Littering and recycling in St James’s and Green Parks

A study to identify new ways to encourage responsible waste disposal in parks

July 2015
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1. Executive Summary

1.1. Background

The Royal Parks asked Keep Britain Tidy to identify new approaches to reduce littering and improve recycling that could be implemented in Green Park and St James’s Park. It was agreed that Keep Britain Tidy would conduct research into park users’ waste disposal behaviours and the behavioural context of these in order to identify potential solutions that would address the drivers of incorrect waste disposal more effectively.

1.2. Aim and objectives

The overall aim of this project was to gain insight into the behavioural drivers of incorrect waste disposal in parks to inform future initiatives to reduce littering and improve recycling rates at St James’s and Green Park. The research objectives were to:

1. identify recycling, littering and waste disposal behaviours at the parks
2. understand the (social, environmental and personal) contexts and drivers of these behaviours
3. identify potential interventions to address the behavioural drivers of incorrect waste disposal.

1.3. Evaluation methodology

The research was conducted at three littering hotspots identified by the Royal Parks – one located in Green Park and two in St James’s Park. The research involved:

- behavioural observations, conducted in eight two-hour sessions per site (48 hours of observations in total), recording a total of 426 people depositing waste items across the three sites (either in a bin or on the ground as litter); and

- intercept interviews with 87 location users, conducted at each of the three sites alongside the behavioural observations. The interviews were designed to encourage people to open up about their waste disposal behaviours.

The behavioural observations and intercept interviews were conducted on different days of the week and at varying times of day to capture a range of visitors to the parks (e.g. peak commute, lunch and the Changing of the Guard times). Further details regarding the research methodology are provided in the main body of the report at Section 2.3.
1.4. Results and findings

1.4.1. Littering behaviours

Extent of littering

Across all sites, the overwhelming majority of people put their rubbish in a bin. Despite this, rates of littering were high; 20.1% (or 67 people) of all people observed depositing waste items during the research littered their waste.

What is littered?

The majority of items littered were food and drinks related (representing 63% of 76 items), though paper items were the single biggest contributor by number (paper items includes tissues, leaflets, receipts, transport tickets, paper bags and serviettes).

Who is littering?

When analysing littering by age and gender, more under-16s littered than any other age group (38% of under 16s littered), and more females littered than males (24% of females compared to 17% of males). This is the case across all age groups except for the U16s, in which males were more likely to litter.

When are people littering?

The research identified two broad types of park users at the sites who handled waste items: leisure visitors and commuters, with leisure visitors representing the majority of park users and being significantly more likely to litter than commuters (24% compared to 5%).

We found a clear trend that people are more likely to litter when they are accompanied by at least one other person, and this likelihood increases again when people are in groups of four or more. This suggests that people feel more confident about littering when accompanied by others, and perhaps less vulnerable to being told off for littering by strangers.

People who were sitting (either on a bench or on the ground) were significantly more likely to litter than those who were standing or walking through the site (45% of people sitting littered compared to 15% standing and 8% walking).

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1 If cigarette butts are included, this figure increases to 29.3% (125 people) observed littering. However, our previous research has found that people treat cigarette butts differently to other types of waste, and many people who would not normally litter other items, litter cigarettes. Therefore in this report cigarette butt disposal is addressed separately (see boxed text on the following page and at Section 3.2.7 in the main report), and excluded from all other results presented in this report.
Classification of littering behaviours

Our research found that most littering in the parks is discrete, rather than flagrant, and most people we observed littering appeared to do so habitually or subconsciously. Correct waste disposal seemed to be low priority for them when visiting the park.

A person’s age group or who they are with does not appear to be a determining factor in the type of littering behaviour they displayed (i.e. no one group consistently littered in a particular way), though a larger sample size is needed to make any firm conclusions around this.

Cigarette litter analysis

Cigarette litter was found to be a major issue at the sites, representing 44% of all items littered during the observations. More smokers (63%) littered their cigarette butts than not. The issue was most prevalent at Site A, where 73% of items littered were cigarette butts. The underground station entrance is heavily used by smokers before or after their journeys or while waiting to meet someone. There is just one ashtray/cigarette bin present at the site (and across all three sites we monitored), however this bin is not ideally situated making access by smokers difficult, and the bin currently displays a ‘No smoking’ sign which may send confusing messages to smokers.

Appropriateness of litter bins provision in St James’s and Green Park

Overall, our observations found that the number of litter bins provided at the three sites is appropriate. However, the design of the bins could be improved. The bins used are made from a mesh wire, which means that there are large gaps in the walls of the bins. This allows the contents of the bins to be easily seen for security purposes and keeps the bins light enough for emptying. However, when a bin bag had been used to line a bin, we repeatedly saw the wind blow the bag outside of the bin, and often rubbish with it. Park users then placed their rubbish on top of the bin bag without rearranging it inside the bin, causing it to disperse around the bin instead of inside it. Sometimes the bins wouldn’t be lined with a bin bag at all. This meant that when there was strong wind, smaller items of rubbish that had been placed inside the bins flew out and littered the area.

1.1.1. Recycling behaviours

Extent of recycling at the sites

At the time of research, there were four recycling bins across the three monitoring sites – two paper/newspaper and two mixed recycling bins. Of all waste items we observed being deposited at the sites (in litter bins, recycling bins and on the ground as litter), 41% (or 157 items) were recyclable in common on-the-go recycling schemes in the UK. Unfortunately, however, just 7% of all waste items were recycled. If The Royal Parks introduced more infrastructure and all of these items were recycled, The Royal Parks could be on track towards achieving its target of 40% of all waste recycled by 2016. It is our understanding that this is currently being explored by management.

Recyclable items include plastic drinks and food containers, coffee cups, glass bottles and jars, metal tins and cans, paper (including magazines and newspaper) and cardboard.
What is being recycled?

Newspaper and paper had the highest rate of recycling at the sites (36% of these items were recycled), while glass drinks containers had the lowest rate (none of these items were recycled). The types of waste most commonly deposited in general waste bins that had the potential to be recycled were coffee cups, newspaper/paper items and plastic drinks containers. Interventions that successfully capture these waste types for recycling are therefore likely to have the biggest impact on overall recycling rates.

Who is recycling?

16 to 24 year olds were the biggest recyclers amongst the age groups, followed by 35 to 54 year olds. Under 16s, which was the age group that littered the most, also recycled the least. However these results should be treated with caution due due the small sample size of each age group observed.

