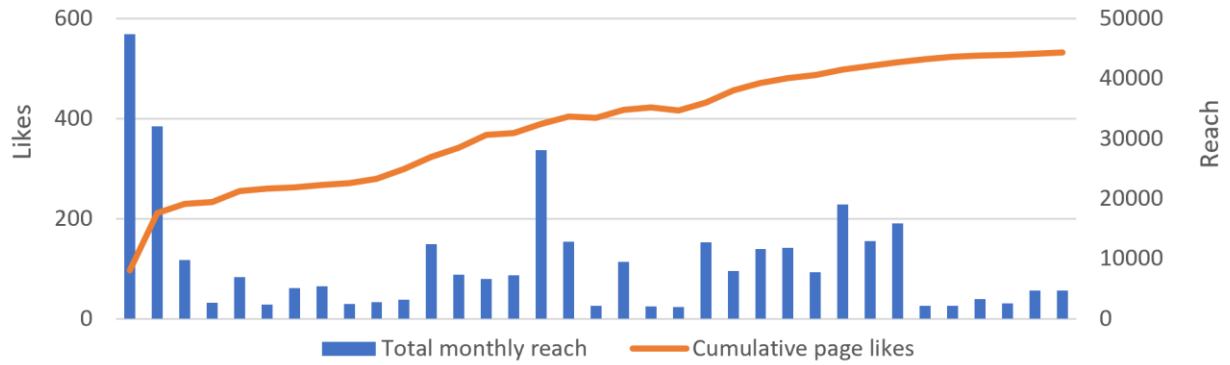
Table 20: Summary of social media engagement on various platforms and key metrics for UHP and Dorset Dogs only. Percentages show the change from the previous year. Asterisk indicates where values are incomplete.

Platform/metric	UHP	Dorset Dogs
Website		
Site sessions/users	3,438 (171%)	35252 (-27%)
Facebook		
Likes	5,942 (34%)	62,650 (6%)
Reach	109,681 (14%)	96,162 (-48%)
Instagram		
Engagements	1,629* (-50%)	616* (-69%)
Reach	31,927 (266%)	10,080 (49%)
Twitter		
Engagements	4,449 (-38%)	
Impressions	136,934 (-39%)	
Total Reach/Impressions	281,980* (-15%)	106,242* (-56%)

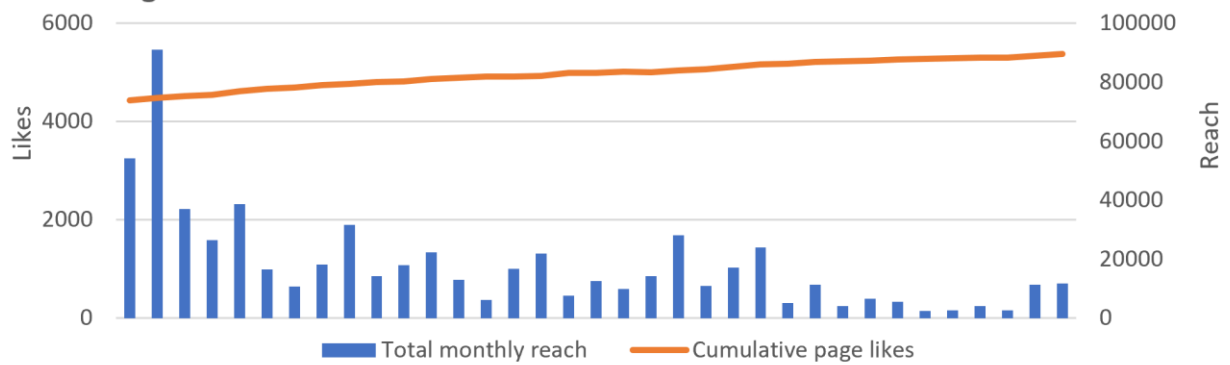
Membership

- 9.13 A total of 34 new members joined Dorset Dogs in 2022. The distribution of the new members in the context of the total membership (2,303 members with postcodes) is shown in Map 15. The distribution is again concentrated within the BCP conurbation and matches with population density and proximity to the heaths.
- 9.14 However, the growth of membership has been slowing. This may be in part due to less engagement during Covid, and no large scale events, but is also thought to be due to reduced membership and more online social media participation as a mechanism for people to engage.

