

**CENTRE FOR
SOCIAL
INNOVATION**



HAMPSTEAD HEATH

Waste and litter report

May 2019

About Keep Britain Tidy's Centre for Social Innovation

Keep Britain Tidy is a leading independent charity with three goals – to eliminate litter, improve local places and prevent waste. We have a long history of successfully delivering campaigns and programmes that have positive impacts for society and the environment at a local, regional and national level.

In 2015, Keep Britain Tidy launched the Centre for Social Innovation, becoming the only UK charity to take a systematic approach to applying behavioural insights to tackle litter and waste issues. Our approach involves gathering insights into specific behaviours and using these to develop, pilot and scale innovative behaviour-change interventions.

We are part of a new global movement of policy-makers, academics and practitioners looking at the application of behavioural insights to encourage pro-social and environmental behaviour. We have won numerous awards for our work including from Nudge Awards 2018, AIM Nudging for Good Awards 2017 and the Charity Awards 2016.

What makes our approach further unique is our ability to take our interventions to national scale. Over 160 local authorities have implemented one or more of our tested interventions since we launched.

To find out more, visit www.keepbritaintidy.org/centre-for-social-innovation.

ABOUT THE WASTE INSIGHTS TEAM

In 2011 Waste Watch merged with Keep Britain Tidy, pulling together over 25 years-worth of understanding and expertise about wasteful behaviours and how to address them.

With a mission to end waste, Keep Britain Tidy's Waste Insights Team help local authority, housing sector and businesses achieve the best environmental and cost performance by helping and encouraging their people to reduce, reuse and recycle. To progress our goals, we have deployed a range of tactics from direct engagement, social media campaigns, events, waste and infrastructure analysis and input to national policy.

Our team of experienced project managers are currently undertaking projects with London Boroughs of Enfield and Tower Hamlets, North London Waste Authority, Chester West and Chester Council, Renewi, Clear Channel and Hampstead Heath.

Along with our continued close relationship engaging schools, young people and community groups in East London through our Recycle for Your Community project, The Waste Insights Team already boast an impressive portfolio of completed projects working with the London Borough of Havering and its residents, including:

- Recycle Week Flats Engagement, 2015
- Fab Food programme, 2017
- Sack Survey, 2018

To find out more, visit <https://www.keepbritaintidy.org/local-authorities/reduce-waste-increase-recycling>.

Contents

Summary of recommendations	4
1 Introduction	5
1.1 Background	5
1.2 Aim and objectives	6
1.3 Methodology	6
2 Research Findings	7
2.1 Composition of waste and litter on the Heath	7
2.2 Littering insights	9
2.3 Site Visit Observations	16
3 Recommendations	19
3.1 General communications	19
3.2 Bin provision, placement and design	22
3.3 Collecting dog waste	24
3.4 Events	25
3.5 Engaging local retailers to reduce waste brought into the Heath	25
3.6 Engaging key stakeholders	27
3.7 Targeted interventions and campaigns to tackle specific behaviours	27
4 Next steps	28
Appendix A: Information Gathering Workshop Notes	29
Appendix B: Co-Design Workshop Notes	34

Summary of recommendations

Our recommendations from Work Package A are summarised below and detailed in Section 3 of this report.

General communications

1. Develop an overarching brand campaign for Hampstead Heath
2. Consider establishing Hampstead Heath as a Waste Free Zone or a Plastic Free Zone.
3. Help people to plan to minimise waste during their visits
4. Update the 'Litter' information provided on the Hampstead Heath website

Bin provision, placement and design

1. Consider removing bins from the periphery of the Hampstead Heath and other strategic locations to reduce litter and fly-tipping
2. Engage stakeholders in advance to gain buy-in to changes to bins
3. Monitor the impacts of changes to bins and feed results back to the public
4. Use pedestrian flow mapping to identify optimal locations for bins and communications/ other interventions
5. Use appropriate images or real-life examples on bin signage
6. Plan-in bin cleaning and maintenance

Collecting dog waste

1. Monitor waste composition to understand the need for separate dog waste bins
2. If dog waste must be collected separately, consider implementing new dog waste bins alongside the general waste and recycling bins

Events

1. Develop a Code of Conduct and consider refundable deposits for organised events
2. Develop a standard for children's parties and other social gatherings

Engaging local retailers to reduce waste brought into the Heath

1. Work with the Heath cafés and surrounding businesses to establish a local Refill network
2. Work with local retailers to reduce single-use packaging brought into the Heath

Engaging key stakeholders

1. Establish a waste and litter Working Group for the Heath
2. Use Community Based Social Marketing activate behaviour change via special interest groups
3. Engage local schools to co-design waste and litter solutions with students

Use targeted interventions and seasonal campaigns to tackle specific behaviours

1 Introduction

1.1 Background

Hampstead Heath is a member of Keep Britain Tidy's fraternity by holding a coveted Green Flag award, recognising their lead in good land management and visitor experience.

The City of London Corporation has developed a new Management Strategy for Hampstead Heath¹. This Strategy will set out four long-term outcomes and ten priorities to guide the management of the Heath over the next ten years.

As part of this work, Keep Britain Tidy has been working with the City Corporation to understand waste and litter issues on the Heath and develop recommendations for the future management of these issues.

Hampstead Heath currently collects dog waste separately from all other mixed waste from visitors, and there are no separate recycling bins provided. Mixed waste has previously been collected in large, shallow, open concrete structures clad in timber, requiring a large agricultural vacuum device to empty them. While this approach has allowed waste to be removed quickly on collection rounds, it means that large amount of recyclable materials are being sent to energy recovery rather than reprocessing, while the open design of the bins also means that local wildlife (particularly foxes and crows) can access and spread the bin contents causing litter.

Suitable food waste and cooking preparation waste is collected from the cafés on a weekly basis and taken by a contractor to a biodigester. There is a general waste compacter sited at the Kenwood Nursery Yard which can compact general waste ready for transfer to treatment facilities.

The City Corporation is exploring options for altering their waste provisions on Hampstead Heath. Changes to be explored are:

- removing current litter bins and replace with enclosures to house a combination of Wheelie bins or Euro bins;
- introducing fully commingled recycling-on-the-go;
- retaining a separate waste stream for dog waste;
- encourage visitors to bring less items that are likely to become waste during their visit to the Heath; and
- introducing pre- and post-consumer food waste collections in their cafés.

This report summarises preliminary research conducted by Keep Britain Tidy in partnership with the City Corporation to identify the key opportunities across these considerations. This research forms the first of four work packages being delivered under the project:

¹ <https://www.cityoflondon.gov.uk/things-to-do/green-spaces/hampstead-heath/Pages/consultation.aspx>

1. Research to understand the issues and identify practical measures and communications to help visitors conform to changes in waste management on Hampstead Heath.
2. Designing & testing communications.
3. Testing of bin provisions.
4. Recycling training for staff.

1.2 Aim and objectives

The aim of Work Package A was to identify the waste and issues at Hampstead Heath and to develop behavioural interventions and recommendations aimed at encouraging people to:

- generate less waste in the first place
- use recycling bins across the Heath as appropriate
- use litter bins across the Heath as appropriate
- take their rubbish home/with them.

1.3 Methodology

The research involved:

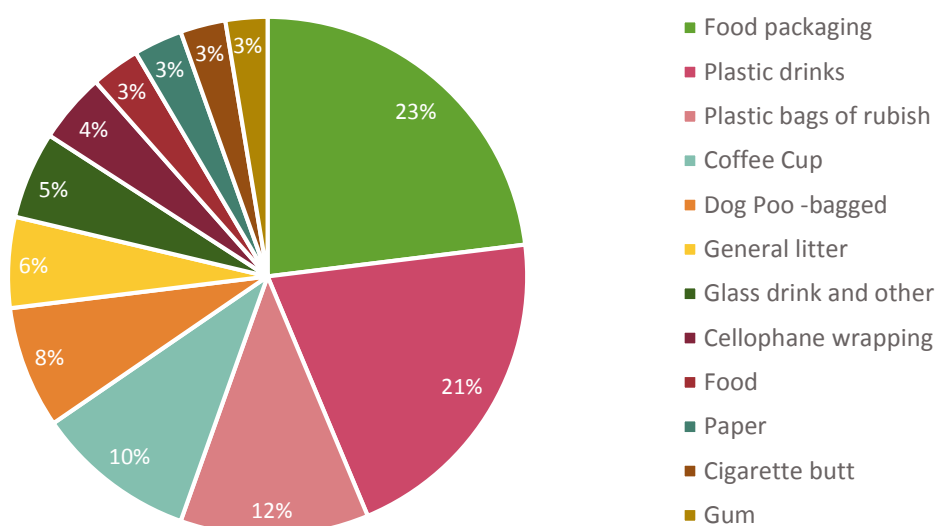
- A desk-based review of global literature and other evidence on waste and litter issues in parks and open spaces and initiatives to address these. This includes a review of Keep Britain Tidy's previous research on littering behaviours at Hampstead Heath as part of the *Abandoned Picnics* project. In this project Keep Britain Tidy conducted 24 hours of behavioural observations on the Heath over warm weather weekends in the summer of 2017 (alongside 24 hours of behavioural observations per four other London parks – 120 hours in total). The observations recorded the behaviours and context of people seen handling waste items (either through bin disposal, littering or taking the waste with them), recording a total of 583 observations on the Heath, and 2,101 across the four Parks.
- An information gathering workshop conducted with stakeholders at Hampstead Heath. This workshop shared findings from the desk-based review, gathered further evidence on key waste and litter issues from participating stakeholders, and began to co-design interventions to optimise waste and litter management on the Heath.
- A site visit to Hampstead Heath to view litter and waste issues, particularly at hotspot locations identified by stakeholders in the co-design workshop;
- A consultation survey with Assessors in the Green Flag Awards programme; and
- A co-design workshop with six Hampstead Heath staff, in which the findings from the research to date were discussed in detail and delegates co-designed a further series of interventions and recommendations for tackling waste and litter issues on the Heath.

