KEEP BRITAIN TIDY.

# ABANDONED PICNICS

## PILOTING A BEHAVIOURAL INTERVENTION TO PREVENT 'ABANDONED PICNICS' LITTER

MARCH 2018

# EXECUTIVE SUMMARY

## Introduction

This project piloted a new behavioural intervention to address litter arising from picnicking in parks, or 'abandoned picnics' litter. The intervention aimed to illustrate the cost of cleaning up litter in parks to those using them. It communicated to park-users how much had been spent to date in each park and what could otherwise have been purchased for the park if this resource had not been spent on cleaning up litter (new trees, a hedgehog habitat, a public barbeque, etc.). This was communicated to park-users through the design and installation of a thermometer style litter gauge and supporting posters.

Keep Britain Tidy partnered with Parks for London to trial this intervention in four London parks, as shown below.

- Oak Hill Park, Barnet
- Hampstead Heath, City of London
- Northala Fields, Ealing
- Finsbury Park, Haringey

## Aim

The aim of the pilot was to test the effectiveness of the litter gauge intervention and supporting posters in preventing 'abandoned picnics' litter.

## Objectives

- Identify the impacts of the intervention on rates and types of 'abandoned picnics' littering
- Identify the impacts of the invention on observable littering behaviours
- Identify the impacts of the intervention on awareness, attitudes and claimed behaviours around 'abandoned picnics' littering

## Evaluation Methodology

A waste audit at each park was carried out by park managers to understand the extent of the 'abandoned picnics' littering issue and the costs associated with managing it. To monitor the success of the intervention, litter monitoring was undertaken by the park managers over a six week period, three weeks to establish a baseline and three weeks to measure during the intervention phase. During the intervention phase, observations of park-users were also undertaken by Keep Britain Tidy's researchers, with the aim of understanding the impact of the intervention on observable littering behaviours. Finally, public perception surveys were conducted with park-users to understand the impacts of the intervention on awareness, attitudes and claimed behaviours around abandoned picnics littering.

## Results and Recommendations

### Objective 1: The impacts of the intervention on rates of 'abandoned picnics' littering

Overall, the intervention reduced litter across four London parks by an average of 18%. Northala Fields had a 48% reduction, Finsbury Park had a 32% reduction Oak Hill Park had a 16% reduction; however Hampstead Heath saw an increase in litter of 24%.

### Objective 2: The impacts of the invention on observable littering behaviours

Of those observed littering during the baseline phase of the intervention, the most prevalent litterers across the four sites were those aged between 16 and 24; male park-users; groups consisting of three to four people, followed by groups of five to ten; friend groups and; adults who were picnicking, socialising or partying, followed by families picnicking.

**Litter types**: During the intervention phase, the observed littering of food related packaging reduced by 61%.

**Park-user engagement with intervention**: Park-user engagement with the intervention was high with 29% of park-users activity engaging with the litter gauge and/or posters.

**Observed behaviours and engagement with the intervention**: There were a number of observed engagements which suggest the intervention was successful in attracting attention and sparking debate about the costs of litter.

### Objective 3: The impacts of the intervention on awareness, attitudes and claimed behaviours around 'abandoned picnics' littering

**Awareness of intervention**: Of those surveyed, 13% of respondents had noticed the litter gauge in the park and 14% had noticed the posters. 42% of respondents believed the purpose of the litter gauge was to prevent litter and improve the park/general environment. However, a third (33%) of respondents felt they did not know what the purpose of the intervention was.

**Impact of the intervention on attitudes**: Of all respondents 52% agreed that the intervention should be used in other parks to discourage littering and 49% agreed that the intervention makes them want to put their litter in the bin. Overall, the attitudes towards the intervention can be seen as positive.

**Impacts on awareness of abandoned picnics littering**: Of all respondents, 52% agree that the intervention has made them more aware of how much money is spent on cleaning up litter.

## Recommendations

Overall, the litter gauge intervention had a positive impact on litter levels across the majority of partners. It is recommended that there is further investigation into the results from Hampstead Heath as there were anomalies in the litter monitoring data.

It is recommended that in future, the intervention is used for longer periods, such as across the whole summer, to enable more park-users to see and interact with the intervention.

It is recommended that improvements to messaging be made for future iterations, namely simplifying it, by reducing the number of items shown on the gauge.

As an engagement tool, the intervention can be seen as having been a success, with 29% of park-users observed seen actively engaging with the intervention. Whilst there are some strong indicative results, we recommend further work is done to understand the impacts on litter levels in parks.

# 1. INTRODUCTION

In 2017, Keep Britain Tidy and Parks for London consulted with park managers across London about the extent and types of litter and waste issues in London parks. This work identified that litter left by those picnicking in parks, or 'abandoned picnic' litter, is a particular priority issue for park managers. This littering behaviour occurs when park-users leave single litter items and whole bags of litter around the base or on top of full bins or elsewhere throughout the park after they have had a picnic.

Previous research has found that people are more likely to litter where litter is present (Cialdini, et al, 1990)[1]. Our recent research, Beacons of Litter: A social experiment to understand how the presence of certain littered items influences rates of littering (Tehan et al. 2017)[2], suggests that the presence of large, brightly coloured litter items are more likely to attract further littering of similar types of litter. Therefore, we understand that the presence of litter can act as both an environmental cue and a social cue at the site, and littering around and on top of bins is likely to similarly lead to further littering in parks.

Picnics and other social gatherings, such as barbeques generate significant amounts of litter and this is more prevalent during warmer months, although feedback from park managers suggests that it can also be an issue at any time of year in some parks. Park managers have found it difficult to manage this abandoned picnic litter in parks and the provision of additional bins does not necessarily address the issue. As well as using the bins provided correctly, park managers would also like to see park-users take their rubbish home, to help park managers to deal with the unusually large volumes of waste that enter London Parks during the warmer months when visitor numbers (and picnics and other social gatherings within the park) increase significantly.

