

# **‘What did I Just See?’ An Exploration of Urban Green Space Values through Observation and Park Managers Interview**



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## Abstract

The urban green space (UGS) provides a variety of benefits for both the visitors (human-wellbeing values) and the urban wildlife on site (wildlife conservation values). However, managing the balance between the two values can be challenging and often dealt with separately. Research emphasises that integrating social issues in urban wildlife conservation can help manage better the conflict between the two. However, there is limited literature on how to develop closer links between academia, UGS managers, and the communities that derive from investigating the values above. This project adopts a mixed-method approach that promotes collaborative work between academia and park managers.

Direct field observation and semi-structured interview were used to understand the relationship between the local UGSs, their visitors, and their managers. Five UGSs in Kingston-upon-Hull were selected as case studies and three park managers were interviewed. Content and thematic analyses were used to explore themes to create snapshots of the park's usage, highlight issues in management, and underline areas to improve.

The observation data revealed 'Community' was the main primary associated value of the UGSs in Hull, especially in providing space for families with children and the youth groups for shared activities, whilst the interview data suggests that personal values of a green space manager may play a significant role in determining how a green space is managed. The priorities and challenges of the park managers may be influenced by the visitors' needs and managing bodies.

This research suggests community-led management, where incorporating community into UGS place-keeping, could help enhance the benefits for both the green space and the community. In addition, creating a network of UGS managers could help establish a platform for managers and the community to connect and share perspectives that can encourage communal problem solving.

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## 1. Introduction

### 1.1. Brief Background

This master by research project is based on a concept developed from the researcher's final year undergraduate project, which was a three-day volunteering assignment that focused on the relationship between environment and society. The project itself was titled "Impact of Disturbance by Visitors in the Humber Bridge Country Park" (see Appendix III for project summary). It took place at the Humber Bridge Country Park where field observations were conducted to monitor the impact of visitor's behaviour and a questionnaire was used to further understand the visitors' perception about the Park's function. The outcome was discussed with the park manager and presented to the module's lecturers.

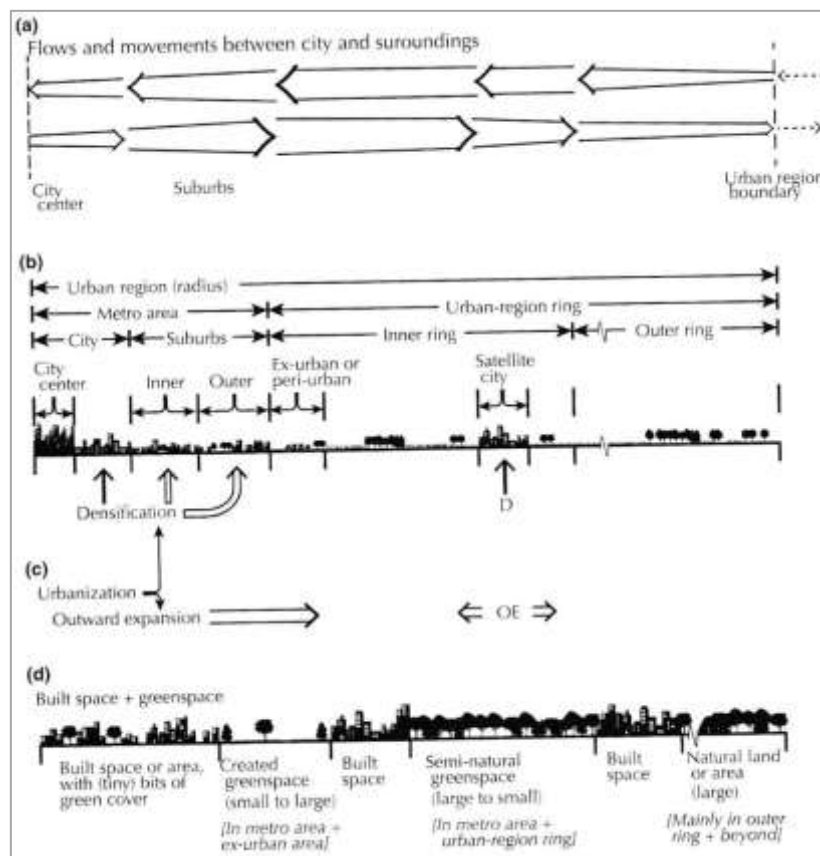
In terms of the results, the observation revealed unifying and positive behaviours (such as refilling communal bird feeders) and destructive behaviours (such as vegetation destruction) inflicted on the Park's environment. Whilst the questionnaire revealed the main purpose of people visiting and the disturbances the visitors observed (for example littering and vandalism). One of the conclusions was that increasing public participation may help in educating the public to be more respectful towards the wildlife on site.

The idea has been expanded in this MSc by research dissertation by increasing the range of 'spaces' observed and widening the research topic, and most importantly, expanding the discussions of management with the park managers. Other influential factors which are mainly social are investigated in this research project, such as the management of parks and how the values are presented in the park (i.e. conflicting or complimentary).

## 1.2. Literature review

### 1.2.1. Defining Urban Green Space

There are various ways of interpreting the term 'urban green space' (UGS). In a brief paper written by the WHO Regional Office for Europe (2017:2), UGS is defined as "all urban land covered by vegetation of any kind" regardless of size, incorporating both public and private spaces and also can include the feature of "blue spaces" (i.e. waterbodies). Defining 'urban' itself can vary depending on the perspective. Forman (2014) stated that the term 'urban' relates to 'cities' and uses the term 'urban area' to generalise the concept. Importantly, the idea of urbanisation is not binary and exists at different spatial scales; Figure 1 shows the different 'layers' that can be included in the urban region boundary (Forman, 2014:6). It shows that a city associated with being 'urban' includes more than just city centres (i.e. diagram b → suburbs, inner, and outer ring).



**Figure 1.** Illustration of urban ecology concepts. (a) shows that there are roughly more flows and movement around the Suburbs, (b) visualises the different layers of urban region boundary, (c) outlines the components of urbanisation in different areas (i.e. densification or outward expansion), and (d) presents the examples of green spaces on the built space. Adapted from Forman (2014:6).



A study by Taylor and Hochuli (2017) concluded that most published studies lack consensus in interpreting the word 'greenspace' and that a qualitative and quantitative definition should be provided at the start of the research to determine what aspect of UGS is being studied. The flexibility of the term 'Urban Green Space' is shown by various publications in which the definition is tailored to the content and the aim of the research. This was investigated by the researcher through a systematic review where journal articles that appeared in Google Scholar search under the keyword '*urban green space*' were scoped. Table 1 presents the chosen five articles with slightly different manner in defining 'urban green space' to show that the UGS can be interpreted differently. In addition, Table 2 reveals findings by Taylor and Hochuli (2017) that the term 'greenspace' has been used in various disciplines interchangeably with similar other terms. An assumption was drawn from both tables (1&2) that there are interlinking themes: *outdoor spaces with vegetation whether managed or unmanaged, public or private, and including both human and wildlife in the framework*. In response to the first point made in this paragraph, this research uses a definition summarised from Table 1: '*A public park that is accessible and large enough to provide various ecosystem services and functions for visitors and to support different kinds of habitat*'.

**Table 1.** Various examples of interpretation for the definition of ‘urban green space’ (publications from 2014-2018).

Title + Author(s)	Interpretation
<i>Urban green space, public health, and environmental justice: The challenge of making cities ‘just green enough’.</i> <b>(Wolch et al., 2014)</b>	“... such as parks, forests, green roofs, streams, and community gardens, provides critical ecosystem services. Green space also promotes physical activity, psychological well-being, and the general public health of urban residents.”
<i>Factors affecting the use of urban green spaces for physical activities: Views of young urban residents in Beijing.</i> <b>(Zhang et al., 2015)</b>	“... are known as places where people can improve their health through engaging in physical activities since the time of ancient Greece (Ward Thompson, 2011)” “Beijing’s urban green spaces mainly include three types: residential green spaces, public green spaces, and parks.” “Residential green spaces are located in residential areas, usually inside the boundaries of a residential unit.” “Public green spaces include green spaces other than residential green spaces and parks (e.g. street landscape, riparian woods, greenbelts).” “Parks are large public spaces intensively managed for recreational, ecological, and conservation purposes.”
<i>Urban green space availability on European cities.</i> <b>(Kabisch et al., 2016)</b>	“Urban residents rely on green spaces, including parks, urban forests, residential gardens and other open spaces for their daily recreation needs and for multiple other ecosystem services (Kabisch et al., 2015).” “... UGS are essential for well-functioning and liveable cities.”
<i>Accessibility of public urban green space in an urban periphery: The case of Shanghai.</i> <b>(Fan et al., 2017)</b>	“... public urban green spaces as public parks and other green spaces that are accessible to the general public and managed by the local government.”
<i>Improving the multi-functionality of urban green spaces: Relations between components of green spaces and urban services.</i> <b>(Belmeziti et al., 2018)</b>	“... green lungs that aerate or irrigate the urban matrix.”

**Table 2.** A number of terms were used interchangeably with greenspace across all disciplines (Taylor & Hochuli, 2017).

Discipline of Journal	Papers	Key term	Other terms used
Biological, Earth, and Environmental Sciences	25	Greenspace; green space; public greenspace; urban greenspace; urban green space	Greenspace; green space; public greenspace; urban greenspace; urban green space; garden; ecological garden; urban forest; urban parks; urban habitat; urban green areas; greenery; green belt
Architecture, Urban Environment and Building	21	Greenspace; green space; urban greenspace; productive urban greenspace	Greenspace; green space; productive urban greenspace; urban greenspace; forest; green area; green environments; green network; green infrastructure; greening project; productive greenspace; working greenspace
Medical and Health Sciences	15	Greenspace; green space	Greenspace; green space; green area; greenery; natural environment; parkland; walkable area
Social sciences (including history, education, economics, policy and political science, sociology, and behavioral sciences)	15	Greenspace; green space; urban greenspace	Greenspace; green space; green area; urban greenspace; natural environment; nature; blue space; green environments
Multidisciplinary	49	Greenspace; green space; green-space; public greenspace; urban greenspace; urban green space; green areas	Greenspace; green space; public greenspace; urban greenspace; urban green space; blue space; garden; greenery; green environment; nature surroundings; green areas; green patches; green infrastructure; multifunctional greenspace; green elements; green roof; urban green; greenness exposure; greenness; open green space; greenbelt; informal urban green-space; nature; public greenspace; riparian greenspace; sky garden; urban forest; trees; urban garden; urban farm; urban greenspace ecosystem; tree cover; urban ecosystem; landscape; urban trees; vegetated area; water bodies; woodland

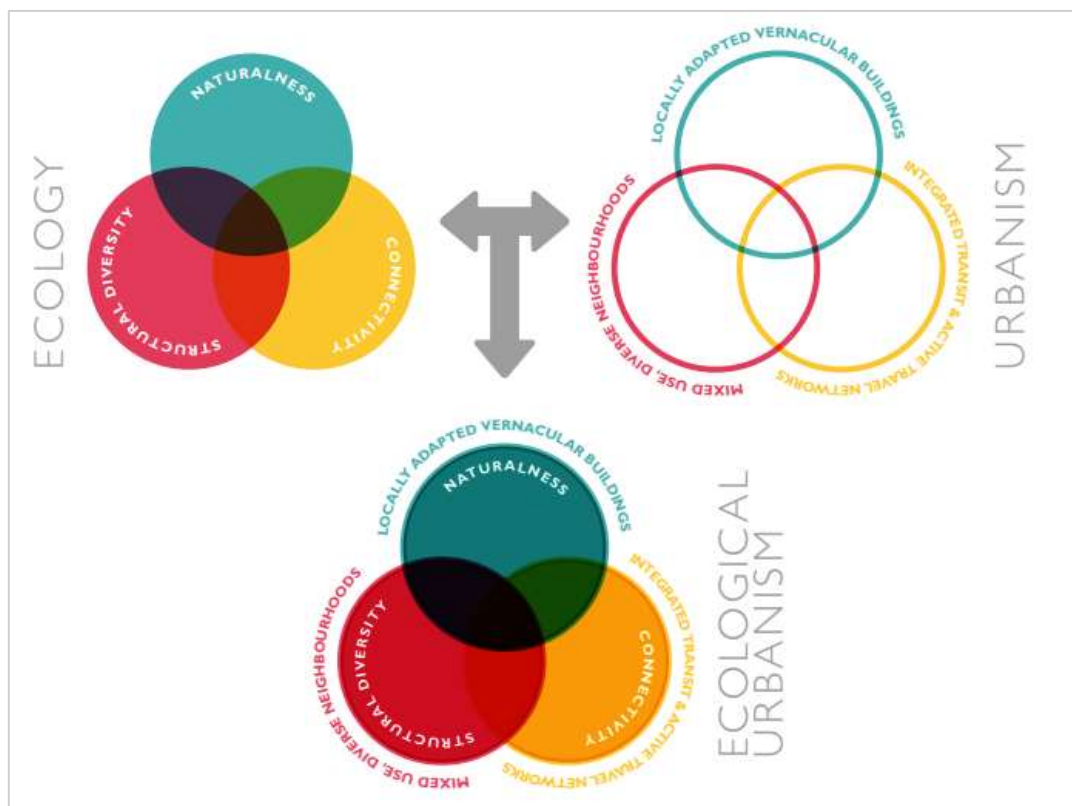
### 1.2.2. Importance of Urban Green Space

#### Being Part of Green Infrastructure (GI)

The urban green space (UGS) is part of the ‘green infrastructure’ in which Benedict & McMahon (2012:1) defined as,

*“...an interconnected network of natural areas and other open spaces that conserves natural ecosystem values and functions, sustains clean air and water, and provides a wide array of benefits to people and wildlife.”*

Elmgvist et al. (2015) stated that investing in ecological infrastructure (e.g. tree coverage) may often be economically advantageous, which can help with environmental improvements and increase the resilience of the city. The demand for the green network to be integrated as part of the urban ecology has increased with improved awareness of conserving the natural habitats within a city. A report about ‘Ecological Urbanism’ published by the Scottish Wildlife Trust (Hughes et al., 2018) described this approach as a ‘nature-based solution’, which integrates the ecological and urbanism aspects within a city (as illustrated in Figure 2).



**Figure 2.** A simple model for Ecological Urbanism (Hughes et al., 2018).

### **Benefits for Humans (Human-wellbeing Value)**

The urban setting increases human exposure to certain environmental hazards that are usually anthropogenic – such as air and noise pollution (WHO Regional Office for Europe, 2017). With the natural setting that creates a network of vegetation, UGS can act as a natural buffer for adverse effects of living in the urban environment (Koprowska et al., 2010). Mexia et al. (2018) investigated the ecosystem services within urban parks through the vegetation structure. It highlighted the role of urban parks as a nature-based solution to multiple environmental problems in cities, with different vegetation types offering different ecosystem services; such as carbon sequestration, seed dispersal, erosion prevention, water and air purification, and habitat quality (Mexia, et al., 2018). As an extension of the natural environment outside the congested centre of the city, UGS's network of support towards the surrounding community can include: the reduction of noise and air pollution (Dzhambov & Dimitrova, 2015; Matos et al., 2019), the establishment of flood defence system (Farrugia et al., 2013), and the regulation of land surface temperature (Masoudi & Tan, 2019). All of these contribute to promoting the physical and psychological wellbeing of the visitors and the surrounding community.

Adinolfi et al (2014) found that the UGSs were largely used for purposes directly related to wellbeing; such as, recreational and sporting activities, socialising, and 'relaxing'. In addition, the most common activities that were observed were governed by features intrinsic to the space itself are: accessibility, design, maintenance and plant richness and distribution (Adinolfi et al, 2014). Many studies have highlighted the importance of providing adequate green spaces that are within walking distances which has positive impact on mental health (Sturm and Cohen, 2014; Wood et al, 2017). However, not only the accessibility that should be taken into consideration when providing an adequate UGS, but also more function-oriented variables (i.e. different types of contact and benefit with nature) as suggested by Ekkel and de Vries (2017). Having a neighbourhood green space can promote increase contact with nature and the chances of engaging in physical activity in which is linked to lower cardiovascular risk, risk of diabetes mellitus, and better mental health through lowering stress and rumination level (Richardson et al, 2013; Tamonasius et al, 2014; Bratman et al, 2015; Van den Berg et al, 2015).

A recent study by White et al (2019) shows that spending at least two hours in nature is associated with better health and wellbeing, regardless how contact is achieved. However, the exact mechanism linking the natural world and human wellbeing was not further investigated. Another research indicated a few factors that may play a part in the relation between health and green space; these included linkage between sensory and immune system, physical activity, stress, and air quality (Barton and Rogerson, 2017). The effect of the natural exposure could also be linked to the restorative ability of nature in mitigating stress proposed by Kaplan (1995) – referring to his Attention Restorative Theory (ART). The theory is an ‘integrative framework’ that focuses on highlighting nature’s characteristics in helping the recovery of direct attention fatigue; these characteristics should induce the feeling of fascination towards the surrounding and provide the sense of ‘being away’ through a different physical environment that requires less directed attention (Kaplan, 1995).

The restorative experience can also be achieved through interacting with natural environment that has educational or leisure purposes in the UGS (Nordh et al., 2012; Nordh and Ostby, 2013). The design or condition of UGS is imperative in the process of creating an attachment towards the space, which can also foster community attachment (Arnberger and Eder, 2012; Peters et al., 2019). Providing a space for users to be active or to be engaged in an activity will also allow users to be social thus promoting social cohesion in shared space (Peters et al., 2019). Jennings and Bamkole (2019) also added that the provision of UGS can encourage healthy behaviours which can increase physical activities and social engagement.

In shaping UGS, the socioeconomic value is sometimes overlooked. Outlined in Table 3, the issues managing UGS may highly likely be related to safety, funding, facilities, users, role of park managers, health risks, access, and the area of the space (e.g. land degradation, gentrification) – these are all considered social-related issues. Loughran (2018) pointed out that utilising the ‘landscaped environments’ to solve socioeconomic issues has been adopted since the 19th century. He suggested that contemporary analyses can be obtained through learning the historical foundations of a green space’s use, because there are similarities between current and past socioeconomic issues which may still shape the green space nowadays (e.g. value of the land, cultural power, social privilege).

**Table 3.** Issues relating to management of UGS.

<b>Research authors</b>	<b>Issues</b>
Chan et al. (2014)	<i>“prolonged shortage of funding by the park authority, the lack of integration of managerial and educational functions of urban parks, and a less responsive role of park managers to address the changing socio-economic condition in the city”</i>
WHO Regional Office for Europe (2017)	<i>The competition for space between the users, Land degradation due to overuse, community dissatisfaction, safety issues, gentrification of the neighbourhood, increase of health risks, and also funding for maintenance</i>
Adinolfi et al. (2014)	<i>Safety issues, difficulty of access, lack of facilities for various activities</i>

### **Conservation in Urban Settings (Wildlife Conservation Value)**

There are many studies evidencing that UGS can play a part in wildlife conservation. Sandström et al (2006) emphasised the importance of having natural structures in the UGS, such as large trees and multi-layered vegetation structures, as it can help maintain ecological diversity of bird species. Habitats with diverse natural structures can also help communities of different ants’ species to thrive (Uno et al., 2010). A study done in the UK by Smith et al (2014) suggested that insect abundance and diversity can be enhanced through simple changes such as switching to “mixed origin grass-free lawns” that includes native forbs (i.e. native herbaceous, broadleaf plants) as opposed to fake-turf. While in larger patches of green space, the diversity in plants can also help support greater abundance and more diverse arthropod natural enemies and biocontrol services (Burkman and Gardiner, 2014). Certain groups of bees may also favour large and diversified urban parks, and the rich diversity of bees may be related to the diversity of micro-environments that provides a nesting and foraging place (Banaszak-Cibicka et al., 2018).

As with broader conservation science, there are still questions regarding the most effective ways to incorporate UGS into wider conservation objectives. Area or patch size are important as urbanisation contributes to habitat fragmentation where the process causes loss of habitat; properly managed UGS can help provide wildlife corridors (Fahrig, 2003). Goddard et al. (2009) suggested that UGS could be the solution in restoring the wildlife in the urban setting, particularly if managed in a ‘wildlife-friendly’ approach by focusing on biodiversity conservation which in turn will encourage plants and small animal species to thrive, including

native plants species and pollinators. 'Ecological land-use complementation' (ELC) can be potentially beneficial for the biodiversity if UGS is clustered together in different combinations, which in turn can help with habitat availability for species and the different functions and ecosystem services (Colding, 2007). In addition, clustering compactness (i.e. creating residential development on existing land) can help maintain and restore functional green infrastructure when there is sufficient amount of natural structures (Sandström et al., 2006).

### **Conflict Between Human-wellbeing and Wildlife Conservation Values**

Based on the literature, it is evident that green spaces are beneficial not only for human-wellbeing but also wildlife conservation. UGS that can provide multiple benefits can potentially be more valuable for both surrounding community and wildlife. However, Aronson et al. (2017) highlighted that the challenges in managing UGS can arise from balancing the human needs and perception as well as maintaining the ecological processes. This suggest that there may be a conflict if the two values are to be maintained in a more balanced proportion. Understanding and integrating social issues in relating to urban wildlife conservation may help in managing the conflict between the two values (Marshall et al, 2007; Redpath et al, 2013). This project is an attempt to understand if there are any conflict between the human-wellbeing and wildlife conservation values associated with Hull's UGSs, and to investigate potential solutions.

### 1.3. Aims, Objectives, and Research Questions

The aim of the research is to investigate a method for researchers and park managers to work collaboratively in finding practical solutions for issues related to wildlife conservation and human-wellbeing values. The research methodology involved in quantifying human-wellbeing value as an attempt to measure the human-use of the UGSs and to provide an empirical evidence for park managers that can be useful for management purposes. To achieve this, the objectives are:

- (1) to assess values that can be associated with the UGSs through an approach that incorporates the visitors and the park managers in the picture;
- (2) to support park managers with providing external data that might be useful for management purpose, particularly the alignment of human-wellbeing and wildlife conservation values;
- (3) to create a dialogue about green space management between park managers and researchers (i.e. university student in this case) in order to increase awareness about the benefits of collaborative work;
- (4) to help create a 'community of practice' across management organisations.

The research questions below focus on the associated values of the UGSs, the perception of the managers, and the mixed-method approach that has been applied for this research project:

- a) What kind of activities that are most commonly observed in each urban green space?
- b) Do visitors exhibit the same activities irrespective of the orientation of the urban green space's management? And, how are these activities relate to the infrastructure of the urban green space?
- c) What are the priorities and challenges of the park managers and do these influence their management strategies?
- d) Does the method of integrating research and management of urban green space support managers in actioning research-based management practices?



#### 1.4. The Researcher's Positionality

##### **Pragmatism as a Philosophical Perspective**

In this section, the researcher outlines factors that influence the research design process and the researcher's interpretation for data collection and analysis. In framing this, the researcher adopted pragmatism as philosophical perspective or research paradigm. Shaped by the researcher's beliefs, discipline, and experience (Creswell, 2009), philosophical perspective can be reflected as personal assumptions that structure the research's approach in carrying out the research (Moon and Blackman, 2014). Pragmatism is a research paradigm that does not necessarily classify a research into specific category of methods (i.e. either qualitative or quantitative); it allows for any necessary approach to be taken in order to understand the problem (Tashakkori and Teddie, 1998), and in turn, encourages the use of mixed-methods (Feilzer, 2009; Moon and Blackman, 2014). The approach also focuses on the experience itself and its significances of the research questions rather than being limited by the methods (Kaushik and Walsh, 2019), thus acknowledging the unexpected elements that encourages the researcher to be flexible and open-minded (Feilzer, 2009), which aligns with the project's research questions that promoted exploring themes.

Dillon (2000) explained that (data) interpretation is attached to the researcher's perspective and experience, which means that a different outcome is expected if the research is conducted by a different individual. However, an overlapping of experiences and beliefs may influence behaviours that might be similar from one another (Kaushik and Walsh, 2019) in which consequently Morgan (2014) believed that the worldviews of people can be "individually unique and socially shared". In this way, this argument concurs that being pragmatic in conducting this research can produce a narrative from a unique perspective with methods that can be replicated.

##### **The Researcher's Background**

Providing the researcher's background can help the readers avoid having misperceptions about the researcher's assumptions (Holmes, 2020). The researcher has lived in Kingston-upon-Hull for at least four years before carrying out this project. This has helped in familiarising and understanding the everyday local culture which aided in the decision-making process for choosing the green spaces for the research. Having a background as an

international student has its pros and cons. The researcher has been exposed to different cultures worldwide through travelling and living outside the native country, which usually helps the researcher in identifying an individual's ethnicity background through appearance and language. However, in general, sometimes the researcher would still feel 'self-conscious' being a female with an Asian ethnicity when visiting public places in the UK - knowing that the researcher may stand out being amongst a crowd of people that would be predominantly white Caucasian. This factor may influence the researcher's willingness to stay in an observation (one of the methods adopted for this research); the researcher may cut short the observation process if it feels uncomfortable (i.e. feeling less safe). This factor is tied to the perception of safety that is expressed in the Results (section 3.1.1. Summary of Observations) and it is part of the emic perspective (i.e. the researcher's perspective as a UGS user). When applied as an etic perspective (i.e. the researcher's perspective as an external observer), the researcher's international background also helped the data processing to be less bias (i.e. not taking sides).

## 2. Methodology

This chapter explains the methodological approaches for the research design and methods for the data collection and analysis. As mentioned in the previous section, the project has taken a pragmatic perspective where it supports flexibility and mixed-methods. The researcher explored how visitors use the parks/urban green spaces (UGSs) and the park managers' perspective using qualitative and quantitative approach. Each chosen park has its own characteristics and provides a variety of functions for both wildlife and human-wellbeing. A comparative case study approach was applied to help highlight the similarities and differences between the parks and to discuss possible interpretations between the park managers (Newing, 2011).