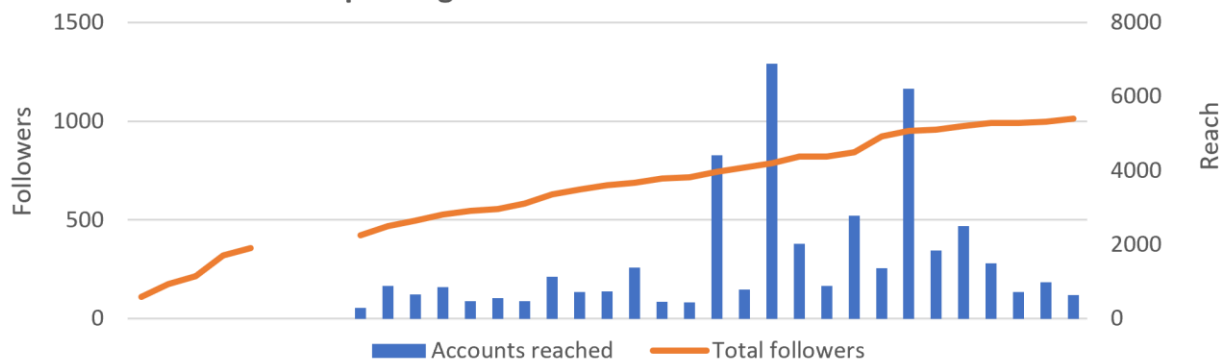
UHP Facebook



Dorset Dogs Facebook



Urban Heaths Partnership Instagram



Dorset Dogs Instagram

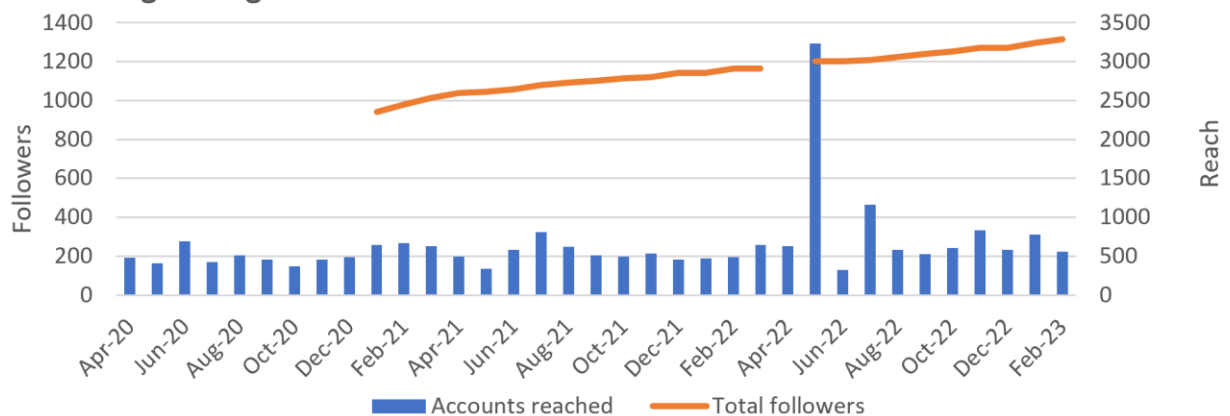
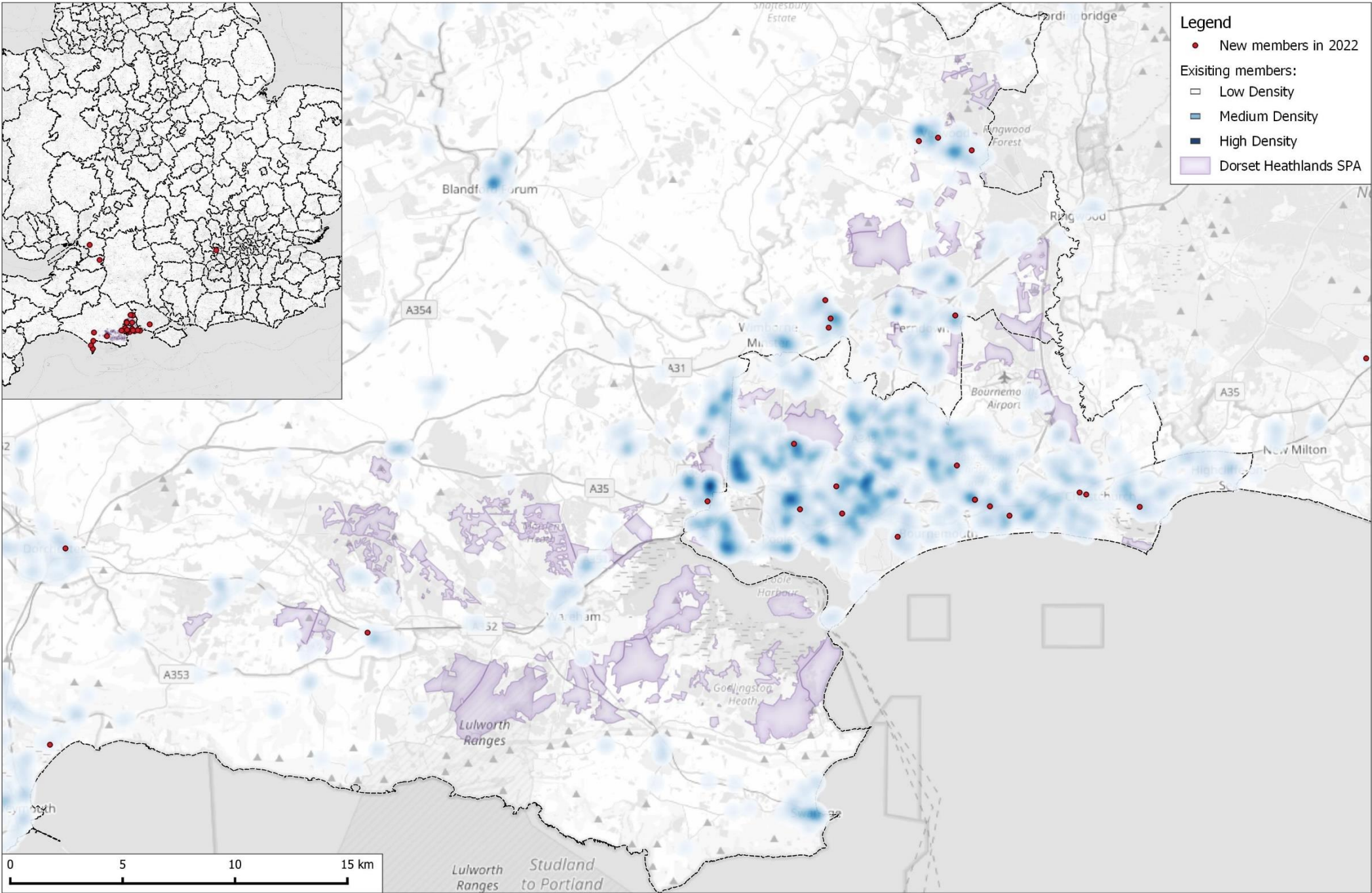