In June 2017, Keep Britain Tidy met with park managers and other stakeholders representing ten different organisations to co-design behavioural interventions aimed at tackling 'abandoned picnics', drawing on insights from previous research by Keep Britain Tidy and delegates' expertise. The workshop produced six intervention ideas to prevent picnic related litter in London parks. Four park managers attending the workshop expressed an interest in piloting one of the interventions in their park during summer 2017, in partnership with Keep Britain Tidy and Parks for London.

[1] Cialdini, R.B., Reno, R.R and Kallgren, C.A (1990), "A focus theory of normative conduct: Recycling the concept of norms to reduce littering in public places", *Journal of Personality and Social Psychology, 58, 6, 1015-26*
[2] Tehan, R., Jackson, L.E., Jeffers, H., and Burns, T., (2017), "Beacons of Litter", *Journal of Litter and Environmental Quality, 6-15*

The four park manager organisations are outlined below:

- Barnet Council
- City of London Corporation
- Ealing Council
- Haringey Council.

The four participating organisations voted on the interventions that they would like to see piloted in their parks. The most popular intervention was the litter costs gauge intervention (see appendix A), alongside supporting posters (see appendix B). It was agreed that the two interventions would be combined into one intervention – a litter gauge together with supporting posters which would highlight to park-users the costs of clearing litter from parks and on what this money could otherwise have been spent in the park (e.g. new trees, a hedgehog habitat, public barbeque).

It was agreed that the intervention would be piloted at peak-times for park use when they are particularly suffering from the issue of abandoned picnic litter.

## 1.1 Aim

The aim of the pilot was to test the effectiveness of the litter gauge intervention and supporting posters in preventing 'abandoned picnics' litter.

## 1.2 Objectives

- Identify the impacts of the intervention on rates of 'abandoned picnics' littering
- Identify the impacts of the invention on observable littering behaviours
- Identify the impacts of the intervention on awareness, attitudes and claimed behaviours around 'abandoned picnics' littering

# 2. METHODOLOGY

Keep Britain Tidy was responsible for produced the intervention in consultation with partners, designing and managing the overall pilot and conducting behavioural observations and perceptions research with picnickers and other users of the sites. The park manager partners were responsible for installing the litter gauge and posters, monitoring rates of litter at the sites, e.g. by weighing the amount of litter dropped on the ground and the amount of litter placed in bins and updating the gauge.

## 2.1 Litter gauge and poster design and installation

The litter gauge and posters (appendices A and B) were designed in consultation with stakeholders and used a 'carnival' style theme similar to posters that might be seen in parks to advertise events and activities. Both used pictorial messaging to make the messages easier to understand and bright colours to attract attention, as shown in Figure 1.




Figure 1: Litter gauge in situ at a London park

The litter gauge was placed in a key location in the park and supporting posters were placed around the park including on bins to communicate with park-users the cost of cleaning up litter in parks and to quantify what the money saved could otherwise be spent on.

The litter gauge was made from a dibond material fixed onto a metal frame, making it durable and weather resistant. This allowed the gauge to remain securely in place and in good condition throughout the pilot. The posters were made from a correx material, again to ensure they were weather resistant and would remain of a high quality throughout.

The litter gauge was designed so that, using coloured stickers (see Figure 1Fig) provided by Keep Britain Tidy, partners could easily update the gauge to show how much had been spent on clearing litter.

## 2.2 Research Methodology

The research was conducted in two stages, before the intervention (baseline monitoring) and during the implementation of the pilot interventions (intervention monitoring). The research aimed to evaluate the effectiveness of the interventions and to gather further evidence of the behavioural drivers of 'abandoned picnics', such as awareness, attitudes, motivations, capability, opportunity and social and personal norms. The methodology is outlined in further detail in the Table 1 below.

Table 1: Research Methodology

| Data collection method | Methodology |
|---|---|
| Litter monitoring | **Aim**<br>To understand the impact of the intervention of litter levels in parks.<br><br>**Data collection and analysis**<br>• Monitoring undertaken by the park manager partners as part of their usual cleansing routine<br>• Baseline monitoring three weeks before the intervention<br>• Intervention monitoring for three weeks during the intervention<br>• Waste dropped as litter and waste placed in bins at the sites (e.g. by weight in kg) each time the site is cleared of litter and the bins collected<br>• Quantitative data analysis by Keep Britain Tidy using Microsoft Excel. The findings of the analysis were reviewed internally. |
| Behavioural observations | **Aim**<br>To understand the impacts of the invention on observable littering behaviours.<br><br>**Data collection and analysis**<br>• 24 hours of monitoring per site over four weekend days per site by Keep Britain Tidy (2101 park-users observed in total)<br>• Two days of baseline monitoring (12 hours)<br>• Two days of intervention monitoring (12 hours)<br>• Qualitative data analysis using Microsoft Excel. The findings of the analysis were reviewed internally. The baseline and intervention observation form is included at Appendix C. |

| Data collection method | Methodology |
|---|---|
| Public perceptions surveys | Aim<br>To understand the impacts of the intervention on awareness, attitudes and claimed behaviours around 'abandoned picnics' littering.<br><br>Date collection and analysis<br>• Target of 50 responses per site (210 achieved in total)<br>• Qualitative and quantitative data analysis using Q Software. The findings of the analysis were reviewed internally. The questionnaire used is included at Appendix D. |

## 2.3 Site selection

Each partner local authority selected one target site where the litter gauge intervention would be trialled. These were fairly similar area types that suffered with picnic related littering, as shown in Table 2 below.

Table 2: Site selection

| Partner | Site |
|---|---|
| Barnet Council | Oak Hill Park |
| City of London Corporation | Hampstead Heath |
| Ealing Council | Northala Fields |
| Haringey Council | Finsbury Park |

# 3. RESULTS

## 3.1 Objective 1: The impacts of the intervention on rates of 'abandoned picnics' littering

This section of the report discusses the impact of the intervention on litter levels in the four London parks. The results show the change in proportion of litter in the park during the intervention, compared to the baseline month for each of the six different partner locations. The proportion of litter collected from the park compared to waste collected in the bins provides an accurate measure of the impact of the intervention on littering behaviour.