This project involved documenting and analysing people's behaviour through observation and understanding people's perspectives through interview which are associated with 'doing ethnography research'. As explained by Eriksson and Kovalainen (2008:150), ethnographic research studies the different types of communities with the aim "to observe and analyse" the interaction between people and with their environment to understand more about their culture. To clarify, this project did not focus on trying to create an 'ethnographic writing', it only adopted the process/method. In related to this, the use of emic and etic perspectives is adopted in conducting data collection and analysis. Emic perspective relates to the internal perspective - in this context, understanding the interaction between the space and the visitors through the researcher's perspective as a visitor/user itself (Crang, 2005; Eriksson & Kovalainen 2008). While etic perspective relates to the external perspective where the researcher studies the visitors and spaces and understanding the managers' perspective as an outsider/holding the researcher role (Crang, 2005; Eriksson & Kovalainen 2008). The project itself was approached mostly with an etic perspective, however, there are certain parts that combined the use of the researcher's emic and etic perspectives. For example, in section 3.1.1., the researcher used etic perspective to describe what has been observed in the spaces, but emic perspective was used as well to describe how the researcher felt regarding to feeling safe when conducting the observations.

## 2.1. Data Collection

The combination of field observations and semi-structured interviews were chosen to address the research questions as shown in Table 4. Although one method may be used more to address a specific research question (RQ), the methods were used concurrently for the purpose of triangulation (SAGE, 2010). The first RQ was answered through analysing observation data. The second RQ used semi-structured interview as a medium to understand the perception of park manager and the observation data as a guide for the managers to understand the researcher’s perspective. The third RQ focused on the perspectives of the park managers which uses the interview data for analysis. Lastly, the fourth RQ combined both observation data and semi-structured interview data to analyse the effectivity of the methods.

Table 4. Methods for data collection and analysis.

No.	Research Question	Methods	
		Data Collection	Data Analysis
1	What kind of activities that are most commonly observed in each urban green space?	Field Observation	Content analysis and thematic analysis
2	Do visitors exhibit the same activities irrespective of the orientation of the urban green space’s management? And how are these activities relate to the infrastructure of the urban green space?	Field Observation; Semi-structure Interview	
3	What are the priorities and challenges of the park managers and do these influence their management strategies?	Semi-structure Interview	
4	Does the method of integrating research and management of urban green space support managers in actioning research-based management practices?	Semi-structure Interview; Field Observation.	

### 2.1.1. Field Observation

Direct field observation method was chosen to observe the visitors of the parks. 'Observing participant' approach was used instead of the conventional 'participating observation' where the observer participates in activities of the participants (Guest et al., 2013). In this context, the 'participant' was the users of the parks (i.e. visitors), and the observer was the researcher. The observation focused on the type of activities and interactions that happened between visitors (i.e. related to the human-wellbeing aspect) and between visitor and the environment (i.e. related to wildlife conservation aspect); this was to investigate how visitors use different features or area of interests of the space and to compare and contrast observed activities between the spaces. The researcher was not limited in what to observe - as long as the activities can be classified as positive-impacting or negative-impacting towards the visitors or the wildlife (using the researcher's knowledge and judgement).

The Hawthorne effect is the possibility of behaviour change of the participants because they are aware that they are being watched (Spencer and Mahtani, 2017). In order to minimise this, social distancing was applied to limit interactions between participants (i.e. the visitors and the observer) so they would not suspect the researcher observing. Mobile and stationary observations were carried out to cover multiple features around the park, and to integrate the researcher with other users (i.e. to look like other normal visitors). Notetaking was done descriptively and manually on a notebook or with personal mobile phone, which will then be made into a digital copy.

The process of observation started with the researcher choosing a spot to observe in the chosen space, this would either be a bench or somewhere shady if the weather is sunny (e.g. under a tree). This was the stationary observation. The position must enable the researcher to blend in with the other visitors and to overlook the perimeter within about up to 20 meters ahead. However, the researcher prioritised on noting down activities within the 10 meters perimeter as this would be easier to determine the kind of activities that the visitors are carrying out. For example, if there is a playground where children are playing within the 20 meters perimeter, the researcher would note it down but not in a detailed manner because it is difficult to know the details of the activity. See example below in Figure 3.

Initially, the researcher wanted to divide parts of the parks into zones as a way of structuring the observation spots. However, this method cannot be applied because the main aim of the observation is not to cover all of the area of the parks, but to observe people as much as I can. Therefore, observation spots are determined by the footfalls (e.g. most popular attractions, path leading to the entrance/exit). Only one of the spaces (i.e. Queens Gardens – see section 2.5.5.) has been zoned because it helped the researcher described the findings of the observation. This zonation method may be useful for future research to structure observation that assure broader coverage.

Pilot observations were completed before carrying out the field work. Three short trips were made to two parks (in different days), with each trip lasting from half an hour to an hour of observation and field recording. The aim of the pilot was to understand the nature of the park, to find appropriate spots and time for observation, and to practice different style of notetaking.

After trial and error, the researcher decided to note down the activities every 9-10 minutes of time duration, with short breaks in between. This choice of notetaking did not influence how the activities were coded and analysed; it was just the most suitable style for the researcher. This way of recording aligned with the partial-interval recording (PIR) which is a method to record people's behaviour using time sampling that records any behaviour that occurs at any point during the intervals (Meany-Daboul et al, 2007). It was decided as well that the notetaking would be done with minimal structure; the researcher started by noting the time of observation, the park's name, the specific spot of observation, and temperature. The activities and visitors were mostly described as detailed as possible (e.g. types of activities, gender, expression, behaviour, alone or within a group). However, this was not binding, as the main aim was to record the different types of activities that the space can support.

In noting down the observations, the researcher tried to prioritise the activity(ies) that happen first and then write more detailed descriptions for the ones that do not happen often. For example, there were a lot of people 'walking', so the researcher would note it down as "*a man walking pass the pond*" or "*there are two teens, a family with a child, and a man walking through the Park*" – forming a self-explanatory statement. While for other less common activities, an example would be: the people that sometimes interact with the wildlife - in

which the researcher would describe the observation as detailed as possible, such as *“a man was feeding a squirrel that climbed up his arms with what looked like bird food in front of children. He was smiling and presumably showing off to the children that looked amazed to what they are spectating”*. Figure 3 below shows an excerpt of the observation notes of the researcher. Seeing this figure, a generalised description would be *“few groups hanging around”* with the location written before *“the circle fountain”*; whilst a more detailed example would be *“...a lady with three children, two of them were curious about the man by the pond, and one of them was pointing at him”*. A more detailed description may lead the description to be coded into more categories, but it was not that imperative for this research as long as the main activity is captured.

<p><b>Date and Time:</b> Saturday, 7<sup>th</sup> September 2019, 15.30 – 17.00 (90 minutes)</p> <p><b>Location:</b> Queen’s Gardens</p> <p><b>Temperature:</b> 15°C/9°C</p>
<p><b>Field Notes:</b></p> <p>3.30-3.40</p> <ul style="list-style-type: none"> <li>• The circle fountain: few groups of youth hanging around.</li> <li>• White monument: a pair sitting on a bench, a guy sitting by the pond, several groups of people walking through (mostly with shopping bags). Mixed ages. There is a lady playing with a dog. Also a lady with 3 children, 2 of them were curious about the man by the pond, one of them was pointing at him.</li> <li>• There’s a lot of pigeons and the air smells faintly like urine. The park itself is in quite a good condition (except the air), bit of barriers on (?).</li> <li>• Two ladies with a stroller stopped in front of the monument but was observing the floor for few seconds.</li> <li>• Other activities observed: smoking, playing with phone, drinking.</li> </ul> <p>3.41-3.50</p> <ul style="list-style-type: none"> <li>• Activities observed: cycling, few groups of people walking, the previous man that was drinking took his top off and changed into a different outfit, teens were taking selfies, a man binning his can.</li> </ul> <p>3.51-4.00 (fountain area)</p> <ul style="list-style-type: none"> <li>• Activities observe: a teen couple was laying down on the grass, separate 2 men were sitting on the bench, 3 older men were walking through, a cyclist passed, a group of youths sitting on the bricks, a dogwalker passed.</li> </ul>

**Figure 3.** Example of the observation note.

Initially, a schedule was created for observation time where all five parks were equally divided. However, this changed due to unforeseen circumstances; the changing weather was a factor that influenced the duration of observation and where to visit, alongside with the distance to take from the researcher’s initial location. For example, the researcher had to leave the park early in one of the observations as it started raining and there was heavy wind. In addition, there were also less people visiting the space which made it less effective in observing.

Furthermore, the researcher had to leave a location even if the observation was not completed as planned if it feels uncomfortable or unsafe. The researcher had to leave the location in compliance to the strict University’s lone working policy – being fully aware that

the researcher's safety is a priority. To clarify, the researcher was never in a serious situation that might compromise the researcher's safety despite of several times of cutting short the observations due to feeling uncomfortable and/or unsafe. These instances were taken as a valuable input for the future observations. See section 2.4. below for further explanation.

#### 2.1.2. Semi-Structured Interview

Semi-structured interview method was used to investigate the perspectives of the UGS managers because of its ability to capture and provide an extensive understanding of different perspectives of park managers (Newing, 2011). Park managers were interviewed for the researcher to understand the challenges of managing parks and the perception towards the values that can be associated with the parks. Some of the questions asked were to distinguish personal and professional perspectives of the PMs. For example, the question "*what are your top priorities in managing the space?*" was to investigate the method of managing the spaces they work for, whilst "*why do you think it is important to preserve the urban green space?*" was to understand their preferences and personal view towards the green spaces in general. The interview was also used to provide park managers an opportunity to raise other subjects by using open-ended and spontaneous questions and probing to clarify the answers (Wilson, 2014).

The interviews were planned to be carried out twice – before and after the observation process, with the objective to explore any perception changes from the managers after seeing the collected data. Except for one PM which the researcher had an additional informal recorded discussion (with consent) discussing the project itself and introduction to the park.

The first interview had a set of questions that are divided into four categories: (1) general information about the park managers and the space, (2) priorities and challenges in managing, (3) the park manager's view towards the concept of UGS, and (4) suggestions for observation. Below is the set of questions asked with different title of project; the project's title was not finalised yet, so this was a temporary title. However, the theme of the project was still the same when title was finalised, so it did not influence the content.

The first round of interviews was carried out whilst observations had been ongoing for at least two weeks which was different from the initial plan. This was due to still sorting out schedule for interview with the PMs, but this did not influence the outcome heavily. The collected data



from the observation were presented in the second interview and the park managers were given a brief report containing the results. The content of the brief report was tailored to the park managers where it contained the summary of the previous interview and ranked activities and associated values for the observations. Word clouds were also included for visual illustration. The main topics that were discussed in the second interview included: (1) the park manager's response towards the data, (2) interaction between the associated human-wellbeing and wildlife conservation values within the UGS, and (3) how the data can be useful for the park manager.

## **Interview Questions**

*Project Title: Unifying the Environmental and Anthropological values of Hull's Urban Green Spaces*

### **PART I: About the (\_\_\_green space name\_\_\_)**

1. How long have you been working for \_\_\_?
2. What draws you into working in this place?
3. What are the main components of the green space?
4. What do you think is the main function of this space?
5. Do you think this space has served the purpose for both human and environmental values?

### **PART II: Priorities and challenges in managing the green space**

1. What are your top priorities in managing this green space?
2. What do you consider the least important?
3. What aspect is the most challenging to be dealt with?
4. Which aspect of the space do you want to be improved? And, what can help the improvement?

### **PART III: Views towards urban green spaces**

1. Excluding this place, how often do you go to urban green spaces in Hull?
2. What kind of activity do you enjoy doing the most?
3. What is a 'perfect' urban green space in your perception?
4. Why do you think it is important to preserve the urban green space?
5. (Explain a bit about what are the environmental and human wellbeing values – give examples) Between the environmental and human values, which one is more important do you think?
6. Do these values have to be conflicting? Or can it be complimentary?

### **PART IV: Data Collection**

1. What kind of human behaviour will I be expecting (at my observation)?
2. What do I need to observe? Any suggestions?
3. What are the things would you like to know further about the human behaviour and the urban green space values?

## 2.2. Sampling Strategy

Non-probability sampling was applied, which were the 'convenience' and 'targeted' sampling (Newing, 2011). This sampling strategy was chosen because of the nature of study being exploratory. For the first method (i.e. Field Observation), it was difficult to quantify the amount of people that should be observed as the research outcome focused on the type of activity itself rather than the quantity. As many people as possible were observed to maximise the range of variability of participants. The five locations chosen were public parks with daily visitors throughout the week.

The second method, the semi-structured interview, was intended to be carried out with at least five park managers, as there were five locations chosen. However, only three people were interviewed as one person was responsible for multiple sites and another site did not have an individual that directly manages it. When scoping for interview participants, the type or level of the park managers did not matter because reaching out for higher role of the management was challenging. The researcher hoped that through 'targeted' sampling, the contacted managers would know other managers who would be willing to be interviewed, but this did not happen.

### 2.3. Data Analysis

In total, there are seven interview transcriptions (duration ranging from around 30 minutes to more than 100 minutes) and sixteen (16) observation notes. The notes were made into digital copies and the recordings of the interviews were transcribed mostly by the software extension 'Nvivo Transcription'. However, it was manually edited to correct any minor mistakes made by the automatic transcription. The digital copies of observation notes and interview transcriptions were then analysed thematically through the NVivo software developed by QSR International.

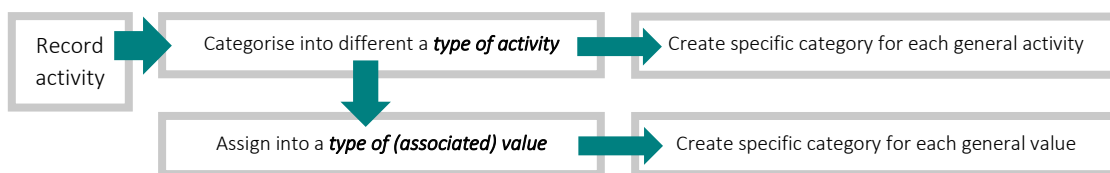
Thematic analysis was used to determine and categorise themes that were observed or discussed, and also, to create relation between themes to build a story or patterns (Nowell et al., 2017). Content analysis was also used to help interpret the overarching themes from the gathered codes/themes (Erlingsson and Brysiewicz, 2017) – combining conventional and summative approach (Hsieh and Shannon, 2005).

The process of finding and highlighting the potential themes from the data using the Nvivo software was referred to 'coding themes'. The process started from transferring the data files into the software so it can be read whilst coding the themes at the same time. Every sentence was analysed to determine what kind of theme(s) can be derived from it. There were cases where smaller and more specific themes arose but, an umbrella theme that could cover these smaller themes was then created. The researcher found that having more of a general theme helped in data analysis because it did not restrict the amount of topics discussed; in comparison to a more specific theme where only specific topics could only be discussed. For example, one of the umbrella themes created was 'interacting with surroundings' which comprised more specific themes including interactions with the animals, the environment, and the researcher. Coding themes were divided into activity and associated values. The researcher followed the observation notes in coding the different types of activities observed. Whilst for associated values, the researcher started only with a general theme that involved people interacting with each other, which is then developed into the theme of 'Community'. This categorisation of activities is explained in the Results (section 3.1.2.).

NVivo helped organising the categories by counting the number of times a word/sentence/phrase has been coded into a theme. These numbers shaped the ranking of

the activities and associated values (see section 3.1.4.). These coded themes were then translated into a codebook generated automatically through Nvivo (see Appendix II to access links for observation and interview codebooks).

The analysis process for observation data started from categorising the different types of activities. From this, as shown in the diagram below, the categorisation was further categorised to: (1) more specific activity and (2) types of values, which is then categorised into more detailed values. This categorisation is further explained in the Results chapter (section 3.1.2.).



To clarify, 'values' in this research context referred to values that can be associated with spaces because they are assigned by the researcher, not provided by the spaces. These types of 'values' may change depending on the individual that is conducting the research (as mentioned in section 1.4.).

Both categorisation (i.e. activities and values) were then projected into ordinal data where each activity was ranked from the most observed to the least recorded. This enabled to view the comparisons between the five parks but without knowing the extent of which is greater (Lovett, 2005).

For the interview data, it is similar with observation. Analysing the interview data involved in reading through the transcription back and forth. The researcher started comparing the answers between the three park managers for the questions asked in the first interview. Some themes were identified following the interview questions (e.g. Table 11), but some were revealed through further analysis. These may be themes that are discovered and not focused on initially (e.g. themes in section 3.2.3).

#### 2.4. Ethical Statement

Ethical approval (FEC\_2019\_209) and risk assessment were approved by the University of Hull before starting the data collection process (i.e. field observation and interviews). All interview participants (i.e. park managers) were informed in advance through e-mail, attached with a summary of the project. All three participants had signed the consent form (Appendix IV). The recorded data was confidential and only used for the purpose of this research, and the identity of all participants was anonymised. Any personal information regarding the participant or other individuals were redacted (including within interview transcriptions). There might be a chance where readers might be able to guess the name of the parks upon reading the interview transcriptions, but they may be less likely to guess the names of the participants/park managers. However, the transcripts are not freely available online to anyone except upon request with granted permission from the researcher and supervisors (with names still anonymised).

Field observations were conducted only in public places and no human identity were recorded within the digitalised observation notes (Appendix II for link). Pictures of sites were taken without the faces of any individuals (blurred if there is any). It is crucial to state that the intention of this project was to improve and help the local community, both the environment and the people, and was not to degrade the reputation of any of the places. Therefore, the associated management groups were informed with any outcome that may be relevant to them through the associated park managers.

The researcher understood the strict guideline on the University's lone working policy for a field trip where the researcher's safety is a priority. The researcher was never forced to carry out any activity that was not consent to. In conducting an observation, a partner may join to accompany the researcher. If this was not possible, the researcher must follow the lone working procedure where the supervisor must be informed of this situation and report to before and after observation is conducted. In addition, the researcher must also report to an emergency contact of choice.

## 2.5. Case Study Locations

### 2.5.1. Kingston-upon-Hull

The city of Kingston-upon-Hull was chosen as the main case study because of the variety of characteristics of public urban green spaces available. These characteristics include size, accessibility, facilities, and habitats. The UGS in the city have not been explored in this context before, so the addition of this data provides new context to wider research on the subject (at a level appropriate for an MSc by Research). The researcher was familiar with the city due to prior research conducted and this project is an extension of the original research (as explained in the Background section). Reports or assessments in related to UGS in Hull have been produced mainly by the Council, such as the Open Space Strategy (2017) and the Avenues and Hull City Council (2015). These reports highlighted the different types of green spaces in Hull and the importance of the space to local people. They emphasised on needing improvement in various aspects, such as accessibilities. Although mentioned, wildlife conservation would usually seem to be the second priority after human-wellbeing. Furthermore, these reports were mostly generalising the green spaces' management – lacking tailored information for individual spaces which may have different needs. They were lacking information about collaboration with from external resources as well such as with an academic researcher.

Hull is located in East Riding of Yorkshire, United Kingdom, with a total area of 71.45 km<sup>2</sup>, and an estimated population of 260,645 in mid-2018 that consists of 50.4% males and 49.6% females (Hull Data Observatory, 2020; Hull Data Observatory, 2020a). Based on estimations, 72% of the land has been converted into a built-on areas, following with 21% urban green space (UGS), and 7% farmland, but with 0% of natural or semi-natural areas (i.e. moors, natural grasslands, etc.) (Easton, 2017). In the Index of Multiple Deprivation (IMD), Hull currently sits on the 4<sup>th</sup> rank on the most deprived local authority, out of 371 local authorities in England (Kingston upon Hull Data Observatory, 2020a). There are seven domains that comprises the IMD, each makes up with different percentage proportion: Income, Employment, Education, Health, Crime, Barriers to Housing & Services, and Living Environment (Ministry of Housing, Communities & Local Government, 2019). The benefits of providing quality UGSs may help in improving the scores, fitting in not only in the Environment domain but also other domains in general as UGSs may provide socioeconomic and human-wellbeing benefits as discussed in the literature (section 1.2.2.).

There are thirty public parks covering about 140 hectares (1.4km<sup>2</sup>) within the Hull's city boundary (Hull City Council, 2017). In addition, the accessibility standard of parks in Hull is about 20 minutes of walk (960m), shorter compared to East Riding of Yorkshire (10km) but slightly longer than Leeds (15 minutes of walk) (Hull City Council, 2017). However, this is not aligned yet with the recommendation by Natural England (2011) which the nearest green space should not be more than 300 meters away. In Hull's Open Space Strategy official draft (2017:12), a 'park' is described as a space that "usually contain a variety of facilities and may have one of more of the other types of open space with them" primarily for "informal recreation" and "community events". These open spaces may include allotments, children's play area, or green corridors. It was mentioned as well that visitors would travel "greater distance" which assumingly is more than the average recommended walking distance which is around ten minutes (Poelman, 2016; Hull City Council, 2017:12; Fields In Trust, 2020). Five locations with HU postcodes are chosen for the data collection area (i.e. four are in the city of Hull, and one is in the town of Hessle). See Appendix V for more detailed explanation about the background and behind the process of choosing these locations.

The selections were based on the researcher's familiarity towards the spaces where it was easy for the researcher to access and familiar with the layout of the space. Upon choosing, the locations and characteristics were taken into consideration where each space has different characteristics and different ways of management (Table 5), aimed for an ideal geographical distribution. These places are free and open to public. Thursday to Sunday were the days chosen for observation with the time range of 9:00-17:00 GMT. The researcher was aware that choosing a specific time range might be a limiting factor as early morning and evening activities would not be observed. However, this specific timing was decided based on the normal working time and the assumption of having higher park-based activities. The researcher was more comfortable with this time arrangement knowing that there would be more people visiting (than in the early morning and evening). For future research, including the observation of early morning and evening activities may be useful to find out more about the variations of activities between the mornings, afternoons, and evenings.

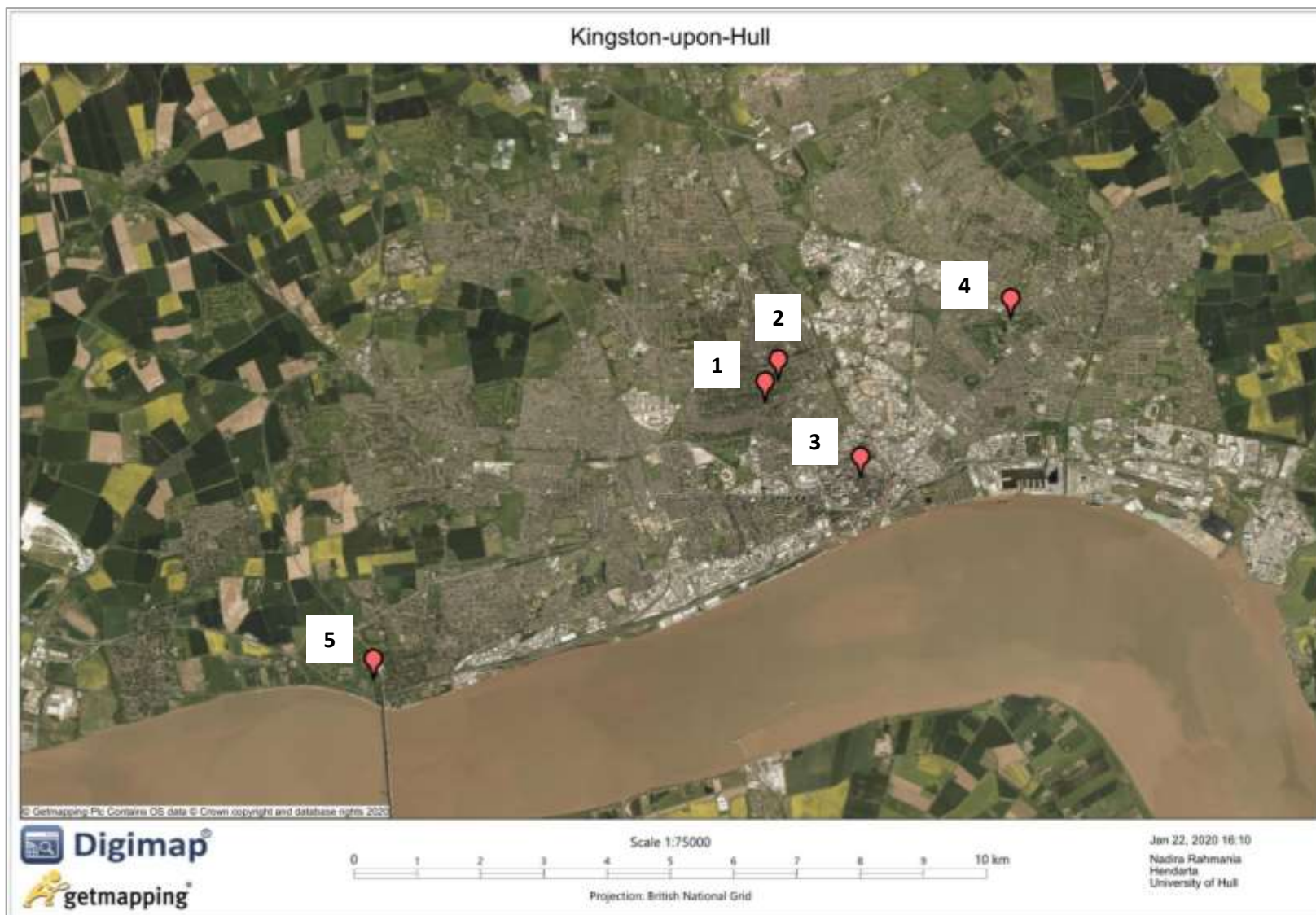


### 2.5.2. Hessle

One of the chosen locations, Humber Bridge Country Park, is located in a small town that borders Hull called Hessle. Although not located specifically in Hull, the Park has the HU postcode and is accessible by car or public transport (e.g. bus, taxi) within reasonable time (15 to 25 minutes). Therefore, it is still considered within the urban region boundary but more in the outer layer from the city centre of Hull - towards peri-urban (referring to Figure 1 in Chapter 1). Holding the status of Local Nature Reserve (LNR), the Park has a different management structure which offers an alternative outlook compared to the other locations.

**Table 5.** Characteristics and management group of the data collection locations.

No.	Location	Post Code	Management Group	Area Size (km <sup>2</sup> )	Characteristics
1	Pearson Park	HU5 2TQ	Hull Culture and Leisure	0.08	Ungated park with multiple access for pedestrians and vehicles; dominated by grass area; pond as one of the main attractions; Grade II listed.
2	Pearson Park Wildlife Garden	HU5 2TD	Yorkshire Wildlife Trust (YWT)	0.003	Small green space that functions as a small office location; vegetations and small pond reflect the seasonality; embracing the wildness for management approach; gated area with one way in and out.
3	Queen's Gardens	HU1 3DJ	Hull City Council	0.04	Ungated park located in the city centre; water fountain as one of the main features; utilised for big events; combination of grass and concrete areas.
4	East Park	HU8 8JU	Hull Culture and Leisure	0.53	Largest park in Hull; provides various attractions and facilities such as the lake for boating and fishing, the Animal Education Centre, and a café; holds the Green Flag Award; large grass area; gated area with multiple access.
5	Humber Bridge Country Park	HU13 0HB	Countryside Access, East Riding of Yorkshire	0.19	Local Nature Reserve situated almost in peri-urban; dominated by woodlands; surrounding white chalky cliffs and large pond as part of the attractions; most different features composition compared to others four parks.