Females were significantly more likely to deposit their recyclable waste in a recycling bin than males (30% of females compared to 17% of males).

Drivers and barriers to recycling

The main barrier to recycling at the parks is clearly the low provision of recycling bins across the sites. There are very few opportunities for people to recycle onsite and only the most committed are likely to carry their recyclables with them until they find an appropriate recycling bin (either in the parks or at other locations).

This is evidenced by our intercept interviews, in which 59% of park users we spoke to admitted they don’t recycle at the parks. Furthermore, our interviews found that park users’ personal obligation to recycle decreases when no facilities are provided. Park users felt that easy to find and use recycling bins would encourage them to recycle.

The mixed recycling bin outside the toilets near Malborough Gate (Site B) was tucked away without any signs indicating its location and could be moved to a more appropriate and prominent location. The nearby newspapers/magazines recycling bin located by the ice cream kiosk should be changed to or accompanied by a mixed recycling bin, as most waste generated at this site is food and drinks related.

Finally, previous research by Keep Britain Tidy has found that one of the key barriers to using any bin is whether it looks clean and whether users need to touch the bin in order to dispose of their item. Therefore it is important to ensure recycling bins are kept clean and that the new bin design is easy to use and accessible.

1.5. Recommendations

Our research found that much of the littering that occurs in St James’s and Green parks appears to be thoughtless or subconscious, and comes from tourists and leisure visitors, rather than regular park users. In terms of recycling, the main barrier appears to be a lack of suitable recycling bins. Additionally, recycling was found to be a low priority for park users, with visitors being unlikely to
carry their recyclables with them until they find an appropriate bin (e.g. at the main gates or outside the park). Our recommendations are therefore based around practical measures to improve the provision of bins across the parks and make correct waste disposal easy and attractive for park visitors.

Unfortunately due to security and conservation concerns, The Royal Parks is limited in what it can do in terms of bin design and provision. For recycling bins, this includes only placing bins in locations that do not obstruct main pathways through the parks and where they can be accessed by vehicle so that they can be quickly removed if necessary. With this in mind, some of our recommendations are intended to provide inspiration rather than be implemented immediately. However, without improving infrastructure it is unlikely that the Royal Parks will meet its recycling rate target of 40%. Ideally, more recycling bins than general waste bins should be provided in order to communicate to park users the importance of and expectations around them recycling their waste.

Based on the findings of the research, we have nine recommendations for preventing littering and increasing recycling at St James’s and Green parks, as summarised below.

1. Make doing the right thing with rubbish and recyclables easy through better bin provision and design:
   - Provide more recycling bins in easy-to-find and predictable locations (e.g. at pathway intersections or near food and beverage kiosks).
   - Provide bins for all waste streams collected in the parks at each bin location.
   - Make recycling easy to understand quickly, e.g. by providing illustrations or examples of the recyclable materials collected on the bins.
   - Ensure that all bin apertures are free of items, easily accessible and facing the best direction for easy disposal.

2. Attract attention to the bins and make doing the right thing attractive:
   - Increase the salience of bins through signage, colourful or interesting bin wraps (e.g. with pictures of landmarks, maps of the area, facts about the parks) and/or the use of footprints to nudge people towards bins.
   - Consider installing ‘fun’ interactive bins at the Marlborough Gate (Site B) and Inn The Park (Site C) litter hotspots to draw people towards the bins, e.g. by installing the ‘world’s deepest bin’ or voting bins (where users can indicate their preference between a number of choices by depositing waste in the appropriate bin).
   - Consider implementing a ‘Bin it for good’ campaign, whereby through correct litter disposal or recycling, park users contribute to a local charity or cause.
   - Ensure that bins are cleaned regularly (e.g. a quick wipe around the aperture with each collection).
3. Show that doing the right thing with waste when at the parks is the social norm, i.e. what most people do and/or what most people think should be done:

- Use positive reinforcement/social norming messages on signage at the parks as well as in external communications and the Park’s website along the lines of ‘you have told us recycling in St James’s/Green Park is important for you and we have listened, please use the new recycling bins we have provided for you’.
- Use the rolling out of the new bins as an opportunity to reframe The Royal Parks as ‘recycling zones’ making recycling the clear norm and expected behaviour.

4. Ensure interventions are *timely* by reminding or prompting people to use bins correctly at the points where they are more likely to need a litter or recycling bin:

- Place recycling reminders at litter hotspots (benches and picnic areas) and in places where people are currently disposing of their items incorrectly.
- Place signs on general rubbish bins asking users ‘could this be recycled? Help us achieve our 40% recycling rate’ (a recycling bin should be placed nearby if using this approach).
- Consider using messaging on cleansing staff uniforms such as ‘wildlife conservation manager’ to prompt park users who see staff litter picking to make links between litter and the welfare of park wildlife, and to highlight that even if they are litter picking, it is not their job to clean up after people, but to look after the environment.

5. Consider replacing the mesh wire litter bins throughout the park.

6. Ensure that all bin lining is securely fixed to the litter bins.

7. Introduce sugar dispensers instead of sugar packets at kiosks.

8. Work with ‘Inn the Park’ to improve cleansing in the bench area around the restaurant.

9. Improve the provision of cigarette bins throughout the park, move the cigarette bin currently provided at Site A to a more appropriate position and remove the ‘No smoking’ sign from this bin.
2. Introduction

2.1. Background

The Royal Parks asked Keep Britain Tidy to identify new approaches that could be implemented at two of its parks – Green Park and St James’s Park – to reduce littering and improve recycling. It was agreed that Keep Britain Tidy would conduct research into park users’ waste disposal behaviours and the behavioural context of these in order to identify potential solutions that would address the drivers of incorrect waste disposal more effectively. The research was conducted at three littering hotspots identified by the Royal Parks – one located in Green Park and two in St James’s Park.

2.2. Aim and objectives

The overall aim of this project was to gain insights into park users’ disposal behaviours in order to identify potential interventions that could reduce littering and improve recycling rates at St James’s and Green Park. The research objectives were to:

4. identify recycling, littering and waste disposal behaviours at the parks
5. understand the (social, environmental and personal) contexts and drivers of these behaviours
6. identify potential interventions to address the behavioural drivers of incorrect waste disposal.