Results show that overall, the intervention decreased litter in parks by 18% on average across all partner areas. The largest reduction was at Northala Fields, whilst Hampstead Heath saw an increase in litter of 24%, as shown in Table 3 below.

Table 3: Overall litter reduction

| Park | Litter reduction (%) | Average litter reduction (%) |
|---|---|---|
| Northala Fields, Ealing | -48% | -18% |
| Finsbury Park | -32% | |
| Oak Hill Park, Barnet | -16% | |
| Hampstead Heath | +24% | |

### 3.1.1 Overall impact on litter levels per partner location

Litter monitoring results for each of the parks are outlined in the tables below. The method in **Error! Reference source not found.**Table 4 was used to calculate the litter reduction for each site.

Table 4: Worked example of litter reduction calculation

| Phase | Waste in bins (total) | Litter on ground (total) | Proportion of waste in bins | Proportion of litter on ground |
|---|---|---|---|---|
| Baseline | 553.5 kg | 36.5 kg | 93.6% | 6.4% |
| Intervention | 952 kg | 50 kg | 95.0% | 5.0% |
| **Step One - Calculate the difference in proportions of litter on ground:** Subtract the % of litter on ground from the intervention from the % of litter on the ground in the baseline phase | | | | 5% - 6.4% = -1.4% |
| **Step Two - Calculate the percentage change in the proportion of litter on the ground from the baseline phase:** Take the result from Step 1 and divide it by the baseline proportion of litter | | | | -1.4% / 6.4% = -22.1% |
| **Therefore, during the intervention, litter on the ground reduced by 22.1%** | | | | |

### 3.1.2 Northala Fields, Ealing

Table 5 below indicates that the intervention was highly successful in Northala Fields, with an average litter reduction of 48%.

Table 5: Litter monitoring results for Northala Fields

| | Total collected (kg) | | Average weight per day (kg) | | Proportions of litter and waste (%) | | Overall change in litter (%) |
|---|---|---|---|---|---|---|---|
| | Bins | Ground | Bins | Ground | Bins | Ground | |
| Baseline | 1089.40 | 2385.70 | 4.69 | 11.89 | 31% | 69% | -48% |
| Intervention | 631.50 | 351.20 | 1.34 | 10.94 | 64% | 36% | |

### 3.1.3 Finsbury Park, Haringey

The results in Table 6 below indicate that the intervention was successful in Finsbury Park, with an average reduction in litter on the ground of 32%.

Table 6: Litter monitoring results for Finsbury Park

| | Total collected (kg) | | Average weight per day (kg) | | Proportions of litter and waste (%) | | Overall change in litter (%) |
|---|---|---|---|---|---|---|---|
| | Bins | Ground | Bins | Ground | Bins | Ground | |
| Baseline | 768.16 | 477.90 | 17.86 | 11.11 | 62% | 38% | -32% |
| Intervention | 303.80 | 107.70 | 18.99 | 6.73 | 74% | 26% | |

### 3.1.4 Oak Hill Park, Barnet

The intervention was also successful in Oak Hill Park, as shown in Table 7 below, with an average reduction in litter on the ground of 16%.

Table 7: Litter monitoring results for Oak Hill Park

| | Total collected (kg) | | Average weight per day (kg) | | Proportions of litter and waste (%) | | Overall change in litter (%) |
|---|---|---|---|---|---|---|---|
| | Bins | Ground | Bins | Ground | Bins | Ground | |
| Baseline | 823.57 | 154.42 | 35.81 | 6.71 | 84% | 16% | -16% |
| Intervention | 405.01 | 61.52 | 30.48 | 5.70 | 87% | 13% | |

### 3.1.5 Hampstead Heath

The intervention did not appear to be successful in reducing litter in Hampstead Heath with litter increasing by 24% over the three weeks during which the intervention was active (see Table 8). The cause of the ineffectiveness of the intervention in Hampstead Heath is unclear at this stage we believe further investigation is needed in particular, because of unexplained anomalies in the litter monitoring data.

Table 8: Litter monitoring results for Hampstead Heath

| | Total collected (kg) | | Average weight per day (kg) | | Proportions of litter and waste (%) | | Overall change in litter (%) |
|---|---|---|---|---|---|---|---|
| | Bins | Ground | Bins | Ground | Bins | Ground | |
| Baseline | 93.75 | 237.73 | 4.69 | 11.89 | 28% | 72% | +24% |
| Intervention | 33.38 | 273.62 | 1.34 | 10.94 | 11% | 89% | |

## 3.2 Objective 2: The impacts of the invention on observable littering behaviours

This section of the report will discuss impacts of the intervention on observable littering behaviours. 2101 behavioural observations of park-users were conducted across the four sites.

### 3.2.1 Littering behaviour

Of those observed littering during the baseline phase of the intervention:

- Ages 16-24 showed to be the most prevalent litterers, accounting for 29% of all instances of littering across all age groups
- Males showed to be significantly more likely to litter, accounting for 68% of all instances of littering, as opposed to 32% of females
- Groups consisting of three to four people were the most prevalent litterers, accounting for 31% of all instances of littering, followed by groups of five to ten (27%)
- Friend groups showed to be the most prevalent litterers, accounting for 55% of all instances of littering, followed by families (40%)
- Adults who were picnicking, socialising or partying were the most prevalent litterers, accounting for 41% of all instances of littering, followed by families picnicking (19%)

### 3.2.2 Litter types

Observations of the types of items littered during both the baseline and the intervention phase saw a reduction in many litter types, in particular food related litter. The observed littering of food related packaging reduced by 61% as shown in Table 1 below. As well as food packaging, other picnic related litter such as plastic bags and drinks packaging decreased. Other litter items, not necessarily associated directly with picnic litter, such as cigarette litter and paper litter also decreased during the intervention phase.