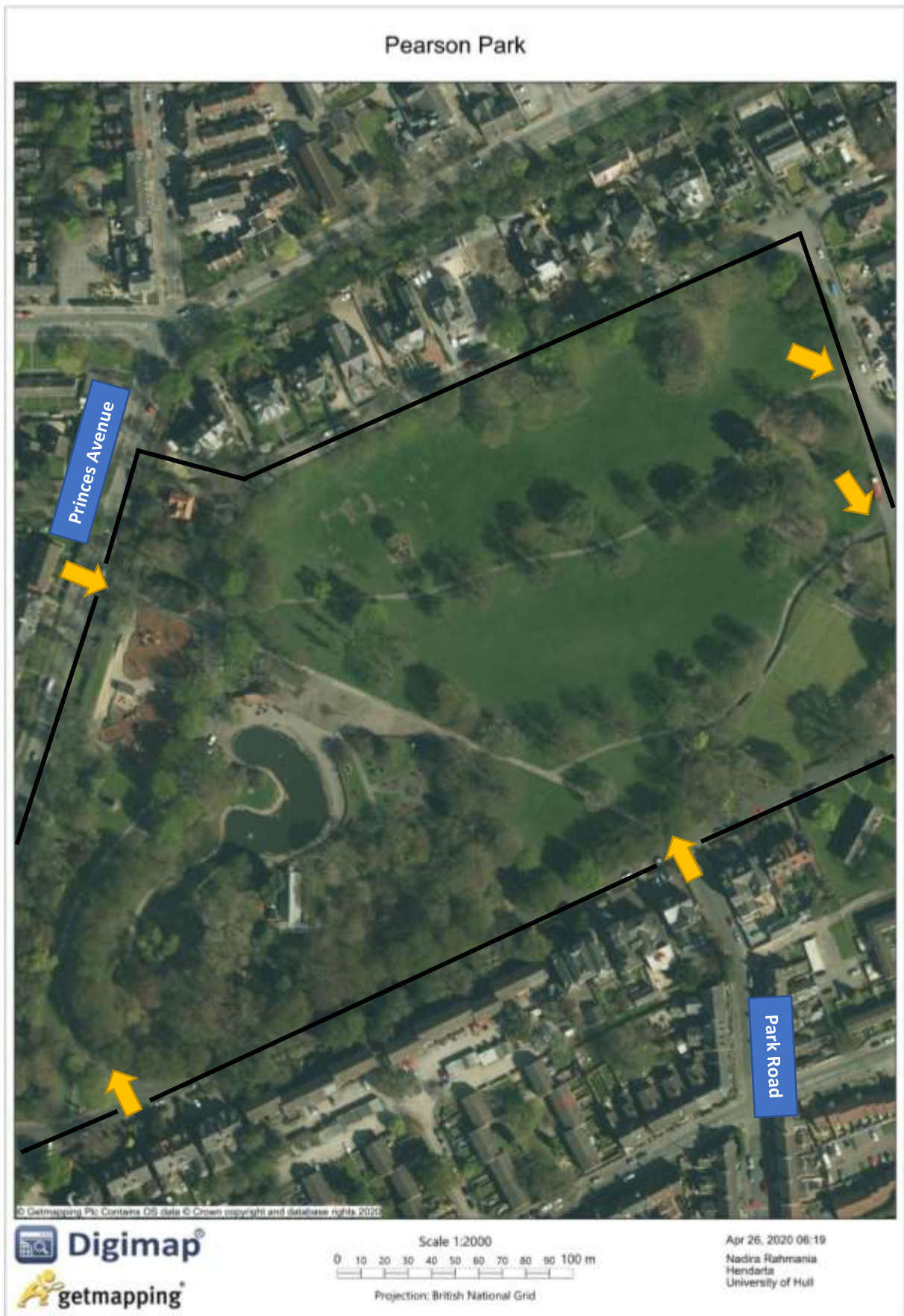
**Figure 4.** Locations of data collection - chosen UGS with HU postcodes: (1) Pearson Park Wildlife Garden, (2) Pearson Park, (3) Queen's Gardens, (4) East Park, (5) Humber Bridge Country Park

### 2.5.3. Pearson Park (PP)

Pearson Park was the first public park in Hull, established circa 1860 as a gift to the local Board of Health by Zachariah Pearson, a philanthropist and the Mayor of Hull in 1859 (Hull Culture and Leisure, 2020; Shaw, 2017). It is currently managed under the Hull Leisure and Culture Ltd, which is owned by Hull City Council (Hull City Council, 2017). There is also the Friends of Pearson Park group that helps the Trustees of the Park manage the attractions and preserve the Victorian character of the Park (Friends of Pearson Park, 2018). The Park is registered as a Grade II site (i.e. related to historical interest) which still retains some of its historic features including the original perimeter carriage drive and the serpentine lake (Hull Culture and Leisure, 2020; Hull City Council, 2020a). Other features include marble statues of Queen Victoria and Prince Albert, a monolith commemorating Zachariah Pearson, ornamental gardens, and bowling greens (Parksandgardens.org, 2001).

Surrounding the edge of the Park are oak, silver birch, and horse chestnut trees. The pond attracts a number of waterfowl (e.g. mallards, greylag geese), which in turn attracts visitors to feed them. Other than the avian population, there is no official information on the wildlife available. The registered size of the Park is about 8 hectares (0.08 km<sup>2</sup>) and it is located in a developed suburban area that was built in various periods (Parksandgardens.org, 2001). In total, there are eight entrances; three for vehicles and pedestrians of which one of them is a designated cycle track, and five for pedestrians only as illustrated in Figure 4 (Hull City Council, 2015).

The Park is currently under a big renovation after the Pearson Park Trust (part of the Hull City Council) secured a £3 million grant from the Heritage Lottery Fund in July 2017 (Hull City Council, 2020a). The objectives for the renovation include restoring and improving the historical and ground infrastructure (Hull City Council, 2020a). It is set to be finished in 2020 with planned celebration in summer 2020 (Hull City Council, 2020b).



**Figure 5.** Aerial view of Pearson Park with few of the entrances for pedestrians (yellow arrows) shown.

#### 2.5.4. Pearson Park Wildlife Garden (PPWG)

Tucked in a junction near the Pearson Park, the Pearson Park Wildlife Garden is a small green space with the area size of 3,092m<sup>2</sup> (0.003km<sup>2</sup>) managed by the Yorkshire Wildlife Trust (YWT). The Garden is a gated area and has only one entrance/exit for the visitors. Besides serving the purpose as a small park, it is also an office location for some of the YWT staff which is located in the middle of the Garden. The Ampitheatre provides a concrete seating area, a picnic bench, and also a wood oven. A greenhouse mainly for storage is located at the back of the Garden, and there are benches placed around the area. The Garden opens on weekdays (10:00 to 16:00) and occasionally on Saturday, with the best time to visit between March and June (Yorkshire Wildlife Trust, 2020). The park managers confirmed that this period of time has a high visitation rate, influenced by school holidays. Therefore, if researcher were to observe in this period, it was predicted that more children and teenagers would be more observed. Unfortunately, the observations were carried out outside these months as the researcher was still sorting out administration matters. The managers also added that there would usually be a higher footfall before 11 AM and after around 15.30 PM. However, the researcher was not able to visit according to this timing all the time. This is a valuable lesson for future research which is knowing the best time to visit before deciding when to observe.

Around 240 different species of wildlife thrive (Yorkshire Wildlife Trust,2020), including garden birds (e.g. blue tits, long-tailed tits, robins), insects, butterflies, shield bugs, ladybugs, solitary bees, and seasonal species. The Pearson Park Wildlife Garden embraces the wildness aspect by having minimal alteration in terms of habitat management. It aims to reflect the seasonal changes through showing the changes of the wildlife. These habitats include a pond, hedgerows, woodland, meadow, allotment, and herb garden (Figure 5).





Figure 6. Official sign board of PPWG illustrating wildlife that can be found on location, and the habitats within the park: (1) Woodland, (2) Pond, (3) Meadow, (4) Vegetable garden, (5) Herb garden.

#### 2.5.5. Queen's Gardens (QG)

Located at the city centre, the Queen's Gardens was initially the first dock in Hull. The area grew into a suburb of the city, but the dock was closed in 1930 after around 150 years of activity (BBC Humberside, 2008). This public park has an elongated rectangular shape with estimated size area of 3.88 hectares (0.04km<sup>2</sup>) (BBC Humberside, 2008), and managed under Hull City Council. The area is ungated therefore it is accessible 24/7. The official website of Visit Hull (2020) described the park as somewhere that is "*perfect for al fresco lunch, a game of football or a leisurely stroll*". The place is also used for Hull's annual big events which are usually in the summer, such as the YUM Food Festival, the Freedom Festival, and Pride in Hull (Visit Hull, 2020; Pride in Hull, 2020). In 2019, it was announced that £4.3m worth of renovation will take place in the park, the focus of which will include: improving access and ponds, and creating more flat spaces for seating (Young, 2019). At the time of research, there is no official information on the biodiversity available.

In terms of big events, the researcher observed the YUM Festival for one of the days as it happened within the period of months allocated for observation. Unfortunately, the observation data turned out to be an insufficient dataset where the footfalls were significantly higher than the normal visit days so it was not taken into the values analysis too much as it would not be comparable. So, the researcher included the types of activities observed within the associated values analysis (i.e. what kind of activities that QG can support) but not including big events in the discussion section.

The park was divided into four parts to make it easier to refer for observation purposes (Figure 6): (1) **the fountain circle**, where there is a big water fountain, is surrounded by grass surfaces and ornamental vegetation. It has concrete surfaces creating paths and where benches are placed. (2) **The pond area** has more seating places, two ponds with flat concrete surface for pathways in the middle, hedges along the side, and the Solar Gate sculpture. Installed in 2017, the sculpture that was described as a 'giant cheese grater', has the key dates in Hull's history etched on it (BBC News, 2017). (3) **The grass area** is an open space of grass with deciduous trees sparsely planted in rows, pathway, grass surfaces, and a gazebo. (4) **The smaller pond area** has seating that is enclosed by a concrete structure with hedges around.



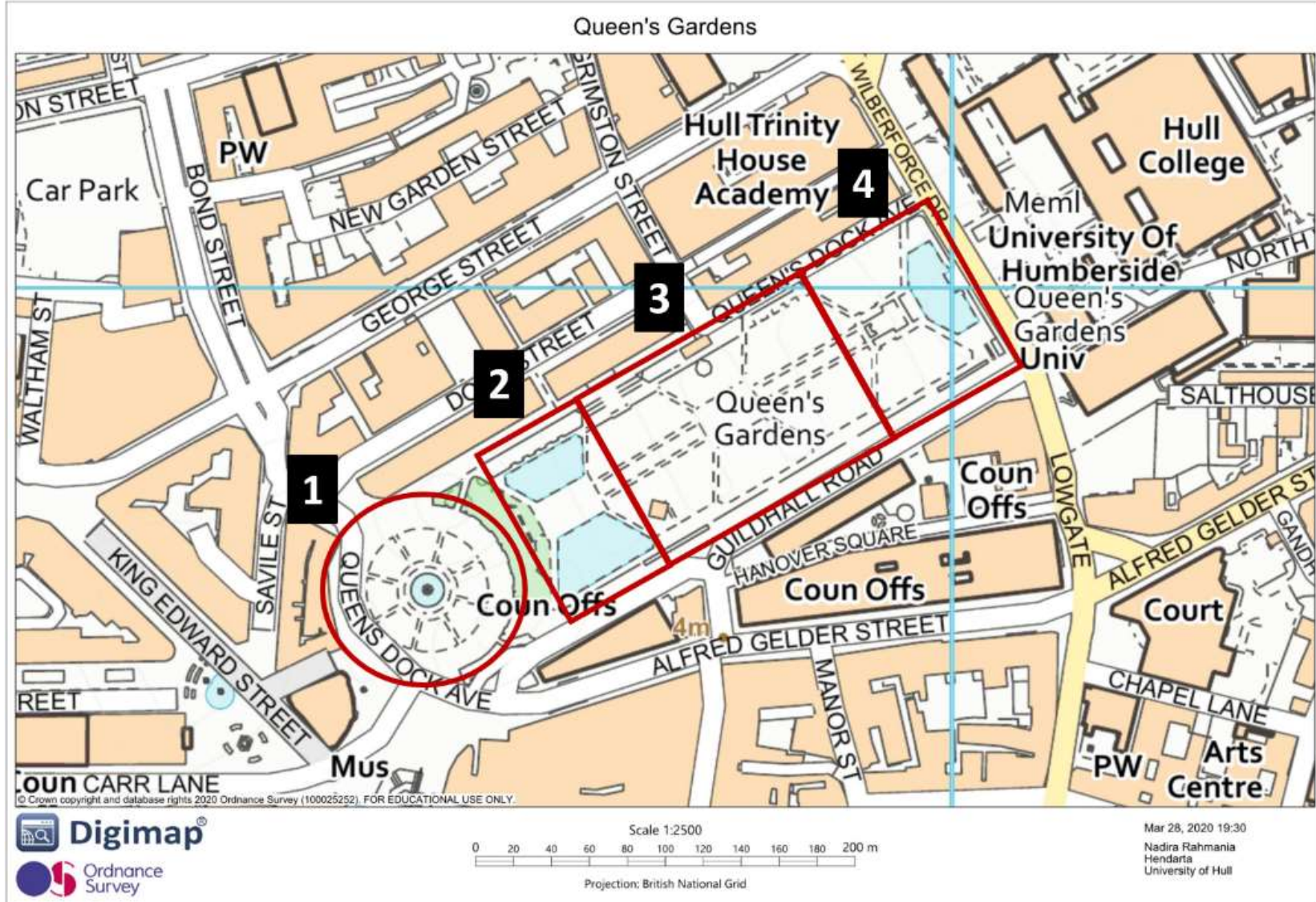


Figure 7. Queen's Gardens – zoned for observation guidance. (1) the fountain circle, (2) the pond area, (3) the grass area, (4) the smaller pond area.

#### 2.5.6. East Park (EP)

East Park is the largest park in Hull covering 130 acres (0.53 km<sup>2</sup>) of land (Hull City Council, 2017). The gated park opens from 07:30 to dusk everyday (Visit Hull, 2020a). Currently, East Park is the only park in Hull that holds the Green Flag Award (Hull City Council, 2017a). The scheme aims to set “*benchmark standard for the management and recreational outdoor spaces*” and rewards “*well managed parks and green spaces*” (Green Flag Award, 2020). It was listed as Grade II site in 2001 (Historic England, 2020). The Park is under the management of Hull Culture and Leisure Ltd.

East Park was designed to be a reminiscent of Pearson Park and was opened in 1887 to celebrate the Queen’s Victoria’s Golden Jubilee (Historic England, 2020; Visit Hull and East Yorkshire, 2020). Several of the features are known to have historical value, one of them is the 16-acre of boating lake that was dug out by unemployed locals after the World War I and it was gifted by Thomas Ferens in 1913 (Historic England, 2020). Recently, the Park received a £10 million council assisted lottery grant to improve its attractions and preserve its historical aspects (Hull Culture and Leisure, 2020a).

The facilities of the space include picnic areas, playgrounds, café, Animal Education Centre, splash boat, boating lake (with swan boats) and a rugby pitch. Various sports and leisure activities are run by local organisations and community clubs (Hull Culture and Leisure, 2020a). The Animal Education Centre is a free, walk-in animal experience that has one of the largest walk-through aviaries in the UK (Visit Hull and East Yorkshire, 2020). Although there is not any official public documentation, based on personal communication with two University of Hull’s Biology lecturers, the biodiversity of wetland birds and dragonflies is comparable to many local green spaces that are dedicated to wetlands conservation (Pers. Comm. Dr Africa Gomez & Dr Dominic Henri). The terrain is almost flat with few mounds, and a tunnelling rockwork called Khyber Pass. There is also a gated rose garden, ornamental garden, and many other kinds of vegetations. Surrounding the Park is a residential neighbourhood.





**Figure 8.** Aerial view of East Park – with main entrances (yellow arrows) and several other pedestrian’s entrances (blue arrows).

### 2.5.7. Humber Bridge Country Park (HBCP)

The Humber Bridge Country Park is 48 acres (0.19 km<sup>2</sup>) green space located in Hessle, East Riding of Yorkshire. The reserve was initially quarried for chalk, and ‘the old quarry cliff terraces now form the edges of the reserve’, exposing the white chalky scenery giving the space the nickname Little Switzerland (ERYC, 2011). It is also recognised as a Regionally Important Geological Site (RIGS) where geological datasets can be gathered from the location (ERYC, 2011; Natural Resources Wales, 2020). The site is managed by the Countryside Access, East Riding of Yorkshire Council. The Park was opened in 1986 - five years after the official Queen’s opening of the Humber Bridge in 1981, which can be seen from the Park (ERYC, 2011; Humber Bridge, 2020). The space is open 24/7 and there are three entrances. There are four trails that visitors can follow throughout the Park, which three nature trails (Meadow, Pond, and Cliff), and another one the Phoenix Sculpture Trail that follows ten hand-carved sculptural seats (ERYC, 2011). The Park also has rest areas (seats/perches) every 100 metres along the path (ERYC, 2011). It is prohibited to camp, horse ride, or ride motorbikes in the Park (ERYC, 2011).

In 2002, the space was declared as a Local Nature Reserve due to ‘its wildlife value and importance to the local community’ (ERYC, 2011; Natural England, 2020). The Park offers different kinds of habitats within the space, creating ‘mosaic of habitats’ forming of woodlands, meadows, ponds and cliffs (ERYC, 2011). Twenty species of butterfly have been recorded and there is population of great crested newts which is a protected species in the UK (ERYC, Natural England, 2015). The Bird Sanctuary also attracts various bird species to feed and lets visitors observe on a nearby bench under a tunnel made of branches, which was created by the Friends of the Humber Bridge Country Park group. The volunteering group meet up and engage in activities that enhance the environment, from putting up bird boxes, tidying the space, to creating an information board (Friends of Humber Bridge Country Park, 2020).

‘Quarry to Country Park’ is a funded project by the National Lottery Heritage Fund to preserve the heritage of chalk mining of the reserve, and was scheduled to finish Spring 2020 (ERYC, 2020). A £724,000 fund will help create another trail ‘the Chalk Walk’ which will contribute to the refurbishment of the Hessle Mill which will be a part of the trail (ERYC, 2020).





Figure 9. Official map of Humber Bridge Country Park (East Riding of Yorkshire, 2020). Three entrances for pedestrians shown by the red squares (top to bottom): Bridge/Country Park entrance, Little Switzerland entrance, Hesse Foreshore entrance.

### 3. Results

#### 3.1. Field Observation

The total observation time of five locations combined was 1,311 minutes (21 hours, 51 minutes) – see Table 5 for individual time. The observations were carried out throughout Monday to Sunday. **Pearson Park (PP)** had the longest total time of observation (5h, 15m) while **Humber Bridge Country Park (HBCP)** and **Queen’s Gardens (QG)** have the same total observation time (3h, 45m). PP had the shortest walking distance to where the researcher was based while conducting the field work, whereas HBCP was the furthest – requiring travel up to 25 minutes by taxi to reach the destination. **Pearson Park Wildlife Garden (PPWG)** is located beside PP, however, the space was only open throughout the weekdays when the field work was being conducted. Being the smallest site to be observed, there were less people visiting the site. QG was accessible by walking (up to 45 minutes) or combined with bus (15 minutes) as it was located in the city centre, however, this was the space where the researcher felt the least safe being alone for more than an hour. Therefore, observation in QG was usually conducted for 30 minutes to an hour if accompanied. Lastly, **East Park (EP)** was the biggest space to be observed that also required a bus to reach the location (up to 30 minutes).

*Table 6. Observation time of five locations (Monday-Sunday).*

Location	Total observation time	Range of time	Month(s) of observation (2019)
East Park	4 hours, 42 minutes	12.38 – 17.00	End of August - Early September
Pearson Park Wildlife Garden	4 hours, 24 minutes	11.04 – 17.00	End of August – Mid-September
Pearson Park	5 hours, 15 minutes	10.30 – 17.00	Early August – End of September
Humber Bridge Country Park	3 hours, 45 minutes	13.55 – 17.00	Mid-August – Mid-September
Queen’s Gardens	3 hours, 45 minutes	13.45 – 17.00	Early August – Early September

### 3.1.1. Summary of the Observations

The following section discusses the findings from the field observations between the five parks. The first part summarises the overall usage of the parks, including how the researcher felt when observing the locations. The researcher decided to talk about safety because each space affected the researcher differently. As mentioned in the Positionality section (1.4.), being Asian and female sometimes made the researcher feel stood out. The second part explains how the observed activities are categorised, complete with the table of activities ranked according to the most popular. The third part briefly explains the reason behind the location arrangement of the tables. The fourth part details the transcription of observations into human-wellbeing values, illustrated by a table ranking the values from the most observed. The final part compares and contrasts the associated values between five parks - highlighting any similarities, differences, and significant values.

#### 3.1.1.1. Pearson Park (PP)

Observations in Pearson Park were primarily focused on the grass and pond area. There were a lot of visitors despite renovations of the infrastructure being carried out which resulted in some areas being closed. There were many families and individuals that used the park, as well as dog-walkers that were walking and playing with their dogs. A lot of visitors cycled through the park, which may be for the purpose of commuting because of the park's multiple entrances. There were a few people that cycled around the park and also did tricks, mostly teenagers, who would also 'hang around' the gym area or on the benches.

The areas that were most popular were the grass, the pond area, followed by the ice cream shop. Visitors were seen observing the pond as well as the pigeons and water birds (e.g. mallards). The ice cream shop would usually be open in the summer when the weather is sunny so the seating area was crowded with people most of the time. There were a lot of children playing in the playground and on the grass. In September, children were seen collecting conkers from horse chestnut trees.

Visitors would also 'hang around' in the area, sitting on the bench or grass, and being engaged in a social activity. For example, having a big gathering or playing a sports game. There were people using the park when it was being observed at 10:00, mainly for physical activities (e.g. running or jogging, flying kites, playing football). In general, the park would constantly have

visitors throughout the day if the weather was not rainy, however it would usually get more crowded after 16:00, especially with children and youths playing around the area.

An interesting aspect to observe was seeing people from different ethnic background coming together – from Asian ethnicity to Eastern Europeans. The researcher's first field observation started here. There were few other park users that greeted the researcher which made it feel safer to be in the PP alone. The researcher also witnessed her thermos that was left accidentally under the bench used for observation being taken by a cyclist. In general, the researcher felt safe in observing the Pearson Park but when observing alone, 1.5 hours (90 minutes) would be the maximum time before researcher felt uncomfortable (further discussed in the Evaluation).

#### 3.1.1.2. Pearson Park Wildlife Garden (PPWG)

Observations were mainly done statically where the main location was the bench in front of the office and the Amphitheatre. Both locations enabled the researcher to see the visitors that went in. However, the researcher missed the period where there would be more people visiting (as mentioned by the park manager), so there were less people observed. The weather factor seemed to not influence the number of visitors that came. It was mainly sunny but there were still less people. Observations were done within the time range of 11:00 to 17:00, except between 12:00 to 14:30.

Interestingly, various activities were observed – more than the researcher expected. Various groups of ages were observed, although not too many teenagers/youths. They were mainly individuals walking around and observing the surrounding or just lingering in the space (e.g. sitting on the bench tucked in the corner of the space). There were dog-walkers exercising their pets. A lady with walking aid came in for a walk around which shows accessibility. A Few visitors interacted with the environment in a form of observation and also taking photos. Most visitors only walked around the space, with only a few people sitting on the benches.

Despite having fewer people, the researcher felt very safe because of the office in the middle of the space and the staff were working throughout the time of observations. The interactions that were exchanged between researcher and users were mainly a stare or a nod. Because of the small space, it was not possible to do many mobile observations as it might make the visitors suspicious (i.e. could not follow the visitors and trying to see what they were doing).



### 3.1.1.3. Queen's Gardens (QG)

Two main focuses for the observations were zone 1 and 2 (see map in Location section). Most visitors observed were mainly passing the space or hanging out on the benches or on the grass near the fountain. Various groups of ages were observed, from motherly figures bringing their prams and children, middle aged men in groups walking through, to groups of teenagers that were hanging around. There were individuals that would sit on the benches which the majority of them were men. From several observations, the space would get more visitors from 16:00 onwards, especially with visitors meeting up.

QG provided a shared space for various kinds of activities. There was a group of people shooting a video judging from the complex equipment they brought, and other visitors seemed to be curious – judging from how they interacted with the group (e.g. asking questions). There were also a group of teenagers that were hanging out and eventually interacted with a family group (seemingly they were strangers to each other) that were around the fountain. A few people were observed waiting on the bench and meeting people around the fountain area before leaving the park, showing how the space has become a meeting spot for some.

The first observation done in QG was when a food festival was taking place, which provided various community-related values (e.g. shared activity, shared space, accessibility). Despite the weather being really windy, there were still many visitors hanging out, consuming food and drinks, and children playing. Some visitors were seen helping others in picking up chairs that were swept away by the wind. A few visitors, including children, were observed binning their rubbish in the bins even though there were official cleaners. These activities almost align fully with how the management describes what the space is suitable for in their website (see section 2.5.5. above) – there were people eating and drinking *al fresco* and walking through the park and looking around the landscape, however, a game of football was never observed.

The Queen's Gardens observations were done fragmentedly because the researcher alone felt less safe if staying for more than thirty (30) minutes. Even accompanied, staying in the park could not be more than ninety (90) minutes based on the researcher's observation experiences. The researcher would start to feel as if other visitors that were already in the

park would start to stare at the researcher, especially if researcher would only be writing things down on the notebook. The researcher sometimes felt wary because the environment of this space reminded the times when the researcher received mild discriminations in public spaces. Mobile observation was done to avoid any suspicion from other visitors. However, the dynamic of the space changed completely when there was a big event because there were more people and there were security measures in place.