2.3. Methodology

As detailed in the table below, we conducted behavioural observations and intercept interviews at each of the three sites on eight different days, with each session lasting two hours. The sessions were conducted at varying times of day to capture a range of visitors to the sites (e.g. peak commute, lunch and the Changing of the Guard times).

Table 2: Evaluation methodology

<table>
<thead>
<tr>
<th>Data collection method</th>
<th>Methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioural observations</td>
<td><strong>Aim</strong>&lt;br&gt;• To gain insight into the user types, demographics, disposal behaviours and behavioural contexts.&lt;br&gt;&lt;br&gt;<strong>Data collection</strong>&lt;br&gt;• Structured naturalistic (unobtrusive) observations at the target sites using pre-coded recording forms to identify instances of different disposal behaviours.&lt;br&gt;• Conducted by Keep Britain Tidy on varying days of the week to capture a range of park users.&lt;br&gt;• Conducted in eight two-hour sessions per site (48 hours across the three sites in total)&lt;br&gt;&lt;br&gt;<strong>Analysis</strong>&lt;br&gt;Quantitative data analysis using Microsoft Excel.</td>
</tr>
<tr>
<td>Intercept interviews</td>
<td><strong>Aims</strong>&lt;br&gt;• To identify park users self-reported behaviours and perceptions on littering and recycling.</td>
</tr>
</tbody>
</table>
Data collection method
- To gain insights into what would improve the likelihood of visitors recycling

Methodology
- Intercept interviews with site visitors across the three sites
- The interviews were conducted on varying days of the week to capture a range of site users
- The interviews were designed specifically to encourage respondents to feel comfortable about opening up about their waste disposal behaviours.

Analysis
Qualitative and quantitative data analysed using Microsoft Excel.

2.3.1. Research sites

Site A - Green Park Station (Green Park)

Site A is located immediately outside of the new Green Park station exit. The site features a fountain and a café kiosk and is an ideal meeting point for visitors of the park. There are four exits/entrances to the site, and at the start of the monitoring period, there were six general bins, one newspaper/magazines recycling bin and one cigarette bin, as shown below.

Figure 1. Site A – Green Park station

Site B - Marlborough Gate entrance (St James’s Park)

Site B is located immediately after the Marlborough gate entrance. The site features a public toilet, a café kiosk, a seating area and an ice cream kiosk. At the start of the monitoring period, there were five general bins, one mixed recycling bin (outside toilets) and one newspaper/magazines recycling bin (next to ice cream kiosk), as shown in the site plan below.

Figure 2. Site B – Marlborough Gate
Site C - ‘Inn The Park’ (St Jame’s Park)

Site C encompasses the space around the ‘Inn the Park’ restaurant. The site features the restaurant, a long, built-in bench for sitting around the restaurant and additional benches in front of the lake/wildlife area. At the start of the monitoring period there were five general bins and one mixed recycling bin, please refer to the site plan below for details.

Figure 3. Site C – Inn the Park
3. Research findings

3.1. An overview of visitors and uses of the sites

Site A: Green Park Station
Observations suggest the site is used mainly as a meeting point for both commuters and leisure visitors (including independent small tour groups like the ‘Walking Tour’ and school trips). There are a great number of commuters and leisure visitors using the site mainly for transit purposes (entry or exit) to or from Green Park underground station. Traffic is usually high on weekdays between 8.30am – 9.30am with commuters going to work; the traffic of leisure visitors starts to pick up from 9.30am onwards. On weekends users of the site seem to mainly be leisure visitors arriving from 9.30am onwards.

Due to the purpose for which park users seemed to be visiting the site (transit/meeting point), the main waste type that could be observed was cigarette butts, followed by food packaging and general litter which consisted mainly of used tissues.

Site B: Marlborough gate entrance area
Observations suggest that the site’s peak times are between 12.00pm – 4.30pm, with an increase in the number of users on ‘Changing of the Guards’ days and weekends. Site users are generally leisure visitors both local and foreign, and small independent groups (e.g. school trips) and large organised tours.

It has been observed that the area around the toilet, especially the path, seems to be problematic; people in transit – rather than actual park users – tend to litter while waiting for family, friends or tour groups using the toilet facilities. The area opposite and around the café has also been found to be highly littered during peak times, mainly with food packaging from the café despite two general bins being located in this area.

SITE C: St James’s Park – ‘Inn The Park’ restaurant area
Observations suggest that the site’s peak times are between 12.00pm – 4.30pm, with an increase in the number of visitors on days when there is ‘Changing of the Guards’ and on weekends. Site users seem to generally be leisure visitors (90% of people observed), both local and foreign, and small independent groups (e.g. school trips). The most problematic area in this site seems to be the built-in benches outside ‘Inn The Park’ restaurant. These benches are highly used by leisure visitors, especially families and small independent groups like school trips, as a lunch spot. Due to this use type, noticeable amounts of litter have been recorded under and on top of the benches almost at all sessions conducted at peak periods. Noticeable levels of litter were also found under the benches facing the lake on weekends, also when visitors are at peak.
3.2. Littering behaviours

3.2.1. Extent of littering at the sites

Across all sites, we found that the overwhelming majority of people put their rubbish in a bin\(^3\). Figure 1 below shows the proportion of people who littered compared to the proportion who binned or recycled their rubbish. Two versions of the results are presented – with cigarette butts included in the analysis and without cigarette butts included.

![Overall waste disposal behaviour at sites with and without cigarette disposal included in the data](image-url)

**Figure 4. Overall waste disposal behaviour at sites with and without cigarette disposal included in the data**

The rationale for excluding cigarette butts from general litter analysis is that our previous research has found that people treat cigarette butts differently to other types of waste, and many people who would not normally litter other items, litter cigarettes. We know that people feel that cigarette butts are dirty and because they are on fire (and could potentially make other items catch fire if disposed of in general litter bins) people are more likely to dispose litter them. Therefore, all analysis and results presented in this report exclude cigarettes, except for Section 3.2.7 where the issue is addressed separately.

Of the three sites, people were significantly less likely to litter at Site A (see Figure 2). One factor that could help explain the difference in littering behaviours between sites is the provision of bins, with Site A having the highest provision of bins in relation to its size\(^4\). Additionally, the research found that people are less likely to litter when they are either standing (as opposed to sitting) or on-the-move (see Section 3.2.4). This may contribute to the lower rates of littering seen at Site A as park users at this site were often in transit or standing while waiting to meet people, whereas park users at sites B and C were often using the site in a more leisurely manner, e.g. sitting and eating in groups.