2 Research Findings

2.1 Composition of waste and litter on the Heath

The behavioural observations conducted in 2017 suggests that waste taken onto the Heath overwhelmingly comprises food and beverage packaging (Figure 1). It should be noted that the composition of waste brought into the Heath is likely to vary significantly throughout the year. Figure 1 provides an indication of waste left during warm weather periods during weekends. It is our understanding from the City Corporation that bagged dog waste becomes one of the most predominant waste types during winter months and colder periods. Nonetheless, the City Corporation has estimated that overall, 80% to 90% of all waste collected from the Heath is recyclable.

Figure 1: Types of waste disposed of by visitors to Hampstead Heath



Base: 460 items

Food packaging observed predominantly came from supermarkets and local businesses selling pre-packaged and take away food. This indicates that interventions at local retailers (e.g. at the till) and/or on the journey between retail outlets and the Heath could be effective locations for engaging visitors.

Table 1: Food packaging types

Food packaging types	Proportion of waste items
Takeaway food	42%
Picnic food	24%
Pizza box	6%
Utensils (fork, spoon...)	6%
All other	23%

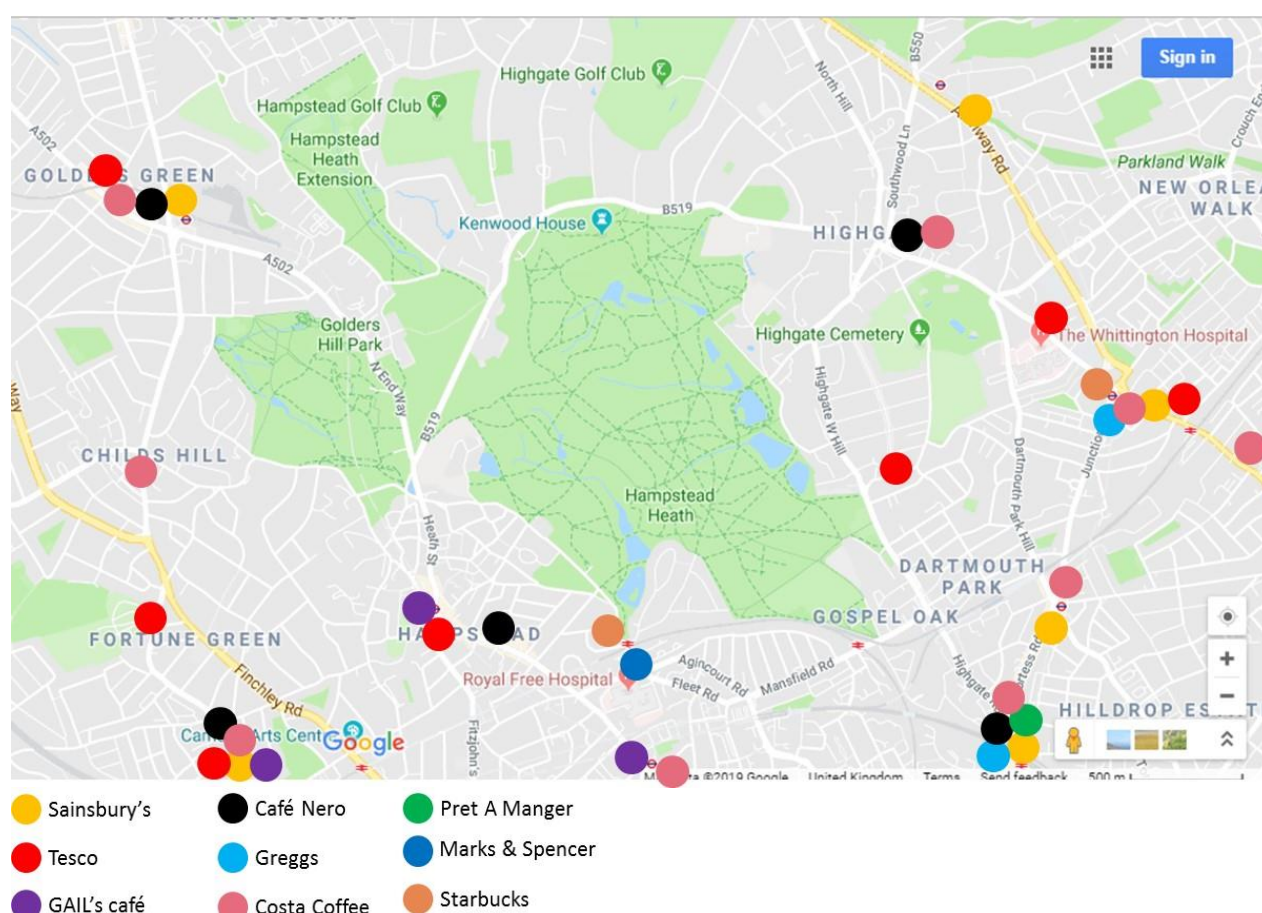
Base: 106 items

The majority of litter observed inside and outside bins during Keep Britain Tidy's site visit to the Heath was branded the following (though it should be noted that this site visit was conducted midweek in March during colder weather and that the types and brands of waste left on the Heath may vary across seasons):

- Sainsbury's
- Tesco
- GAIL's Café
- Greggs
- Café Nero
- Pret a Manger
- Costa.

Figure 2 provides a map of key retailers around the Heath that could be engaged to develop behavioural interventions to tackle waste and litter issues on the Heath. Keep Britain Tidy can support in efforts to engage these retailers.

Figure 2: Locations of food and beverage retailers located around the Heath



During the site visit we also observed a large number of adults (presumably local residents) walking a dog or two and drinking coffee from disposable coffee cups. This suggests that initiatives targeted to local residents to discourage the use of disposable coffee cups (e.g. by using reusable cups of 'sitting in') could be useful for reducing the amount of waste left on the Heath.

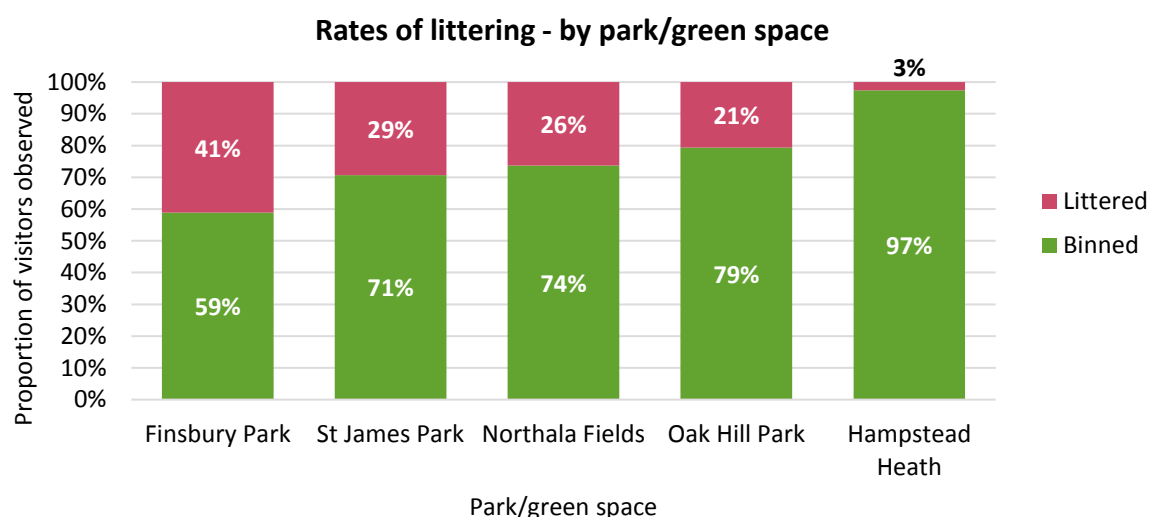
2.2 Littering insights

Littering on Hampstead Heath

This section presents the results from the 2,101 behavioural observations conducted as part of the 2017 *Abandoned Picnics* project, with a view to providing insights into the social and environmental drivers of littering in parks and green spaces.

The research found that of the five parks/green spaces included in the study, Hampstead Heath has the lowest rates of littering, with just 3% of visitors observed littering their rubbish (Figure 3). It should be noted that the behavioural observations were only conducted in two areas within the Heath (Pryors Field and Parliament Hill areas) and as such may not have captured littering in other areas within the Heath, however we consider this to be a very positive indication that the overwhelming majority of visitors to the Heath dispose of their waste responsibly.

Figure 3: Rates of littering in parks and green spaces



Base: Finsbury Park = 622 ; St James = 427; Northala Fields = 278; Oak Hill Park = 174; Hampstead Heath = 426

Overall, only 11 visitors to the Heath were observed littering during the 24 hours of observations. Of these:

- five visitors littered one or more cigarette butts
- two visitors littered a non-alcoholic beverage container
- one visitor littered food packaging
- one visitor littered a paper item (this category include receipts, train/bus tickets, and other small items of paper)
- one visitor littered a plastic bag filled with rubbish
- one visitor littered general/other litter (uncategorised).

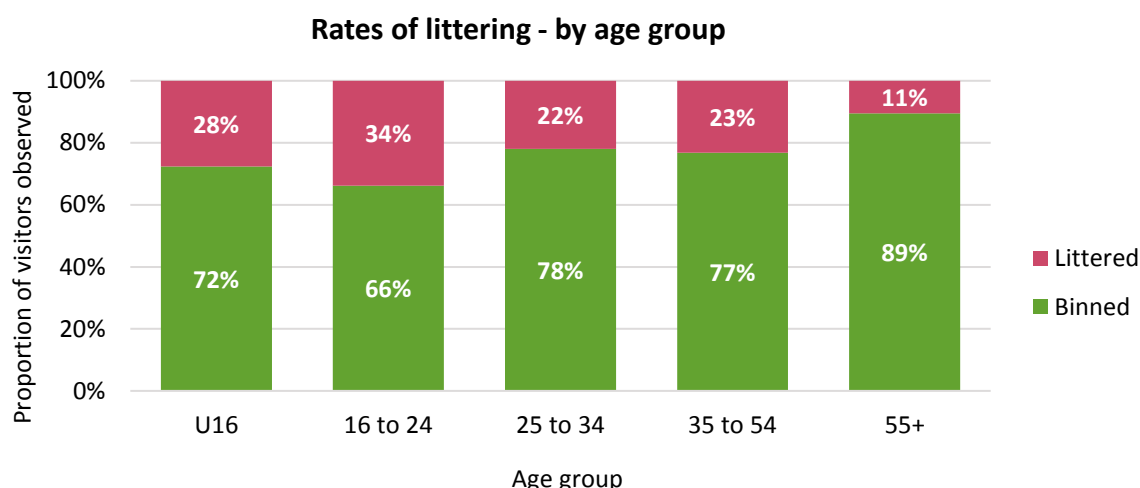
These 11 visitors were generally:

- in a couples or groups of three to four friends
- aged between 25 and 34 years
- picnicking and socialising at the time of littering
- leisure visitors or tourists, rather than local residents (based on appearance/behaviour).