Table 9: Reduction in observed littering

| Litter types | Percentage reduction (%) |
|---|---|
| Food packaging (take away/picnic food packaging, cellophane wrapping, utensils) | -62% |
| Paper (travel tickets/receipts/cardboard) | -48% |
| Cigarette related litter (butts, papers, packaging, etc.) | -35% |
| Plastic bags (loose bags/bags of rubbish) | -32% |
| Drinks packaging (plastic/glass bottles, cans, hot drinks cups/sleeves) | -21% |

*Bases: baseline = 1046; Intervention = 1055*

### 3.2.3 Park-user engagement with intervention overall

During the intervention stage of the pilot, 29% of those park-users observed were seen actively engaging with the intervention, whether this was by reading the litter gauge and/or posters, talking about it with the group they were with, or with strangers in the park.

With regards to demographics, 30% of all females observed had engaging with the intervention, compared with 28% of all males observed. Park-users aged 70 and over were most engaged with the intervention, followed by under 12s. The least engaged group were those aged between 16 and 24.

In terms of group dynamics, 35% of all couples visiting the park were observed engaging with the intervention, whilst 33% of all families observed engaged with the intervention and 11% of groups of friends.

When looking at the activities park-users were undertaking in the park during the intervention phase, 36% of those observed exercising in the park engaged with the intervention, whilst 33% of children playing engaged. Those who engaged least with the intervention were teenagers socialising (8%) and adults socialising (5%).

## 3.3 Observed behaviours and engagement with the intervention

All observed comments and behaviour across all four partner sites during the intervention phase are recorded in the tables below. The tables demonstrate the interest created by the litter gauge and posters in the parks, and the levels of engagement from a range of group dynamics and age groups.

### 3.3.1 Hampstead Heath

Observed behaviour around the intervention in Hampstead Heath showed park-users engaging with the cost message of the litter gauge, and taking part in discussions about the cost of the items, as shown in Table 0 below.

Table 10: Observed behaviour: Hampstead Heath

| *Hampsted Heath* |
|---|
| *"Look – they spend £12,000 pounds on picking up litter. Dad, look at this."* |
| *"Look – they've spent £11,000 on litter since 1st September. It's terrible – people don't care do they?"* |
| Group seemed to be quibbling over the cost of park items. |

### 3.3.2 Northala Fields

Observed behaviour in Northala Fields showed park-users heavily engaged in the intervention, with many positive comments from a range of age groups in Table 11 below. Observed group discussions from families and teenagers were also recorded. Some of the observed behaviours appear to suggest that littering behaviour had been directly influenced by engagement with the litter gauge.

Table 11: Observed behaviour: Northala Fields

| *Northala Fields* |
|---|
| *"Read this – it's interesting."* |
| *"That's good information. I don't believe they spend £12,000 pounds though."* |
| Child measures self against gauge<br>*"Nanny look, I'm worth £7000 pounds", "Wow that's a lot of money",* she replies. |
| Two children stood on the litter gauge to measure themselves against it. |
| A child didn't understand the litter gauge, so they asked another child what it meant. |
| Park-users discuss which of the items the money saved could be spent on. |
| Park user dropped an ice cream – read the litter gauge and then went to get a tissue to pick up and dispose. |
| Grandparent explained poster to grandchildren, who thinks a doggie play area is great. They said *"we take our litter home!"* |
| A group read the litter gauge and talked amongst themselves about what they would like to see in the park. |
| Park-user read the litter gauge and noticed a napkin which had blown from the café onto the ground, plus a plastic bag floating in the pond. They retrieved it and then binned it. |
| Teenagers talked about the litter gauge and explained to friends how it works; one said *"no way have they spent that much money."* |
| A parent told his children to go and read the litter gauge. |

### 3.3.3 Oak Hill Park

Observed engagement was high amongst children at Oak Hill Park, with questions about the purpose of the litter gauge being asked, and parents encouraging their child to read the litter gauge. There is also evidence to suggest that the litter gauge encouraged group discussions, as shown in Table 12 below.

Table 12: Observed behaviour: Oak Hill Park

| *Oak Hill Pak* |
|---|
| A child asks parent what the litter gauge was, the parent explained it was how much is spent on litter, and then reminded the boy about the time she said to find a bin. She then encouraged the child to read the litter gauge. |
| A child stopped to read the litter gauge, then the parent came over to join. |
| Child on a bike said "wait, what's this?" then the rest of the group stopped to read the litter gauge. |
| A park-user first read the litter gauge, then pointed it out to the rest of the group and they talked about it. |
| Parent went to read the gauge and their child said they'd already read the gauge and that it was interesting. The child said they would like the skate park and asked when it was coming. |

### 3.3.4 Finsbury Park

Again, observed behaviour recorded instances of parent and child interaction with the litter gauge and posters, with discussions amongst groups about what the money spent cleaning up litter could be otherwise be spent on. Park-users were also observed taking pictures of the litter gauge, as recorded in Table 13 below.

Table 13: Observed behaviour: Finsbury Park

| *Finsbury Park* |
|---|
| A child alerted parents and they explained poster to her. |
| Children discussed what would be best to have in the park. One child favoured the doggie play park. |
| A park-user collected rubbish from around the park. |
| A parent explained the poster to their child. |
| A child called their parent back to look at the litter gauge – *"look Mum, what are we going to get?"* The parent then looked at the gauge and explained to the child what it was showing. |
| A child misunderstood the litter gauge, and the mother explained to the daughter what it was. |
| A park-user took a photo of the litter gauge. |

## 3.4 Objective 3: The impacts of the intervention on awareness, attitudes and claimed behaviours around 'abandoned picnics' littering

This section of the report discusses the impacts of the intervention on awareness, attitudes and claimed behaviours around 'abandoned picnics' littering. Here, we also present the feedback from respondents on the pilot intervention. The results are based on 210 respondents across all partner locations, unless otherwise stated.

### 3.4.1 Awareness of the intervention

Looking at awareness of the intervention, 13% of all respondents said they had noticed the litter gauge in the park, and slightly more respondents (14%) had noticed the posters. Awareness of the intervention was higher in females than males. Of all females surveyed, 17% reported to have noticed the litter gauge, as shown in Table 14 below.