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\(^3\) This figure includes people who incorrectly disposed of recyclable materials in general waste bins. Recycling behaviours are discussed further at Section 3.3.

\(^4\) However it should be noted that overall, 60% of all 67 littering incidents occurred less than five metres from a litter bin, therefore more bins does not necessarily mean less litter.
3.2.2. What is being littered?

As shown below, the majority of items littered are food and drinks related (representing 63% of 76 items altogether), though paper items are the single biggest contributor (this includes tissues, leaflets, receipts, transport tickets, paper bags and serviettes).

The five most littered item types at each site are shown in Table 3. Plastic bags appear to be more of an issue at Site A, possibly due to its proximity to shops along Piccadilly.

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Bases: Site A = 135, Site B = 100, Site C = 99.
Table 3: The five most littered item types at each site

<table>
<thead>
<tr>
<th>Litter type</th>
<th>Site A</th>
<th>Site B</th>
<th>Site C</th>
<th>All sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper</td>
<td>54%</td>
<td>23%</td>
<td>25%</td>
<td>29%</td>
</tr>
<tr>
<td>Food packaging</td>
<td>23%</td>
<td>29%</td>
<td>22%</td>
<td>25%</td>
</tr>
<tr>
<td>Food</td>
<td>0%</td>
<td>19%</td>
<td>16%</td>
<td>14%</td>
</tr>
<tr>
<td>Coffee cup</td>
<td>8%</td>
<td>10%</td>
<td>6%</td>
<td>8%</td>
</tr>
<tr>
<td>Plastic bags</td>
<td>15%</td>
<td>6%</td>
<td>3%</td>
<td>7%</td>
</tr>
</tbody>
</table>

*Base: Site A = 13, Site B = 31, Site C = 32, Overall = 76*

Small items of food and drinks related packaging are a litter issue around the park kiosks, particularly at Site B, a large portion of which were paper sugar packets. Because of their small size, even when sugar packets were disposed of in the general rubbish bin, they constantly escaped through the mesh wire wall of the bins or blew out in the wind, especially when bins were full. This may cause people to perceive these sites as littered, and Keep Britain Tidy’s previous research has found that people are more likely to litter where litter is present. We suggest replacing the sugar packets with sugar dispensers to reduce the amount of small litter generated around the kiosks. These kiosks already have dispensers for other items such as milk and ketchup.

**Figure 7.** Various dispensers are already in place at kiosks

3.2.3. Who is littering?

**Age groups**

Under 16s were more likely to litter than all the other age groups, though the majority of people observed in each age group did place their rubbish in a bin.

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3.2.4. When are people likely to litter?

When accompanied by others

There is a clear trend showing that people are more likely to litter when they are accompanied by at least one other person, and this likelihood increases again when people are in groups of four or more.
This trend is apparent across all age groups except for the over 55s. The finding reflects previous research by Keep Britain Tidy which has found that people are more likely to litter when accompanied by others, particularly younger age groups who tend to feel supported by their peers. Other factors are also likely to contribute to the increased likelihood of people littering when in groups. For example, people may be less willing (even subconsciously) to disrupt what they are doing in the group to go over to a litter bin, however further research in this area is required.

Interestingly, it appears that of all group types, people are least likely to litter when in a couple (e.g. on a date or with their partner). Previous research conducted by Keep Britain Tidy 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.

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6 Beacons of Litter, Keep Britain Tidy, 2015 (unpublished); ‘We’re Watching You’: A poster intervention trial to reduce littering in the Beaconsfield Motorway Service Area, Keep Britain Tidy, 2015 (unpublished).


When visiting for leisure/sightseeing

The research identified two broad types of park users at the sites who handled waste items: leisure visitors and commuters. The leisure visitor category includes anyone observed who was obviously there to sightsee or visit the park for enjoyment purposes. It includes both local and foreign visitors.

When we look at the proportion of users per type (commuter or leisure visitor) we can see that the majority of littering was from leisure visitors.

The majority of leisure visitors who littered were children (aged under 16) on school trips, representing 73% of the 63 leisure visitors seen littering. This suggests that engaging schools
participating in school trips to the parks could help to reduce littering, e.g. by highlighting the responsibility of visiting teachers to ensure that children do not litter.

**When sitting down**

It is worth noting from our observations that there is a strong trend in the disposal behaviour of park users in relation to their activity prior to disposal. Overall, people who were sitting (either on a bench or on the ground) were significantly more likely to litter than those who were standing or walking through the site.

*Figure 13. Proportion of people who littered by action prior to waste disposal*

<table>
<thead>
<tr>
<th>Action</th>
<th>Proportion of people who littered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sitting</td>
<td>55%</td>
</tr>
<tr>
<td>Standing</td>
<td>15%</td>
</tr>
<tr>
<td>Walking</td>
<td>8%</td>
</tr>
</tbody>
</table>

*Bases: sitting = 96; standing = 79; walking = 159.*

This issue was especially noticeable in Site C, where 78% of people observed littering were sitting down prior to waste disposal, the majority (80%) of whom were sitting on the benches located at the Inn the Park café. Our observations found a clear issue with litter accumulating on and around the benches surrounding the café and measures to increase the cleanliness of this site may in turn discourage littering. We understand from our discussions with The Royal Parks that Inn The Park staff are responsible for cleaning this area on a reactive basis. At the time of research this did not appear to be sufficient (as requested, a photographic record of our observations is included with this report at Appendix A). However, our observations suggest that most litter in this area appears to come from leisure visitors using the benches to eat food they have brought into the park with them, rather than from costumers of Inn the Park. Consequently, we recommend that the Royal Parks work with Inn the Park to develop a clear and consistent routine to ensure cleaning happens around these benches at regular intervals. For example, Inn the Park could be responsible for pre and post lunchtime sweeps, while the Royal Parks cleanse team could be responsible for morning and evening sweeps.

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9 It should be noted that the research was conducted during colder months and that during warmer periods, this issue may simply move to grassed areas.
3.2.5. Classification of littering behaviours

Keep Britain Tidy classifies the waste disposal behaviours of people identified through behavioural observations into 10 categories based on those used in previous littering studies in Australia and North America\textsuperscript{10}. This helps to ensure that Keep Britain Tidy’s research can contribute to global literature on littering by collecting evidence in a consistent manner. The disposal behaviour classifications are listed below.