Littering in parks/green spaces – by age group

Across all of the parks and green spaces included in the Abandoned Picnics research, rates of littering by visitors were generally similar across all age groups, although those aged 55 and over were the least likely to litter their rubbish, while those aged 16 to 24 were the most likely to litter (Figure 4). This finding is somewhat typical of Keep Britain Tidy's broader research on littering behaviours, which has found that people in all age groups litter, but that the majority of people do the right thing.

Figure 4: Rates of littering by age group



Base: U15=210; 16 to 24 = 346; 25 to 34 = 474; 35 to 54=375; 55+=95

Littering in parks/green spaces – by visitor type

Interestingly, our research suggests that people who litter in parks/green spaces are significantly more likely to be local residents, rather than tourists or visitors from further afield (noting that our researchers categorise the people they observe based on appearances, activity and behaviour, and that some inaccuracies may occasionally occur) (Figure 5). Based on Keep Britain Tidy's previous research, we suggest that a proportion of this could be due to local residents taking household rubbish into parks/green spaces².

In 2018, Keep Britain Tidy conducted an experiment across three parks in partnership with Ealing Council and Merton Council to monitor the impacts of removing all bins from the parks on litter and fly-tipping. The results from this suggest that incidents of household fly-tipping in the parks (particularly bags of rubbish left next to bins) visibly decreased following the bin removal:

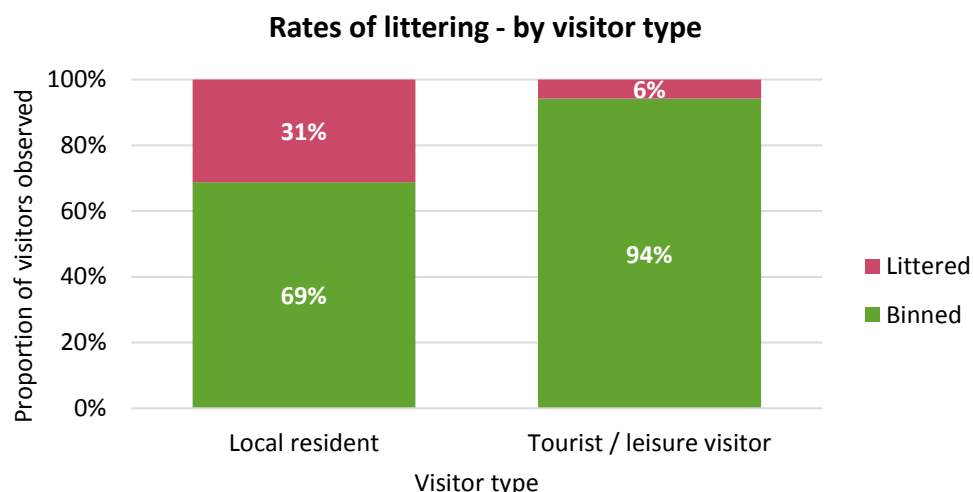
"We picked the park [for the experiment] because we knew that there were bins that were being abused by local residents – they were using these for domestic waste. So we knew we would probably have a reduction in fly-tipping as a result of the bin removal [...] We did see bags of household rubbish dumped near the entrance in the first week, but then this stopped."

(Partner interviewee)

² Keep Britain Tidy, *Understanding and Tackling Fly-tipping in London*, 2018; Keep Britain Tidy, *Inside the Head of Fly-tippers*, 2017.

If fly-tipping of black bags and other rubbish by local residents is an issue next to bins around the periphery of Hampstead Heath, we recommend conducting a trial to remove these or move them further into the Heath. This is discussed further in Section 3: Recommendations.

Figure 5: Rates of littering by visitor type

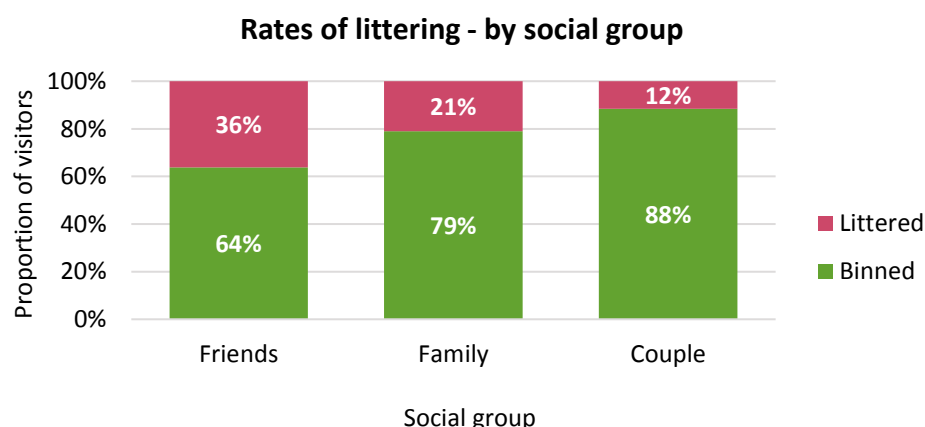


Base: Local Resident = 1018; Tourist/ leisure visitor = 359

Littering in parks/green spaces – by social group

The research found that visitors were least likely to litter when in a couple (e.g. on a date or with their partner), and most likely to litter when with friends. Previous research by Keep Britain Tidy with young adults had similar findings, with 18-25 year olds stating they would never litter in front of a date as they felt this could be a turn-off, and they would hold reservations about dating someone who littered. With these findings in mind, we suggest that fun, interactive and social interventions would be appropriate for engaging people visiting with friends. We have made a number of recommendations for this in Section 3.

Figure 6: Rates of littering by social group



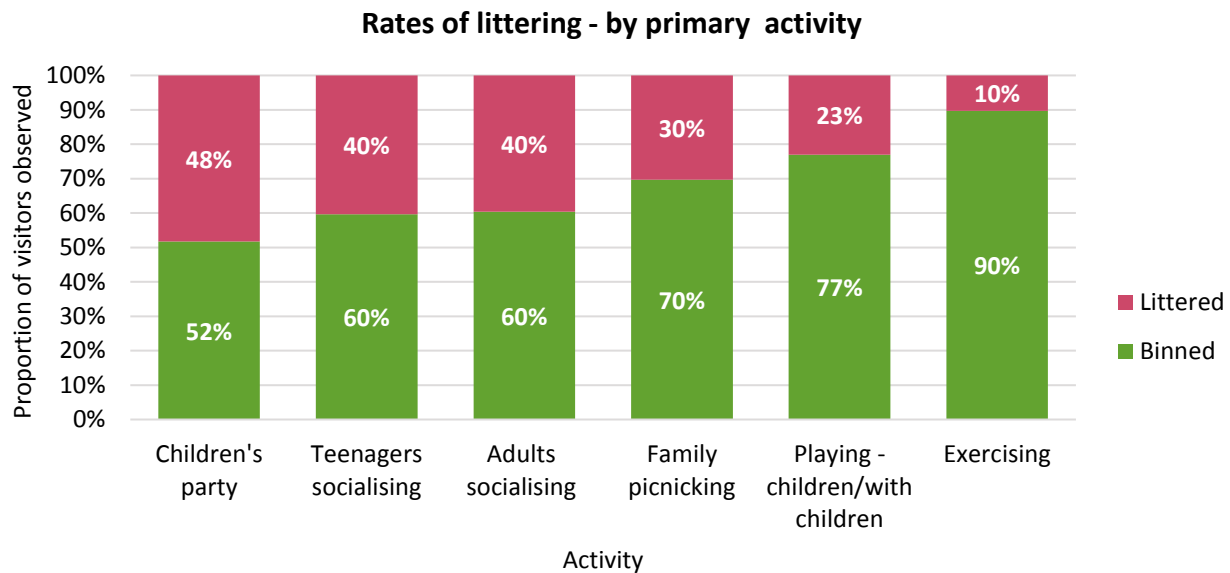
Base: Friends = 487; Family = 563; Couple= 182

Based on conversations with the City Corporation staff and local stakeholders, we understand that a number of students from local schools spend time on the Heath during breaks, and that this is a key driver of littering in specific areas, namely near the ponds and in the Parliament Hill area (this issue was not captured in the *Abandoned Picnics* research due to the observations being conducted on weekends). We suggest that engaging students from these schools to co-design interventions targeted to peers could be an effective way to discourage this issue – this is discussed further in the recommendations at Section 3.

Littering in parks/green spaces – by activity

The *Abandoned Picnics* results suggest that a large proportion of littering in parks/green spaces comes from children’s parties and teenagers and adults socialising (Figure 7), and the stakeholder workshops conducted as part of this project confirmed that this can be an issue on the Heath. We suggest that practical measures could be an appropriate way to address this issue, for example by providing a ‘standard’ for children’s parties and providing novelty rubbish bags for collecting and sorting rubbish from parties. Our recommendations are discussed further at Section 3.