Table 14: Awareness of intervention by gender

| | Female (%) | Male (%) |
|---|---|---|
| Awareness of litter gauge | 17% | 10% |
| Awareness of posters | 16% | 12% |

*Bases: females noticed litter gauge = 100, males = 104; females noticed posters = 101, males = 105*

Awareness of the intervention was highest amongst respondents aged 65 and over, as shown in Table 15 below, and least engaged with the intervention materials were those aged between 25 and 34 years.

Table 15: Awareness of intervention by age

| | 16-24 years | 25-34 years | 35-44 years | 45-54 years | 55-64 years | 65+ years |
|---|---|---|---|---|---|---|
| Awareness of litter gauge | 18% | 7% | 9% | 22% | 11% | 27% |
| Awareness of posters | 21% | 7% | 4% | 23% | 13% | 36% |

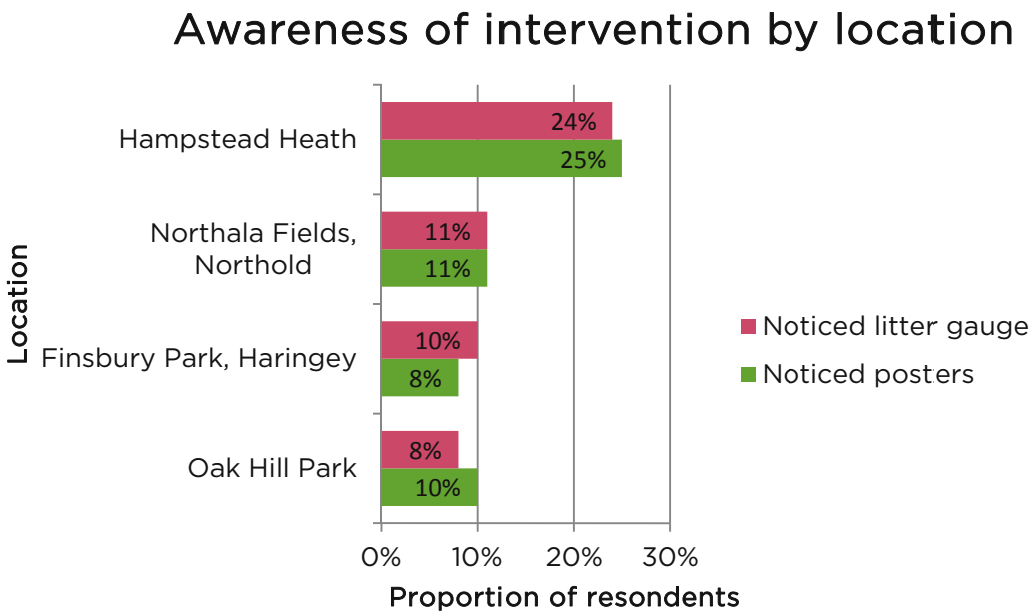
*Bases: Noticed litter gauge: 16-24 = 33; 25-34 = 45; 35-44 = 45; 45-54 = 32; 55-64 = 38; 65+ = 11*

*Bases: Noticed posters: 16-24 = 34; 25-34 = 46; 35-44 = 45; 45-54 = 31; 55-64 = 39; 65+ = 11*

### 3.4.2 Awareness of the intervention by location

Awareness of both the litter gauge and posters was significantly higher amongst respondents in Hampstead Heath, as shown in Figure 2 below. In Northala Fields, awareness levels of both posters and the gauge were the same; in Finsbury Park, slightly more people reported having noticed the litter gauge than the posters and; in Oak Hill Park slightly more users reported to have noticed the posters as opposed to the litter gauge. The results may be influenced by the placement of the materials within the park, for example where a litter gauge was placed near one of several entrances of the park, which may have been bypassed by park-users.

Figure 2: Awareness of intervention by location




*Bases: noticed litter gauge = 204; noticed posters = 206*

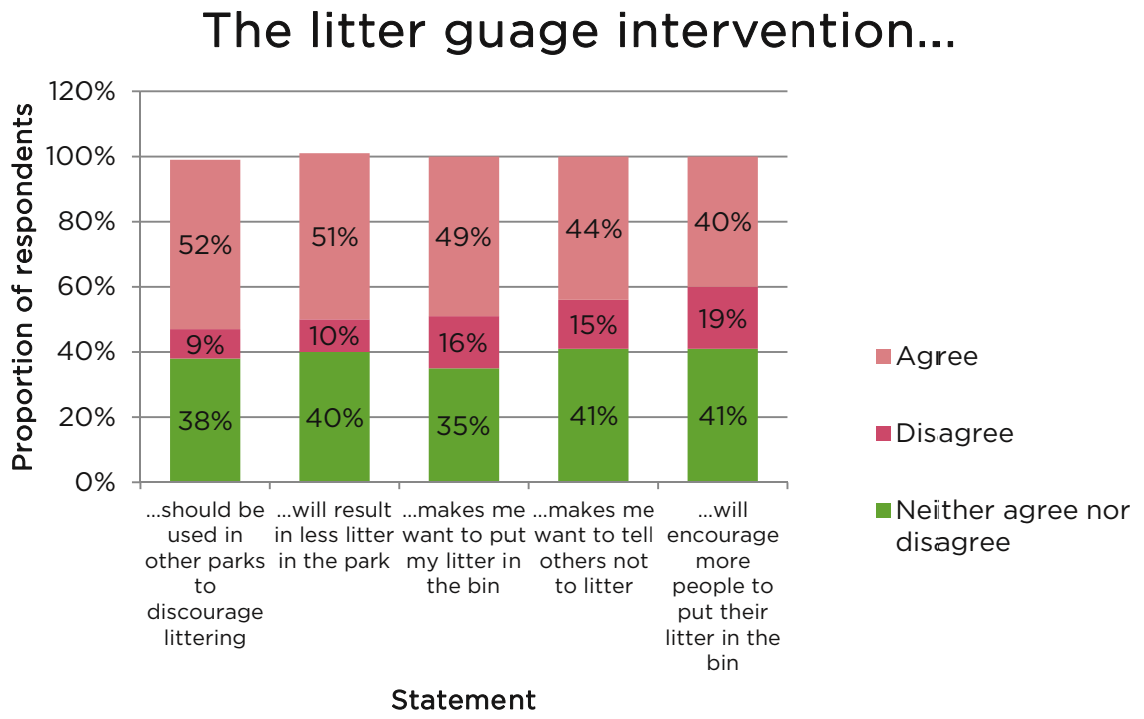
### 3.4.3 Perceived purpose of the intervention

Of all respondents, a significant proportion (42%) believed the purpose of the litter gauge and posters was to prevent litter and improve the park/general environment. Nearly a quarter (24%) of all respondents thought the purpose of the intervention was to demonstrate that money spent on cleaning up litter in the park could be better spent elsewhere. A third (33%) of respondents felt they did not know what the purpose of the intervention was.