Figure 10: Social media stats for April 2020 onwards.

Map 15: Distribution of new and existing Dorset Dogs members. Inset map shows distribution of all new members.



10. References

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Appendix

Table 21: Summary of numbers of Dartford Warbler, Nightjar and Woodlark recorded in 2022 from sites (or the 1km squares which represent a subset of sites).

Site	Woodlark	Dartford Warbler	Nightjar
Alder Hills	0	0	
Arne Heaths	2	74	50
Avon Heath North	2	13	19
Avon Heath South	9	8	9
Barnsfield Heath	13	27	22
Blacknoll	1	4	0
Bourne Bottom (Valley)	0	1	0
Canford Heath	0	78	60
Corfe Bluff	0	0	
Corfe Hills	0	0	0
Creech Heath	0	0	0
Dewlands Common	0	0	0
Dunyeats Hill	0	11	6
East Holme	0	0	
Ferndown Common	2	17	6
Gallows Hill	0	0	
Grange Heath	2	5	9
Great Ovens	1	17	14
Ham Common	0	2	2
Haymoor Bottom	0	0	
Hengistbury Head	0	0	
Holt Heath/ Whitesheet	1	59	60
Holton Lee	0	4	4
Hurn	4	5	8
Hurn Forest	2	6	8
Hyde's Heath	4	16	12
Kinson Common	0	0	
Lions Hill	0	4	3
Lytchett East & Central	0	0	
Noon Hill	0	0	0
Parley Common	1	27	21
Ramsdown	0	0	0
Redhill Common	0	0	
Sandford Heath	1	8	4
Slepe Heath/ Hartland Moor squares	3	30	25
Slop Bog	0	0	
Sopley Common			0
Sopley & Troublefield	0	0	
Stephens Castle	0	2	2
Stoborough Heath	0	0	0
Stoborough RSPB	3	11	23