Figure 7: Rates of littering by primary activity at time of disposal

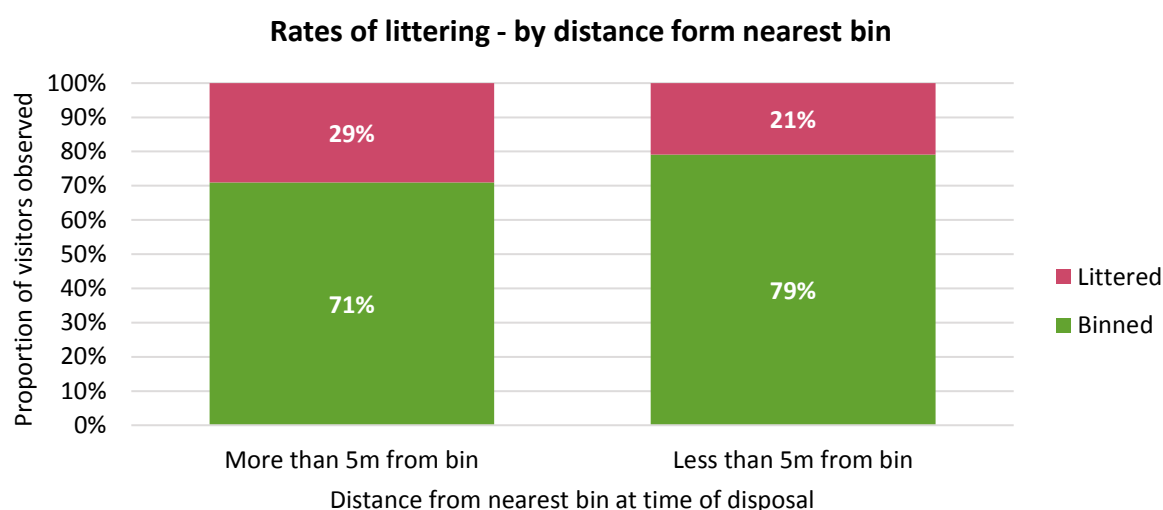


Base: Children’s party = 29; Other = 58; Teenagers socialising = 62; Adults Socialising = 361; Family picnicking = 188; Playing children = 226; Exercising = 575.

Littering in parks/green spaces – by distance from a bin

Our research found that people who were within five metres of a bin were slightly less likely to litter compared to those who were further than five metres from a bin (Figure 8), however this difference in not statistically significant.

Figure 8: Rates of littering by distance from nearest bin at time of disposal



Base: More than 5m from bin = 824; Less than 5m from bin = 647

There is some evidence to suggest that having no bins or fewer bins in the right locations will help to reduce litter levels in parks and green spaces, although further research is required to verify this.

For example, litter monitoring in our bin removal experiment with Ealing Council and Merton Council (conducted in Maytrees Rest Garden and North Acton Playing Fields in Ealing, and Wandle Park in Merton) found that while the amount of litter collected from the ground increased significantly following bin removal, the Park Managers involved felt that litter levels were lower than what they would normally expect during warmer weather periods when the experiment took place:

“It worked – litter reduced significantly... There was no increase in fly-tipping or side waste.”

“Visually it looked good, because where there were bins before, there was often litter around them, and so it took away that eyesore.”

“As a [partner] we are incredibly happy. We inspected the park three times a week and we could see that it was cleaner.”

(Partner interviewees)

Despite the increases in litter recorded in the experiment, the total amount of waste left in each park³ decreased significantly from the baseline monitoring period following bin removal (by an average of 68% across the three parks, and up to 84% in one of the parks), indicating that a large proportion of park visitors took their rubbish with them. Both partners informally monitored on-street litter bins in the areas immediately surrounding the parks and felt confident that park visitors were not using these in place of the removed bins.

³ Waste left in bins and on the ground prior to bin removal, and waste left on the ground once the bins had been removed.

The park user perceptions results in this experiment were mixed. Perceptions of litter, fly-tipping and the overall attractiveness of the park were not impacted in Maytrees Rest Garden, and in fact improved slightly following bin removal. Perceptions in the North Acton Playing Fields were positive in the month immediately following bin removal, but declined in the longer term monitoring conducted three months later. Perceptions in Wandle Park were generally negative following bin removal across both the shorter and longer term monitoring periods. Positively, when asked what they would do with their rubbish without bins in the park, the majority of park users surveyed across all three parks said that they would take their rubbish home.

We consider the results from this experiment to be promising, although we recommend further piloting of the approach to gather more robust evidence on the impacts of bin removal on rates of littering. Our experiment monitored the amount of litter left on the ground and placed in bins during the baseline monitoring period, which enabled us to account for fluctuations in footfall (e.g. during warmer weather, when visitor numbers and thus the amount of waste taken into the park tends to increase). This means that the true rate of littering can be captured – i.e. the amount of litter left on the ground versus that disposed of in bins. Once the bins were removed, this was not possible. We therefore strongly recommend that future trialling of the approach includes a mechanism for capturing the amount of litter dropped as a proportion of the overall amount of waste taken into and out of the park/greenspace. Behavioural observations are one way that this could be achieved. Gathering robust evidence of litter impacts will be crucial for providing a rationale for the approach to the public, as removing bins to reduce litter could be considered counter-intuitive.

Our experience in this experiment suggests that it is vital to engage key stakeholders in the lead-up to bin removal to gain their buy-in to the approach. This includes 'Friends of' and other community interest groups. We suggest engaging such groups to participate in the experiment, for example by helping to develop communications to inform the public of the approach and/or by involving these stakeholders in litter monitoring activities.

Picnics

Hampstead Heath is a popular destination for picnics and as with many other parks/green spaces, this can lead to significant volumes of waste and litter at certain times, particularly:

- on warm days (the biggest predictor)
- on weekends and bank holidays (but also on weekdays during warm weather)
- during lunchtimes and early evenings
- in spring and summer generally.

When visitors pack up to leave a park/green space following a picnic, they tend to collect their rubbish into one or more plastic carrier bags. The photographs by the City Corporation below show an example of this, with plastic carrier bags of rubbish left in and next to general waste bins, presumably at the end of a busy, warm weather day.

Figure 9: Photographs provided by the City Corporation, which show bags of ‘picnic rubbish’ left in and around bins on Hampstead Heath



There are two important implications from this to consider when developing the future waste collection arrangements and communications:

1. From the photographs, it appears that people have not separated general waste and recyclables – rather these have been mixed together into single bags. As there are no recycling facilities currently provided on the Heath (aside from split bins provided outside the Parliament Hill café) this can be expected. However, once the new recycling bins are introduced on the Heath, we recommend additional prompts to encourage visitors to separate their waste for recycling before disposal, rather than dispose of these in a single bag, to maximise recycling and to help prevent the apertures from becoming blocked. For example, this could include messaging on bins or A-frame boards/chalkboards placed next to bins and a key picnics areas, alongside seasonal face-to-face engagement with visitors.
2. With smaller apertures in place, some people are likely to leave bags of rubbish next to the bins. Keep Britain Tidy’s research on fly-tipping behaviours has found that many people are not aware that leaving rubbish next to bins is ‘fly-tipping’, with many believing that it is an appropriate thing to do because the waste can easily be collected when the bins are emptied. Furthermore, a single bag left next to a bin can quickly accumulate as others take it as a signal that it is acceptable to do the same. As noted by the City Corporation staff during the co-design workshop, interventions that prevent the first bag of rubbish from being left next to a bin are therefore essential. We recommend using visual cues around the base of bins for this purpose. Examples include:
 - A-frame boards placed next to bins with a similar message and an accompanying call to action such as ‘If this bin is full, please take your rubbish home’;
 - pavement stencils or artwork around the base of bins that use images of local wildlife (hedgehogs, grass snakes, etc.) alongside the message ‘Wildlife lives here. Please do not leave rubbish next to this bin.’;
 - ‘Beautiful obstructions’ to design-out dumping, such as planters, although bin access by waste collectors will need to be considered; and
 - Ground mats or artwork that create visual boundaries around the bin. For example, in a small experiment with Havering Council, Keep Britain Tidy used AstroTurf around the base of on-street litter bins to discourage fly-tipping of household waste by the bins. This intervention reduced the number of black bags left by bins by approximately 50%. Our hypothesis is that the AstroTurf created a boundary around and relative beautification of the bins, which prompted people to behave differently.

Figure 10: Photograph provided by the City Corporation of one style of bin housing being considered for the new bins on Hampstead Heath

2.3 Site Visit Observations

The key observations from the site visit are summarised below.

- There was a sufficient number of general waste and dog waste bins around the periphery of the Heath: Parliament Hill, Dukes Field, Stone of Free Speech and the Highgate ponds.
- There were considerably fewer bins but also less litter in the middle areas of the Heath: South Meadow and Sandy Heath.
- Parliament Hill Café provided their own bins, including recycling bins. These had a different design and signage to the main bins provided throughout the Heath.
- General waste bins and dog waste bins were generally provided side-by-side, but not in all instances. This may be confusing for some dog walkers if the intention is to collect dog waste separately from general waste.

Figure 11: Bins currently provided on Hampstead Heath

General waste and dog waste bins provided throughout the Heath



Split general waste and recycling bin provided at Parliament Hill Café



Bins: Cleanliness and Fullness

- The majority of general waste bins observed on the Heath were clean and in good condition.
- However, a number of the dog waste bins appeared dirty and had waste trapped in the aperture. The flap lid design of the aperture on the dog waste bins requires people to touch the bin in order to deposit waste in there. Evidence from Keep Britain Tidy's previous research suggests that having to touch a bin can be a 'turn-off' to people using it, as they consider it unsanitary⁴. Waste trapped in the flap in the aperture may also cause people to think that the bin is full.
- The majority of general waste bins observed were less than 50% full. Waste in these bins was predominantly coffee cups and bagged dog waste, with the latter occurring even where dog waste bins were provided next to the general waste bin. Aside from their relative cleanliness, the general waste bins are easier to use than the dog waste bins (i.e. waste is simply dropped into the large opening of the general waste bin, rather than 'posted' through a flap), which may encourage a preference for them.

Figure 12: Example of a dirty dog waste bin



⁴ *Little Book of Litter*, Keep Britain Tidy, 2012, https://www.keepbritaintidy.org/sites/default/files/resources/KBT_Little_Book_of_Litter_2012.pdf.