### 3.4.4 Impacts on attitudes and awareness

The research found that the intervention had a positive influence on attitudes towards litter, with 52% of the overall sample agreeing that the intervention should be used in other parks to discourage littering, as shown in Figure 3 below. Just under half (49%) of respondents agreed that the intervention encourages themselves to put their litter in the bin, and 44% agreed that it made them want to tell others not to litter. Overall, the attitudes towards the intervention can be seen as positive.

Figure 3: Attitudes around litter and the intervention

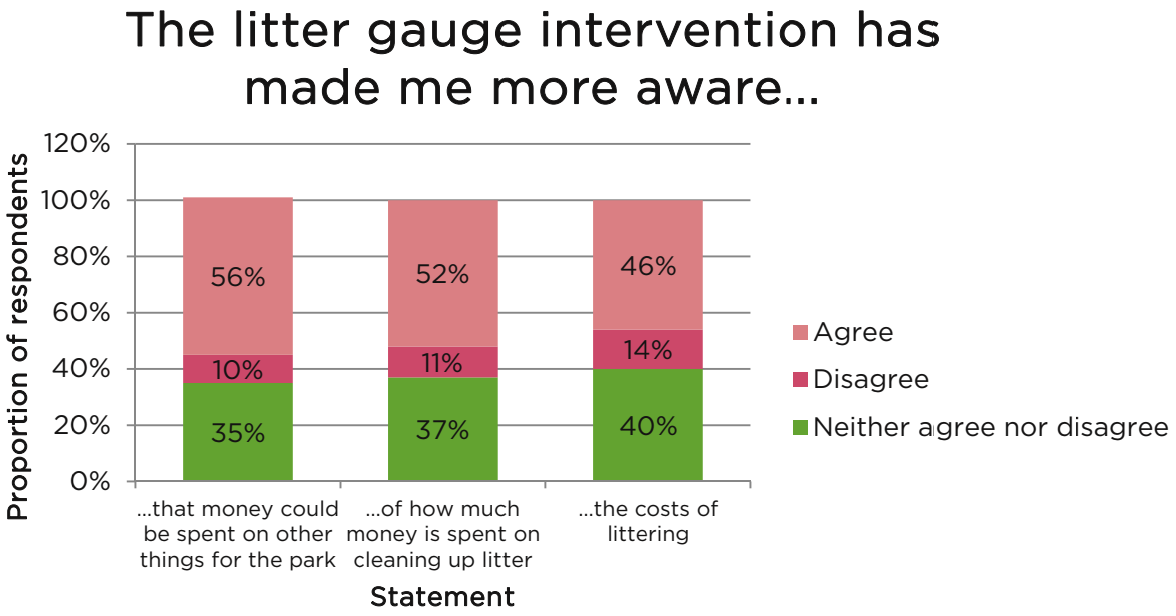



*Bases: "should be used in other parks..." = 195; "will result in less litter..." = 189; "makes me want to put my litter in the bin" = 199; "makes me want to tell others not to litter" = 193; "will encourage more people to put their litter in the bin" = 200.*

### 3.4.5 Awareness

The research found that the messaging used in the intervention was reasonably well understood, with 56% of the overall sample agreeing that the intervention has made them more aware that money spent of cleaning litter could be spent on other things for the park or local community, as shown in Figure 4 below. A total of 52% of the overall sample agreed that they were more aware of how much money is spent on clearing up litter as a result of the intervention and a significant proportion of the sample (46%) also agreed that as a result of the intervention, they are more aware of the overall costs of littering. There were a proportion of those sampled who neither agreed nor disagreed that the intervention made them more aware of the issues above, illustrating that further work could be done to make the intervention and key messages even clearer.

Figure 4: Awareness around the intervention and key messages




*Bases: "money spent on cleaning litter could be spent..." = 194; "how much money is being spent on cleaning up litter..." = 197; "the costs of littering" = 194*

### 3.5 Feedback around the intervention

When asked their thoughts on the overall intervention, in particular the key messages used on the litter gauge and posters, nearly half (45%) of respondents were unable to provide feedback, nearly a quarter (23%) provided feedback on the intervention as a litter specific message. Of all respondents, 21% provided general positive feedback and a small proportion (10%) provided ideas for future improvements. Examples from the samples comments include:

#### Litter-related feedback

*"Dropping litter wastes money which could be spent on other important things."*

*"Littering costs money so don't do it, and then money saved can be spent on making park look nice."*

#### Positive feedback

*"The design looks fun and celebratory; the [materials] don't look like they are talking about something negative."*

*"It is clear at showing what could have been bought. The design is bright and easy to read."*

*"It is quite informative and has good colours; it is encouraging people not to litter as it costs money."*

## 3.6 Ideas for future improvements

*"The messaging is effective as it quantifies the waste in terms of what we could have had instead, but it is difficult to read."*

*"Poor choice of colours, also trying to say too much, a simpler, concise message would be better."*

*"Too many colours and all looks too busy which puts me off reading it thoroughly."*

# 4.CONCLUSIONS & RECOMMENDATIONS

Overall, the litter gauge intervention had a positive impact on litter levels across the majority of partner sites in which it was tested with the greatest results achieved in Northala Fields. Clearly, there is a need to further investigate the results from Hampstead Heath to better understand why the intervention appears not to have been affective in spite of good results across the other three sites.