Prior to choosing the spaces, the researcher is aware of the status of this space (according to some people that reside in Hull) where it can be a 'dodgy' place (i.e. perceived as less safe at times due to questionable activities that often take place there – it could be from gatherings of group of people or individuals doing questionable activities). The researcher only realised that the place could make the researcher feel less safe after observation period had started. This is because the researcher has never visited and stayed in QG for more than 5-15 maximum, and it would only be for the purpose of having an outdoor break whilst being in the city centre. The researcher still chose this space because of the potential in becoming a significant green space for the surrounding areas as it is located right in the middle of the city centre. Furthermore, it is subjected to undergo a renovation when this project started which improvements can be made.

#### 3.1.1.4. East Park (EP)

Observations would usually start at the grass area near the main entrance of Holderness Road before going around to the rest of the park. Static and mobile observations were carried out many times in order to cover many visitors in different parts of the park. Being the largest park in Hull, it was not surprising that there were many different types of activities observed.

EP attracted visitors of different ethnic backgrounds and age. There were a lot of families and also other different user groups that were doing shared activity. For example, having a picnic, playing football, and having a celebration on the same area. The most crowded areas were the grass area near the main entrance (Hessle Road) and the areas near the Animal Education Centre where the playground and the bird feeding area are located. Children would play on the playground, around the grass and were also climbing around any hilly features. Learning behaviours were observed, such as learning how to cycle and also correctional behaviours by the parental figure(s). People with a visually apparent mobility-related disability (e.g. using wheelchairs) were also present.

It was interesting to see that there were different areas that were less visited, where visitors tend to walk through and not linger around the area. One of them that was the grass area on the other side of the lake bordering the James Reckitt Avenue which was a busy main road. The presence of vehicles and buildings might make it less 'immersive' than other parts of the park.

As mentioned in the Methodology (section 2.1.1.), there were times that it was challenging to record all of the activities because there were a lot of things happening at the same time and also it required more time to circle the park (i.e. more observation spots to stop at). The Park was crowded in general, from the afternoon (before 12:00) towards the closing time around 17:00. The researcher felt safe observing in East Park, including in the less crowded areas, where there would always be a few people fishing or walking around.

### 3.1.1.5. Humber Bridge Country Park (HBCP)

HBCP was the furthest site to be visited by the researcher. In general, visitors were engaged with their surroundings – from climbing the cliffs in a playful manner, observing the birds, to reading the information boards. The observations were primarily focused on the pond area, intersection between two entrances, and the area near the Bird Sanctuary. These places are considered to have the most footfalls, and in addition, the Pond and Bird Sanctuary are considered as main attractions by the park manager. There were mostly families with children - mainly walking around. The children were usually engaged in playful interactions/activities, and some were bringing scooters and skateboards and also playing with sticks (i.e. fallen branches).

Parental behaviours were also repeatedly observed, where parental figure(s) supervised a child in learning something (e.g. how to walk) or behavioural correction (e.g. not allowing to touch certain things). Some children would follow what they were told but others needed more enforcement. Some children were also copying adult figure(s), mostly being playful, such as looking for sticks, throwing rocks into the pond, and also exploring the hilly areas. More people visited in groups of two or more. A Few of them were bringing prams while dog walking. There were also individuals that would usually be jogging, dog walking, or cycling.

There were a lot of activities observed around the (large) pond area. Dogs were seen being playful and jumping into the pond, which then stopped when the owner left the area. Visitors were interacting with the surrounding features, such as throwing rocks into the water, observing the sticklebacks, or reading the information board. People also lingered and sat on the picnic bench while observing the scenery before leaving the area.

The researcher felt safe in observing the HBCP as there were always people around the park, and they were doing recognisable/familiar activities (not perceived negative by the researcher – further explained in section 3.1.4.). In addition, it was easy to navigate around the space even though it was a huge location and filled with deciduous trees.

### 3.1.2. Categorisation of Activities

The observed activities were classified into fourteen types of activity (Table 7). All categories stemmed from activities that were carried out by an *individual* or *between users* or *between users and non-human entity* (e.g. dogs and vegetation). Because these categories are broadly defined, sub-categories are assigned to classify the activities into more details. The activity may also be classified into more than one category if it is applicable. This method helps with pointing out the differences between each case of activity that took place.

For example, looking at the first activity at Table 7 below, '*Assisting or supervised*' in this context there were visitors that '*were assisting other users*' or '*a user was being supervised*'. The assigned sub-categories are: '*adult*', '*elder*,' and '*youths*', which means the users that were being supervised/assisting could be either a child, an adult or an elder. '*Assisting or supervised*' in this context means a user is looking after another user, this includes behavioural correction from a parental figure, and teaching or learning activities (with example on Table 7).

This style of categorisation is used throughout the research to capture overarching themes as well as to document the details. An assigned definition for each activity can be found in the codebook on Appendix II. Table 7 shows the examples of each category and how it would incorporate the sub-category. These category of activities plays a part in determining the four overarching associated values which are discussed in the following sections.

### 3.1.3. Location Arrangement

As shown in Table 8 and 10, the UGSs are arranged based on the orientation of how the space is managed, either more towards human-wellbeing or wildlife conservation (see information on each UGS in section 3.2.1. below for stated management objectives). It does not intend to classify a site into one orientation because all space can be associated with both human-wellbeing and wildlife conservation values. Judgement is based on the researcher's perception, drawing from the location, field observations and park managers' interviews. This is evaluated in more detail in the discussion.

**Table 7.** Examples detailing the activities observed.

No.	Activity	Sub-category	Examples
1	Assisting or supervised	<ul style="list-style-type: none"> <li>▪ Adults</li> <li>▪ Elders</li> <li>▪ Youths</li> </ul>	<ul style="list-style-type: none"> <li>▪ A child was climbing up the steps supervised by fatherly and motherly figures.</li> <li>▪ An elderly woman was trying to stand up and walk around slowly while holding onto the wheelchair and an elderly man who was being held by another man.</li> <li>▪ A teenage girl obeyed her motherly figure not eating a berry-like fruit she picked up.</li> </ul>
2	Consuming	<ul style="list-style-type: none"> <li>▪ Drinking</li> <li>▪ Eating</li> <li>▪ Picnic</li> </ul>	<ul style="list-style-type: none"> <li>▪ An Arabic family are having a picnic under a tree (judging based on the attire and the researcher's general knowledge of the Arabic culture).</li> <li>▪ A man in his late 40s or early 50s was sitting and vaping. Beside him were plastic beverage bottles, and one of them had the lid off and was filled with a yellow substance. Both of the bottles' label were stripped off.</li> </ul>
3	Cyclist	<ul style="list-style-type: none"> <li>▪ General cycling</li> <li>▪ Exercise</li> <li>▪ Learning</li> <li>▪ Playful</li> <li>▪ Youths</li> </ul>	<ul style="list-style-type: none"> <li>▪ A teen boy was cycling around while another teen boy was sitting on the handlebar.</li> <li>▪ Fatherly and motherly figures were giving encouragement to a young girl going around on a tricycle.</li> <li>▪ A man and a child cycling through the paths.</li> </ul>
4	Dog-walkers	<ul style="list-style-type: none"> <li>▪ Playing</li> <li>▪ Walking</li> </ul>	<ul style="list-style-type: none"> <li>▪ A pair of elders walked around the pond area with their dog followed and also played in the pond. When they left the area, so did the dog.</li> <li>▪ Three dog-walkers waited for a boy that was using the gym facility.</li> </ul>
5	Hanging out	<ul style="list-style-type: none"> <li>▪ All Adults</li> <li>▪ All Youths</li> <li>▪ Mix Group</li> </ul>	<ul style="list-style-type: none"> <li>▪ Three teen boys were standing at the edge of the park with one of them smoking. They played wrestling with each other before sitting on a bench together.</li> <li>▪ A man was drinking a canned beverage on the bench and was joined with another middle-aged man. They were chatting while staring at the pond.</li> </ul>
6	Interacting with surroundings	<ul style="list-style-type: none"> <li>▪ Animals - excluding dogs &amp; other domestic animals, i.e. pets (appreciation, chasing, communicate, feeding, observation)</li> <li>▪ Environment</li> <li>▪ Others</li> <li>▪ Researcher</li> <li>▪ Sign/Information board</li> <li>▪ Vegetation</li> </ul>	<ul style="list-style-type: none"> <li>▪ Two children were looking into an information board accompanied by an adult.</li> <li>▪ A motherly figure with a child and elderly man were sitting on the footpaths, they were eating and observing the lake's scenery.</li> <li>▪ A random man walked passed in front of the researcher, suddenly turned around and gave a smile and a 'thumbs up'.</li> <li>▪ Three teens were whacking the leaves of a tree with their bag and a long branch.</li> <li>▪ A toddler said 'hi' to a pigeon. He then picked up a small feather and blew it and tried picking it up again, but a fatherly figure did not let him.</li> </ul>
7	Other means of transport (alternative transport)	<ul style="list-style-type: none"> <li>▪ Mobility scooter</li> <li>▪ Others</li> <li>▪ Playful</li> <li>▪ Walking device</li> <li>▪ Wheelchair</li> </ul>	<ul style="list-style-type: none"> <li>▪ On the lake, there were several 'swan' boats being used. One of them had a fatherly figure with a child crying. There was also a pair of adults rowing a boat.</li> <li>▪ A group of Lithuanians (based on the flag displayed on the tent) were having a gathering and the children were roller blading around the paths.</li> </ul>

8	Others	<ul style="list-style-type: none"> <li>▪ Camera use</li> <li>▪ Fishing</li> <li>▪ General helping</li> <li>▪ Gym user</li> <li>▪ Litter picking/binning</li> <li>▪ Smoking/vaping</li> <li>▪ Sunbathing</li> <li>▪ Uncategorized others</li> <li>▪ Unidentified intentions</li> </ul>	<ul style="list-style-type: none"> <li>▪ Metal chairs and a bin were swept away by strong winds and visitors were helping to gather and put them back (food festival was happening).</li> <li>▪ A topless man was sunbathing but was woken up by a 'cranky' child that was few meters away.</li> <li>▪ A man with a large pram that was covered with a cloth was going around the hedges and looking for something.</li> <li>▪ There were securities constantly circulating the area (food festival was happening).</li> </ul>
9	Playing	<ul style="list-style-type: none"> <li>▪ Ball</li> <li>▪ Climbing</li> <li>▪ Kite</li> <li>▪ Others</li> <li>▪ Stones</li> </ul>	<ul style="list-style-type: none"> <li>▪ A fatherly figure and a child were playing around the path with a paper plate.</li> <li>▪ Two teens were climbing on top of the Khyber Pass (a rocky tunnel-like structure) despite of the sign "do not climb".</li> <li>▪ A boy was throwing stones into the pond with two adults cheering beside him.</li> </ul>
10	Running or jogging	<ul style="list-style-type: none"> <li>▪ Alone</li> <li>▪ Exercise</li> <li>▪ Group</li> <li>▪ Playful</li> </ul>	<ul style="list-style-type: none"> <li>▪ Two boys were running around wooden path near the lake while a fatherly figure was giving encouragement.</li> <li>▪ Three teen girls were jogging around the park.</li> </ul>
11	Sitting	<ul style="list-style-type: none"> <li>▪ Alone</li> <li>▪ General sitting</li> <li>▪ Group</li> </ul>	<ul style="list-style-type: none"> <li>▪ A group of adults were sitting on a row of concrete tree stump-like. Children were initially playing on top of it as stepping stools.</li> <li>▪ Two young teens were sitting on a tree at the edge of a park while talking to each other.</li> </ul>
12	Sports game and exercise	<ul style="list-style-type: none"> <li>▪ Child present</li> <li>▪ Cricket</li> <li>▪ Football</li> <li>▪ Others</li> </ul>	<ul style="list-style-type: none"> <li>▪ A topless man was jumping around and stretching.</li> <li>▪ Three teen boys were playing football; they brought a compact goal post and one of them was using the whistle.</li> <li>▪ A group of six people that might be university students were playing softball.</li> </ul>
13	Using mobile phones	<ul style="list-style-type: none"> <li>▪ General usage</li> <li>▪ Taking photos or selfie</li> </ul>	<ul style="list-style-type: none"> <li>▪ A motherly figure was taking pictures of her family.</li> <li>▪ A topless man was on his phone while standing beside the pond where his dog was floating and playing with a log.</li> </ul>
14	Walking	<ul style="list-style-type: none"> <li>▪ Alone</li> <li>▪ General walking</li> <li>▪ Group</li> <li>▪ Pram</li> <li>▪ Stick possession</li> </ul>	<ul style="list-style-type: none"> <li>▪ A man, walking with a bike on his side, interacted with another man that looked like he was in pain as he was clutching the side of his abdomen and there was an expression of pain. They appeared to know each other and walked away together.</li> <li>▪ A girl was walking with big stick (tree branch) and left it on the edge of the pond. A boy then picked it up.</li> <li>▪ Only few people were walking alone at 4.30 pm.</li> <li>▪ Three groups of family were walking around the park bringing baby prams.</li> </ul>

**Table 8.** Ranked activities observed in the urban green spaces, with location arrangement based on the orientation of management.

Rank	QG	PP	EP	PPWG	HBCP
1	Walking	Walking	Interacting with surrounding	Walking Consuming Others	Walking
2	Sitting	Interacting with surrounding	Assisting/supervised Others	Dog-walkers Interacting with surrounding	Playing
3	Others	Cyclist Sitting	Dog-walkers Playing	Sitting Using mobile phones Other means of transport	Dog-walkers Interacting with surrounding
4	Using mobile phones	Hanging out	Walking	n/a	Assisting/supervised
5	Hanging out Cyclist Interacting with surrounding	Dog-walkers Playing	Cyclist Sports game/exercise		Sitting
6	Dog-walkers Consuming	Consuming Others	Other means of transport		Cyclist
7	Playing	Assisting/supervised	Sitting		Others Other means of transport
8	Running/jogging Other means of transport Assisting/supervised	Running/jogging Sports game/exercise	Running/jogging Consuming		Running/jogging Using mobile phones
9	n/a	Using mobile phones	Using mobile phones		n/a

**Human-wellbeing Focused**

**Wildlife Conservation Focused**





#### 3.1.4. From Observations to Values

Based on the activities observed, values that are associated with the spaces are classified into three overarching themes: Community, Environment, Physical Health, and 'Negative' as an additional. Including 'Negative', there are 13 sub-category or sub-values in total (Table 8).

The Community value has six sub-values and is based on the activities carried out between two users or more. It may be recreational, educational, physical, or any other leisure activities. It shows that UGS, especially local parks, can promote social cohesion within the community by providing a medium for social interactions to happen and can support the development of social ties (Peters et al, 2010; Kaźmierczak, 2013). In this context, an assumption is made that the community consists of residents living in the surrounding area of the UGS, including groups of people united over the same interest or cause and has some form of attachment towards the space (e.g. the Friends of the park group, birdwatching community). This assumption was made based on what the park managers perceived (based on the researcher's engagements with them) – to call the spaces as a 'local' parks/space where the meaning is associated with a space that is provided for the local people to enjoy/use. Observed activity can be coded more than once if there are overlapping themes. For example, 'a fatherly figure and two children were playing with a kite on the grass area' can be coded/categorised into 'Shared Activity' (from Community and Physical Activity values) and 'Family' (from Community value).

The next overarching theme is the Environment which has four sub-values. This value represents any activities that have or involve interactions between visitors and their environment, which can be the vegetation, animals, or any infrastructure of the space (e.g. signage) – anything that forms the space. The environment values altogether represent how interaction with the natural aspect of a space can help visitors connect and hopefully learn something positive from that experience. Alcock et al (2020) highlighted that visiting nature for recreation purposes may enhance the appreciation towards the natural world which can increase pro-environmental behaviour. Regardless of the name, the value may not necessarily benefit the wildlife or vegetation of the parks. Although, through interactions, visitors can learn about the environment which can be classified as a positive behaviour.

The following value is the Physical Health, which is categorised into two sub-values. This theme covers any physical activities that may enhance the visitor's physical health. As stated

by Jennings and Bamkole (2019), positive interactions between users in UGS can ‘catalyse health-promoting behaviours’. The observed physical activities can happen between users or carried out individually.

In the Community and Physical Health values, two of the sub-values are the Shared Activity and Shared Space. Shared Activity value incorporates any activity that is being shared by multiple people, while Shared Space value is when few people from the same group are doing different things at once in the same place, which emphasises the multi-functionality aspect of the space. The Shared Space for Physical Health is slightly different, as it incorporates not only doing different activities within the same group, but also different types of physical activity that is being done by different people on the same location at the same time. So, this sub-value emphasises different types of physical activities that can be carried out on the parks.

A special case is given to the activity of ‘walking’ where it is categorised into Shared Space but not for Shared Activity because it is assumed that all visitors would have to walk in order to reach or commute through the spaces, but this excludes visitors that requires walking aid. However, the researcher still wanted to derive the implicit physical value in walking, whether people still intended to engage in physical activity or not. Hence, categorising walking in Shared Space.

Lastly, the activities that do not fit into the categories above are put into ‘Negative’. These are mainly activities with unidentified intentions and may have negative impact on either the environment or other users (perceived by the society). In this case, this can be cases involving vandalism/property destruction, actions that might hurt another individual (e.g. being aggressive, verbal/physical abuse), the act of stealing, substance abuse, etc. To clarify, having ‘Negative’ value associated with the space does not necessarily mean that the space encourages negative activities to happen, or it is a ‘bad’ space to be. The spaces that do not have ‘negative’ value does not mean it does not have it, further observations might prove it differently.

**Table 9.** The colour-coded overarching themes of values observed with twelve sub-values.

Values Observed			
Community	Environment	Physical Health	Negative
Accessibility Learning Family Youth & Children Shared Activity Shared Space	Entertainment Learning Leisure Others	Shared Activity Shared Space	

**Table 10.** Values provided by the five observed UGS, ranked from the most observed.

Rank	QG	PP	EP	PPWG	HBCP
1	Shared Activity	Shared Activity	Youth & Children	Family	Shared Activity
				Youth & Children	
				Shared Activity	
2	Youth & Children	Family	Shared Activity	Accessibility	Family
				Learning	
				Shared Space	
				Learning	
				Others	
Leisure					
3	Family	Youth & Children	Family	n/a	Youth & Children
4	Shared Space	Shared Space	Shared Activity		Learning
5	Shared Space	Shared Activity	Shared Space		Entertainment
6	Negative	Shared Space	Shared Space		Learning
	Leisure		Leisure		Shared Space
	Others				
	Accessibility				
Learning					
7	n/a	Leisure	Entertainment		Shared Space
8		Others	Others		Shared Activity
			Accessibility		Leisure
9		Accessibility	Learning		Others
				Negative	
10		Learning	n/a	n/a	n/a
11		Entertainment			
12		Negative			

### 3.1.5. Comparing and Contrasting the Values

Referring to Table 9 and 10, 'Community' value (blue) dominates the ranking across five parks, while 'Environment' value (green) is at the bottom of the ranks. 'Physical health' value (red) sits relatively in the middle. Although there are thirteen types of overarching values observed, no green spaces have all thirteen of them. The closest would be the Pearson Park that has 12 types of values that can be associated with. For the individual sub-values, the most recorded on the top 3 would be 'shared activity', 'family', and 'youth and children' which are all included under the 'Community' value.

#### 3.1.5.1. Community

The most supported community values of the UGSs are: 'shared activity', 'family', and 'youth and children'. Visitors were seen to be engaged in a shared activity – including playful or sporty activities, such as playing football or flying a kite, or more leisure activities such as having a picnic or fishing. A lot of visitors visited the parks as a family which would consist of parental figure(s) with one child or more. This categorisation was determined from the observed parental behaviours towards a child (e.g. correcting, teaching), and also seen from the prams that were brought (assuming they were the mother or father of the child). Many youths (i.e. teenagers) and children visited the spaces, either with their family or with other youths. Which may explain why 'family' and 'youth and children' values are high on the rankings. It shows how these parks can be considered *family-friendly*. However, this will depend on individual's perception to what is considered 'safe'. In addition, the condition at the parks may vary at different times and there would be other types of users who might be engaging in questionable activities.

The researcher also observed diverse groups of people from different backgrounds (including different age) engaged in shared activities. These locations were PP, QG, and EP. In most cases, the researcher assessed the background of the visitors based on their appearance and language spoken. Some languages were recognisable where the researcher could identify the origin/ethnicity of the person, and it will be recorded. Sometimes it would be the 'set up' that helped the researcher identify the background. For example, in EP, the researcher observed a group of Arabic people wearing Arabic traditional outfit (presumably a family based on the researcher's knowledge on Arabic culture) having a picnic. On a different observation in EP as

well, there was a large group of people (more than 10) from Lithuania that were having a gathering that seemed like a celebration (based on the decorations and tents put up alongside Lithuania's flags). It should be noted that all judgements were limited to researcher's knowledge. Furthermore, the spaces that were not mentioned above (PPWG and HBCP) may also receive visitation from diverse visitors; it was just not observed when the researcher were conducting the data collection.

Following the ranks, shared space value ranks quite high for the locations that are managed more towards human-wellbeing focused (QG, PP, EP). It is expected to see the space provides multiple human-wellbeing values – physical activities, leisure, relaxational, etc. It is also expected to see physical activities value being on almost the same ranking because there were many visitors exercising or engaging in sports games at the same time.

It is interesting to see how accessibility ranked quite low (QG, EP, PP), and it was not observed at all in HBCP. This does not mean the parks were not facilitating this value. In HBCP, the paths were mainly flat but there were parts that needed to be accessed by stairs. The main interaction of the place are the chalky hills surrounding the space, which may contribute to why there were no visitors with wheelchair or walking aid. In this research, the accessibility refers to how hard/far the researcher can reach the spaces (i.e. emic perspective) and how the space facilitates the people with disabilities. However, the researcher is aware that this is difficult to determine, therefore, further research is needed.

Another value that is quite high on the HBCP ranking is 'learning'. This park provided facility of features that could be used for learning medium, such as signs and wildlife habitats. There were mixed-age group of people that were reading the new sign on the large pond area. Although, it is unknown whether these users have learned anything new, it can be assumed that the readers voluntarily read the signs and received information about the space. For wildlife habitats, users were seen observing fish in the pond and birds near the Bird Sanctuary.

#### 3.1.5.2. Physical Activity

The spaces that are more human-wellbeing oriented (QG, PP, EP) have physical activities value sandwiched between the community and environment values, and sits in the middle of the rankings. This is different with HBCP, where the values sit lower on the rankings; this is expected because there were no sporty activities that were in groups recorded (e.g. football)

which were seen more in other parks. The type of physical activities observed in HBCP would mainly involve more of the features of the park, such as climbing the cliffs or doing bicycle tricks on the uneven surfaces. There were no activities observed in PPWG that can be associated with the 'physical activity' value, which might be caused by the small area size and no features that directly support any typical physical activities such as open field for ball games or routes for cycling.

In general, physical activities were carried out by mixed-age group. Cycling activity, which is mostly done by adults, was observed the most when it comes to sharing space with other users. In this context, the shared space was the paths within the parks and the users who were sharing with walkers, runners, and dog-walkers.

In PP, it was interesting to note that electric bikes were being used as this was not observed in other UGSs. The researcher is uncertain whether it was the same user or not. Many groups of people were engaged in ball games and were sharing the grass area with other users, such as visitors that were hanging out, having a picnic, or playing with kites. Interactions were observed between user groups, one of them was a football player repeatedly asking other passing or nearby users (walkers) to pass the thrown ball back to him, however, after few times following the request, some people did not continue to participate. In terms of water-related, physical activity were only observed in EP (e.g. boating and fishing) as the site has the largest waterbodies out of all sites.

An assumption that is not included in this category is that certain users may have challenges in doing physical activities, which in this case may include elders with walking aids or injured users are having a walk around the park. This is because the assumption goes beyond observation and require the user's knowledge to confirm their ability to carry out these simple tasks.

#### 3.1.5.3. Environment

Overall, the environment values are positioned on the bottom of the rankings for all the spaces, except in HBCP with the two values that are higher in the rank (i.e. entertainment and learning). The only two spaces that have all four sub-values are EP and HBCP. One of the sub-values that is shared across the parks is the leisure value; where visitors engage with the environment with the assumption that it is for personal relaxation purposes. One of the

examples is visitors observing the water feature, which was recorded across all the spaces, except in PPWG. Visitors took time to stop and see the feature of interest, which may be the water movement, the ducks, or even the wildlife residing in the pond or lake. Other examples are boating (EP), photography (PPWG), and collecting conkers (PP).

The two values that might sound similar are the entertainment and the leisure values. The difference between them is in how it may impact the visitors' feelings and also the type of activity they are engaged in – entertainment is more playful while leisure is more for relaxation. Although, the emotion of visitors was unknown, the behaviour was the determinant for categorising the activities. Entertainment value was recorded the most at HBCP where interaction happened with the features of the park (i.e. pond, vegetation, signage). The most recorded activity was throwing stones into the pond done mostly by children. Other activities done by children were climbing the cliffs and jumping into puddles of water. While in EP, there were more interaction involved with the wildlife, such as chasing off pigeons and observing the emu in the Animal Education Centre. There was also a man surrounded by children and he had a squirrel perching on his hand while he tried to feed it. The children looked very excited by the act.

There are 'others' values in this theme, and it was recorded highest in PP. This sub-value categorises any activity with uncertain intentions, whether it would have a positive or negative impact. One of them was the act of feeding the waterfowl however it looked more like littering. A man was seen 'throwing' pieces of flat bread onto the ground. He was doing this despite not having birds consuming the bread. Later on in the data collection, it was confirmed by the park manager that this man had been suspected of fly-tipping (illegal waste dumping) because of his multiple acts of 'littering' in the park.

#### 3.1.5.4. Negative

This 'Negative' value (Table 9 and 10) is an additional category for the activities that do not fit in with the themes above. It is similar with the previous 'others' value in the environment theme, where it includes activities with uncertain intentions and impact, however it covers more than the environment (i.e. wildlife, features) – interactions with other users are also included. There are not many recorded which justifies how this value is at the bottom of the rankings (Table 10).