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Site	Woodlark	Dartford Warbler	Nightjar
Studland/ Godlingston Heath squares	0	22	12
Talbot Heath	0	9	3
Town Common/SCH	0	23	33
Turbary Common	0	2	0
Turnerspuddle Heath	0	0	0
Upton Heath	1	48	22
Verwood Forest/ Cranborne Common square	5	3	12
Wareham Forest/ Morden Bog squares	1	9	19
Winfrith & Tadnoll Heath	4	18	26

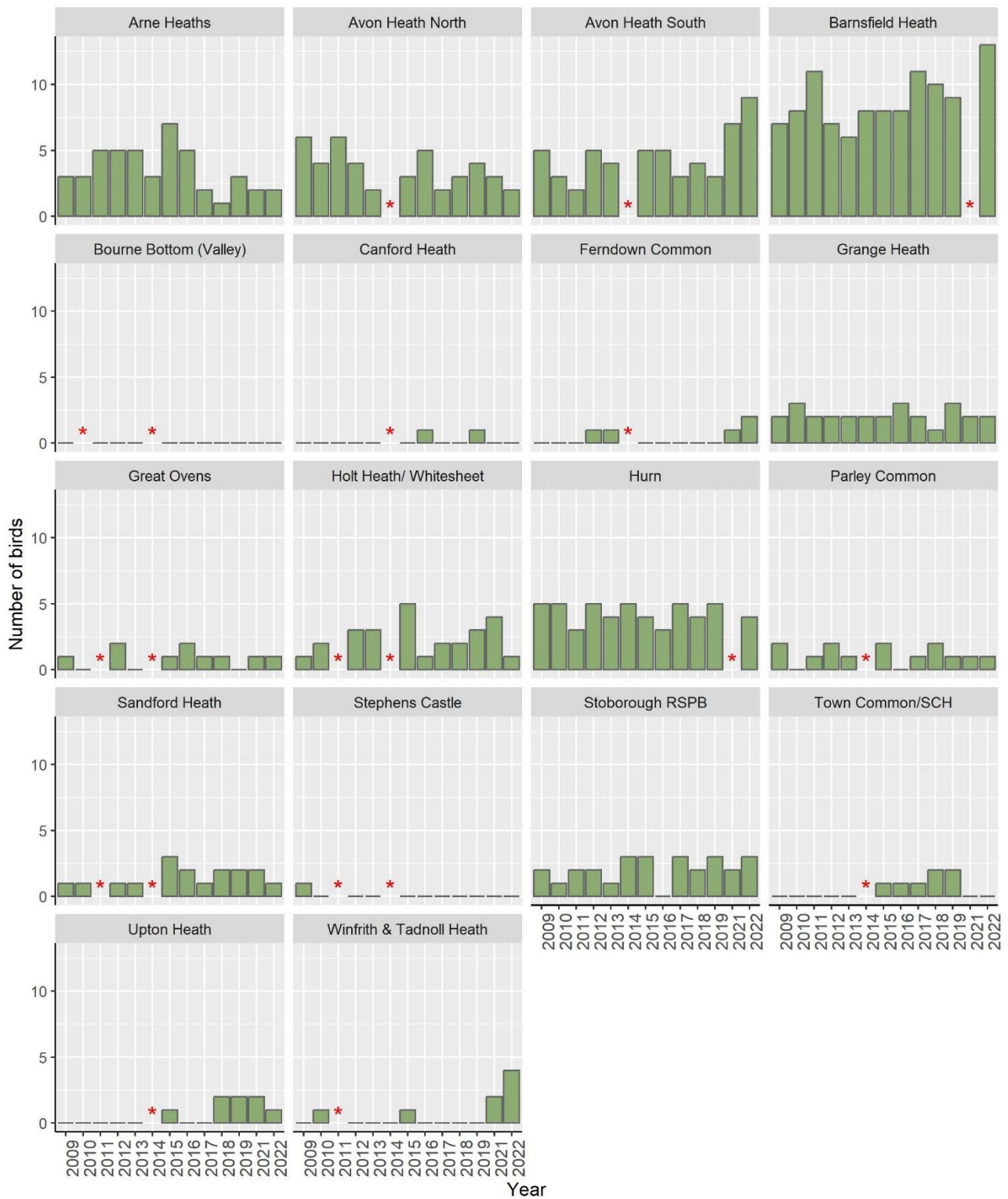


Figure 11: The number of Woodlark recorded at each site (or the 1km squares which represent a subset of sites) from the annual monitoring data. Sites shown are those with ≥ 11 years of count data.