The intervention received positive engagement from park-users of all age groups across all of the pilot sites. Looking specifically at picnic related litter, the observations research found that the intervention was successful in reducing observed instances of food related litter, as well as paper litter, cigarette related litter, plastic bag litter and drinks packaging.

We recommend that in future the intervention is used for longer periods, such as across the whole summer. Regular updates of the litter gauge will continue to be needed throughout any period to ensure that it is perceived as a dynamic intervention by park-users. This will enable more park-users to see and interact with the intervention.

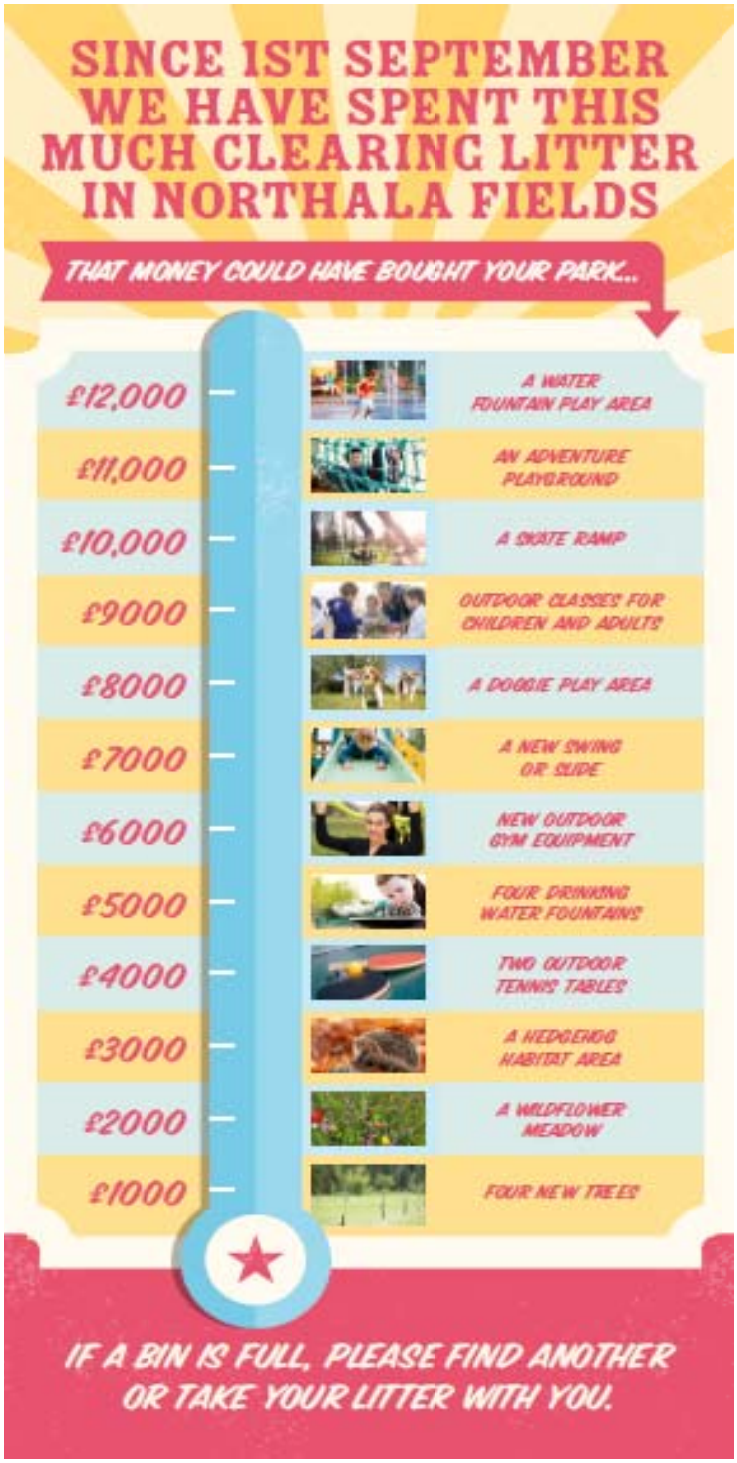
Whilst a reasonably large number of people surveyed (42%) were able to identify that the purpose of the litter gauge and posters was to prevent litter and improve the park/general environment, 33% felt that they did not know what the intervention was about. To address this, improvements to messaging could be made for future iterations, namely simplifying it by reducing the number of items shown on the gauge.

Overall the responses to the gauge were positive, with more than half of the sample agreeing that the intervention has made them more aware that money spent clearing litter could be spent on other items for the park and over half of the sample agreeing that the intervention should be used in other parks to discourage littering.

As an engagement tool, the intervention can be seen as having been a success, with 29% of park-users observed seen actively engaging with the intervention. Whilst there are some strong indicative results, we recommend further work is done to understand the impacts on litter levels in parks.