The value was observed in HBCP, PP, and QG. In HBCP, a couple of police vehicles were parked on the carpark and they were exchanging something between the personnel. They stared at the researcher when walking across the empty carpark. It was interesting to know that the carpark in HBCP is managed by a different group, creating a question of to what extent HBCP is responsible of the users of the carpark who are the visitors of HBCP assumingly. There were also police vehicles and ambulance present in PP at one time, which inferred that an incident happened on that day. The cyclists that took the researcher's thermos is also categorised into this value. Lastly, in QG, there was a man and a young teenage boy circling around the area, looking into the cars. Their outfits were worn out and the fatherly figure was holding a guitar.

Although uncertain of the impact, these activities may have a tendency towards having a more negative impact, especially on the visitors' perception in long term. For example, having police vehicles on parks might indicate that something must have happened which can create worry for the users, or it could also instil the feeling of being safe because of the existence of enforcement group on the ground. Nevertheless, the 'Negative' value is added because safety is one of the things that can be improved within Hull's UGSs based on the researcher's and park managers' perspective.



## 3.2. Semi-Structured Interview

### 3.2.1. General Overview

In this section, the transcripts of three park managers (PMs) that were interviewed for this project are reviewed. Seven separate interviews were conducted with the total time of thirteen hours of recorded audio file. For ethical reasons, all names and personal identity are anonymised. The PMs have been renamed based on the organisation they work for instead. To clarify, there are more than one park manager per location. The researcher chose the term 'park manager' to generalise the role of someone that helps manage green space(s) regardless the official role they have (which is not stated in this research). To help compare the PMs, it is important to understand the background of the company/organisation that they are working for. Below are the organisations and a brief statement of their general vision:

- The first PM works for **Hull Culture and Leisure Ltd. (HCL)** which is a company owned by the Hull City Council. For this project, the PM management covers Pearson Park (PP) and East Park (EP). As written in the Hull Culture and Leisure official webpage, the company is in charge in providing *“a vast range of facilities, services and events”* covering *“all interest and abilities”* and aiming for people to *“have fun, be active and stay healthy”* (Hull Culture and Leisure, 2020). The outdoor facilities that they manage provide *“relaxing spaces”* and a place to host *“a range of activities and events to be enjoyed by people of all ages”* (Hull Culture and Leisure, 2020:a).
- The second PM works for **East Riding of Yorkshire (ERY)**, specifically for the Countryside Access Team. In this project, their management covers the Humber Bridge Country Park (HBCP). Written in the summary of the HBCP ten years management plan, their vision statements are divided into three categories. The first one is for the habitats and species where they aim to *“restore, maintain and enhance its nature conservation value... whilst preserving the valued experience on offer”* (Countryside Access Team (CAT) and Haycock and Jay Associates, 2013). The second one is for the landscape and geology where they aim to *“preserve its sense of naturalness”* and *“to ensure that they remain in good conditions”*, in addition *“to maintain the cliffs so that their geological importance can be appreciated by visitors”* (Countryside Access Team (CAT) and Haycock and Jay Associates, 2013). Lastly, it is for the public access, enjoyment and learning where they want to *“help visitors enjoy*

and appreciate what the country park has to offer, and to further their understanding of wildlife, nature conservation and environmental issues” in a safe environment for all age groups (Countryside Access Team (CAT) and Haycock and Jay Associates, 2013).

- The third PM works for **Yorkshire Wildlife Trust (YWT)**, and their management covers the Pearson Park Wildlife Garden (PPWG) for this project. Provided in their official webpage, the Yorkshire Wildlife Trust is “*a charity dedicated to conserving, protecting and restoring wildlife and wild places in Yorkshire*”, with vision for Yorkshire to be “*abundant in wildlife*” and to have “*more people having a genuine and meaningful connection with the nature*” (YWT, 2020). They also stated that their work “*inspires people to understand the value of nature and to take action for it*” (YWT, 2020).
- The remaining green space is Queen’s Garden which falls under the Hull City Council management. Unfortunately, the researcher was unable to find anyone who was able to participate in the interviews. UGS in Hull is included as part of the open space management, and strategies of improvement is documented through the Open Space Strategy report where the public and working partners are welcomed to submit a feedback as a response (Hull City Council, 2017). This Strategy report is developed in order to “*direct and prioritise improvements and spending across its open spaces*”, with the vision of “*protecting and improving Hull’s open spaces now and in the future*” (Hull City Council, 2017). The most recent Open Space Strategy is the 2017 edition, and the draft is available to download in the official webpage (link provided in reference list).

After being presented with the results (i.e. in the second interview), all three managers responded that they expected the types of activities that were encountered but were mostly surprised by the ranking of the activities and values. Overall, there was a positive reaction towards this method of data collection and the project itself. Response to data from the PMs is presented in the further section.

The following sections compare and contrast the managers personal perception and preference for what encapsulates an urban green space (UGS), followed by a comparison of their management approach and issues they face in their sites, and lastly, their response to the data collection (based on the brief report given). Significant themes were highlighted and compared in a table for each section. Throughout this section the researcher aims to highlight

the differences in the management style of each PM despite the similarities of perception between them.

### 3.2.2. Park Manager's Perception of Urban Green Space

In this section, the perspectives of the PMs are explored. Professional and personal perception towards the UGS were investigated and also on how both perceptions may impact the way they manage. Table 10 exhibits the variety of responses from the PMs towards different topics that were discussed in the interviews. The PMs were asked what their 'perfect park' was and also if they would visit any other UGSs in Hull (excluding their own sites). The interviews revealed that certain activities or functions that were discussed can be associated to certain values, either:

- human-wellbeing (**purple font** colour-coded),
- wildlife conservation (**orange font** colour-coded), or
- balanced (**red font** colour-coded) – combination of both values above and are complementary to each other.

#### 3.2.2.1. Personal Preference of the Park Managers

Initially, the questions asked were focused on the PM's **professional** perspectives (i.e. related to their responsibilities), however their responses might be influenced by their **personal** perspective based on the data. All PMs were asked explicit questions regarding their responsibilities of managing spaces and also their personal preferences in UGSs. This assumption could infer that there might be an alignment between PMs' personal and professional perspectives towards the values associated with UGS in general (i.e. all green spaces) and specifically the spaces they are responsible for. Referring to Table 11, each interviewee had different response to the questions mentioned above.

**Perfect park** – PM HCL did not think that there is a perfect park. Elaborating more on people's expectations, PM HCL mentioned that *"...people's expectations are so different"* and regardless the design *"there's always going to be something in it that means it's not perfect for any aspect of your visitors"* (as seen on Table 11). PM HCL's role in the management group is focused on the visitors, which might have influenced the response that can be considered

as visitor-oriented. On the contrary, PM ERY and YWT both expressed their preference in their perfect park, they explained more of their preference through the design and condition of the environment shown in Table 10, such as litter free and having paths. PM ERY and YWT both wanted a space that is *“not too managed”* and *“some areas with informality”*.

While PM ERY also talked about the needs of the visitors (like PM HCL), they included consideration for urban wildlife; for example, describing having *“areas which are undisturbed as well as areas which are good for kids to play in”*. Discussing human-wellbeing and wildlife conservation aspects within the perfect park may align with PM ERY’s professional responsibilities where balancing the two aspects is important. A clearer alignment may be shown by PM YWT response: having less formality is desirable where *“that it’s just not cut grass”* and wanting *“rough areas or no structured areas”*, and informal mowing regimes (i.e. lawns are mown less) are a major aspect of achieving biodiversity in UGS. This personal preference of ‘wilder’ approach has been implemented in the PPWG habitat management.

**Visitation of Hull’s Urban Green Spaces** – Out of three PMs, only PM ERY that seems to be using other Hull’s UGSs the most outside their own site (mainly for dogwalking). Not living in Hull was one of the reasons for PM HCL not to visit other UGSs. Both PM HCL and YWT seemed to actively avoid the UGSs within Hull as PM HCL said, *“I try and avoid the parks that I have responsibility for. Because otherwise you’re not escaping”* and PM YWT stated *“...very, very rarely (visit Hull’s UGSs). Because of the social aspects that occupy the urban green spaces”*. PM YWT elaborated that the social aspects referred to people’s behaviours that are not aligned with the PM’s principles (and can be deemed negative behaviour in public’s eyes), such as irresponsible dog owners – PM dislike unruly dogs without leash. However, PM YWT shared past experiences stories of PM’s involvement in using the UGSs as a teaching space for the people of Hull. This shows that PM may still want to be involved with activities that takes place in UGSs as long as it is for educational purposes.

**Human-wellbeing & Wildlife Conservation Values** – The researcher attempted to categorise all PMs responses into either more human-wellbeing or wildlife conservation focused (as seen on Table 10 and 11 with colour coding). However, not all have been assigned as not all can be categorised into an orientation. The orientation itself is not to strictly divide the PMs approaches in managing, but it is created to help the researcher assessing the spaces’ management approach in general. The orientation may be seen as a flexible measurement

that may change depending on the circumstances. In assessing this, the value statements from each organisations (as seen on section 3.2.1.) and their personal and professional perspectives were taken into considerations, in which revealed that both perspectives seemed to align with one another. PM YWT and ERY responses were more wildlife conservation oriented where they view wildlife aspect is essential in green space and actively trying to promote better habitat provision for the wildlife. Whilst PM HCL responses were more human-wellbeing oriented where functions for humans are prioritised more in UGSs. To clarify, all PMs expressed both associated values (human-wellbeing and wildlife conservation) were important in their responsibilities, but the degree of which aspect should be prioritised the most differs.

Interestingly, when asked about the main function of the spaces, all PMs responses were related more to human-wellbeing focused (as shown in Table 11) despite the orientation above. PM HCL classified the function into two: “*daily function*” where it covers regular visitation such as by walkers, dogwalkers, runners, and then “*wider function*” that focuses more on leisure and recreation purposes - including special interest user groups (e.g. education purpose). PM YWT responded that the office is the main function of the PPWG. Lastly, the main function is mixed for HBCP,

*It is a balance between nature conservation and countryside recreation. So, compromises have to be made here with the nature conservation side of it. (PM ERY)*

All three PMs agreed that both values can be complementary, demonstrating that certain aspects that are beneficial for human users can also be beneficial for the wildlife on site and vice versa. It was explained that visitors have a role in creating change that will benefit the wildlife, as expressed by the PMs:

*If people didn't visit parks, we wouldn't be doing things (for the wildlife) (PM HCL)*

*...you're introducing the wildlife to people and the environment that you've provided for the people (PM YWT)*

*Oh, they've got to complement each other. I think that's the job of the park manager or officer (PM ERY)*

These quotes suggested a theme present throughout the interviews: a relationship between the PM's professional perspectives and their personal values. While PM HCL appeared to perceive that wildlife benefits from the development within the parks for the visitors, PM

YWT adopted an opposite position believing that ‘the visitors benefit from the improvements made for the wildlife’. Lastly, PM ERY expressed a balanced perspective mostly between benefits for visitors and wildlife.

In exploring the values within the UGS, the researcher initially focused on the conflicting aspect that might arise between human-wellbeing and wildlife conservation values. However, the topic was widened as it demonstrated that positive relationship between the two values is possible (with the assumption that conflicting means negative).

**Table 11.** Themes portraying personal perception of the park managers (PMs) towards UGS.

Colour-coded based on orientation (**purple**: human-wellbeing values, **orange**: wildlife conservation values, **red**: balanced values, **bold black**: emphasising response).

Topic	Park Manager (PM)		
	HCL	ERY	YWT
Perfect park	<p><b>"I don't think there is a perfect park.</b> No matter how well the park's design is structured, there's always going to be something in it that means <b>it's not perfect for any aspect of your visitors....</b></p> <p>So I think there are elements that you could have in each perfect park, but in terms of just one perfect park, <b>you never going to do that because people's expectations are so different."</b></p>	<p>"It's somewhere which has a real feel of greenness and isn't too managed. <b>It has habitat that is it is good for the urban wildlife to thrive.</b> So it's got areas which are undisturbed <b>as well as areas which are good for kids to play in.</b> So it might need to be zoned. So you've got <b>areas which have lots of people making lots of noise</b> and then you've got areas which are quieter, less disturbed. And that can easily be done subtly through directing people or it could be done by more prominent fencing or signage, I guess. It needs to be safe...</p> <p><b>...I need to be safe there...not to be really busy for me... it needs to have a sense of escapism up to a point, and adventure and getting away from it. Needs to smell nice...</b></p> <p><b>I wouldn't want to be surrounded by cigarette ends or bottles... No traffic would be good. And yeah interesting things to look at and absorb. Trees, obviously."</b></p>	<p>"...One would be litter free – real problem for me. Another one would be it's not formal, there's some areas with informality. <b>I don't mind some formality, but I want some areas that it's just not cut grass.</b> It has got structures and varieties and full changes. Those are probably the two main things. <b>I would probably want paths.</b> It's strange just thinking about it, so that you aren't wandering aimlessly... <b>So just thinking about that formalisation might be something that I do want in an urban green space even though I want rough areas or no structured areas."</b></p>
Visitation of Hull's UGS	<p><b>"No (I don't visit parks in Hull),</b> but that's partially because <b>I don't actually live in Hull.</b> So, you know, I commute in every day. I don't generally come to Hull...</p> <p>And to be honest, sometimes <b>I try and avoid the parks that I have any responsibility for.</b> Because otherwise you're not escaping. I try to, and I must admit I do try and avoid certain parks when I'm away or over or on holiday.</p> <p>If it's a particularly well-known park.. I'll come visit, but I won't just visit parks I've not heard of..."</p>	<p><b>"I do. I live in Hull so therefore I visit other places,</b> so yeah <b>I walk my dog in Pearson Park and wonder around the Wildlife Garden as well. I visit Queen's Gardens if there's a festival or something like that...</b></p> <p>Pearson Park daily, Queen's Gardens not that regularly, and the other parks not at all really. So I would be more likely to venture to the coast or up to the North Yorkshire moors for a longer walk. For dog-walking activity, probably Pearson Park.</p> <p><b>...But in a more 'urban' urban green spaces it'll be less wildlife watching. But because I'm interested in that, I would be looking out for woodpeckers in Pearson Park, birds of prey, butterflies, and bats.</b></p> <p>So, yeah, a bit of wildlife watching, but mainly walking the dog. Buying an ice cream..."</p>	<p><b>"... very, very rarely. Because of the social aspects that occupy the urban green spaces."</b></p>

<p><b>Human-wellbeing &amp; Wildlife Conservation Values in UGS</b></p>	<p><b>“Looking at the findings, some will have a negative impact on the environment because obviously things are putting pressure on natural resource... Most people they visit a park, they are sort of walking around. They're not particularly destroying anything... that's down to educating people of what to do.</b></p> <p><b>“But I also think it's beneficial as well to the environment, because if people didn't go, we wouldn't do it. So if people didn't visit parks, we wouldn't be doing things in... So parks management has to change because of lack of resources and things like I think biodiversity actually improve a lot of parks and open spaces...”</b></p> <p><b>“I think the conservation output will increase as people look for the input to decrease in management...”</b></p> <p><b>“...there is a place for conservation in nature and in parks. But there's also I think if you truly want to do wild conservation, you need to look away from urban parks and accept that rather than actually doing the conservation here and that replace (with) where you educate people about conservation.”</b></p>	<p><b>“...It's important for our wellbeing health, physical health, mental health, emotional health. It's important for just for the value in their own rights. Take away the humans, it's still important for wildlife to have a space to live. So even if there aren't any people involved, some might say those animals and creatures have rights for a space to live in. It's important to provide a diverse landscape for people to live and thrive...”</b></p> <p><b>“...It's important for childhood development, for social cohesion, for community to live together. It's free as it should be. In an ideal world of free space, it's free for people to walk, me to walk, breathe, do things.”</b></p> <p><b>“...depends on the place... because I think each green space is going to have so many different dynamics, and the use of that green space is going to be different therefore that's going to influence which is more important in that green space. So you could have two green spaces that are identical in what's there and in the community surrounding it, but one might be managed different to the other...And it might change overtime.”</b></p> <p><b>“Oh, they've got to complement each other. I think that's the job of the park manager or officer. That is my job to kind of nurture along through it along so that they are compatible... So you've got to go in there and probably be as creative as you can be, as open as you can be and have the ability to talk to as many people as possible to find out what their expectations are and what they want to do. But at the same time, bringing in the value of the physical space and the and the wildlife as well.”</b></p>	<p><b>“For me, I find it really hard that we push the nature element because we must do so much. This is not the place in the nature that you would go out to. You know, please let's not think that you can grow nature by having a piece of one grass patch... and so much of what we're doing now, listening to people, this is not a bigger nature reserve. It needs a lot more than that (resources to manage). I struggled with that quite a lot being here, this isn't like a proper outdoor nature.”</b></p> <p><b>“I personally struggle by saying we can make a difference to wildlife in city green spaces. Because I'm concern that we think we can replace a rich and varied habitat with the park. And that really does concern me. We can do things in the park to improve wildlife, but we cannot replace the high value wildlife values with parks. It's just making improvements.”</b></p> <p><b>“I think people need to have a holistic view, and nature... if you have five pillars of commerce, I would like to see nature as six pillars that stands alongside everything we do.”</b></p> <p><b>“Could be complementary. Yeah, because I don't see it as replacing the priorities of wildlife value. It is complementary, cause you're introducing the wildlife to people and the environment that you've provided for the people.”</b></p> <p><b>“I do feel that conservation is a choice thing, we don't have to do it. Often conservation comes with affluence... And if growth and economic side is the driver, conservation can be (a) challenge to many.”</b></p>
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### 3.2.3. Managing the UGS and Understanding the Challenges

The management of the UGSs was explored through questions about challenges that cover from day-to-day to longer term concerns. Table 12 below presents the conflicts and challenges that the PMs face accompanied by the management approach they have taken or are planning to take. To clarify, this research was just an attempt to understand the surface of UGS management. Further in-depth research is needed if more detailed analysis is needed. Below are the explanations for five underlining themes for the challenges followed by the measures taken.

#### Resources

There is a universal concern for having lack of resources in obtaining more resources. These resources included a defined budget and access to people with appropriate specialist skills. Each PM talked about resources in different ways. PM HCL explained that it was one of PM's priorities to find extra income to be used for funding other projects, whilst PM ERY's perception may be seen as contradicting where creating profit is the least important aspect for them. However, PM ERY understood that it might be different for people with different role, specifically who oversees the finance. PM ERY also expressed that more resources are needed in order to make more improvement, such as for the infrastructure, which applied to the other PMs as well. For PM YWT, lack of resources was one of the main issues in place-keeping that hinders the development of the green space.

The PMs explained that some form of collaboration can be used to fill funding short-falls with other parties in helping with place-keeping, either with specialists or community groups (e.g. Friends group). PM HCL and PM ERY mentioned about the works that had been done with the Environment Agency (EA) for habitat management. PM ERY also mentioned about working together with the Jessica Lawson Foundation for water safety around the pond. While it aimed to help visitors to be more aware of the risks near water, it also helped protect the wildlife within the ponds as an outcome that follows. For PM YWT, an example for collaboration was with a university member of staff about the insects in PPWG. Improving internally was also important according to PM YWT:

*...to be better at recycling. Better at things we use, better appreciation of how we act and demonstrate to same other to do it.*

## Infrastructure

Infrastructure was one of the topics related to safety that was significantly discussed. The word 'infrastructure' was used mainly by PM HCL, but the context was translated to the other PMs'. In the interviews, infrastructure could mean the facilities, the habitats, or the built-in structures. PM HCL mentioned that the infrastructure within parks were *"often overlooked because it's not particularly exciting"*, and there was a need in improvement due to the old age for some. For PM ERY, improving the infrastructure means improving the safety for visitor's accessibility, for example, improving the steps for the entrance to the site. Lastly, PM YWT talked about infrastructure more about in connection with the safety precautions or as a response for an incident response. It appears that infrastructure plays a part in preventing crimes and may also establish the feeling of safety for the visitors, especially in PPWG. The examples that were mentioned included CCTV installed that are dotted across the park and the gate that surrounds the edge of the park.

The maintenance of the infrastructure is tied to the availability of the resources. As PM HCL expressed, *"we all, as park managers, will have list of things we want to do. But then actually finding the resources to go out and do that, is a struggle..."*. One of the challenges mentioned was the decision to provide certain things, such as bins and signage. There is also an uncertainty in how to deal with damages from nuisance activities. In PPWG, the nuisance they have dealt with included trespassers at night, rough sleepers, facility damage.

Currently, PM HCL and ERY mentioned that they follow a specific guideline in managing the sites. These would include guidelines for the landscape or habitat management and the infrastructure. For EP, following the Green Flag Award guideline is mandatory in order to maintain the award, and also for both EP and PP, the sites are under the Grade II listing. However, PM HCL explained that this does not seem to influence much of the day-to-day maintenance. With HBCP, a 10-year management plan is adopted by the management group. In contrast to PPWG, less formal approach is adopted by PM YWT with less intervention for the vegetation and habitat management.

## Dealing with People

The people described by the PMs included the visitors, management staff and other park managers (either within the same group or different). All PMs expressed the struggle in meeting certain demands as people have different perceptions and needs. Conflict may arise when visitors wanting certain aspect of the UGS to change, where this may occur between different groups of visitors or between visitors and PM. Certain user groups may also feel that their needs were not met explained by PM HCL. All PMs conveyed that there is a need in finding different ways in understanding the different perspectives, and that also includes the different perspectives of PMs which may cause conflicts.

All PMs expressed that the visitors are part of the main priorities in management. The PMs were aware that their visitors are from diverse backgrounds, mostly for PM YWT and HCL. Both PMs (PM ERY & YWT) emphasised the importance of interacting with the visitors as they would like to know what their thoughts are in relation to visiting their UGS. Whereas PM HLC did not mention much about visitor interaction but expressed that the enjoyment of the role is obtained from the happiness of the visitors. There is a parallelism between PM ERY and PM YWT where both explicitly talked about their reason of interaction with the visitors in which it was to further understand their interest and motivation of visitation.

One of the measures mentioned to understand the different perceptions was through reaching different audiences, for example, through social media (PM HCL and YWT). PM ERY also believed that having various events for different ages and creating alternative panels/signage also helped connect with different kinds of audiences (i.e. different age, user groups). Talking to visitors was mentioned mostly by PM YWT and ERY – asking for their motivation of visit and impression towards the site(s). They also stated that visitors are encouraged to ask questions, especially about the wildlife for PM YWT. PM ERY also said that they explained to the visitors when they are experimenting with habitat management approaches.

Passive approaches were also taken to combat behavioural issues without creating more conflict between visitors and PMs or wildlife. The PMs may create changes within the site in order to initiate changes in the visitors' behaviour. For example, PM ERY replied that instead of banning barbecue, the provision of barbecue stand has encouraged visitors to barbecue

safely. PM ERY also placed benches in certain areas in order to prevent visitors climbing onto the cliffs behind instead of putting a signage. The wildlife approach that has been adopted by PM YWT is aimed to help visitors understand more about the natural changes of the vegetation and wildlife habitat which in turn could instil more respect towards the wildlife. As stated by PM YWT, *“we are very, very passive. As a garden space, it’s not your typical garden. Many people complain about it to us”*.

## Safety

Safety was not only a priority for the PMs, but also a constant concern. Out of three PMs, PM ERY and YWT had safety as part of the most challenging thing to deal with, where PM ERY expressed that it is challenging because it is “out of control”. PM ERY described that dealing with out of hours activities is challenging because it is out of their work time and that *“...we cannot see a way of dealing with it at the moment. There is potentially finance involved with it. And the consequences of it could be significant from operational point of view”*. These activities may be compromising the safety for both visitors and staff, especially for PM YWT where the main component of PPWG is the office. PM HCL talked about a *“conflict between who manages and who enforces”* and stated necessary training is needed for people who enforce, whilst park rangers are not trained. PM YWT also added that the staff acts as an enforcement agent within the sites.

All PMs also confirmed that vandalism is part of the challenges that they face. PM HCL said that, *“every parks department gets vandalism. I don’t think it’s excessive in Hull. I think it’s very periodic”*. While for PM YWT, nuisance has been a constant main concern and has impacted the infrastructure of the site which poses the risk hindering their day-to-day job. As expressed by PM YWT, the frustration stemmed from not having *“the means to correct that behaviour available”* and will have to utilise the available resource which might not be sufficient.

There seemed to be differing attitude in approaching the topic of safety between the PMs, especially in approaching the visitors on site. PM ERY believed that talking to visitors could help find ways to improve the HBCP, whereas PM YWT held a similar belief but also displayed more wariness and was cautious in approaching the visitors as they might have bad intentions. PM YWT expressed that conversation with visitors could be a way to establish

presence, as stated, *“I would find a reason to go and talk to them... You’re not putting somebody off but you’re making them aware that you’ve noticed them”*.

In approaching this challenge, measures are taken through the infrastructure changes. For example: having CCTV (EP, PPWG), gated area (EP, PPWG), and improving the steps (HBCP). However, all PMs emphasised that these measures are not effective enough in preventing issues mentioned above. All PMs agreed that understanding people’s different behaviours and perceptions is important in tackling the safety issue.

### **Balancing the Values**

Based on the interview, all PMs expressed their agreement explicitly and implicitly on the importance of balancing both associated human-wellbeing and wildlife conservation values. Although mostly expressed by PM ERY, the concern over maintaining the balance between the human-wellbeing and wildlife conservation values is applicable to other PMs. The concern has been expressed enough through the examples in the *values* part within Table 11 above. Conflict may arise because sometimes an associated value would need to be compromised and that would usually be the wildlife conservation. Balancing the associated values seemed to correlate with issues mostly concerned with humans. Even when the PMs were discussing about wildlife conservation, the human aspect played a significant role because changes in the parks will have to consider the visitors/humans’ response (e.g. is this new habitat will be easily vandalised? Will visitors understand the changes made within the environment are important to the surrounding wildlife?). It shows how wildlife conservation in the UGS dependant on human influence. Furthermore, the source of the conflict may arise from people who damage the habitat component or differing perceptions between the managing park managers which was mentioned also by the other PMs.

**Table 12.** Highlighted themes discussed in park manager (PM) interviews for functions & attractions of UGS, the management approach taken by the PMs, conflicts & challenges faced by the PMs, and priorities and responsibilities of the PMs. Colour-coded based on orientation (purple: human-wellbeing values, orange: wildlife conservation values, red: balanced values).