As shown in Figure 15 below, a large proportion of the littering we observed was seemingly accidental, but then left behind (38%), or discretely dropped by people who then slowly moved away from it (28%). Those who displayed the latter behaviour tended to be sitting down. Most people we observed littering appeared to do it habitually or subconsciously, and correct waste disposal seemed to be low priority for them when visiting the park.

\begin{figure}
\centering
\includegraphics[width=\textwidth]{classification_of_littering_behaviours.png}
\caption{Classification of littering behaviours observed}
\end{figure}

It is interesting to note that a person’s age group or who they are with does not appear to be a determining factor in the type of littering behaviour they displayed, though a larger sample size is needed to make any firm conclusions around this.

3.2.6. Provision of litter bins in St James’s and Green parks

\textit{Number of bins}

Our research suggests that there are enough bins at the sites. Most people (75%) did the right thing, and in fact of those 67 people who were seen littering, the majority (60%) did so within five metres of a bin.

\textsuperscript{10} Understanding Littering Behaviour in Australia; Williams, Curnow & Streker, 1997; Littering Behaviour in America: Results of a National Study, Keep America Beautiful, 2009.
Bin design

Our discussions with The Royal Parks made evident that there are several specifications and requirements that need to be considered for an optimal bin design for St James’s and Green parks. These relate to conservation and security measures, and being able to adapt bin provision to varying volumes of park visitors throughout the year. In this sense, the litter bins at the parks need to:

• be see-through so that rubbish disposed in the bin is identifiable from the outside;
• be lightweight, allowing bins to be moved out of the way when they are not needed (winter/low season) or for security reasons due to specific events taking place;
• have a wide enough aperture to fit large rubbish items such as pizza boxes, a commonly disposed item during the summer months; and
• be easily identifiable and attractive while remaining discreet in order to keep the aesthetics of the park undisturbed. This also applies to any signage in the parks.

Current bin design issues that contribute to litter in the parks

There are currently different types of bins in use across the park. Most bins have mesh wire walls and no lid. Sometimes they are lined with bags and sometimes left without. We were also told that occasionally bags are placed over the top of the bin apertures to prevent people from using them, but this is not clear to park users.

Unfortunately our observations found that the mesh wire bins are not appropriate for the sites due to the large gaps they have in the walls of the bins. When a bin bag had been used to line a bin, we repeatedly saw the wind blow the bag outside of the bin, and often rubbish with it. Park users then placed their rubbish on top of the bin bag without rearranging it inside the bin, causing it to disperse around the bin instead of inside it. Sometimes the bins wouldn’t be lined with a bin bag at all. This meant that when there was strong wind, smaller items of rubbish that had been placed inside the bins, such as sugar packets and receipts, flew out through the gaps in the mesh wire walls and littered the area. We make a number of recommendations for improving the design of the bins in Section 4.
3.2.7. Cigarette litter analysis

Cigarette litter is a major issue at the sites, representing 44% of all items littered during the observations. Our observations show that people were more likely to litter their cigarette butts than not (63% of smokers littered). The issue was most prevalent at Site A, where 73% of items littered were cigarette butts. The underground station entrance is heavily used by smokers before or after their journeys, or while waiting to meet someone.

Our observations found that the cigarette bin currently provided at Site A is not appropriate for encouraging people to bin their cigarette butts. It is in a position that does not allow it to be used by several people at the same time. Once one person stands in front of it, he or she blocks the access to the bin. Additionally, a ‘no smoking’ sign is currently displayed on the bin, sending mixed messages to smokers. Our observations suggest that moving the bin to a more appropriate location within the site or introducing an additional cigarette bin as well as removing the ‘no smoking’ sign on the bin could help to encourage smokers to dispose of their litter responsibly (see recommendations at Section 4).

We also recommend providing for cigarette litter across the other sites, e.g. by using general waste bins with ash trays, to encourage people to place their cigarette butts in a bin. Keep Britain Tidy’s previous research has found that smokers are unlikely to dispose of their cigarettes in general waste bins as they are afraid other items could catch fire.\(^1\)

An alternative option which could have a significant impact on cigarette litter in the parks is to ban smoking within the parks altogether.

\(^1\) Research with smokers, Keep Britain Tidy, 2013.
3.3. Recycling behaviours

3.3.1. Extent of recycling at the sites

At the time of research, there were four recycling bins across the three monitoring sites – two paper/newspaper\(^{12}\) and two mixed recycling bins\(^{13}\). Of all waste items we observed being deposited at the sites (in litter bins, recycling bins and on the ground as litter), 41% (or 157 items) were recyclable in common on-the-go recycling schemes in the UK. These items include plastic drinks and food containers, glass bottles and jars, metal tins and cans, paper (including magazines and newspapers), cardboard and coffee cups\(^{14}\). Unfortunately, however, just 7% of all waste items were recycled. If The Royal Parks introduced more infrastructure and all of these items were captured for recycling, The Royal Parks could be on track towards achieving its target of 40% of all waste recycled by 2016. It is our understanding that this option is currently being explored by management.

\(^{12}\) Located in Site A (near the entrance to Green Park underground) and Site B (next to the ice cream kiosk).

\(^{13}\) Located at Site B (outside the toilets near Malborough Gate) and Site C (near Inn The Park café).

\(^{14}\) While we have included coffee cups in our analysis, it should be noted that some recycling plants do not accept coffee cups and The Royal Parks should confirm with its contractor whether coffee cups are accepted.
3.3.2. What is being recycled?

Newspaper and paper had the highest rate of recycling at the sites, with 36% of these items being recycled, while glass drinks containers had the lowest rate of recycling (no items recycled).

The types of waste most commonly disposed in general waste bins at the site that had the potential to be recycled were coffee cups (28% of recyclable items disposed), newspaper/paper items (27%) and plastic drinks containers (20%). Interventions that successfully capture these waste types are therefore likely to have the biggest impact on recycling rates. One approach to achieve this could be to introduce clear signage on the recycling bins that illustrate the items that can be recycled, with the illustrations of the most common recyclable items being more prominent (see recommendations at Section 4).
Another approach that could be considered is engaging the kiosks and cafes within the park in a campaign to increase recycling rates. Employees of the kiosks could be asked to remind customers to ‘please remember to recycle their coffee cups/plastic bottles/waste’ or to display signage at their counters encouraging people to recycle and informing them of The Royal Parks’ recycling targets (see recommendations at section 4).