Signage on bins

- The general waste bins display a small 'no dog fouling' image and no other signage (see Figure 11 above). This may be confusing to some visitors, who may interpret the signage as 'no dog waste in bin'. If this is the intention, this signage could be made clearer and more prominent.
- Small 'general waste' and 'recyclables' symbols are displayed on the split general/recycling waste bins provided at the Parliament Hill Café, however these could be made clearer and more prominent (see Figure 11 above). We note that coffee cups were found in both the general waste and recyclables sections of the split bins. Keep Britain Tidy's previous research has identified that there is much confusion around the recyclability of coffee cups and these are a common contaminant in recycling bins.

Litter issues present

- The Heath was generally clean and free from litter at the time of the site visit.
- The litter observed around the Heath was generally plastic bags and crisp packets. These items can be easily blown out from inside the general waste bins and we heard from participants in the workshop with the City Corporation staff that this can be an issue, alongside birds and foxes spreading rubbish from inside these bins.
- A relatively large amount of litter (plastic bags, crisp bags and coffee cups) had accumulated behind the lines of trees and other 'litter traps' within the Heath.
- Dog fouling and littered bagged dog waste was observed in various (mostly peripheral) areas of the Heath.

Street furniture

- Where water fountains were available, these had no running water at the time of site visit and there was no tap option to easily fill water bottles. We understand that the water fountains are switched off during the winter months to prevent the pipes from freezing.
- Benches and other furniture provided on the Heath were generally in good condition.

People

- The majority of the people observed on the Heath at the time of the site visit (Thursday morning) were adults. Most (presumably local residents) were walking a dog and drinking from a take-away coffee cup.
- Several commercial dog walkers were observed, with some walking more than four dogs each.

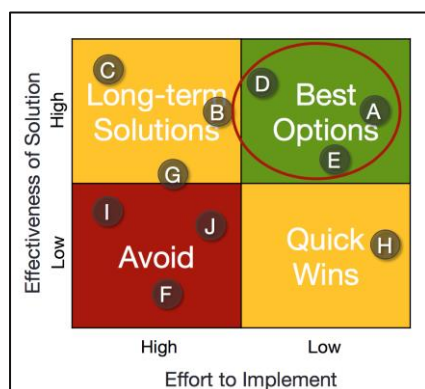
3 Recommendations

The following recommendations draw on insights from Keep Britain Tidy's information gathering activities (desk review, site visit, workshops and Green Flag Assessor survey) alongside ideas developed through the co-design workshops with local stakeholders and the City Corporation staff.

The recommendations range from 'quick wins' to longer term aspirations. It could be useful for the City Corporation to prioritise preferred recommendations by plotting these on a 'benefit/effort' matrix (see example at Figure 13). This is a simple tool which can help to rapidly identify which activities should be focussed on in the first instance. The horizontal axis of the matrix indicates the level of effort required to implement the activities according to the resources required (time, money, staff capacity, etc.), while the vertical axis indicates the level of expected impact. We suggest that the latter could be plotted in line with the waste hierarchy (avoid, reduce, reuse, recycle, recover, dispose) – those activities which are likely to reduce the amount of waste brought into the Heath in the first place will reduce management costs for the City Corporation and also help to reduce litter.

It should be noted that a number of our recommendations may require further development in order to map these across the benefit/effort matrix effectively.

Figure 13: Example of a benefit/effort matrix



Source: Wilko

3.1 General communications

1. Develop an overarching campaign for Hampstead Heath

Hampstead Heath is known as one of London's most popular green spaces, and it was clear from the stakeholder workshop that there is a strong sense of cultural, natural and geographical identity associated with it. We recommend that an overarching campaign be developed for Hampstead Heath which leverages these sentiments with a view to encouraging greater care for the local environment by visitors. Based on comments by participants in the stakeholder workshop, we suggest that the campaign could focus on elements such as:

- The Heath's status as a much-loved local icon;
- The Heath as a 'wild' place, with special natural features and wildlife – similar to a National Park or Area of Outstanding Natural Beauty; and
- The unique Hampstead Ponds.

These could also be aligned with the four intended outcomes of the new Management Strategy for Hampstead Heath. We suggested testing campaign themes and messaging with visitors to the Heath (e.g. via the face-to-face surveys to be conducted in Work Package B).

Workshop participants suggested that a series of branded merchandise linked to the campaign could be developed as part of this, such as reusable coffee cups, water bottles, food containers and tote bags. There was also a suggestion that local celebrities could be utilised to support the campaign.

Within this brand, or as a minimum, we suggest that a campaign be developed for Hampstead Heath that focusses on reducing the amount of waste left on the Heath (by bringing less waste onto the Heath in the first place, by taking waste home for recycling).

Alongside this we suggest that the waste campaign:

- **Use values-based messaging approaches.** There is much evidence to suggest that appeals to intrinsic values (equality, universalism, benevolence, etc.) can be more effective in motivating a behaviour that requires additional time and effort than appeals to extrinsic values (personal rewards, financial gains, etc.)⁵. Values-based messaging highlights the intrinsic social and environmental benefits of doing something and helps people to join the dots between their actions and the intrinsic benefits. In the case of Hampstead Heath, this could include messaging around and images of local wildlife, shared enjoyment of the Heath, the views from a scenery around the Heath, pride on the Heath as an institution and a piece of countryside in the middle of a global city, events and traditions unique to the Heath, and so on. As noted above, Work Package B will provide an opportunity to test different messaging approaches with the public and Keep Britain Tidy will work with the City Corporation to develop and prioritise messages to be tested.
- **Consider the ‘messenger effect’.** We are greatly influenced by the communicator of information and the same message from different sources can have different effects⁶. We recommend that communications use ‘trusted messengers’ to deliver information (e.g. by using images of and direct quotes from messengers in posters and other communications materials). For example, Hampstead Heath Rangers or operatives may be effective messengers when communicating about wildlife and waste issues. We suggest testing different messenger options with visitors in Work Package B.

⁵ See, for example, case studies referenced in *Common Cause for Nature: A practical guide to values and frames in conservation*, Common Cause and PIRC, 2013, https://publicinterest.org.uk/download/framing_nature/Common%20Cause%20for%20Nature%20-%20Practitioners%20Guide.pdf.

In 2017 Keep Britain Tidy conducted a survey with 2,119 adults across the UK as part of its research on bottled water consumption. This found that respondents who elected ‘helping the environment’ as the main advantage of using a reusable water bottle were significantly more likely to say that they were willing to put extra effort and time into finding alternatives to bottled water when no tap water is immediately or conveniently available, whereas those who elected ‘saving money’ as the main benefit were significantly less likely to indicate that they would do this. This suggests that interventions that highlight monetary savings from using a reusable water bottle may not be as effective in reducing bottled water consumption as appeals to other values, such as environmental, societal and personal health and wellbeing. See:

https://www.keeptobritaintidy.org/sites/default/files/KBT_CFSI_BRITA_Water_Water_Everywhere_2017.pdf.

⁶ *MINDSPACE: Influencing behaviour through public policy*, Institute for Government, 2010, <https://www.instituteforgovernment.org.uk/sites/default/files/publications/MINDSPACE.pdf>.

- **Use local wildlife to highlight the importance of pro-environmental behaviours.** This could include visual prompts placed at key locations within the Heath to remind visitors that it is home to wildlife such as hedgehogs, grass snakes, muntjac deer, foxes and moles that can be impacted by litter. Using specific statistics will help to increase the immediacy of environmental concerns and add authority to messaging. For example, 'There are 22 hedgehogs on Hampstead Heath...'.
- **Communicate targets, provide feedback to the public and demonstrate momentum.** The <5% contamination target is ideal for this, because it will help to raise awareness of an issue that many don't know about – that small amounts of contamination can mean that whole loads of recycling are rejected. Communications around this could be placed on or around general waste and recycling bins, and used in online communications. These should specify common recycling contaminants that should be placed in the general waste rather than recycling bins, such as food and coffee cups.

Dynamic scoreboards or 'ometers' that are frequently updated with the latest waste reduction results could be displayed at key locations on the Heath to provide 'real time' feedback on people's behaviours across the Heath with regards to reducing waste and increasing recycling. Providing in-situ feedback to people on behaviours is one of the most effective ways to influence behaviour change, and often there is no feedback loop on the behaviour of reducing waste or recycling.

- **Use general 'good practice' communication principles:**
 - Tell people what to do (rather than just what they shouldn't do)
 - Frame messaging to be on the side of the public
 - Humanise communications (for example, use images of and quotes from real people)
 - Correct misperceptions / use social norming to highlight what most people do/say/want
 - Use relevant images to communicate quickly and across language barriers
 - Use plain, specific language.

2. Consider establishing Hampstead Heath as a Waste Free Zone or a Plastic Free Zone.

This would be a good opportunity to build on the current public momentum around reducing single-use plastics and waste. The key 'call to action' would involve asking visitors to bring less waste onto the Heath and to take the waste they do bring in out with them again. Hampstead Heath could demonstrate its commitment to the cause by taking actions and setting targets towards eliminating waste from its own operations and through the facilities it provides (recycling bins, water fountains etc.). Local retailers could be engaged to make their own pledges to the cause. Signage at key entrance points could be used to communicate to visitors that they are now entering a 'waste free zone'.

3. Help people to plan to minimise waste during their visits

We recommend adding information to the *Getting to Hampstead Heath* webpage⁷ to set expectations around people minimising and managing their waste when visiting the Heath, and to help them plan for this. This could include setting a carry-in/carry-out expectation, tips for reducing waste brought onto the Heath, information on recycling, and information on local retailers that accept/provide reusable packaging, water bottles refills and other options to help minimise waste. Local community groups and Heath user groups could be asked to disseminate this information through their networks.

4. Update the 'Litter' information provided on the Hampstead Heath website

We suggest updating the litter information provided on the Hampstead Heath website⁸ to clarify the key messages and reflect values-based messaging approaches.