# 5. APPENDIX A

Litter Gauge



# 6. APPENDIX B

Intervention Poster



# 7. APPENDIX C

Observations Form

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Person reference number | | | | | | | | |
| Age Group<br>1: U12 2: 12-15 3: 16 -24<br>4: 25-34 5: 35 - 54 6: 55-69 7: 70+ | | | | | | | | |
| Gender (M/F) | | | | | | | | |
| # of people in group (1 = individual) | | | | | | | | |
| Group description:<br>1: School trip 2: Friends 3: Family 4: Couple | | | | | | | | |
| Activity of visitor:<br>1: Exercising (walking, running, etc.)<br>2: Playing - adults<br>3: Playing – children / with children<br>4: Adults picnicking / socialising / partying<br>5: Family picnicking<br>6: Children's party<br>7: Teenagers socialising<br>8: Other | | | | | | | | |
| Type of visitor (if identifiable):<br>1: Local resident<br>2: Tourist/leisure visitor<br>3: Homeless<br>4: Other (write in comments overleaf) | | | | | | | | |
| *Prior to disposal were they:*<br>1: Sitting 2: Standing 3: Walking past | | | | | | | | |
| >5m from bin? | | | | | | | | |
| 1: Binned litter 11. Took litter with them<br>2: Placed litter next to bin<br>3: Shoot and miss<br>4: Flagrant - fling/throw<br>5: Drop with intent<br>6: Inch away / left behind<br>7: Wedge<br>8: Sweep<br>9: Accidental drop - did not notice<br>10: Accidental drop - noticed and left | | | | | | | | |
| Dog poo - unbagged | | | | | | | | |
| Dog poo – bagged | | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Cigarette butt | | | | | | | |
| Cigarette related materials (cig packaging, cig papers, lighters) | | | | | | | |
| Gum | | | | | | | |
| *Drinks* – Plastic/can drinks container | | | | | | | |
| *Drinks* - Hot drinks cup coffee/tea/soup (and insulating wraps) | | | | | | | |
| *Drinks* - Glass drink container | | | | | | | |
| *Drinks* - Other | | | | | | | |
| *Drinks – is the drink alcoholic? Y/N* | | | | | | | |
| *Food packaging* - Takeaway food containers and packaging - box, polystyrene box/tray, sandwich pack, paper bag, napkin<br>**Write item & brand name in comments* | * | * | * | * | * | * | * |
| *Food packaging – Picnic food containers and packaging (dips, bread bags, crisp packets, etc.)* | | | | | | | |
| *Food packaging* – pizza box | | | | | | | |
| *Food packaging* – all other | | | | | | | |
| Utensils (fork, spoon…) | | | | | | | |
| Food | | | | | | | |
| Cellophane wrapping | | | | | | | |
| *Paper* – train/bus tickets, receipts, flyers, leaflets, tissues | | | | | | | |
| Cardboard box | | | | | | | |
| Newspaper/magazine | | | | | | | |
| Plastic bag – loose | | | | | | | |
| Plastic bag – of rubbish | | | | | | | |
| General litter / other | | | | | | | |
| Unsure | | | | | | | |

## Additional comments

Please add any additional comments in the table below, e.g. if you observe a behaviour not specified in the recording form. Please take the reference number

| Ref number | Comments |
|---|---|
| | |
| | |
| | |
| | |

| | |
|---|---|
| | |
| | |
| | |
| | |
| | |
| | |
| | |

General comments about session (for example, is there a particular location where lots of people are littering a certain item? Please provide details)

| General comments |
|---|
| |

# 8. APPENDIX D

'Abandoned Picnics' 2017
Public Perception Survey

INTERVIEWER, PLEASE SPEAK TO 50 PARK-USERS AT EACH SITE.
Hello, my name is xxx from xxx, an independent research company. We are currently carrying out some research on the views of people in xxx (insert location from below). We would be grateful if you could spare 5 minutes to answer some questions. All of your responses will be confidential and no individual comments will be attributed to you.

| Location | Day | Date |
|---|---|---|
| Finsbury Park, Haringey | | |
| Northala Fields, Northolt | | |
| Oak Hill Park, Hampstead | | |

1. How often do you visit this park? INTERVIEWER: SINGLE CODE

| This is my first visit | Rarely – Once or twice per year | Sometimes – Every couple of months | Often – At least every month | Always – At least every week |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| Skip to Q3 | Continue | Continue | Continue | Continue |

2. Have you noticed anything new about this park over the past month? If so, can you tell me what you've noticed?
INTERVIEWER: PLEASE RECORD VERBATIM COMMENTS IN FULL

_____
_____
_____
_____
_____
_____

3. **Have you noticed this signage in the park?** (SHOW CARD A – litter gauge) SINGLE CODE

| | |
|---|---|
| Yes | 1 |
| No | 2 |
| Don't know | 3 |

4. **Have you noticed these posters in the park?** (SHOW CARD B) SINGLE CODE

| | |
|---|---|
| Yes | 1 |
| No | 2 |
| Don't know | 3 |

5. **What do you think is the purpose of the signage and posters?** OPEN ENDED. INTERVIEWER: PLEASE RECORD VERBATIM COMMENTS IN FULL – WE WOULD LIKE TO USE QUOTES

6. **What feedback do you have about the design and key messages used in the signage [litter gauge] and posters?** OPEN ENDED. INTERVIEWER: PLEASE RECORD VERBATIM COMMENTS IN FULL – WE WOULD LIKE TO USE QUOTES

7. I am now going to read out some statements about the signage [litter gauge] and posters initiative and I would like you to tell me how strongly you agree or disagree with each one.

The initiative…

SINGLE CODE ONLY

| | *1.1.1.1.1.1.1* | Strongly disagree | Slightly disagree | Neither agree nor disagree | Slightly agree | Strongly agree | Don't know |
|---|---|---|---|---|---|---|---|
| a) | …will encourage more people to put their litter in a bin | 1 | 2 | 3 | 4 | 5 | 6 |
| b) | …makes me want to put my litter in a bin | 1 | 2 | 3 | 4 | 5 | 6 |
| c) | …makes me want to tell others not to litter | 1 | 2 | 3 | 4 | 5 | 6 |
| d) | …has made me more aware of the costs of littering | 1 | 2 | 3 | 4 | 5 | 6 |
| e) | …has made me more aware of how much money is spent on cleaning up litter in this park | 1 | 2 | 3 | 4 | 5 | 6 |
| f) | …has made me more aware that money spent on cleaning up litter could be spent on other things for the park and/or the local community | 1 | 2 | 3 | 4 | 5 | 6 |
| g) | …will result in less litter in the park | 1 | 2 | 3 | 4 | 5 | 6 |
| h) | …should be used in other parks to discourage littering | 1 | 2 | 3 | 4 | 5 | 6 |

General classifications:

Gender

| | |
|---|---|
| Male | 1 |
| Female | 2 |
| Other | 3 |

Age group:

| | |
|---|---|
| U12 | 1 |
| 12 - 15 | 2 |
| 16 - 24 | 3 |
| 25 - 34 | 4 |
| 35 - 44 | 5 |
| 45 - 54 | 6 |
| 55 - 64 | 7 |
| 65+ | 8 |

Interviewer name:

Interviewer signature:

*I confirm that this survey has been undertaken in accordance with the Market Research Society Code of Conduct.*

Date:

Thank respondent and close