### 3.3.3. Use of the newspaper/magazines recycling bin at Site A

There is currently only one recycling bin at Site A and it is a newspaper/magazines-only recycling bin. Commuters traveling to this site seem to be using this recycling bin regularly to dispose their newspapers. Nonetheless, of the total amount of recyclable paper disposed in the area, only 45% was recycled, while 45% was placed in general rubbish bins and 10% was littered.

**Contamination**

Of all items placed in the newspaper/magazines recycling bin, by number 59% were the correct items (newspaper/paper), while 32% of waste deposited were non-paper items, causing contamination. However, a number of items placed in the bin were other recyclable items, indicating that changing this bin from a newspaper/magazine to a mixed recyclables bin could help to increase recycling rates at Green Park (see recommendations in Section 4).
3.3.4. Use of recycling bins at Site B

During the first half of research, there were two recycling bins at Site B – one mixed recycling bin outside the toilets and one newspaper/magazines recycling bin by the ice cream kiosk. These bins were removed halfway through the research, therefore the analysis presented in this section refers only to the eight hours of observations during which the recycling bins were in place.

The recycling bins at Site B were hardly used by park visitors. Our observations found that only seven (13%) out of 55 people observed used either of the recycling bins when depositing waste items at the site. Of these, only four deposited the correct recyclable items in the appropriate bin. Nonetheless, we believe these numbers should not be a discouragement from having recycling bins at this site, rather their provision could be improved. The locations of the bins at this site were not ideal. The mixed recycling bin outside the public toilets near Malborough Gate was in an out-of-sight location without any signage to assist people in finding it, meaning that only those who were previously aware of its location or using the toilets were likely to find it. The newspaper/magazines bin located by the kiosk was hardly used (only one instance recorded) and most waste generated at this site is food and drinks related, therefore a mixed recycling bin would be more appropriate at this location. Overall, recycling bins should be located in easy-to-find and predictable locations throughout the parks at the points at which where people are most likely to need them, e.g. near food and beverage outlets rather than by the toilets (see recommendations at Section 4).

3.3.5. Who is recycling?

Age group

16 to 24 year olds were the biggest recyclers amongst all of the age groups, followed by 35-54 year olds. Under 16s, which was the age group that littered the most, also recycled the least.
Figure 21. Proportion of people who recycled in each age group

![Disposal of recyclables by age group](image)

Bases: U16 = 20; 16-24 = 20; 25-34 = 44; 35-54 = 35; 55+ = 7.

**Gender**

Females were significantly more likely to deposit their recyclable waste in a recycling bin than males.

Figure 22. Proportion of people who recycled correctly/incorrectly in each age group

![Disposal of recyclables by gender](image)

Base: Females = 57; Males = 69.

### 3.3.6. Barriers to recycling at the parks

**Lack of recycling bins**

The main barrier to recycling at the parks is clearly the low provision of recycling bins across the sites. There are very few opportunities for people to recycle onsite and only the most committed are likely to carry their recyclables with them until they find an appropriate recycling bin (either in the parks or at other locations). This is evidenced by our intercept interviews, in which 59% of park users we spoke to admitted they didn’t recycle at the parks and added that they would if there were more bins available.

The intercept interviews also showed that the importance respondents give to recycling decreases when no facilities are provided, as shown in Table 5 below.
Table 5: Intercept interview comments regarding the importance of recycling when out and about

<table>
<thead>
<tr>
<th>Do you think it is important to recycle even when out and about?</th>
<th>Proportion of interviewees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, it is always important</td>
<td>19%</td>
</tr>
<tr>
<td>Yes, but only if there are facilities</td>
<td>41%</td>
</tr>
<tr>
<td>Yes, but only if there are a lot of/easily accessible facilities</td>
<td>9%</td>
</tr>
<tr>
<td>Yes, but I need signage/reminders to do so</td>
<td>3%</td>
</tr>
<tr>
<td>Only if people want to recycle</td>
<td>16%</td>
</tr>
<tr>
<td>If it is compulsory</td>
<td>1%</td>
</tr>
<tr>
<td>No</td>
<td>8%</td>
</tr>
</tbody>
</table>

Base: 68

Intercept interviewees were asked to rate how much effort they would put into finding an appropriate bin for their litter or recycling when challenged by three different scenarios (when ill, when in a rush and when there were no recycling bins around), as shown in Figure 22 below. This found that respondents’ personal obligation to recycle appears to be lowest when they feel that the provision of facilities is inadequate. Therefore, providing more recycling bins is imperative; this is also likely to communicate to park users that recycling is a priority to The Royal Parks.

Figure 23. Proportion of people who recycled correctly/incorrectly in each age group

Respondents’ self-reported personal norms around binning their litter and recyclables

"When I am ill with a fever/headache and I would have to walk out of my way to reach a bin...”

"When I am rushing and need to dispose of a recyclable item...”

"When I am holding an empty soft drink can, and there are no recycling bins around...”

Additionally, our findings show that the design of the bins and clear signage on them is key to increasing recycling rates and avoiding contamination. Our intercepts showed that only 15% of respondents would always stop to think whether an item can be recycled or not when they are in a rush, and only 11% would stop ‘sometimes’ (base was 87 respondents) strengthening the case for easy to use, mixed recycling bins.
Lack of clear signage and reminders

In our intercept interviews we asked people who said they didn’t recycle at the park what they thought would make them more likely to recycle. Again, 59% of respondents said more bins that are more visible or more accessible would make them more likely to recycle, while 33% of respondents said that signs or reminders would also be useful to encourage them to use the bins. A further 6% said greater education around recycling would encourage them to recycle more.

Table 6: Intercept answers on what makes park users more likely to recycle when in the park

<table>
<thead>
<tr>
<th>What do you think would make you more likely to recycle when in the park?</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>More bins/more visible bins/more accessible bins</td>
<td>59%</td>
</tr>
<tr>
<td>Signs/reminders to help me remember to recycle</td>
<td>33%</td>
</tr>
<tr>
<td>Making it compulsory</td>
<td>27%</td>
</tr>
<tr>
<td>Education</td>
<td>6%</td>
</tr>
<tr>
<td>I never recycle</td>
<td>2%</td>
</tr>
</tbody>
</table>

*Base: 51*

Recycling bin cleanliness

Previous research conducted by Keep Britain Tidy has found that one of the key barriers to people using a bin is perceptions of uncleanliness and whether or not they need to touch the bin in order to dispose of their items. In the case of recycling bins at the sites, our observations showed these were often dirty and the openings blocked by items. (See recommendations at Section 4) Part or the reason bins are dirty seems to be the lack of cigarette ashtrays, park users are stubbing out their cigarettes against the surface of the recycling bin, leaving black marks on it. Cigarette ashtrays could be positioned in key spots around the park to try to avoid this issue.