The first paragraph has slightly mixed messaging, in that it asks visitors to take their rubbish with them, but then specifies that bins are provided for this purpose:

*We welcome picnickers to the Heath, but do ask that everyone takes their rubbish with them.
We provide large bins across the Heath for this purpose.*

We acknowledge that the intention here is to ask visitors to take their rubbish to a nearby bin, rather than out of the Heath, however we recommend providing a clearer and firmer 'call to action' to establish expectations around waste management. For example, ask people to take their rubbish out with them and tell them why this is important.

The second paragraph focuses on extrinsic values by highlighting the financial cost to City Corporation and by referring to 'you' the 'users':

Litter is very expensive to manage, and we are a registered charity with limited resources. By disposing of your litter, you allow us to save those resources for the conservation of the Heath and for projects which benefit you, our users.

We suggest updating this to focus on intrinsic values, such as wildlife, the social groups and activities that can be impacted by litter, and community expectations with regards to taking rubbish away.

3.2 Bin provision, placement and design

1. Consider removing bins from the periphery of the Hampstead Heath and other strategic locations to reduce litter and fly-tipping

As indicated in Section 2.2, there is evidence to suggest that removing bins from certain areas has a positive impact on litter levels and fly-tipping. We suggest undertaking a series of pilots to:

- remove bins from around the periphery of the Heath to discourage household fly-tipping next to the bins. These could be moved further into the Heath (e.g. along pathways where they can be easily accessed by the waste collection vehicles) – the idea is to make them less convenient to reach from outside the Heath.

⁷ <https://www.cityoflondon.gov.uk/things-to-do/green-spaces/hampstead-heath/visitor-information/Pages/Getting-to-Hampstead-Heath.aspx>

⁸ <https://www.cityoflondon.gov.uk/things-to-do/green-spaces/hampstead-heath/visitor-information/Pages/where-to-eat.aspx>

- remove bins from defined areas within the Heath entirely to encourage visitors to carry their rubbish out. For example, these could be litter hotspot areas, the Bathing Ponds areas or ‘wilder’ countryside areas.

2. Engage stakeholders in advance to gain buy-in to changes to bins

Based on our experience in the abovementioned bin removal experiment, we strongly recommend that any pilots or interventions involving the removal of or changes to bins (including dog waste bins as discussed below) incorporate stakeholder engagement in advance of the changes to ensure that these don’t come as a ‘shock’. For example, key interest groups could be engaged to introduce the concept, invite their ideas about how to communicate it more broadly, and/or support monitoring and evaluation of the initiative. Signage (we recommend A-frame boards) could be placed at the bins to be removed/changed for a number of weeks in advance to explain the coming changes and rationale for these.

3. Monitor the impacts of changes to bins and feed results back to the public

Linked to this, we strongly recommend that any potentially controversial changes (e.g. bin removal) are robustly monitored and evaluated with a view to providing a rationale to the public around impacts and effectiveness. Keep Britain Tidy can provide support and guidelines for monitoring waste and litter issues.

4. Use pedestrian flow mapping to identify optimal locations for bins and communications/ other interventions

We strongly recommend using behavioural observations to map pedestrian flow patterns into and around the Heath in order to identify optimal bin locations and the waste types catered for at each of these, alongside locations for signage and other interventions. These should take into account the journeys from key local retailers and transport hubs/bus stops to the Heath, and from popular picnic areas, dog walking areas, etc. within the Heath.

5. Use appropriate images or real-life examples on bin signage

Use illustrations, colour coding and/or real-life examples on bin signage to help people quickly understand what can go into each bin. ‘Real-life’ examples could be incorporated into the design of the bin (e.g. by using Perspex window or boxes on the bin to display the types of items that should go in the bin) or via stickers placed on bins designed to look like a window into the bin. Emphasis could be given to the items most commonly disposed at the Heath (coffee cups, glass and plastic bottles, etc.).

6. Plan-in bin cleaning and maintenance

A number of participants in the co-design workshop with key City Corporation staff highlighted the need to allocate specific time/resource towards maintaining the quality of the new bins. Keeping bins clean will also help to encourage people to use them. Incorporating a quick bin clean into existing bin collection routines is one approach that could help to maintain bins without being too resource-intensive.

3.3 Collecting dog waste

1. Monitor waste composition to understand the need for separate dog waste bins

We understand that significant volumes of dog waste are disposed of on the Heath throughout the year, and that this can be a particular issue during quieter periods when dog waste overwhelms other waste left in bins. However, it is not clear whether this will continue to be an issue under the new waste collection arrangements when fewer large capacity bins are introduced. It is therefore recommended that waste on the Heath be monitored to understand the relative volumes of dog waste during both quiet and busy periods, and to use this data to understand whether separate dog waste collection is required under the new waste collection system.

If viable, the priority option should be to remove separate dog waste bins entirely and collect dog waste with general litter. This avoids separate collection rounds (and associated environmental impacts) and aligns with the ‘any bin will do’ message which is increasingly used by land managers elsewhere. Alternatively, dog waste bins could be used during the ‘off-season’ only.

2. If dog waste must be collected separately, consider implementing new dog waste bins alongside the general waste and recycling bins

The dog waste bins currently provided on the Heath have a flap lid aperture and requires people to touch the bin to dispose of waste, which has been found to be a ‘turn off’ to people using a bin in previous research. The bins are also relatively small for the large volumes of dog waste managed by Hampstead Heath. Finally, a number of the dog waste bins we observed during our site visit appeared dirty and in need of updating.

If the City Corporation would like to continue collecting dog waste separately from all other waste in Hampstead Heath, we recommend that new dog waste bins be considered for the Heath. These should be designed so that people don’t need to touch the bin in order to use it. The bins at Figure 14 provide examples of ‘hands free’ dog waste bins. The foot pedal operated example has the added benefit of being relatively large capacity (66 litres), which would be useful for managing the large volumes of dog waste left on the Heath. The *Ezeleash*⁹ example is designed to discourage rubbish other than bagged dog waste from being deposited. This design would be useful in popular dog walking areas where all other bins have been removed (e.g. to discourage littering). It should be noted that this particular bin was not available in the UK at the time of writing this report and is provided as an illustration of good design only.

Collecting dog waste separately provides an opportunity to consider onsite or offsite anaerobic/bio composting. There are a number of case studies within the UK and overseas that have used onsite dog waste composters to power street lamps¹⁰. This type of initiative may provide added incentive for dog walkers to dispose of dog waste responsibly, however, the feasibility of using onsite composters on the Heath would need to be explored further, as its large size and multiple entrance/exit points would make it difficult to channel dog walkers towards specific locations for composting dog waste. The City Corporation could explore options for sending dog waste to an offsite anaerobic digestion facility and this is the preferred option to incineration in a circular economy.

⁹ <http://www.ezeleash.co.nz/Default.aspx?page=5573>

¹⁰ For example: <https://www.theguardian.com/environment/2018/jan/01/stools-to-fuels-street-lamp-runs-on-dog-poo-bio-energy-waste->

Figure 14: Examples of ‘hands free’ dog waste bins



3.4 Events

1. Develop a Code of Conduct and consider refundable deposits for organised events

It is recommended that a Code of Conduct be developed for organised events, including regular sports events. This should specify expectations around waste management and require organisers to sign a pledge that they will take actions around minimising the amount of waste brought into the Heath and taking rubbish away. A refundable deposit could also be considered for larger events which would be returned if waste is managed appropriately.

2. Develop a standard for children’s parties and other social gatherings

Feedback from participants in the workshops suggests children parties can be an issue on the Heath, particularly around Pryors Field. One approach towards tackling this could be to develop a standard for organised parties, for example a ‘Hedgehog-friendly events’ standard. This would provide principles and checklists for ensuring that organised parties minimise waste and litter. A version of the standard could be targeted towards children to engage them in the process of ensuring that their party is ‘hedgehog-friendly’.

3.5 Engaging local retailers to reduce waste brought into the Heath

1. Work with the Heath cafés and surrounding businesses to establish a local Refill network

Local businesses (particularly those that service food and drinks) can help to reduce waste from single-use water bottles by providing free drinking water to the public while they are out and about. These businesses have drinking water infrastructure that is already in place and maintained by the businesses, making this an efficient and cost-effective way to build a network of safe and accessible public drink water facilities. Keep Britain Tidy’s previous research¹¹ has found that members of the public feel uncomfortable about asking businesses for free drinking water in a reusable water bottle when making a purchase, and in either a glass or reusable water bottle when no purchase is being

¹¹ *Water, water, everywhere*, Keep Britain Tidy, 2017.

made. The Refill¹² scheme seeks to overcome this by making it easy for the members of the public to identify those businesses that are willing to provide free drinking water to both customers and non-customers. Businesses signed up to the scheme display a 'Free tap water available here' window sticker and can also be located via the Refill app.

It is recommended that the City Corporation and/or volunteers work with Refill to establish a local refill network, starting with the Heath cafés. Keep Britain Tidy has heard anecdotal evidence that businesses can benefit financially from community water schemes such as Refill, as they encourage new customers.

a. Reinstate water fountains on the Heath and install taps for water bottles

The site visit identified that water fountains on the Heath had no running water. As part of establishing a local Refill network, it is recommended that these be reinstated and have taps installed to allow water bottles to be easily filled. Accompanying signage should be used to highlight that the fountain is working a safe to use, e.g. *London's finest tap water*.

2. Work with local retailers to reduce single-use packaging brought into the Heath

We suggest that a plan be developed for engaging local retailers to support the City Corporation's efforts to reduce the amount of single-use packaging brought into the Heath. Keep Britain Tidy can support in developing an appropriate strategy for this. Retailers should be provided with evidence about the issues (e.g. the amount of branded waste collected on the Heath, public perceptions, etc.) and steps that the retailers can take to address these issues. Local volunteers could be recruited to support engagement with local businesses.