Topic	Park Manager (PM)		
	HLC	ERY	YWT
Functions & Attractions	<ul style="list-style-type: none"> <li>• <b>Daily function:</b> Incl. commuting, running, dogwalking</li> <li>• <b>Wider function:</b> E.g. as a tourist attraction, family destination, events venue, large play areas, <b>Animal Education Centre (specifically EP)</b></li> <li>• <b>Specialist interest people:</b> bird watchers, fishermen</li> <li>• <b>Most popular attraction (EP):</b> Animal Education Centre</li> <li>• Different audience between EP and PP; reflecting interest on the local area</li> <li>• <b>PP attractions:</b> bat walk, music recital</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Not a town park:</b> Serving people a natural place to escape and recreation that is safe – woodland, high places (cliffs), ponds.</li> <li>• <b>Wildlife aspect:</b> bird feeding area, butterflies, frogs, fish, amphibians</li> <li>• <b>Main function:</b> balance between nature conservation and countryside recreation (compromising nature conservation side)</li> <li>• <b>Having events for different age range</b></li> <li>• <b>Place for dogwalkers</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Education function: (secondary component) visitor helping public outreach for conservation</b></li> <li>• <b>Main function:</b> office for the PMs - the location provides convenient alternative</li> <li>• <b>Wildlife aspect:</b> providing habitats for dragonflies, butterflies, frogs, amphibians, insects; vegetation reflects the changing season</li> <li>• <b>Gated, one way in and out:</b> having the intention to provide safer environment for visitors</li> <li>• <b>Visitors:</b> Incl. walkers, dogwalkers, photographers, family</li> </ul>
Management Approach	<ul style="list-style-type: none"> <li>• <b>Green Flag Award guidelines:</b> E.g. vegetation sight lines</li> <li>• <b>Grade II listed:</b> signage and street furniture</li> <li>• <b>Safety aspect:</b> CCTV, understanding different perspectives</li> <li>• <b>Reaching different audience:</b> social media, understanding different visitors' behaviours</li> <li>• <b>Collaboration:</b> E.g. Environment Agency</li> <li>• <b>Trying new things:</b> e.g. weed control; finding grant funding, finding new trends</li> <li>• <b>Infrastructure &amp; habitat management:</b> pest control, signage and advisory – e.g. feeding ducks, place allocation, seasonal changes</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Collaboration:</b> E.g. Environment Agency – fish control, Jessica Lawson Foundation – water safety, Humber Bridge Board – toilets and carpark.</li> <li>• <b>Habitat management:</b> E.g. butterfly – long grass and nectar, inspections, tree care, fencing, Bird Sanctuary.</li> <li>• <b>Not income generating:</b> reasonable charge for events.</li> <li>• <b>Reaching different audience:</b> various events, panels/signage</li> <li>• <b>Passive approach:</b> not putting more bins, providing BBQ stand, putting benches in certain areas.</li> <li>• <b>Safety aspects:</b> precaution if people get stuck, steps improvement</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Safety aspect:</b> CCTV, grill on window, locked gate. Working until 6, understanding the different types of people coming in different times. Talking to people, make presence known. Open gate on weekdays 9:00 – 17.00.</li> <li>• <b>Connecting with visitors:</b> understanding visitors' perspective, encouraging people to ask questions and get familiar with the wildlife approach.</li> <li>• <b>Less formal approach:</b> less tidy; less cutting and picking on fallen leaves, branches, and grown grass. Manage the cars, having sightline. Passive approach.</li> </ul>

		<ul style="list-style-type: none"> <li>• <u>Understanding users' behaviour</u>: level of respect towards the natural features, use of different spaces</li> <li>• <u>10-year management plan</u>: covering various aspects of management, both for the visitors and wildlife</li> </ul>	<ul style="list-style-type: none"> <li>• <u>Wildlife approach</u>: less interventions; cuttings of vegetation are left to reflect the natural changes of seasons.</li> <li>• <u>Main things to manage</u>: "litter, drink, and drugs". Asking people to leave if drinking.</li> </ul>
<p><b>Conflicts and Challenges</b></p>	<ul style="list-style-type: none"> <li>• <u>Finance</u>: spending less without compromising good service</li> <li>• <u>Improving infrastructure</u>: overlooked factor; incl. certain aspects of ground maintenance</li> <li>• <u>Different perception between users</u>: fulfilling the different demands and needs, managing expectations, reaching different audiences, managing conflicts between different types of users, controlling visitor's behaviour – e.g. feeding ducks, conveying message</li> <li>• <u>Finding alternatives</u>: e.g. <b>weed management</b></li> <li>• <u>Safety</u>: different perception, enforcement – who &amp; when, vandalism</li> <li>• <u>Profession</u>: gaining recognition, acquiring skills, changing trend, salary</li> <li>• <u>Differing perspective of PMs</u>: having different ways in dealing with different types of visitors</li> <li>• <u>Most challenging</u> → Finding resources - not only cash but also specialist and people with the required set of skills</li> </ul>	<ul style="list-style-type: none"> <li>• <u>Maintaining balance between wildlife and human</u>: compromising between the needs of two values, finding the culprit of destruction, conveying the message of wildlife conservation</li> <li>• <u>Managing different priorities</u> – e.g. litters, events, accessibility, working with Friends group</li> <li>• <u>Different perception</u>: compromising different needs of users, between users, between PMs</li> <li>• <u>Litter</u>: bin provision, BBQ rubbish</li> <li>• <u>Most challenging</u> → <b>Controlling things that are detrimental to the fabric of the park</b>: things out of control, compromising the features – e.g. vandalism, overuse, disturbance, annoyance between users, fire hazard, <b>pulling out newly planted trees</b></li> </ul>	<ul style="list-style-type: none"> <li>• <u>Safety</u>: out of hours activity – trespassing, arson; anti-social behaviours, people drinking alcohol on site. Covering both staff &amp; visitors.</li> <li>• <u>Different perceptions</u>: <b>visitors not understanding the wildlife approach &amp; wanting unmeasurable change</b> - handling people's disagreement. commitment issues with volunteering. Finding ways to communicate with visitors. Local policy on UGS management.</li> <li>• <u>Self-conflicted concerns</u>: Not wanting for people think UGS is a replacement of a wilder place – self struggle not being in an outdoor area. How to create meaningful changes.</li> <li>• <u>Infrastructure &amp; habitat management</u>: not having enough resources, <b>dealing with cats, prioritising conservation</b></li> <li>• <u>Most challenging</u> → <b>Out of hours behaviour</b>: damaging facility, not having the means to correct</li> </ul>

### 3.2.4. Response to Data

In response to the fourth research question, the PMs were asked for their feedback about the project and how they felt about it. This section mostly based on the interviews that were done after the observation took place. Table 13 below summarised the positive and negative feedback from the PMs towards the project and the observation data combined.

**Table 13.** Feedback of the park managers towards the project and the observation data (combined).

General response	
Positive	Negative
<ul style="list-style-type: none"> <li>• Positive feedback in general</li> <li>• Relevant issues picked upon</li> <li>• Word cloud (and the brief report) was a good reflection/representation</li> <li>• Confirmation/new knowledge about observation findings</li> <li>• Opportunity for brainstorming for ideas or to discuss matters with different perspective</li> </ul>	<ul style="list-style-type: none"> <li>• Too much detail about methods (in meeting)</li> <li>• Only covered certain aspects</li> <li>• Title not inclusive (before changing to the final title)</li> <li>• Concept of project was hard to grasp; explaining value as function helped.</li> <li>• Clarification on functions/values needed</li> <li>• Interpretation of visitors may not be accurate</li> </ul>

#### 3.2.4.1. General Feedback towards the Project

The researcher was able to obtain valuable feedback from all three PMs. The data presented in the brief report were easily understood by most PMs. The interview provided a valuable opportunity for the PMs to discuss various topics relating to the UGS and explore related new topics from the research, such as volunteering, design of park, and park manager’s community of practice. When explaining about the project, the PMs expressed some information that they would like to know which can be useful for future research. For example, PM ERY was curious about the behaviours of the visitors towards certain natural features of the HBCP, for example:

*...I'd love to know that we believe people head towards the pond*

*...I'd be quite interested in you observing the extent to which people struggle in climbing the steps*

Whilst PM YWT had a desire to see changes and learn how to extrapolate the values within the PPWG to the other UGSs:

*For me, what would be nice is how you take this, to out there (referring to [park name]), because this has a value to us (the park managers) ... And clearly it has values to the people that come in. And to take this (PPWG) out there, may improve the value of that [the*



*same park that was referring to]. Improve the societal perception of that green space as supposed to just the green space where antisocial behaviour (takes place). (PM YWT)*

In this context, PM YWT was referring 'out there' to PP which is a neighbouring park. However, PM YWT discussed also about how his approach could be implemented in other parks and how it would be beneficial for both humans and wildlife.

Overall, there was a positive engagement between the researcher and the PMs. As expressed by PM ERY,

*I do see what you're doing, and it is an opportunity for us to understand here a bit more about how we manage the place and how I see the place, whether that matches what visitors are doing.*

#### 3.2.4.2. Response to Observation Data

After seeing the observation data, the most common response from the PMs was that the types of activities and visitors (e.g. single person, family) were expected but not for the arrangement of rankings of observed activities and associated values. The PMs expressed that the data is a good representation of the UGSs, giving a snapshot of activities, and also a positive feedback towards the word cloud that was generated from the observation notes for each UGS:

*...I think it is quite a nice reflection of the kind of activity that does actually go on in there.*  
(PM HCL)

*There are no surprises, I think it's a good representation of what we envisage people... And there's no words that are particularly negative. It looks pretty positive.* (PM ERY)

However, there are certain aspects that can be improved for future research (as written in Table 12 as part of the negative feedback). When presenting the observation data, one of the PMs said that it was confusing understanding the methods of categorisation, the PM expressed that the concept was "a bit harder to grasp". This was because the researcher was explaining the methods of categorisation in details which it was not necessary as the PM wanted to focus on the results itself and how it could be useful for the management team. In the end, what helped was explaining the different associated 'values' of the UGSs (Table 7 & 9) as functions that the UGSs may provide. This was the first interview that was done after the observation was completed. The researcher had since revised the layout of the report and the content and changed the style of presentation based on the feedback from this interview.

Two of the PMs mentioned that the research only covered certain aspects, for example, the data only informed the social aspect of the green space but not *“the level of respect towards the space”*. The research also did not include much about the mental health aspect towards the visitors. This was justified through the assumption that by being engaged in positive activities within the UGS would have positive mental health effect on the individuals. In addition, not having to interact to the visitors made it difficult to understand the motivation of visit and impression towards the UGS. Another issue highlighted by a PM was that the researcher’s interpretation might not be accurate which the researcher had been aware of from the start due to the limitations of the study. Explaining the barriers of the study was also helpful in justifying the way the study was conducted and the topics covered in this research. For the usefulness of the data, the PMs answered that any additional data would be useful in general, such as for documentation or how this project can be part of the discussion in board meetings. For example, PM HCL stated,

*...we don’t have a lot of data collection anyway. So it’s always useful to actually just get a better picture of what’s going on that’s just not anecdotal or your feelings on the ground but actually has been researched and someone’s followed through.*

PM YWT added that the observations may help highlight aspects of green spaces that can be improved,

*Those observations... I think they’re really critical for moving the city of Hull. People do not recognise that because they do not spend enough time studying the area, and that is valuable to the city... it’s that perception – if you feel it, the others feel it.*

PM HCL also stated that the data might be useful for green prescribing scheme where *“if we’ve already got a base point where people physically active in parks then that might help us argue, probably try to persuade general practitioners to provide prescribed time in urban green spaces”*.

## 4. Discussion

### Community as the Primary Value of Hull's Urban Green Spaces

The observation data revealed the associated sub-values within the 'Community' value that are most commonly observed are 'Shared Activity', 'Family', and 'Youth & Children', irrespective of how it is managed (i.e. human-wellbeing or wildlife conservation focused). As stated in the observation result (Section 3.1.4), an assumption is made that the 'Community' in this context includes residents living in the surrounding area and groups of people with special interests, which these people are part of existing communities. The research focuses on this aspect based on the PMs perception more than building new communities.

MacQueen et al (2001) defined community as *"a group of people with diverse characteristics who are linked by social ties, shared common perspectives, and engage in joint action in geographical locations or setting"*. The interviews with the PMs confirmed that the main visitors of the UGSs in Hull are people from the local neighbourhoods and also groups with special interests or shared attachment towards the spaces (e.g. birdwatchers, anglers, Friends group). Therefore, the definition above (by MacQueen et al, 2001) aligns with the community observed in Hull where visitors from different backgrounds engaged in shared activities that take place in the UGS as observed by the researcher and confirmed by the PMs.

Taking evidence from both datasets in this dissertation, providing space for families with children and the youth groups is Hull's UGSs central role for the local community. This idea is supported by the literature as one of the well-recognised positive impacts of UGS is improved social cohesion, as spaces can encourage people to be engaged in activities together (Walker, 2004; Peters et al, 2010; Kaźmierczak, 2013).

Although the topic 'community' was not explicitly mentioned, it was expressed that the visitors and staff are part of all three PMs main priorities which can be implied that community is central to the management. It was stated as well that each site can reflect the public interest of the local neighbourhood. Although not discussed explicitly, the deprived community was part of the conversation. It was known that some of the sites are most likely to be near a deprived neighbourhood (e.g. EP) and visitors have differing ethnicity background and possibly social statuses. This was discussed mostly by PM HCL and YWT where sites like PP and PPWG are the most common in visitation by non-English users. Visitors from this specific

background would use the UGS as an 'escape' (i.e. for leisure purpose) because it is free of charge, as stated by PM YWT and HCL. This infers that some Hull's UGSs may be accessible for the deprived community. This builds the significance of the community value because Hull is ranked 4<sup>th</sup> in the most deprived cities in the UK as mentioned in the methodology (Section 2.5.1). Within the literature context, exposure to green space is linked to health benefits for deprived community (Thompson et al, 2012; Roe et al, 2017). However, there are also prominent issues relating to inequality to access (Dai, 2011; Moseley et al, 2013; Hoffmann et al, 2017; Li et al, 2019) and misuse of space that leads to safety concerns (Gidlow and Ellis, 2011; Hoffmann et al, 2017). This could be further explored by the PMs and the managing bodies through assessing how sites like EP and PP are accessible and can sustain this particular function but also what kind of functions that can encourage positive behaviours and how it can be translated to other sites.

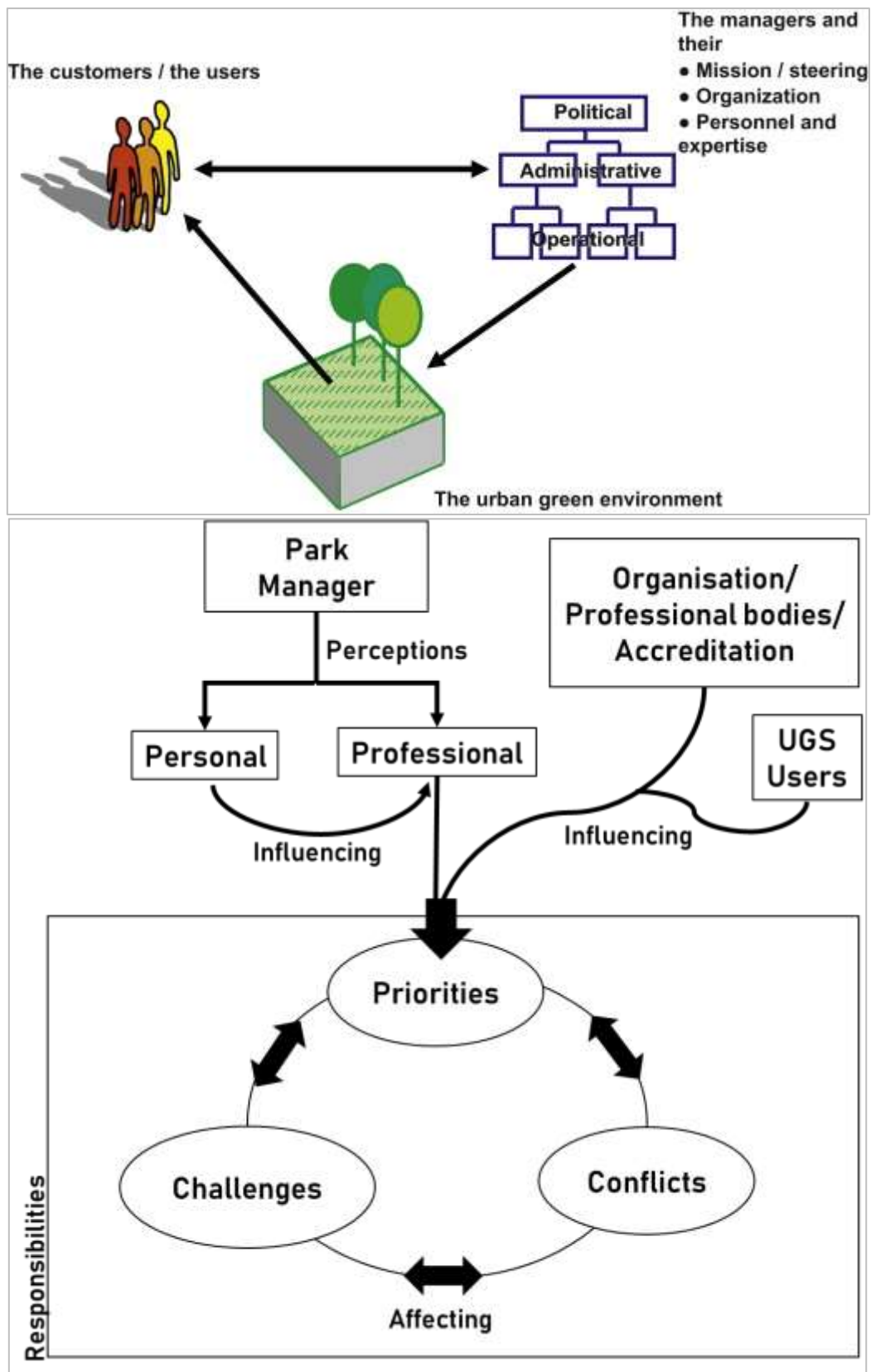
### **Alignment between Professional and Personal Park Managers' Perceptions**

UGS managers play an integral role in deciding the desired associated 'values' of a green space by managing the priorities of the UGS management team. In addressing the third research question (*'What are the priorities and challenges of the park managers and do these influence their management strategies?'*), personal preferences and professional perception of the PMs were explored. Interview revealed that there may be an alignment between PMs professional and personal perceptions towards the associated values of UGS. Between three PMs, wildlife conservation values were mostly expressed by PM YWT and PM ERY, whilst human-wellbeing values were mostly expressed by PM HCL. This does not indicate PM HCL not having any wildlife conservation values and vice versa; it suggests that the personal perception of a green space manager may play a role in determining how a green space is managed. There is still limited appreciation towards this aspect in the general literature.

The PMs' professional perception is further assessed through their priorities and challenges to investigate what influences these factors. Figure 11 shows the relationship between the space, the managers and the users; the POU model by Randrup and Persson (2009), illustrating the relationship between the main element of the management of green space (i.e. park, organisation, user) in a linear circle. Based on this figure, the researcher created a

diagram that incorporates more aspects extrapolating from the interview data. Compared to the initial diagram, the relationship between park managers, users, and organisation is not simply a straightforward linear cycle. It revealed that PMs priorities can be shaped by their personal perception, managing bodies, and their visitors. The main differences between the two are the separation of the PM from the managing bodies and how visitors can also influence the space which also influence the priorities of the PMs.

As illustrated in the new diagram below (Figure 11), priorities are part of the PMs responsibilities alongside with challenges and conflicts which are interrelated. For example, a conflict or a challenge can become a priority (e.g. safety). Based on the interviews, the visitors are central to PM's responsibilities. The PMs showed willingness to accommodate different users and to support different functions within the UGSs; they were curious about the perceptions of different users towards the UGS. The PMs understand how the behaviour of users can impact other users, whether it is positively or negatively, or even neutral as PM HCL mentioned. It can be inferred that visitors' demands/needs would likely shape the responsibility of the PMs - although to what extent is still uncertain.



**Figure 10.** (Top) The park-organisation- user (POU) model illustrates the relationship between public green spaces, park managers, and the visitors (Randrup and Persson, 2009). (Bottom) Diagram based on the interview data showing the relationship between park manager's perceptions and responsibilities; park manager's priorities are influenced by the visitors of urban green space (UGS) and guidelines set up by managing bodies.

## Defining Human-wellbeing, Wildlife Conservation, and Balanced Values

Based on the results, all five UGSs displayed both human-wellbeing and wildlife conservation values which are dependent on how visitors use the space and decisions made by the PMs. Referring to Table 14 below, human-wellbeing value revolves around the people who are involved in the UGS scene which includes visitors and staff, whilst wildlife conservation value focuses more on creating the space for wildlife to thrive and increasing the awareness of the importance of coexistence with wildlife within the urban environment. To clarify, neither of the two values are superior to the other. There were also instances in which the presence of one value enhanced the other which the researcher named 'balanced value.' This additional associated value reflects an ideal situation where human-wellbeing and wildlife conservation can be managed in an equal/balanced way producing more benefits for both humans and wildlife, possibly where neither of these two associated values are compromised. Maintaining ecosystem services is an example of promoting more balanced value within the park's management. Coming back to the definition of UGS adopted in introduction (*'a public park that is accessible and large enough to provide various ecosystem services and functions for visitors and to support different kinds of habitat'*), ecosystem services is part of the requirements in which all five UGSs have provided but in different levels. Further research assessing specific types of ecosystem services and the benefits for both human and wildlife may be beneficial.

Although differing in the degree of wildlife conservation value (i.e. Environment value in Section 3.1.4), all five UGSs have the potential to enhance their infrastructure and environment so they can sustain more balanced values. One method is through assessing space utilisation. For human-wellbeing value, EP is the best example in compartmentalising the areas within the space. Having specific places to do certain activities helps create attractions that appeal to a wider demographic of people to visit (a function itself). However, there is still an unrecognised biodiversity potential within EP even though the main priority of management (according to PM) is mainly for visitors. In other words, EP is mainly human-wellbeing focused but has high biodiversity. In contrast, HBCP has presented good examples of utilising spaces which can be dedicated for balanced values. Specific areas within HBCP, for example the Bird Sanctuary and the pond area, have become a recognised attraction to the site and serving the balanced values through providing habitats for wildlife and ecosystem

services for recreation purpose. Not having these areas could lead to losing some of the attractions of the space. Another example is PPWG where there is already a specification within the name (i.e. Wildlife Garden). Although it is in a smaller scale, PPWG has generated some of the examples for balanced value, mainly through educational perspective and creating exposure for users to a 'wilder' environment. PM YWT also mentioned that few visitors had interest in foraging within the space - this is unique from the other UGSs. It can be inferred from that investing in wildlife conservation values may enhance the ecosystem services provided for the visitors to which potentially sustaining more associated balanced values. For example, creating a recreational and/or educational space but at the same time functions as a habitat.

Extending the theme of space utilisation, having attractions can improve the values within the space through establishing specifications in the functions. However, there is still ambiguity in what visitors can and cannot do within the UGSs in Hull. One of the main motivations for visitation of UGs is for recreation and leisure purposes, so having clear functions or attractions the space offers may be useful. Multifunctionality is desirable as long as the established functions are being served appropriately (e.g. having the appropriate infrastructure). This approach can also help create the 'identity' of the space which will help with the marketing. Having specification of function can also create medium for values exploration by managers and visitors. Re-assessing the ecosystem services available can be a part of the main steps in establishing functions that can serve balanced values. There is a possibility of not having to compromise either of the values but with a site-specific approach where not one method fits all - aligning with the pragmatic approach.



**Table 14.** Examples of values for overarching theme or keyword from the park managers' (PMs) interviews. Values are colour-coordinated (same as in the Results Section 3.2.2.).

Value	Overarching theme/keyword	Description/Example
Human-wellbeing	Functions of UGS	E.g. Daily (e.g. dogwalking, commuting), for recreation and leisure purpose, office
	Guidelines to follow	E.g. Green Flag Award, management plan
	Public opinion	Tailoring to user's demands
	Improvements on staff training	More focus in improving the system, getting more qualifications/specialists
	Future ideas	E.g. Trends on commercialisation, events, office area with lollipop style (one entrance with office in the middle)
	Main issues relating to humans	Leads to human-based priorities, compromising wildlife conservation value due to limited resources
Wildlife Conservation	Wildlife	Recognising the potential of the biodiversity
	Future ideas	Practical changes that require less effort in management, e.g. bat brick, seeding roofs, wildflower beds, less grass cutting regime
	Awareness of public	Recognising the need to increase public's appreciation towards wildlife; utilising the space to provide exposure
	Issue relating to wildlife	E.g. resources available, damage from visitors, domestic cats
Balanced	Facility	Designated space for activities that may be destructive towards the wildlife, e.g. BBQ stand, benches; promoting educational benefit, e.g. Animal Education Centre
	Habitat	Supporting biodiversity, e.g. green corridors, woodland, waterbodies, shrubs; providing relaxation and escapism aspect for visitors
	Different types of user groups	E.g. birdwatchers, volunteers
	Personal perception	E.g. preference of park, appreciation towards wildlife
	Collaboration	Maintaining areas that can benefit both users and wildlife, e.g. Environment Agency, Friends groups

## 5. Reflection

In addressing the fourth research question (*'Does the method of integrating research and management of urban green space support managers in actioning research-based management practices?'*), the researcher asked and received feedback for the project and specifically for the gathered data (as presented in the result section 3.1.1.). There was a positive engagement between the researcher and the PMs where mutual positive interactions occurred. The researcher gained insights for the PMs perception, and in return provided opportunity for PMs to explore various topics related to green spaces with a different perspective (i.e. through the lens of a researcher and non-local citizen). Concluding from the Table 13 (from the result section 3.1.1.), data can be useful, especially as a supplementary document and to be used for future applications, if context is easily understood by the PMs, represents the essence of the space, and highlights aspects of the space that can be improved.

Varieties of topics relevant to green space management were able to be explored through the combination methods of observation and interview. The method also helped create generalisation for the use of space and issues relating to place-keeping which can be useful for providing a general baseline data. The complexity of the mixed-methods was assessed where the main gap was in the visitor's perception. Initially the usage of questionnaire was included within the methods, however it was opted out due to ethical reasons. Another method that was removed was focus group for the PMs which was due to time limitation. Challenges were present in conducting field observations; external reasons including unpredicted weather that affected the space visitation footfall and internal reasons which were the researcher's health condition and self-consciousness (i.e. feeling safe/comfortable), in which affected the time spent on the site. The impact overall was that the observations accumulated time was less than planned and not all areas within the spaces were covered equally.