*Figure 24. Cigarette burn marks on the recycling bin.*
3.3.7. Provision of recycling bins in St James’s and Green parks

All of these findings suggest that an effective approach to increasing recycling rates, especially to achieve The Royal Parks’ recycling rate target of 40%, would be to introduce more recycling bins and appropriate signage throughout the park. Additionally, recycling bins should be placed in prominent locations at points where people are most likely to need them or look for them, i.e. by food and beverage kiosks, rather than by the public toilets. Ideally, more recycling bins than general waste bins should be provided in order to communicate to park users the importance of and expectations around them recycling their waste. These could be located at each footpath intersection throughout the parks or in every location where there is currently a general rubbish bin. At each location, the bins should provide for all recyclables collected at the parks (e.g. if The Royal Parks would like to continue collecting paper/newspapers and other mixed recyclables in separate bins, both bin types should be provided at all sites), be clearly labelled, colour-coded and kept clean.

4. Recommendations

Our research found that much of the littering that occurs in St James’s and Green parks appears to be thoughtless or subconscious, and comes from tourists and leisure visitors, rather than regular park users. In terms of recycling, the main barrier appears to be a lack of suitable recycling bins. Additionally, recycling was found to be a low priority for park users, with visitors being unlikely to carry their recyclables with them until they find an appropriate bin (e.g. at the main gates or outside the park). Our recommendations are therefore based around practical measures to improve the provision of bins across the parks and make correct waste disposal easy and attractive for park visitors.

Unfortunately due to security and conservation concerns, The Royal Parks is limited in what it can do in terms of bin design and provision. For recycling bins, this includes only placing bins in locations that do not obstruct main pathways through the parks and where they can be accessed by vehicle so that they can be quickly removed if necessary. In view of this, a number of our recommendations may not be fully appropriate for the site but are provided for inspiration. However, without improving infrastructure it is unlikely that the Royal Parks will meet its recycling rate target of 40%. Ideally, more recycling bins than general waste bins should be provided in order to communicate to park users the importance of and expectations around them recycling their waste.

Our recommendations include ‘nudge’ style approaches that engage visitors at the point when they are likely to need a bin. We suggest that ‘nudge’ approaches are appropriate in this context because they can overcome language barriers, they aim to engage with people on a subconscious level, and they are likely to reach a large number of people in a cost effective way. Awareness raising activities such as stunts, community engagement stalls and one-off events, while still important, should be lower priority, as these are likely to have the least impact at the parks due to most littering coming from tourists and leisure visitors who do not appear to visit the parks on a regular basis. This means
that there is a very small window of opportunity to engage them and change their behaviour through education without significant resource input.

We understand there is currently a plan to roll out the implementation of recycling bins across the sites and that the design of these will be different from the current one, we emphasise the importance of getting the design of the bins right, particularly as our intercept interviews showed that only a small proportion of park users would always stop to think whether an item can be recycled or not. Therefore having easy to use bins that can be quickly read and understood by users is vital to increasing recycling rates.

In order to maximise the effectiveness of future interventions to reduce littering and increase recycling rates, we suggest these should follow the Behavioural Insights Team’s EAST framework\textsuperscript{15}, whereby solutions should be made Easy, Attractive, Social and Timely. Below we present a series of recommendations under these four headlines. We also make some additional recommendations that seek to tackle specific issues we have identified through the research.

**Recommendation 1. Make doing the right things with rubbish and recyclables easy**

- Provide more recycling bins in easy-to-find and predictable locations, e.g. at path intersections.
- Provide bins for all waste streams collected in the parks (e.g. newspaper/paper and mixed) at each bin location.
- Make recycling easy to understand quickly – provide illustrations of what is collected at the bins, use colour coding, consider using real examples of what is collected on the bins (e.g. by using the material collected in the design of the bin or by displaying glass bottles etc. on glass recycling bins), or use see-through bins. Emphasis could be given to the items most commonly disposed at the parks (coffee cups, plastic bottles and paper) through displaying larger illustrations of these.
- Ensure that all bin apertures are free of items, easily accessible and facing the best direction for easy disposal (e.g. facing outwards towards the footpath where most people walk, rather than inwards so that people have to walk around the bin).

**Recommendation 2. Attract attention to the bins and make doing the right thing attractive**

- Increase the salience of bins and attract attention through signage, colourful or interesting bin wraps (e.g. with pictures of landmarks, maps of the area, facts about the parks) and/or the use of footprints to nudge people towards bins (e.g. green human footprints, which we have found to be effective in parks, or animal footprints that allude to wildlife present in the parks, e.g. yellow duck footprints for general waste and orange squirrel footprints for recycling).
- Consider installing ‘fun’ interactive bins at the Marlborough Gate (Site B) and Inn The Park (Site C) litter hotspots to draw people towards the bins, as we found that people were more likely to litter if they were sitting down at these locations. Examples of interactive bins include the ‘world’s deepest bin’\textsuperscript{16} and voting bins, whereby people indicate their preference between a number of choices (e.g. members of the Royal Family, favourite park animal – duck or squirrel, social issues).

\textsuperscript{15} Behavioural Insights Team, 2014. *EAST: Four simple ways to apply behavioural insights.*

species of tree, plants that you would like to see growing in the park, etc.) by placing their rubbish in the appropriate bin.

- Apply our ‘Bin it for good’ approach to increase recycling rates whereby through recycling, park users are helping a cause (e.g. each item recycled could turn into a flower with The Royal Parks promising to plant one seed for each recycling bin filled correctly).
- Ensure that bins are cleaned regularly (e.g. a quick wipe around the aperture with each collection).