The workshops generated a number of ideas for reducing waste from local retailers and these could be further developed alongside the relevant businesses:

- Incentivise customers to avoid using disposable coffee cups – for example, charge a levy on disposable cups with proceeds going to local charities or causes, or provide discounts for 'drinking-in' or using a reusable coffee cup. A campaign specifically aimed at people walking dogs on the Heath is recommended, as we observed numerous dog walkers drinking coffee in disposable cups during the site visit.
- Ask retailers to default to not distributing items such as disposable utensils, serviettes, paper/plastic bags, straws etc., requiring customers to specifically ask for these.
- Ask local pizza restaurants to serve take-away pizzas in paper bags instead of boxes. Pizza boxes may cause new issues when the new bins are installed, as they can block 'post' style bin apertures.
- Support retailers in conducting an audit of their food and drink packaging, with a view to reducing unnecessary packaging and identifying products that could be sold in reusable/returnable alternatives.
- Consider selling Hampstead Heath branded reusable coffee cups via local retailers.
- Ask retailers to support Hampstead Heath waste and litter campaigns in store, for example by displaying communications and via verbal messaging at the till.

¹² <https://refill.org.uk/>

3.6 Engaging key stakeholders

1. Establish a waste and litter Working Group for the Heath

The workshop with key stakeholders revealed that there is appetite amongst local residents for actively supporting the City Corporation in its efforts to tackle waste and litter issues on the Heath. To this end, we suggest establishing a Waste and Litter Working Group which could meet regularly to review and steer progress against waste and litter initiatives and targets. Local residents could also be engaged to support the roll-out and monitoring of initiatives.

2. Use Community Based Social Marketing activate behaviour change via special interest groups

In addition to this, we recommend using a Community Based Social Marketing approach to disseminate messages and activate behaviour change via Hampstead Heath's special interest and user groups. This would involve mapping all groups that use the Heath (sporting groups, social groups, environment groups, etc.) alongside the key waste and litter issues that they could support action on. Representatives from each group would then be engaged on the relevant issues (e.g. drink container littering by sports participants) and asked to come up with practical solutions that meet their needs (e.g. sports event organisers might pledge to instruct participants to take their rubbish with them before and after games, provide their own bins at event for this purpose or ban single-use containers at events).

3. Engage local schools to co-design waste and litter solutions with students

We understand that students from four local schools visit the Heath regularly during lunchtimes and after school, and that this can be a source of litter in certain areas (near the ponds and Parliament Hill). It is therefore recommended that these schools be engaged in developing solutions to student-led waste and litter issues on the Heath via co-design workshops or similar activities. Having students design intervention and communications will help to ensure that these are more targeted and effective in engaging other students.

3.7 Targeted interventions and campaigns to tackle specific behaviours

The stakeholder workshops identified a number of opportunities for developing seasonal or targeted campaigns. These include:

- A New Year's Eve campaign on glass bottles (particularly Prosecco).
- A tongue-in-cheek 'designated waste carrier' campaign (based on designated driver campaigns) aimed at tackling litter from social gatherings/party picnics that involve alcohol.
- Mobile information boards to be used on busy days – these could use innovative messaging approaches to encourage pro-environmental and pro-social behaviours, or could provide practical information and litter picking equipment similar to #2minutebeachclean¹³ boards. On very busy days we recommend rolling out mobile information boards that encourage visitors to take their rubbish home, rather than additional mobile bins.

¹³ <https://beachclean.net/boards>

Keep Britain Tidy is also constantly developing new interventions and campaigns to prevent litter and waste. Recent examples include:

- We're Watching You: A social experiment to tackle dog fouling – achieving an average reduction in dog fouling of 46% across 128 pilot sites;
- Bin it for Good: Incentivising positive environmental behaviour through donations to charities – achieving an average reduction in general litter of 38% across 18 pilot locations;
- Walk This Way: Using dog walking routes to nudge dog walkers towards a bin – achieving an average reduction in dog fouling and bagged dog waste littering of 38% across six parks;
- Smoking zones: Nudging smokers towards cigarette bins – achieving an 89% reduction in the number of people observed littering cigarette butts;
- Green Footprints: Testing Pelle Hansen's green footprints nudge in high streets and parks – achieving an average reduction in general litter of 19.5% across eight pilot sites;
- It's Still Littering: Calling-out 'leave behind littering' via in-situ litter characters – achieving an average 20% reduction in general litter across 11 pilot sites;
- Crime Scene Investigation Tape: Providing in-situ feedback to address expectations that fly-tips will be collected quickly and without repercussions – achieving an average reduction in rates of fly-tipping of 41% across three weeks.

We would welcome the opportunity to develop and pilot new campaigns and interventions on Hampstead Heath.

4 Next steps

Work Package B will involve face-to-face surveys with visitors to the Heath to gather feedback on different messaging approaches. This will help to inform the development of communications around litter and waste, including bin signage, general signage, and supporting online and other communications.

The specific messaging approaches to be tested will be developed alongside the City Corporation. We recommend that these include:

- Testing different messages for motivating positive waste disposal behaviours to identify effective approaches (e.g. 'carrot versus stick', values-based messaging, appeals to wildlife and the Heath as a 'wild place', communicating waste targets and achievements, and so on) and the most appropriate messengers for these (local residents, celebrities, operative staff, etc.);
- Gathering information on the most appropriate ways to reach visitors through communications;
- Gathering information on how visitors can be supported to minimise the amount of waste they bring into the Heath (and to maximise the amount they recycle/take out with them);
- Supporting conversations and awareness-raising with local shops, cafés and other businesses to support waste minimisation in the Heath; and
- A follow up workshop with stakeholders at Hampstead Heath to share updates on progress since the information gathering workshop and discuss next steps.

Appendix A: Information Gathering Workshop Notes

The City Corporation and Keep Britain Tidy hosted a workshop with key local stakeholders at Hampstead Heath on 2 February 2019. The objectives of the workshop were to:

- share evidence and information on waste and litter issues on Hampstead Heath
- prioritise the key issues from stakeholders' perspective
- develop ideas for tackling waste and litter issues on Hampstead Heath.

The notes from the workshop are summarised below.

1. General discussion

New Management Strategy for Hampstead Heath

Hampstead Heath has released a new Management Strategy for 2018-2028. The new Strategy addresses current waste and littering issues that are affecting the Heath. The expected results from this new Strategy include reducing the amount of litter, improving the conditions for the staff, and improving the visitor's experience.

Recycling

- There are recycling bins inside and immediately outside the café, but no recycling bins outside this area.
- The café recycling bins currently collect approximately 50 to 70 tonnes per year.
- Approximately 80-90% of waste collected in the general waste bins and via litter picks is recyclable.
- Camden Council collects the recyclables.
- The Council will reject recyclables with more than 5% contamination.

Litter

- Dog fouling on the Heath has ecological impacts and is a water quality issue.
- Litter/dumping on the Heath has impacts on staff and volunteer wellbeing.
- The Sandy Heath area has no bins and tends not to be heavily affected by litter. There was some discussions as to whether this is due to lower footfall in the area.
- Some key litter issues raised during the general discussion are: coffee cups, ice cream vans/food trucks surrounding the Heath ('fly-trading'), balloons in trees from children's parties, and litter from school students who take their lunch breaks on the Heath.

2. Identifying the priority waste and litter issues on the Heath

The priority waste and litter issues identified by participants were as follows:

- Dog waste and dog fouling – particularly:
 - The separation of dog waste from the general (and recycling) waste streams
 - Dog fouling
 - Littering of bagged dog waste
 - Commercial dog walkers, although this issue is being addressed through a separate project being delivered by the City Corporation.
- Reducing the overall quantities of waste being brought into the Heath
- Picnic litter
- Take away food packaging from surrounding retailers
- Coffee cups litter and waste
- Lack of communications/signage/awareness

- Lack of recycling
- Schools-related litter

3. Mapping hotspot locations within the Heath

Participants were asked to identify hotspots for litter and dog fouling on the Heath. These are marked in the map below (orange dots). It is interesting to note that most of them are in the periphery of the Heath. Keep Britain Tidy will be viewing these hotspot locations during a follow-up site visit.



4. Workshop activities

Participants were asked to select the litter and waste issues that they would like to focus on through the remainder of the workshop. These were:

1. Reducing the amount of waste taken into the Heath
2. Recycling
3. Dog waste and dog fouling
4. Schools-related litter
5. Social gathering / picnic related litter.

Participants split into two groups to work on their chosen issues and were tasked with three activities the support the evidence review and development of recommendations:

- 1) Mapping the behavioural context, in which participants brainstormed the 'who, what, where, why, when and how' of each issue. The purpose of this activity was to gather information to ensure that interventions and recommendations develop through the project are appropriately targeted;
- 2) Individual ideas, in which participants independently recorded as many ideas as they could think of for interventions aimed at tackling their group's issues; and
- 3) Developing intervention ideas, in which the groups discussed their individual ideas, grouped these by theme and started to further develop their best ideas.

Notes from the above activities are recorded below.

Priority Issue 1: Reducing the amount of waste taken into the Heath

Mapping the behavioural context

Who is doing it?	What is it?	Where does it tend to happen?
<ul style="list-style-type: none"> Everybody: visitors and residents Social group picnickers School groups Mothers gathering Solo bench sitters 	<ul style="list-style-type: none"> Heavy items e.g. glass and plastic bottles Single use plastics Take away food boxes Plastics packaging Water bottles Alcoholic cans Cigarette butts 	<ul style="list-style-type: none"> Bins Benches Near ponds Parliament Hill
How do people tend to do it?	When does it happen?	Why does it happen?
<ul style="list-style-type: none"> Littering Abandoning Dumping next to bins 	<ul style="list-style-type: none"> Summer days/heat waves Weekends and bank holidays School holidays and lunches School exams finishing Early evening post work 	<ul style="list-style-type: none"> Too heavy Nowhere to dispose of litter Plastic packaging from shops Can't take on public transport People don't want to carry rubbish home People don't care/ are not engaged There are many nearby supermarkets and food sellers.

Intervention ideas

- A Social media education campaign.
- Place "re-fillable" water points on the Heath where people can refill their own water bottles.
- Offer bags with the message "I'm taking my litter home" and involve local retailers to do it.
- Place temporary bins over the weekends and bank holidays.
- Increase signage and communications raising awareness.
- Place signs at the Heath entrances encouraging "litter picking by all"
- Enforce "no alcohol at bathing facilities"
- Clearly mark recycling bins including alcohol bottles etc.
- Offer "Helping the Heath" branded re-usable coffee cups by local retailers.
- Offer incentives for using re-usable cups in local shops.
- Use signage encouraging people to take rubbish home.
- Enforce less plastic packaging for local retailers.
- Label bins as: recycling / landfill (it was noted that general waste from the Heath is incinerated and that as such, an alternative version could be developed).
- Offer volunteer rubbish sticks and bin bags at the exit and entrance of the Heath.