UHP MONITORING: 2022

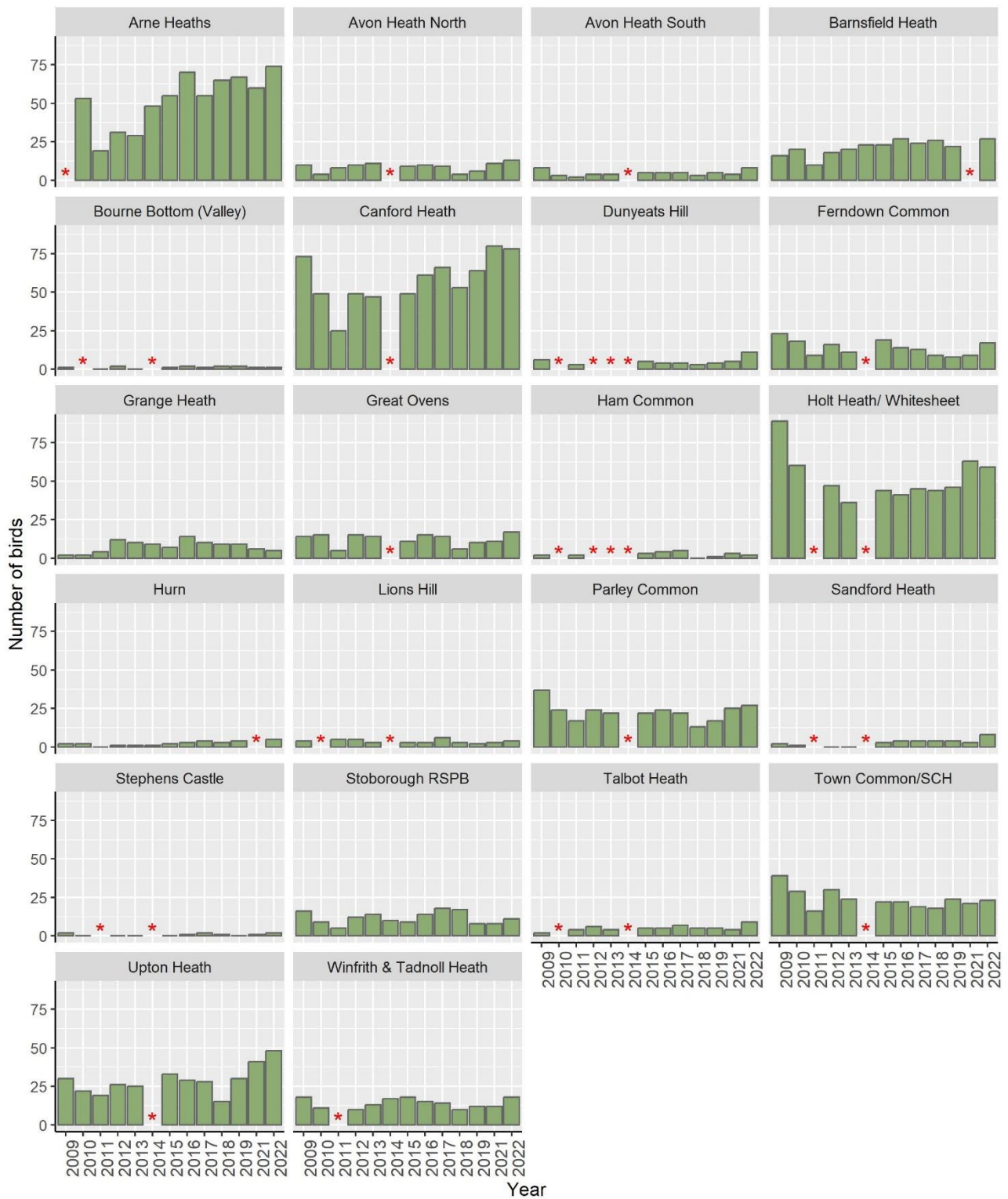


Figure 12: The number of Dartford Warbler recorded at each site (or the 1km squares which represent a subset of sites) from the annual monitoring data. Sites shown are those with ≥ 10 years of count data.