Improving the methods will require more focus on the visitor's perception of UGS. In the interviews, the PMs expressed their interest towards understanding the visitor's motives and behaviour with the intention to create a desirable UGS. Recognising the visitor's perception will contribute to understanding how UGS can be beneficial for the community. Another way

to improve the methods is to consider how to further incorporate the data of wildlife conservation and balanced values of the UGS within the discussion in order to obtain reflection from the PMs. For improving the interview method, more structured framework will help obtain more straightforward response, however, it should still allow exploration of topics. More focus should be given to what the PM wants to know which not only provides helpful guidance for the observation process, but also highlights the data they are lacking to make informed decisions. From the feedback, the research process was partly helpful in capturing the essence of UGSs however the data that the PMs wanted was not fully obtained. Lastly, working within a group may help provide more perspectives in data interpretation and would also help cover more spaces for observation whilst also justifying the positionality of different individuals.

## 7. Recommendation

### **Community-led Management**

Community develop has been highlighted as the primary human-wellbeing value of the UGSs observed. In addition, the issues highlighted by PMs were mostly related to the visitors which are part of the community. Based on the data, it would be appropriate to find a solution that places community as central to management. 'Community-led management approach' focuses on community involvement in place-keeping within an UGS. Contemporary literature highlights a growing focus on the value of community-based greenspace management (Krasny et al, 2014) and that a community-based approach would have a value in Hull's UGS.

Research shows that community-involvement in the management and place-keeping of UGS is an effective way of enhancing ecosystem service provision (Krasny et al, 2014; Dennis and James, 2016). Through this research, the researcher wanted to highlight that the PMs priorities have covered functions that can be translated to ecosystem services (e.g.). Aiming to improve various functions of ecosystem services can be an effective method for balancing the wildlife conservation and human-wellbeing values within the UGS, especially involving the community/visitors to take part. Furthermore, there is a growing recognition of managers being a crucial medium in enabling community involvement through provision of established procedure and in reaching out to higher authorities (Mattijssen et al, 2017; Fongar et al, 2019). This aligns with the PMs perception where the park sector "should be leading the change" and it is "their job" to establish the connection between the visitors and the space (to encourage balanced values).

Similarly, in the interviews the PMs highlighted the difficulty in obtaining community perspectives in order to help shape priorities. While the reflection section highlights how the research methods could be improved in order to address this issue, the gap could also be closed by community-led management schemes that incorporates diverse background within the community.

## A Network of Urban Green Space Managers

As highlighted earlier, the researcher has been very careful to ensure not placing one kind of value over the other, or place the perspectives of one manager over the other. To justify, all UGS have valid perspectives and approaches to which can be enhance through creating a professional network for PMs to allow collaboration. As stated earlier, a focus group was not able to be included due to time limitation, however interest in taking part was expressed by the PMs. Having a “middle person” that is knowledgeable about the UGSs in Hull and also familiar with the managing structure could be beneficial if a focus group were to be carried out. In addition, the PMs were curious about the results for other UGSs as expressed within the interviews.

Having a platform to connect provides a space for PMs to share their broad perspectives and encourage communal problem solving. Creating a network for managers can also be impactful when transboundary issues need investigating and can be done collaboratively. The managers of different spaces can adopt shared approaches for communities of species that migrate between local spaces manages by different organisation. This would also apply to community-related issues. Networks can also facilitate engagement with UGS researchers and the adoption of research-based management. The connection can create a two-way communication with a community in assessing how measures can be applied. This can be incorporated through providing information of what data is needed by PMs, delivering skills trainings, and sharing of contemporary research.

## References

- Adinolfi, C., Suárez-Cáceres, G. and Cariñanos, P., 2014. Relation between visitors' behaviour and characteristics of green spaces in the city of Granada, south-eastern Spain. *Urban Forestry & Urban Greening*, 13(3), pp.534-542.
- Alcock, I., White, M. P., Pahl, S., Duarte-Davidson, R. and Fleming, L. E. (2020) Associations between pro-environmental behaviour and neighbourhood nature, nature visit frequency and nature appreciation: Evidence from a nationally representative survey in England. *Environmental International*, 136, 105441.
- Arneberger, A. and Eder, R. (2012) The influence of green space on community attachment of urban and suburban residents. *Urban Forestry & Urban Greening*, 11(1), pp.41-49.
- Aronson, M., Lepczyk, C., Evans, K., Goddard, M., Lerman, S., MacIvor, J., Nilon, C. and Vargo, T., 2017. Biodiversity in the city: key challenges for urban green space management. *Frontiers in Ecology and the Environment*, 15(4), pp.189-196.
- Banaszak-Cibicka, W., Twerd, L., Fliszkiewicz, M., Giejdasz, K. and Langowska, A., 2018. City parks vs. natural areas - is it possible to preserve a natural level of bee richness and abundance in a city park?. *Urban Ecosystems*, 21(4), pp.599-613.
- Barton, J. and Rogerson, M. (2017) The importance of greenspace for mental health. *PJPsychInternational*, 14(4), 79-81.
- BBC Humberside (2008) *Coast Walk – Point 1: Queen's Gardens*. Available online: [http://www.bbc.co.uk/humber/content/articles/2005/06/20/coast05walks\\_stage1.shtml](http://www.bbc.co.uk/humber/content/articles/2005/06/20/coast05walks_stage1.shtml) [Accessed 09/03/2020].
- BBC News (2017) *'Giant cheese grater' sculpture installed in Hull park*. Available online: <https://www.bbc.co.uk/news/uk-england-humber-40934421> [Accessed 07/03/2020].
- Belmeziti, A., Cherqui, F. and Kaufmann, B. (2018). Improving the multi-functionality of urban green spaces: Relations between components of green spaces and urban services. *Sustainable Cities and Society*, 43, pp.1-10.
- Benedict, M. and McMahon, E. (2006). *Green Infrastructure: Linking Landscapes and Communities*. United States: Island Press, p.1.
- Bratman, G. N., Hamilton, J. P., Hahn, K. S., Daily, G. C. and Gross, J.J. (2015) Nature experience reduces rumination and subgenual prefrontal cortex activation. *PNAS*, 112(28), 8567-85732.
- Burkman, C. and Gardiner, M., 2014. Urban greenspace composition and landscape context influence natural enemy community composition and function. *Biological Control*, 75, pp.58-67.
- Cambridge Dictionary (2020) *Behaviourist*. Available online: <https://dictionary.cambridge.org/dictionary/english/behaviourist> [Accessed 10/01/2020].
- Countryside Access (CAT), Haycock and Jay Associates (2013) *Humber Bridge Country Park – Local Nature Reserve Management Plan 2013-2023 SUMMARY*. East Riding of Yorkshire Council.

- Crang, M. (2005) (eds) Flowerdew, R. and Martin, D. *Methods in Human Geography: A guide for students doing a research project*. 2<sup>nd</sup> edition. Malaysia: Pearson Education Limited (England).
- Dai, D. (2011) Racial/ethnic and socioeconomic disparities in urban green space accessibility: Where to intervene? *Landscape and Urban Planning*, 102(4). 234-244.
- Dennis, M. and James, P. (2016) Site-specific factors in the production of local urban ecosystem services: a case study of community-managed green space. *Ecosystem Services*, 17, 208-216.
- Dillon, D. R., O'Brien, D. G. and Heilman, E. E. (2000) Literacy research in the next millennium: From paradigms to pragmatism and practicality. *Reading Research Quarterly*, 35, 10–26.
- Dzhambov, A. and Dimitrova, D. (2015). Green spaces and environmental noise perception. *Urban Forestry & Urban Greening*, 14(4), pp.1000-1008.
- East Riding of Yorkshire Council (ERYC) (2011) *Humber Bridge Country Park*. Available online: [https://eastridingcoastandcountryside.co.uk/find-a-place/?place\\_type=Nature%20Reserve](https://eastridingcoastandcountryside.co.uk/find-a-place/?place_type=Nature%20Reserve) [Accessed 17/03/2020].
- Easton, M. (2017) *BBC News – How much of your area is built on?*. Available online: <https://www.bbc.co.uk/news/uk-41901294> [Accessed 06/10/2020].
- Ekkel, E. D. and de Vries, S. (2017) Nearby green space and human health: evaluating accessibility metrics. *Landscape and Urban Planning*, 157, 214-220.
- Elizabeth Orsega-Smith, Andrew J. Mowen, Laura L. Payne & Geoffrey Godbey (2004) The Interaction of Stress and Park Use on Psycho-physiological Health in Older Adults. *Journal of Leisure Research*, 36(2), pp.232-256.
- Elmqvist, T., Setälä, H., Handel, S., van der Ploeg, S., Aronson, J., Blignaut, J., Gómez-Baggethun, E., Nowak, D., Kronenberg, J. and de Groot, R. (2015). Benefits of restoring ecosystem services in urban areas. *Current Opinion in Environmental Sustainability*, 14, pp.101-108.
- Eriksson, P. and Kovalainen, A. (2008) Ethnographic Research. *Qualitative Methods in Business Research*, 149-163.
- Erlingsson, C. and Brysiewicz, P. (2017) A hands-on guide to doing content analysis. *African Journal of Emergency Medicine*, 7(3), 93-99.
- ERYC (2020) *Major heritage project about to start in the Humber Bridge Country Park – Quarry to Country Park*. Available online: <https://www.eastriding.gov.uk/say/features/major-heritage-project-about-to-start-in-the-humber-bridge-country-park-quarry-to-country-park/> [Accessed 21/03/2020].
- Fan, P., Xu, L., Yue, W. and Chen, J. (2017). Accessibility of public urban green space in an urban periphery: The case of Shanghai. *Landscape and Urban Planning*, 165, pp.177-192.
- Farrugia, S., Hudson, M. and McCulloch, L. (2013). An evaluation of flood control and urban cooling ecosystem services delivered by urban green infrastructure. *International Journal of Biodiversity Science, Ecosystem Services & Management*, 9(2), pp. 136-145.

Feilzer, M. Y. (2009) Doing mixed methods research pragmatically: implications for the rediscovery or pragmatism as a research paradigm. *Journal of Mixed Methods Research*, 4(1), 6-16.

Fields In Trust (2020) *Champion: The ten-minute walk and why it's important*. Available online: <http://www.fieldsintrust.org/News/the-ten-minute-walk-and-why-its-important> [Accessed 07/08/2020].

Fongar, C., Randrup, T. B., Winstrom, B. and Solfjed, I. (2019) Public urban green space management in Norwegian municipalities: a manager's perspective on place-keeping. *Urban Forestry & Urban Greening*, 44.

Forman, R., 2016. *Urban Ecology*. Cambridge: Cambridge University Press, p.6.

Friends of Humber Bridge Country Park (2020) *Friends of the Humber Bridge Country Park*. Available online: <https://sites.google.com/site/fohbcpr/> [Accessed 21/03/2020].

Friends of Pearson Park (2018) *History of Pearson Park*. Available online: [http://www.friendsofpearsonpark.co.uk/?History\\_of\\_Pearson\\_Park](http://www.friendsofpearsonpark.co.uk/?History_of_Pearson_Park) [Accessed 04/01/2020].

Get mapping (2020) *Kingston upon Hull*. 1:75 000. EDINA Digimap (OS Strategi). Created online: <https://digimap.edina.ac.uk/> [Created 22/01/2020].

Gidlow, J. C. and Ellis, N. J. (2011) Neighbourhood green space in deprived urban communities: issues and barriers to use. *The International Journal of Justice and Sustainability*, 16(10).

Goddard, M., Dougill, A. and Benton, T. (2010). Scaling up from gardens: biodiversity conservation in urban environments. *Trends in Ecology & Evolution*, 25(2), pp.90-98.

Green Flag Award (2020) *What is the Green Flag Award*. Available online: <http://www.greenflagaward.org.uk/about-us/> [Accessed 10/03/2020].

Guest, G., Namey, E. E. & Mitchell, M. L. (2013) Chapter 3 | Participant Observation. *Collecting Qualitative Data: A Field Manual for Applied Research*. Available online: <https://methods.sagepub.com/book/collecting-qualitative-data/i409.xml> [Accessed 10/01/2020].

Historic England (2020) *East Park, Hull*. Available online: <https://historicengland.org.uk/listing/the-list/list-entry/1001519> [Accessed 10/03/2020].

Hoffmann, E., Barros, H. and Ribeiro, A. I. (2017) Socioeconomic inequalities in green space quality and accessibility – evidence from a southern European city. *Environmental Research and Public Health*, 14(8), 916.

Hsieh, H. and Shannon, S.E. (2005) Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277-1288.

Hughes, J., Taylor, E. and Juniper, T. (2018) *Living Cities: towards ecological urbanism*. Scottish Wildlife Trust. Edinburgh.

Hull City council (2015) *Avenues and Pearson Park Conservation Area Character Appraisals*. Hull: Hull City Council. Available Online:



[http://www.hullcc.gov.uk/pls/portal/docs/PAGE/HOME/PLANNING/CONSERVATION/CONSERVATION%20AREAS/AVENUESANDPEARSONPARKAPPRAISAL\\_JULY2015.PDF](http://www.hullcc.gov.uk/pls/portal/docs/PAGE/HOME/PLANNING/CONSERVATION/CONSERVATION%20AREAS/AVENUESANDPEARSONPARKAPPRAISAL_JULY2015.PDF) [Accessed 12/05/2020].

Hull City Council (2017) *Hull City Council Open Space Strategy: Draft for Consultation*. Hull: Hull City Council. Available online: <http://www.hull.gov.uk/council-and-democracy/policies-and-plans/draft-open-space-strategy-2017> [Accessed 19/04/2019].

Hull City Council (2017a) *Press release – East Park award*. Available online: <http://www.hullcc.gov.uk/api/pressrelease.php?id=660> [Accessed 08/03/2020].

Hull City Council (2020a) *Hull City Plan – Pearson Park*. Available online: <https://cityplanhull.co.uk/index.php/pearson-park/> [Accessed 04/01/2020].

Hull City Council (2020b) *HullCCNews – Huge Pearson Park restoration to be celebrated in summer*. Available online: <https://www.hullccnews.co.uk/11/02/2020/huge-pearson-park-restoration-to-be-celebrated-in-summer/> [Accessed 05/05/2020].

Hull Culture and Leisure (2020) *Pearson Park*. Available online: <https://www.hcandl.co.uk/sport-and-leisure-and-parks/your-local-park/pearson-park> [Accessed 03/01/2020].

Hull Culture and Leisure (2020a) *East Park*. Available online: <https://www.hcandl.co.uk/sport-and-leisure-and-parks/your-local-park/east-park> [Accessed 10/03/2020].

Hull Data Observatory (2020) *Population Overview (Hull)*. Available online: [http://109.228.11.121/IAS\\_Live/profiles/profile?profileId=1](http://109.228.11.121/IAS_Live/profiles/profile?profileId=1) [Accessed 02/03/2019].

Hull Data Observatory (2020a) *Deprivation Overview (Hull)*. Available online: [http://109.228.11.121/IAS\\_Live/profiles/profile?profileId=7](http://109.228.11.121/IAS_Live/profiles/profile?profileId=7) [Accessed 02/03/2019].

Humber Bridge (2020) *Hidden Histories*. Available online: <https://www.humberbridge.co.uk/humberbridge/hidden-histories/> [Accessed 19/03/2020].

Jennings, V. and Bamkole, O., 2019. The Relationship between Social Cohesion and Urban Green Space: An Avenue for Health Promotion. *International Journal of Environmental Research and Public Health*, 16(3), p.452.

Kabisch, N., Strohbach, M., Haase, D. and Kronenberg, J. (2016). Urban green space availability in European cities. *Ecological Indicators*, 70, pp.586-596.

Kaplan, S. (1995). The restorative benefits of nature: Toward an integrative framework. *Journal of Environmental Psychology*, 15(3), pp.169-182.

Kaushik, V. and Walsh, C. (2019) Pragmatism as a research paradigm and its implications for social work research. *MDPI Social Sciences*, 8, 255.

Kaźmierczak, A. (2013) The contribution of local parks to neighbourhood social ties. *Landscape and Urban Planning*, 109(1), 31-44.

- Koprowska, K., Łaskiewicz, E., Kronenberg, J. and Marcińczak, S. (2018). Subjective perception of noise exposure in relation to urban green space availability. *Urban Forestry & Urban Greening*, 31, pp.93-102.
- Krasny, M., Russ, A., Tidball, K. G. and Elmqvist, T. (2014) Civic ecology practices: participatory approaches to generating and measuring ecosystem services in cities. *Ecosystem Services*, 7, 177-186.
- Lachowycz, K., Jones, A. P., Page, A. S., Wheeler, B. W. and Cooper, A. R. (2012) What can global positioning systems tell us about the contribution of different types of urban greenspace to children's physical activity?. *Health & Place*, 18(3), 586-594.
- Li, Z., Wei, H., Wu, Y., Su, S., W, W. and Qu, C. (2019) Impact of community deprivation on urban park access over time: understanding the relative role of contributors for urban planning. *Habitat International*, 92.
- Loughran, K. (2018) Urban parks and urban problems: an historical perspective on green space development as a cultural fix. *Urban Studies*, 57(11), 2321-2338.
- Lovett, A. A. (2005) (eds) Flowerdew, R. and Martin, D. *Methods in Human Geography: A guide for students doing a research project*. 2<sup>nd</sup> edition. Malaysia: Pearson Education Limited (England).
- MacQueen, K. M., McLellan, E., Metzger, D. S., Kegeles, S., Strauss, R. P., Scotti, R., Blanchard, L. and Trotter, R. T. II (2001) What is community? An evidence-based definition for participatory public health. *Am J Public Health*, 91(12), 1929-1938.
- Manohar, N., Liamputtong, P., Bhole, S., and Arora, A., 2017. Researcher positionality in cross-cultural and sensitive research. In Liamputtong, P. (ed) *Handbook of Research Methods in Health Social Sciences*. Singapore: Springer, pp. 1-15.
- Marshall, K., White, R. and Fischer, A. (2007) Conflicts between humans over wildlife management: on the diversity of stakeholder attitudes and implications for conflict management. *Biodiversity and Conservation*, 16, 3129-3146.
- Masoudi, M. and Tan, P. (2019). Multi-year comparison of the effects of spatial pattern of urban green spaces on urban land surface temperature. *Landscape and Urban Planning*, 184, pp.44-58.
- Matos, P., Vieira, J., Rocha, B., Branquinho, C. and Pinho, P. (2019). Modeling the provision of air-quality regulation ecosystem service provided by urban green spaces using lichens as ecological indicators. *Science of The Total Environment*, 665, pp.521-530.
- Mattijssen, T. J. M., van der Jagt, A. P. N., Buijs, A. E., Elands, B. H. M., Erlewein, S. and Laforteza, R. (2017) The long-term prospects of citizens managing urban green space: from place making to place-keeping?. *Urban Forestry & Urban Greening*, 26, 78-84.
- Messmer, T. A. (2000) The emergence of human-wildlife conflict management: turning challenges into opportunities. *International Biodeterioration & Biodegradation*, 45(3-4), 97-102.

Mexia, T., Vieira, J., Príncipe, A., Anjos, A., Silva, P., Lopes, N., Freitas, C., Santos-Reis, M., Correia, O., Branquinho, C. and Pinho, P. (2018). Ecosystem services: Urban parks under a magnifying glass. *Environmental Research*, 160, pp.469-478.

Ministry of Housing, Communities & Local Government (2019) The English Indices of Deprivation 2019 (IoD 2019) – Statistical Release: Main findings. *National Statistics: English indices of deprivation 2019*. Available online: [English indices of deprivation 2019 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/statistics/english-indices-of-deprivation-2019) [Accessed 08/06/21].

Moon, K. and Blackman, D. (2014) Review - A guide to understanding social science research for natural scientists. *Conservation Biology*.

Morgan, D. (2014) *Integrating Qualitative and Quantitative Methods: A Pragmatic Approach*.

Moseley, D., Marzano, M, Chetcuti, J. and Watts, K. (2013) Green networks for people: application of a functional approach to support the planning and management of greenspace. *Landscape and Urban Planning*, 116, pp. 1-12.

Mulgan, G. (2010) *Measuring social value*. Available online: [https://ssir.org/articles/entry/measuring\\_social\\_value#:~:text=A%20second%20reason%20that%20measuring,but%20also%20about%20social%20values](https://ssir.org/articles/entry/measuring_social_value#:~:text=A%20second%20reason%20that%20measuring,but%20also%20about%20social%20values) [Accessed 15/09/2020].

Natural England (2011) Providing Accessible Natural Greenspace in Towns and Cities. *English Nature Research Report*. No. 153 (ENRR526). Available online: <http://publications.naturalengland.org.uk/publication/65021> [Accessed 08/08/2020].

Natural England (2015) *Guidance – Great crested newts: protection and licences*. Available online: <https://www.gov.uk/guidance/great-crested-newts-protection-surveys-and-licences> [Accessed 19/03/2020].

Natural England (2020) *Local Nature Reserves (England)*. Available online: <https://data.gov.uk/dataset/acdf4a9e-a115-41fb-bbe9-603c819aa7f7/local-nature-reserves-england> [Accessed 19/03/2020].

Natural Resources Wales (2020) *Regionally Important Geological and Geomorphological sites (RIGS)*. Available online: <https://data.gov.uk/dataset/8aafe661-c368-4135-9be1-0423b6366bab/regionally-important-geological-and-geomorphological-sites-rigs> [Accessed 17/03/2020].

Newing, H. (2011) *Conducting Research in Conservation: A Social Science Perspective* [eBook]. Taylor & Francis.

Nordh, H. and Østby, K., 2013. Pocket parks for people – A study of park design and use. *Urban Forestry & Urban Greening*, 12(1), pp.12-17.

Nordh, H., Hagerhall, C. and Holmqvist, K., 2013. Tracking Restorative Components: Patterns in Eye Movements as a Consequence of a Restorative Rating Task. *Landscape Research*, 38(1), pp.101-116.

Nowell, L. S., Norris, J. M., White, D. E. & Moules, N. J. (2017) Thematic analysis: striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, 16(1).

- Parksandgardens.org (2001) *Pearson Park 2580*. Available online: <https://www.parksandgardens.org/places/pearson-park> [Accessed 10/01/2020].
- Peters, K., Elands, B. and Buijs, A., 2010. Social interactions in urban parks: Stimulating social cohesion?. *Urban Forestry & Urban Greening*, 9(2), pp.93-100.
- Poelman, H. (2016) *A walk to the park? Assessing access to green areas in Europe's cities*. European Commission. Available online: [https://ec.europa.eu/regional\\_policy/sources/docgener/work/2016\\_03\\_green\\_urban\\_area.pdf](https://ec.europa.eu/regional_policy/sources/docgener/work/2016_03_green_urban_area.pdf) [Accessed 07/09/2020].
- Pride in Hull (2020) *About us*. Available online: <https://prideinhull.co.uk/about/> [Accessed 07/03/2020].
- Randrup, T. B. and Persson, B. (2009) Public green spaces in the Nordic countries: development of a new strategic management regime. *Urban Forestry & Urban Greening*, 8(1), 31-40.
- Redpath, S. M., Young, J., Evely, A., Adams, W. M., Sutherland, W. J., Whitehouse, A., Amar, A., Lambert, R. A., Linnell, J. D. C., Watt, A. and Gutierrez, R. J. (2013) Understanding and managing conservation conflicts. *Trends in Ecology & Evolution*, 28(2), 100-109.
- Richardson, E. A., Pearce, J., Mitchell, R. and Kingham, S. (2013) Role of physical activity in the relationship between urban green space and health. *Public Health*, 127(4), 318-324.
- Roe, J. J., Aspinall, P. A. and Thompson, C. W. (2017) Coping with stress in deprived urban neighbourhoods: What is the Role of Green Space According to Life Stage. *Frontiers in Psychology*.
- SAGE (2006) Exploratory Research. In Jupp, V. (ed) *The SAGE Dictionary of Social Research Methods*. Available online: <https://methods.sagepub.com/reference/the-sage-dictionary-of-social-research-methods/n75.xml> [Accessed 10/01/2020].
- SAGE (2010) Triangulation. In Salkind, N. J. (ed) *Encyclopedia of Research Design*. Available online: <https://methods.sagepub.com/reference/encyc-of-research-design/n469.xml> [Accessed 9/01/2020].
- Sandström, U., Angelstam, P. and Mikusiński, G., 2006. Ecological diversity of birds in relation to the structure of urban green space. *Landscape and Urban Planning*, 77(1-2), pp.39-53.
- Shaw, M. (2017) *Zachariah Charles Pearson*. Available online: <http://www.hullhistorycentre.org.uk/research/research-guides/zachariah-pearson.aspx> [Accessed 04/01/2020].
- Smith, L., Broyles, M., Larzleer, H. and Fellowes, M., 2014. Adding ecological value to the urban lawnscape. Insect abundance and diversity in grass-free lawns. *Biodiversity and Conservation*, 24(1), pp.47-62.
- Spencer, E.A and Mahtani, K. (2017) Hawthorne bias. *Catalogue of Bias*. Available online: <https://catalogofbias.org/biases/hawthorne-effect/> [Accessed 12/01/2020].
- Sturm, R. and Cohen, D., 2014. Proximity to urban parks and mental health. *The Journal of Mental Health Policy and Economics*, 17(1), pp.19-24.