**Recommendation 3. Show that doing the right thing with waste when at the parks is the social norm i.e. what most people do and/or what most people think should be done**

- Feature positive reinforcement/social norming messages in signs at the parks as well as in external communications and the Park’s website along the lines of ‘you have told us recycling in St James’s/Green Park is important for you and we have listened, please use the new recycling bins we have provided for you’. These could be effective by triggering two different behavioural motivations, ‘reciprocation’ and also the motivation of ‘preserving our public image’ or how we are seen by others. Make sure when possible to specify the name of the park as more targeted messages tend to be more effective than general ones.
- Use the rolling out of the new bins as an opportunity to reframe The Royal Parks as ‘recycling zones’ making recycling the clear norm and expected behaviour. For example, signs could be placed at the entrances informing people they are now inside a ‘recycling zone’ to make people feel they are making a public commitment to behave accordingly. Signs could also be positioned in the kiosks emphasizing the message that ‘80% of park users think recycling is important’.

**Recommendation 4. Ensure interventions are timely by reminding or prompting people to use bins correctly at the points where they are more likely to need a litter or recycling bin**

- Place recycling reminders at litter hotspots (benches and picnic areas) and in places where people are currently disposing of their items incorrectly. If recycling bins are placed next to or near general rubbish bins, signs on the general rubbish bins asking users ‘could this be recycled? Help us achieve our 40% recycling rate’ or simply having a recycling sign with a cross on top, could prevent them from disposing recyclables in general litter bins (as long as there is a recycling bin nearby).
- The Royal Parks cleansing staff uniforms provide an opportunity to communicate different messages to park users in a timely manner. For example, uniforms could display the message ‘wildlife conservation manager’ to prompt park users who see staff litter picking in uniform to make links between litter and the welfare of park wildlife, and to highlight that even if they are litter picking, it is not their job to clean up after people, but to look after the environment.

**Recommendation 5. Consider replacing the mesh wire litter bins throughout the park**

The current mesh wire bins are not suitable as the mesh walls allow rubbish to escape in the wind. The wooden bin housing already being used in some locations in the park appear to work well in containing rubbish and fitting with the aesthetics of the park. We understand that being able to see into the bins is important for security, therefore The Royal Parks could consider alternatives, such as
plastic see-through bins. Another option is to place the mess wire bins inside bin housing such as that shown in Figure 25 below – the design of this housing allows the contents to be seen for security purposes while protecting it from wind and wildlife.

**Figure 25. An example of litter bin housing used in Queens Square park in Bristol**

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**Recommendation 6. Ensure that all lining is securely fixed to the litter bins**

We suggest more attention should be given to how bags are attached to the bins, particularly if the mesh wire bins continue to be used. At present, bags are not adequately secured to the bins. One simple solution is to firmly tie the bags to the bins. Another solution is to add a ring at the top to secure the bags to the bins.

**Recommendation 7. Introduce sugar dispensers instead of sugar packets at kiosks**

We were informed that this was already discussed with kiosk managers who thought sugar dispensers could be seen as unhygienic. However the kiosks currently have dispensers for fresh milk, mustard, mayonnaise and ketchup. We therefore believe that the suggestion of sugar dispensers should be further pursued and tested as a way to reduce sugar packets being littered. Alternatively, if sugar dispensers cannot be introduced, small counter caddies could be placed at the kiosks for customers’ small rubbish.

**Recommendation 8. Work with ‘Inn the Park’ to improve cleansing in the bench area around the restaurant**

The seating area outside Inn The Park café is the main hotspot for litter accumulating in Site C. Research by Keep Britain tidy and others has evidenced that ‘litter attracts litter’ and keeping this area clean could prevent more rubbish being littered there. We understand that the new café manager has adopted an irregular but reactive routine of cleaning this area, however our observations found litter accumulation still present in this area. We also found that much of the litter comes from people who bring food and drinks into the park, rather than customers of the restaurant.

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Therefore, we recommend working with Inn the Park to develop a shared cleansing routine. For example, The Royal Parks could cleanse every morning and evening, while Inn The Park could be responsible for pre- and post-lunchtime cleanses, while also monitoring the site and conducting ad-hoc cleanses as necessary.

**Recommendation 9. Improve the provision of cigarette bins, particularly at Site A**

Cigarette litter is a big issue at the sites, constituting 44% of all items littered during our observations. People appear to avoid using the general waste bins for cigarette butts because they are on fire and could melt the bin lining, while the current cigarette bin at Site A (where the issue is most prevalent) is not located in the best location to maximise usage and displays a ‘No smoking’ sign that send a confusing message to smokers by implying that the bin shouldn’t be used for cigarettes.

We recommend moving the current cigarette bin at Site A out to a more salient and accessible location where more people can stand around it (e.g. at the opposite side of the Green Park underground station entrance, across the square from its current location) and adding an additional cigarette bin to this site.

Additionally, the ‘No smoking’ sign should be removed from the cigarette bin.

We also recommend providing for cigarette litter across the other sites, e.g. by providing ash trays attached to the general waste bins.

**5. Conclusions**

Overall our observations show that the majority of site users, both commuters and leisure visitors, do the right things with their rubbish by disposing of it in bins when in the parks. Moreover our research suggests that park users are willing to recycle, but only where there is adequate provision for this, and they are unlikely to carry their recyclables with them until they find the correct recycling bin.

Our findings indicate that the main cause of litter is park users not being mindful enough of their rubbish and people littering habitually or subconsciously. Leisure visitors/tourists are also more likely to litter than commuters or people who appear to visit regularly. These findings suggest that ‘nudge’ style approaches are the most appropriate style of intervention for encouraging correct waste disposal at the sites (rather than awareness raising activities such as stunts or community engagement stalls) and we have made recommendations for this. Additionally, park users are more likely to litter when sitting down or in groups, and we have made recommendations for drawing people towards bins and making them fun and social at sites B and C.

The main barrier for recycling in the parks is the low provision of bins and lack of signage towards these. The park users we spoke to felt a duty to recycle, but only felt accountable when there are enough and easy to use facilities provided. We have therefore made recommendations for improving the provision of recycling bins.
Overall given the nature of park users at Green and St James’s parks, we recommend a combined approach of improved infrastructure and prompts using the Behavioural Insight Team’s EAST framework: that is, making interventions to encourage correct waste disposal easy, attractive, social and timely. We believe that by implementing these measures, The Royal Park could significantly increase recycling rates at the parks towards its target of 40% while reducing litter at the same time.
Appendix A – Documentation of litter in Site C bench area

Documentation 1: Cleanliness of benches on 30/03/2015 (outside Inn Park Café)
Documentation 2: Cleanliness of benches on 10/04/2015 (outside Inn The Park café)
Documentation 3: Cleanliness of benches on 11/04/2015 (outside Inn The Park café)