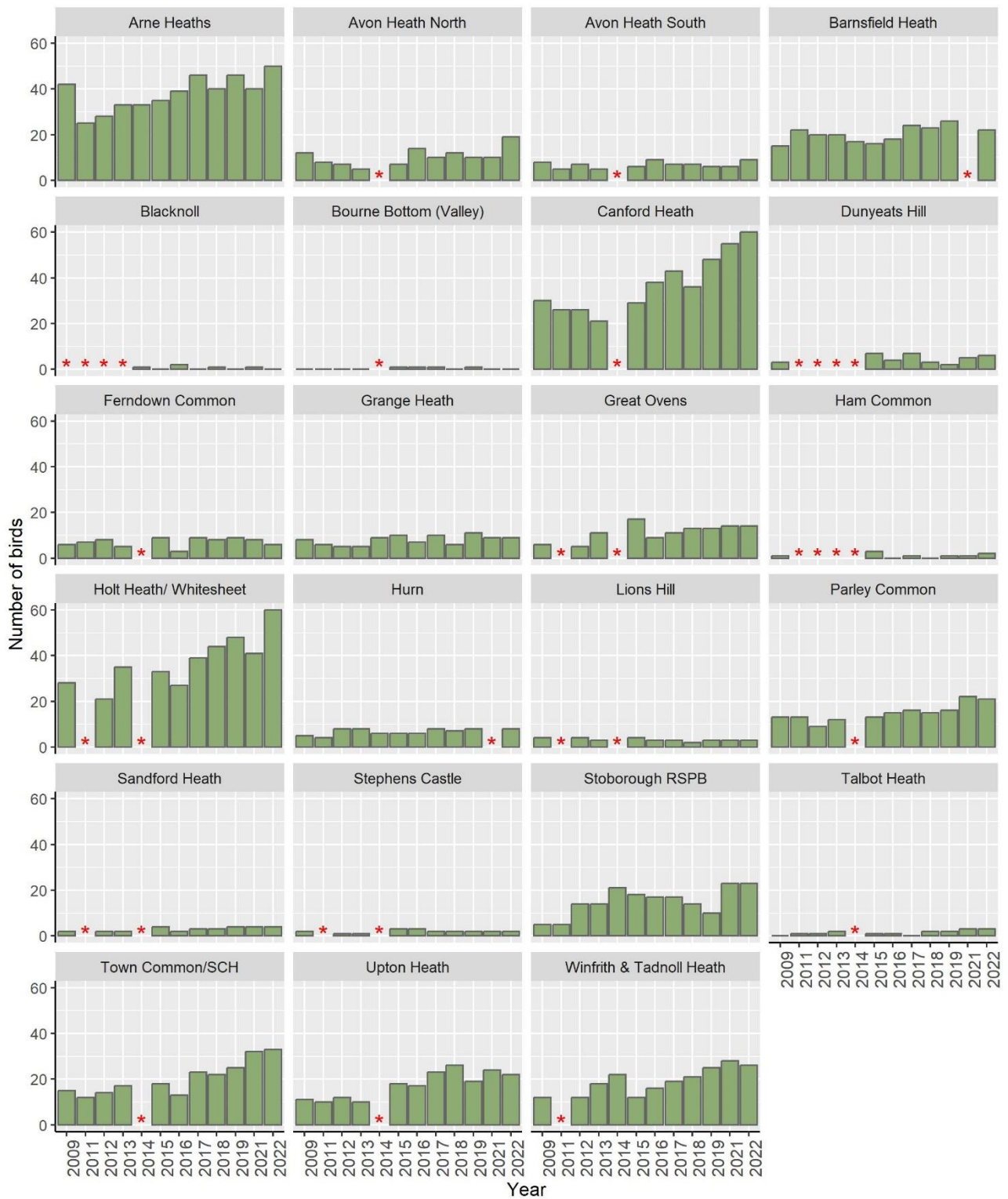


Figure 13: The number of Nightjar recorded at each site (or the 1km squares which represent a subset of sites) from the annual monitoring data. Sites shown are those with ≥ 7 years of count data. Note missing values for 2010 across all sites.