Priority Issue 2: Recycling

Mapping the behavioural context

Who is doing it?	What is it?	Where does it tend to happen?
<ul style="list-style-type: none"> Everyone Social groups 	<ul style="list-style-type: none"> Plastic bottles Bags Newspapers / magazines Glass bottles 	<ul style="list-style-type: none"> In bins Abandoned – left behind

	<ul style="list-style-type: none"> • Drink cans 	
How do people tend to do it?	When does it happen?	Why does it happen?
<ul style="list-style-type: none"> • Littering / abandoning • Dumping next to bins 	<ul style="list-style-type: none"> • Summer days/ heat waves • Weekends and bank holidays • School holidays and lunches • School exams finishing • Early evening post work 	<ul style="list-style-type: none"> • Lack of recycling bins options • Inconvenience

Intervention ideas

- Social media campaign in Instagram/Facebook/Twitter involving celebrities that live around the Heath.
- Place clearly marked recycling bins around the Heath.
- Offer recycling bags so that visitors can separate their waste.
- Recycling on the Heath campaign on radio/TV.
- Give flyers with recycling information.
- Place signage showing stats and figures of costs and of recycling.
- Offer waste pick up sticks and bags at the entrances and exits of the Heath.
- Place signage promoting recycling.
- Place a recycling bin and signage asking people to remove the plastic packaging from their food and drinks and recycle it in the bin before coming into the heath.

Priority Issue 3: Dog waste

Mapping the behavioural context

Who is doing it?	What is it?	Where does it tend to happen?
<ul style="list-style-type: none"> • Commercial dog walkers • Dog owners • Late teenagers • Young adults 	<ul style="list-style-type: none"> • Un-bagged • Bagged 	<ul style="list-style-type: none"> • Everywhere
How do people tend to do it?	When does it happen?	Why does it happen?
<ul style="list-style-type: none"> • They leave the “second poo” • They are distracted on their phones. • Headphones 	<ul style="list-style-type: none"> • All times • When nobody else is around. 	<ul style="list-style-type: none"> • People don't care/ are not engaged • Inconvenience

Intervention ideas

- Send Rangers and Keepers to share information on dog fouling around the Heath.
- Offer paper dog waste bags to reduce the amount of plastic that goes into dog bins.
- Place as many dog waste bins as other bins.
- Limit the number of dogs per commercial dog walker.
- Place poo bags on the fences along Millfield Lane.
- Place dog bins in tracks. Every 15 minutes' walk distance, visitors should be able to see a bin.
- Place a signage with punishment and fine for dog fouling.
- Use crime scene stickers for dog fouling.
- Place signage showing dangers of dog waste, amount of dog waste per year and costs.
- Separate dog bins from combined general waste bins.

- Explore options for managing dog waste (e.g. anaerobic digestion/alternative energy sources).

Priority Issue 4: Schools

Mapping the behavioural context

Who is doing it?	What is it?	Where does it tend to happen?
<ul style="list-style-type: none"> • Schools kids • Secondary 	<ul style="list-style-type: none"> • Food packaging • Drinks 	<ul style="list-style-type: none"> • Close to schools • Café • Sitting area
How do people tend to do it?	When does it happen?	Why does it happen?
<ul style="list-style-type: none"> • Leave behind where sitting • Not embarrassed / flagrant 	<ul style="list-style-type: none"> • Lunch • After school • Free periods – all day 	<ul style="list-style-type: none"> • They feel cool • Smoking • Teachers smoking • No respect / no fear • Lack of guidance • No monitoring by teachers • Treated like adults • Allowed out

Intervention ideas

- Place recycling bins of plastic bottles right by school in the exit point.
- Deposit refund scheme for recycling.
- Supply clear waste bags for visitors to collect and sort their recycling.
- Get the kids in detention to litter pick on the Heath.
- Produce a bag with the message “I’m taking my litter home”.
- School litter campaign.
- Clear a bag of litter taken into school during an assembly.

Priority Issue 5: Social gathering / picnic related litter

Note: The ‘mapping the behavioural context’ activity was not undertaken for this issue.

Intervention ideas

- A mobile rubbish collection.
- Temporarily bins for high season and over the weekends.
- On spot fines for littering.
- Incorporate waste levy for event organisers.
- Enforce “no alcohol” rule at the Bathing Ponds.
- Campaign to reduce the quantity of waste coming into the Heath.
- Clear bags distributed by staff and volunteers
- Rangers and Keepers to patrol, communicate, give recycling bags and leaflets.
- Get kids involved after or during events to do a tidy up and offer prizes.
- Engage with supermarket Directors or Managers to meet with Heath Campaigners to reduce waste at its source.
- Get “Rubbish Fairies” and Elves to educate people during children’s parties.
- Target Leaflet local shops close to entrance to educate public on littering.

Appendix B: Co-Design Workshop Notes

On 26 March 2019, the City Corporation and Keep Britain Tidy held second workshop to gather additional insights for the research, to prioritise waste and litter issues on the Heath from the perspective of key operational staff, and to co-design behavioural interventions and other approaches to address these.

The objectives of the workshop were again to:

- share evidence and information on waste and litter issues on Hampstead Heath
- prioritise the key issues from the perspective of key operational staff
- develop ideas for tackling waste and litter issues on Hampstead Heath.

The ideas shared by the workshop participants fall into four board themes:

- Communications
- Services and infrastructure
- Feedback enforcement
- Other

1. Interventions/ideas for tackling waste and litter in Hampstead Heath

Communications

- Seasonal Campaigns (e.g. New Year's Eve glass bottles) – Use the Heath vehicles to promote the campaign.
- Waste info on front page of website visit section.
- Code of conduct for organised parties. A standard for parties eg. 'Hedgehog friendly events'.
- Use wildlife to highlight dangers of littering.
- Concentrate on environmental issues rather than the City Corporation resources.
- Big campaign BBC and ITV
- Don't collect waste for a weekend to shock people about the amount of it.
- Educates public about waste stream segregation – see if we can get higher than 5% dog waste compliance in our recycle bins.
- 5% campaign including signage/real examples of correct waste bins.
- Social media campaign targeting hipsters behaviour. (Drinking and BBQs)
- Give regulars updates on waste collection and recycling cost of waste removal.
- Publish data: volume of co-mingled recycling being collected and number/volume of rejected recycling.
- Mobile information boards to be used on busy days / summer highlighting problems.
- Preventive messaging at bins: 80% of this waste is recyclable, bins coming...take your rubbish home.
- Create working group and do quarterly meetings with waste & recycling group.

Services and Infrastructure

- Removing bins / less bins.
- Communications critical to changing / removing bins.
- Introduce co-mingled recycling bins across the Heath.
- Design clear and simple messages to form a comparison to reduce the waste coming onto the Heath.
- Three bins: Recycling / General waste / Dogs waste.
- Change the water fountains to allow visitors to fill their own water bottles.

- Better signage on bins about what can / can't be recycled.
- Visuals on recycling bins for non-English speakers.
- Use dog bins off season only.
- Do a Test/Pilot to determine if dogs waste should go in separate bins or mixed with general waste.
- Better design of dog bins / use pedals
- Give staff a hangout clear bags for co-mingled recycling.
- Free water top ups at drinking fountains.
- Put in place mowing regimes.
- Dog poo composting or bio composting.
- Vehicle dress up bell messaging.
- Energy from dog waste bins – mobile phone charging.
- Commit to keeping recycling bins clean and maintained.

Feedback enforcement

- Volunteers to spend time talking to visitors about waste. – best way to deal with events.
- Dog walking controlled.
- Introduce the “crime” scene tape and notices.
- Maximise food waste collection
- Special provision for super busy days.
- Charge people who organize events.
- Peer pressure communication: Staff, regular users, volunteers

Other

- User groups encouraging no waste to site
- Peer pressure via locals and visitors self-policing
- Engage retailers to find solutions and incentives to reduce coffee cups
- Coffee shops should charge more to use take away cups and give proceeds to charity.
- Create waste free zones
- Branded reusable coffee cups and water bottles
- Hampstead Heath linen cotton bags ‘Litter free Hampstead’
- Deposit Scheme for cans bottles plastic
- Branded re-usable coffee cups & water bottles
- Innervation for dog walkers to tackle the use of coffee cups.
- Share the Heath waste and recycling campaigns to local shops, cafés and supermarkets.
- Make more returnable products
- Strengthen the relationship with Camden Council
- Engage with local schools.
- Interventions to specifically address the ‘first bag’
- Schools – create a learning team building in reduce waste / litter messages into sessions.
- Community responsibility of local outlets.
- Partnerships with local shops/supermarket to reduce packaging.
- Sponsored Euro bins (e.g. Tesco, M&S, etc)
- Engage local businesses to reduce packaging in products
- Retailers – default of not handing out utensils etc.
- Sen Zero Alpaco pizza – paper bags instead of boxes.
- Keep cup intervention to discourage take away cups.

2. Potential piloting locations

Zone 1 - Parliament Hill

One of the busiest areas of the Heath. This would be a good place to pilot:

- Co-mingled / general waste bin system. Use bins with apertures defaults and nudges.
- Band stand (+pizza boxes)
- Coffee cups recycling bins.
- Water provision
- Messaging and engagement with schools and farmers market.

Zone 2 - Bathing Ponds

No dogs and no food are allowed in this area. These areas are frequented by 'hipsters' and young people. There are recycling interventions already present and working well. It's a good place to pilot interventions to tackle littering, for example picnic interventions for young adults.

Zone 3 - Pryors Field

This area has major transport links and is frequented by young families and workers. It is a good place to pilot interventions to encourage recycling from:

- Children parties
- Workers gathering at lunch time
- Picnics and drinking around the Mixed Pond