- Tamosiunas, A., Grazuleviciene, R., Luksiene, D., Dedele, A., Reflaitiene, R., Baceviciene, Vencloviene, J., Bernotiene, G., Radisauska, R., Malinauskiene, V., Milinaviciene, E., Bobak, M., Peasey, A. and Niuwhenhuijsej, L. (2014) Accessibility and use of urban green spaces, and cardiovascular health: finding from a Kaunas cohort study. *Environmental Health*.
- Tashakkori, A. and Teddlie, C. (1998) Mixed Methodology: Combining Qualitative and Quantitative Approaches. *Applied Social Research Series*, 46.
- Taylor, L. and Hochuli, D. (2017). Defining greenspace: Multiple uses across multiple disciplines. *Landscape and Urban Planning*, 158, pp.25-38.
- Thompson, C. W., Roe, J., Aspinall, P., Mitchel, R., Clow, A. and Miller, D. (2012) More green space is linked to less stress in deprived communities: evidence from salivary cortisol patterns. *Landscape and Urban Planning*. 105(3). 221-229.
- Torabi, N., Lindsay, J., Smith, J., Khor, L. and Sainsbury, O., 2020. Widening the lens: Understanding urban parks as a network. *Cities*, 98, p.102527.
- Uno, S., Cotton, J. and Philpott, S., 2010. Diversity, abundance, and species composition of ants in urban green spaces. *Urban Ecosystems*, 13(4), pp.425-441.
- van den Berg, M., Wendel-Vos, W., van Poppel, M., Kemper, H., van Mechelen, W. and Maas, J. (2015). Health benefits of green spaces in the living environment: A systematic review of epidemiological studies. *Urban Forestry & Urban Greening*, 14(4), pp.806-816.
- Visit Hull (2020) *Queen's Gardens*. Available online: <https://www.visithull.org/venue/queens-gardens/> [Accessed 07/03/2020].
- Visit Hull (2020a) *East Park*. Available online: <https://www.visithull.org/venue/east-park-3/> [Accessed 08/03/2020].
- Visit Hull and East Yorkshire (2020) *East Park*. Available online: <https://www.visithullandeastyorkshire.com/Hull-East-Park-Hull/details/?dms=3&venue=2171202> [Accessed 10/03/2020].
- Walker, C. (2004) The public value of urban parks. *Beyond Recreation: A broader View of Urban Parks*. The Urban Institute and The Wallace Foundation.
- White, M., Alcock, I., Grellier, J., Wheeler, B., Hartig, T., Warber, S., Bone, A., Depledge, M. and Fleming, L. (2019). Spending at least 120 minutes a week in nature is associated with good health and wellbeing. *Scientific Reports*, 9(1).
- Wilson, C. (2014) Chapter 2 – Semi-structure interviews. *Interview Techniques for UX Practitioners: A User-Centered Design Method*, 23-41.
- Wolch, J., Byrne, J. and Newell, J. (2014). Urban green space, public health, and environmental justice: The challenge of making cities 'just green enough'. *Landscape and Urban Planning*, 125, pp.234-244.

Wood, L. and Bull, F., 2017. Public green spaces and positive mental health – investigating the relationship between access, quantity and types of parks and mental wellbeing. *Health & Place*, 48, pp.63-71.

World Health Organisation (WHO) (2017). *Urban green spaces: a brief for action*. Denmark: World Health Organization (WHO) Regional Office for Europe, p.2. Available at: [http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0010/342289/Urban-Green-Spaces\\_EN\\_WHO\\_web3.pdf?ua=1](http://www.euro.who.int/__data/assets/pdf_file/0010/342289/Urban-Green-Spaces_EN_WHO_web3.pdf?ua=1) [Accessed 7 Jan. 2020].

Yorkshire Wildlife Trust (YWT) (2020) *Pearson Park Wildlife Garden*. Available online: <https://www.ywt.org.uk/nature-reserves/pearson-park-wildlife-garden> [Accessed 09/03/2020].

Young, A. (2019) *Queens Gardens WILL get stunning £4.3.m facelift as council approves plans*. Available online: <https://www.hulldailymail.co.uk/news/hull-east-yorkshire-news/queens-gardens-facelift-council-plans-3119820> [Accessed 07/03/2020].

Zhang, W., Yang, J., Ma, L. and Huang, C. (2015). Factors affecting the use of urban green spaces for physical activities: Views of young urban residents in Beijing. *Urban Forestry & Urban Greening*, 14(4), pp.851-857.

Appendix I – Images from Observation

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All pictures were taken in the period of data collection (Summer 2019) by the researcher. No pictures were taken for the Queen’s Gardens.

**Pearson Park (PP)**



View of the pond area



An example of fly-tipping by food (scattered bread) – observation was confirmed by PM who mentioned that a person had been concealing motive of throwing away food waste inappropriately by ‘feeding the ducks’





A signage posted in front of the playground where they get high footfall



Observed elder couple consuming ice creams bought from the on-site shop whilst to be appear relaxing



One of the posters informing the progress of the renovation



Pearson Park Wildlife Garden (PPWG)



A sign post on the intersection



Hopscotch drawn near entrance – PM mentioned that it has successfully encouraged children to enter the site and play with it



An example of path within the site reflecting the less-formal management approach



Picnic bench beside the Ampitheatre



East Park (EP)



View of the large waterbody



Popular spot for visitors to feed the ducks in which also has been deliberately designated by the managers



Signage placed on small bridge railings



Free-ranging peacock in the bird greenhouse that is located within the Animal Education Centre



## Humber Bridge Country Park (HBCP)



Information board in front of the entrances



One of the picnic benches available with barbecue stand beside



View of the Humber Bridge from the open grass area



View of the big pond

## Appendix II – Additional Resources (See separate files)

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Interview transcriptions and brief interim report of each UGS are only available upon request. Please email to **nadirahendarta@yahoo.com** if you want to discuss about gaining access to the files.

Below is the list of the available online resources that can be accessed, see separate files to access each document:

- Field observation notes (collated)
- Field observation data (collated)
- Codebook (generated from Nvivo)
- Layout of brief of interim report for park managers after the first interview and finished observation period

## Impact of Disturbance by Visitors in the Humber Bridge Country Park (HBCP)

**Methods:** Observation of the visitors and short survey about the visitors’ perception of the Park, to find out what kind of disturbances that are inflicting by the visitors towards the environment, the impacts, and if there is any solution for the issues observed.

### Results - Observation

- Investigating what people do and how they behave, focusing on activities that have impact on the environment (both positive and negative).
- 48 visitors were observed.

Table 1. Behaviours observed at the Bird Sanctuary and pond areas.

Type of behaviour	Bird Sanctuary	Pond Areas
<b>Positive</b>	Filling the bird feeder, behavioural correction from the parents, interest in wildlife (appreciation expressed verbally and physically).	Children interaction with the environment (in a more educational way), people sightseeing.
<b>Negative</b>	Noise disturbance by children, destructive behaviour; shouting, beating by sticks, picking out branches or sticks from the branch fence. Most disturbed area occurred 1 to 3 meters in radius from the inner part of the Sanctuary.	Interaction with the pond (in a more destructive way) – throwing things such as rocks, sticks, ball into the pond, going into the pond to retrieve the item thrown. Disturbance by dogs, most adults seemed uninterested. Flooded pond areas increased the interaction between visitor and the water.

Table 2. Observation notes

Time	Visitors				Observation note
	Adults	Children	Teenagers	Dogwalkers	
16.45 – 17.00	8	8	4	3	Path is completely submerged with water, but the dogs went through. From the outfits the walkers were wearing, they seemed like they knew it would rain, they weren’t deterred. Could be fixed by a drainage system. Children are more interested in exploring and are imaginative. Water issues could be due to disturbance in water table.
17.14 – 17.30	17	4	2	2	Water issues causes fragmentation issues. Due to water issues, people are changing habitats by choosing alternative pathways could be because of extended habitat. Children seemed to be curious, but adults weren’t interested.



## Results – Short Survey

- 9 people answered the survey, with the age range of 18-41.
- Main purpose of visiting: relaxing walk, walking the dog, others.
- Most of the people rarely visit the Country Park.
- The disturbance in the HBCP that they are aware of includes littering and destructive activity.



Fig 1. Whether the visitors know that it is a Local Nature Reserve (LNR)?

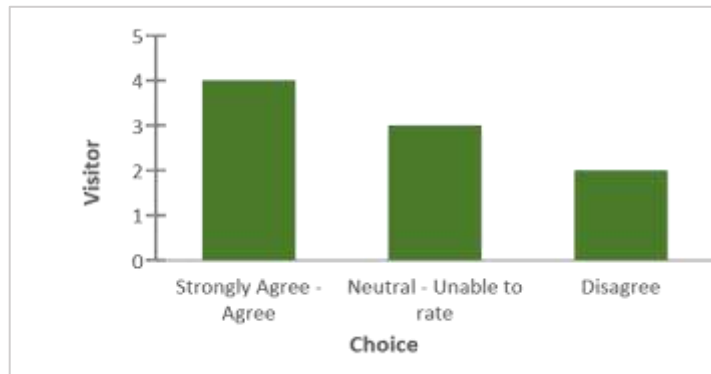


Fig 2. The visitor's view has changed after knowing it is a Local Nature Reserve (LNR).

## Impacts of the Behaviours

### **Covering wildlife habitats (including Bird's Sanctuary and the large pond)**

#### **1. Bird's Sanctuary:**

(-) Minimal damage from unattended children messing around the seeds on the bird trays, and from visitors trampling the fences.

(+) Attended children and attentive parental figure(s) resulted in child observing the birds and the habitat.

#### **2. Change in people's perception:**

(-) Visitors 'copycat' behaviour – following other people's action although it is not necessarily positive; e.g. trampling, getting into the pond.

(+) Gain an understanding about the environment; e.g. less or no damage done by children when parental figures explain about the importance of wildlife and its habitats.

#### **3. Pond's wildlife:**

(-) Disturbed ecosystem within the pond from visitors throwing sticks or stones, and from dogs coming into the pond.

(+) Undisturbed ecosystem.

#### **4. Disturbance in the adjacent area**

## Possible solutions

- **More signs** – containing information about the condition of the environment; emphasising on the importance of respecting nature.
- **'No people' area** – area temporarily fenced to enable wildlife to thrive.
- **Instigate a passive activity for people to do collectively** – e.g. build something by laying sticks.
- **Update target and aim** – or have a special target that differs from each year; it will be announced to the public; this might increase the interest to participate in events and also attracts different communities.
- **Others:** Fencing, lake assessment, Dog Control Order, All Age Learning Centre

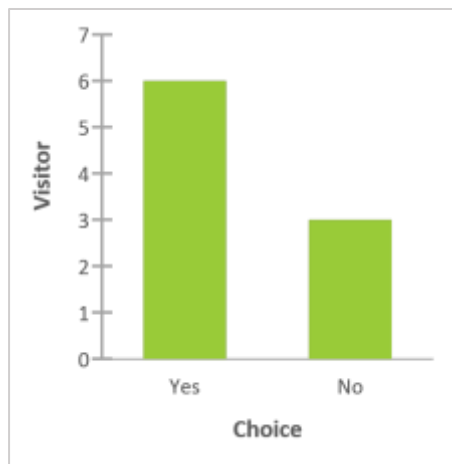


Fig 3. Would it be beneficial to have an 'All Age Learning Centre'?

## Limitation

- Time constraint
- Requires more resource (people)
- Travel distance
- Visitors tend not like to be approached for surveys
- Observation aim to generalised

## Conclusion

- Increasing public participation could be a way in educating the public to be more respectful towards the wildlife.
- Parents' engagement plans an important role in controlling their children in how they would behave.
- Some visitors seemed to not be interested in learning about the wildlife.
- If disturbance persist without any correction, the impact could be long-term, in which can create change in the visitor's behaviour.

Further research and long-term monitoring are needed.



**CONSENT FORM FOR 'UNIFYING THE ENVIRONMENTAL AND ANTHROPOLOGICAL VALUES OF HULL'S URBAN GREEN SPACES' PROJECT'**

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I, \_\_\_\_\_

**Hereby agree** to participate in this project '*Unifying the environmental and human-wellbeing values of Hull's urban green spaces*'.

**Project Outline**

Green space is vital for human wellbeing, but also provides significant reservoirs for species embattled by the impacts of urbanisation and agricultural intensification. There is conflict between these two values of urban green space, the extent of which is determined by the way that people use the green space and the way that space is managed.

The project will investigate people's use and the park managers' perception of urban green space across a range of public parks across Hull. Methodology will involve observation of behaviour of park users without collection of any personal data and interview with the green space managers for their priorities and challenges in creating and managing these spaces. The project aims to provide practical solutions to mediate the conflict between the environmental and anthropological benefits of urban green space.

**I understand that**

1. All data will therefore be anonymous and is not associated with any identifying information.
2. Any information that I provide will not be made public in any form that could reveal my identity to an outside party i.e. that I will remain fully anonymous.
3. Aggregated results will be used for research purposes and may be reported in academic journals and presented at symposia and conferences.
4. Individual results **will not** be released to any person except at my request and on my authorization.
5. That I cannot withdraw from the study once I have submitted my survey because all information is provided anonymously.
6. Responses to questions will be audio-recorded and stored electronically.

Signature:

Date:

The contact details of the primary researcher are: Dr Dominic Henri, Hardy Building, School of Environmental Sciences, University of Hull, HU6 7RX. [D.henri@hull.ac.uk](mailto:D.henri@hull.ac.uk)

*This appendix section was created in response to one of the questions from the feedback given by the researcher's research examiners.*

**Question:**  
**Were the parks chosen first or the managers?**  
**How did you get in touch with them?**

**Both – in the choosing process, parks and managers were taken into consideration.** Initially, there were 10 green spaces chosen but was short-listed to 5. The process of elimination involved:

- the journey's time (to get to the location),
- the transportation needed,
- how 'safe' is the location based on the researcher's and the researcher's supervisor knowledge,
- the differing characteristics and management, and
- how easy to contact the managers and receiving permission to observe the parks.

In general, these 5 spaces were chosen because the researcher received a response and permission from the managers.

The Humber Bridge Country Park and Yorkshire Wildlife Park were among the first locations chosen. Next were Pearson Park and East Park (they were under the same management), and lastly was the Queen's Gardens.

**Humber Bridge Country Park (HBCP)**

The Humber Bridge Country Park was chosen first because of the good affiliation with the manager. The researcher and supervisors had worked together previously with the same park manager for the researcher's third year's undergraduate project. When the researcher started planning for this MSc project, it was a mutual agreement between the researcher and the supervisors to work together again with the same park manager because of the positive collaboration based on the previous project. The park manager was very helpful and open to any feedback in improving the space. Hence the HBCP was the first definite choice.

**Pearson Park Wildlife Garden (PPWG)**

The researcher acquired an email of a park manager (from PPWG) from attending a stand for Yorkshire Wildlife Trust in the University of Hull's career's fair. The researcher contacted the given address and organised a meeting on the location. Not until the researcher attended the meeting with the managers to found out that PPWG and Pearson Park are two separate

locations and are managed under different bodies. Although the PPWG does not get as much as footfall as Pearson Park, the researcher decided to include the space as part of the research subject because of the contrasting condition and characteristics between the two (neighbouring parks). Furthermore, comparing the different managing organisations would make an interesting discussion. In addition, the park managers were very enthusiastic in being a part of my research which the researcher really appreciated.

### **Pearson Park (PP) & East Park (EP)**

One of the main reasons that the Pearson Park was chosen because it was near the researcher's accommodation at that time so the researcher was very familiar with the environment. Whilst for East Park, it was mainly because of the characteristics of being the biggest green space in Hull and the only park in Hull that holds a Green Flag Award. The researcher had been to EP only a few times and was intrigued to study the space more.

For both of the locations, the researcher initially found a general email address for Hull Culture & Leisure through online searching. After contacting the address, the researcher was referred to the park manager that agreed to collaborate for the project. The manager explained that multiple locations was under the manager's management. The manager was open to collaborate with the researcher and to discuss both parks in the interviews.

### **Queen's Gardens (QG)**

This location was a tricky one to choose and was more difficult in finding a specific person to contact. The researcher contacted a general email address found online but had no response. Not until the researcher received an email address from the manager of PP and EP. From there, the researcher got hold of a manager with a specified role on the financial side for Hull City Council. A permission to observe was given but was told that the best person to interview was the same manager (for PP and EP). However, this could not work because this manager did not manage Queen's Garden directly. The researcher concluded that it would be best to just observe the space. The researcher decided to choose the space in the end because a permission was already given, and it took a while to get to this point. In addition, the location of the space is right in the middle of city centre which the researcher thought could provide an interesting perspective in compared to the other spaces that is not in the centre.

## Observation Progress

Location	AM	PM	TOTAL
Pearson Park	75 minutes	240 minutes	315 minutes
Pearson Park Wildlife Garden	54 minutes	210 minutes	264 minutes
Queen's Gardens	-	225 minutes	225 minutes
East Park	-	282 minutes	282 minutes
Humber Bridge Country Park	-	225 minutes	225 minutes

Target	AM	PM	TOTAL
Pearson Park	180 minutes	240 minutes	420 minutes
Pearson Park Wildlife Garden	180 minutes	180 minutes	360 minutes
Queen's Gardens	180 minutes	210 minutes	390 minutes
East Park	180 minutes	300 minutes	480 minutes
Humber Bridge Country Park	180 minutes	270 minutes	450 minutes

## Observation Field Notes

**Date and Time:** Saturday, 10<sup>th</sup> August 2019, 10.30 – 11.45 (75 minutes)  
**Location:** Pearson Park – bench overlooking the grass fields, the pond, and the gym, footpaths  
**Temperature:** 22/16 C (scattered rain, very windy)

**Tally:**

- Dog-walker: IIII IIII IIII IIII IIII IIII III
- Runner: IIII
- Cyclist: IIII IIII IIII I
- Walker: IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII III
- Cricket: IIII
- Football: IIII
- Sitting: II
- Playing kite: I
- Mobility scooter user: I
- Gym facility user: II

**Description:**

- Dog-walker: any person(s) that is/are visibly going through the park in any ways (e.g. jogging) with a dog or more than one.
- Runner: appear to be engage in the sporty activity of running or jogging.
- Cyclist/mobility scooter user: using the bike/mobility scooter to get around/through the park.
- Walker: appear to be walking around/through the park.
- Cricket/football: engage in the sporty activity of cricket/football – with apparent equipment (e.g. cricket bat, ball).
- Sitting: taken place either on the grass, bench, etc.
- Playing kite: apparent interaction with kite equipment.
- Gym facility user: being in the area of the gym or using the available equipment on the area provided.

**Field Notes:**

- A boy, supervised by a woman, is playing at the gym facility.
- A woman was walking with a stroller and a dog.
- **10.38:** A lady walking a dog left after playing in the grassy area.
- **10.40:** A man is sitting on a bench, presumably taking photos/selfie judging from how he was holding his phone. **10.46** He hung around with his phone. **10.50:** while drinking something from a can, he approached the child that is playing the kite in the grassy area and helped him in flying it (still doing this until **11.09**).
- Three dog-walkers with a boy that uses the gym.

- 10.48: A man and his poodle have been jogging/walking around the footpaths.
- 10.50: A man, a boy and a dog hanging around in the grassy area.
- 10.50: the boy is still playing kite
- A walker passed the observer while vaping.
- A dogwalker passed with a child.
- 10.53: A man and a girl child playing around the footpath with paper plate.
- A man is playing around the gym area by chasing a boy. 10.58: walking around with a stroller.
- Two older men walking their dog.
- 10.55: Previously observed, the big group are now all playing crickets (it was divided into cricket and football game) and it has now become 9 people now (it was previously 8).
- Two ladies and a teen girl were walking around the grassy area and then joined the big group but looked like they were only observing.
- A man was walking in front of me and smiled at me.
- A cyclist greeted me while he passed in front of me.
- A lady and a child were using the gym.
- A man was sitting on the bench.
- 11:17: A previous runner lady still hangs around the park, probably cooling down.
- A man and child were walking around in front of the pond and the she got into the stroller.
- From the big group: A man and 2 children left.
- A lady was walking pass with a stroller.
- A dog-walker was doing a run
- A man dragging like a wagon, going around picking up litters from each bin in the park.
- A man and a teen were walking by.
- Two adults and a child were walking.
- 11:06: Two women, a teen and a child were walking.
- Two dogwalkers interacted with another previous dogwalker.
- A man walked thorough with bike on his side.
- 11:12: The group grew to 10 people, mostly teens and children. 11:13: the previous two ladies and the teen came back with a boy that was playing football (went away from the group). 11:17: The ladies and teen were sitting on the grass while observing the group.
- A man and a boy walking by.
- A man and two kids were playing a kite on the grass area.
- A running lady is using the gym facility.
- Two adults walking by with a stroller.
- Three dogwalkers interacted with each other.
- A previous man that was hanging around was joined by another man.
- A lady pasted a piece of paper (it was the rose garden announcement for taking out the rose for the week after) and then two previous dogwalkers interacted with her.
- A runner was going around.
- A man and a child on her bike was going through the paths.
- 11:35: Three adults and two children walked through the park passing the pond, and then one of the child scared the bird away.
- A man was walking with a bike on his side and then interacted with a man that was walking on the grassfield in which he looked like he was in pain as he was clutching his side of abdomen and there was an expression of pain. It appeared that they know each other.
- Three adults and 2 children were walking in front of the pond with pretend strollers.
- 11:38: There are 8 walkers, 2 cyclist, and 2 dogwalkers.
- 11:41: A cyclist took my flask that I accidentally left under my bench.
- Another walker smiled at me while I was leaving.

**Date and Time:** Saturday, 10<sup>th</sup> August 2019, 13.45 – 16.00 (135 minutes)

**Location:** Queen's Gardens – fountain area, grassfields

**Temperature:** 22/16 C (scattered rain, very windy)

**Field Notes:**

There is a food festival currently happening so the area is crowded. Not a lot of people settle (i.e. not sitting down, just passing) as it might be because of the weather – very windy (21C), and might be because that it is the last day of the festival. However, a constant wave of people keep on coming in by every hour (might be because of lunch time).

There are many of children, dog-walkers, elders, and people with visible disabilities (including wheelchair and mobility scooter users).

The function of the park is currently used big event (i.e. food festival – vendors and stalls) and for people to sit down, eat, mobile usage, smoking area.

Children are playing around the fountain area, and also interacting with it. The wind was strong enough to sweep the water away. It also at some point, swept some metal chairs from one of the vendors and the bin. When this happened, people were helping to pick up the chairs and the bin.

Security are all around, constantly circulating the area, same with the litter pickers. The bin liners are constantly changed when it is full. However, there are still rubbish around (e.g. dirty nappy, spilled food – around fountain area).

People, including children, were throwing away their rubbish into the bins provided.

**My interpretation + comments:**

There were many people visiting this space, with different ranges of age. Even though the main purpose of the event is for entertainment and culinary purposes, it was a good incentive for people to visit the local urban green space. People were not only enjoying the food, but also being outside as shown by the interactions, such as the children playing on the grass and around the big fountain. People with special needs were present, which infers that the event and/or the space is accessible or welcoming enough. People might have feel safe as well because of the security guards going around the area.

Facilities that were used on the event were mainly the grass area, benches, and paths. In addition, the bins provided were being used adequately. Based on this, the children might have had a good behaviour example as children were spotted throwing away their rubbish. There were also litter pickers present, which contributed a lot to the cleanliness of the space and might have a positive influence for people to throw away their rubbish on the bin. However, there were only general bins (non for recyclables).

People were not deterred by the strong winds at that day. Positive behaviour was observed when some of the chairs and board stand were flown away by the winds and random people around were helping to get the chairs back. However, the wind might have flown more things beyond observation such as food bits. This could contribute to the increase of pests around the area. There was also still rubbish left behind, such as plastic glasses and used nappy.

Overall, the management team seemed to have thought about the impact of the event on the space. The food festival was not first time held in this area, so the team must have evaluated the impact altogether.

**Date and Time:** Saturday, 17<sup>th</sup> August 2019, 15.00 – 17.00 (120 minutes)

**Location:** Humber Bridge Country Park – pond, woodland

**Temperature:** (warm, slightly windy)

**Field Notes:**

**\*pond – components: pond, bench, BBQ, stone stepping stools, sign**

- 3.00 (sat on bench near the grass): dog owner let dog go into the pond. Another dog just jumped into the pond.
- There are 8 children, they are throwing rocks into the pond, 1 is utilising a big stick as a walking stick. It was given to another younger child.



- A man and a young boy were looking at the pond while the boy was holding a rubber ball.
- A boy played on the stone stepping stools.
- A child on the edge of the pond was on a leash.
- 2 children are looking into the sign accompanied by an adult.
- Previous dogs are still fetching in sticks.
- Children are throwing rocks and sticks into the pond.
- A teen is kicking a plastic bottle on the path.
- A boy then kicked the same plastic bottle. It then disappeared, assuming that it was eventually picked up.
- A dog on the pond was choking.

\*3.10

- The stone stepping stools are being used as bench by the adults.
- 2 juvenile moorhens were swimming around on the pond. At this point, there's less people and no dogs in the pond.
- A pair of man and woman was with a young child. The kid was holding hands with the man, and then was supervised by both when the kid was climbing up the stairs.
- 4 cyclist went through the path; one was doing tricks on the grass.
- A magpie appeared around the bush near the edge of pond (no people on the bench near the bush).

\*3.20

- 5 people around the area; a man and woman came with a child. The kid looked into the board, not sure whether he was able to read already or not. The man was staring into the pond which then called the child to approach the pond. Meanwhile, the woman appeared to be taking photos with her phone. The man was still observing the pond which then called the lady and pointed to something on the pond. (After they left, we found that there are small fishes living in the edge of the pond in which might be the one that the man was observing).
- A boy is throwing rocks with 2 adults cheering him.
- A bird flew out of the bush near the pond.
- 2 men left bench, which then got occupied shortly by appeared to look like a family group.
- The previous girl had a stone that she had previously thrown into the pond but weren't allowed to pick it up.
- There were shouting noise from children/teens from another area, and also loud airplane noise.
- 3 children are throwing rocks.
- 2 young girls are using nets to pick up something from the pond. They then shouted to the ladies (presumably their mothers) if they can touch the water because the dog is in the pond. They appeared to have a bucket, 2 plastic bottles, a net and a shovel.
- The ladies of the previous young girls are sitting on the bench with a dog on a leash sitting beside them.

\*3.40-3.45

- One of the previous girls climbed the hilly area behind the bench where the ladies are sitting, and then the other girl followed in climbing. The ladies looked like that they weren't really concern of the behaviour.
- Group of people with stroller was present.
- There are now 3 juvenile moorhens swimming near the edge, no people near the pond.
- Another dog then came into the pond. It looks like the owners are elders. When they walked away, so did the dog. They then were reading the sign board.
- A girl came with a big stick and left it on the edge of the pond, then previous boy came and picked it up.

\*3.30 (change bench nearer to pond)

- Dragonfly flew in front of us.
- Children with scooter, alongside with teens and adults holding a scooter walked through the area.
- A group of people came; the child picked up a big stick near the pond and rocks, accompanied by men. The men then looked for stones behind the make-shift branch fence. The girl child wanted to pick up a
- A dog went into the pond. It fetched a stick. The owner threw a rock into the middle of the pond but the dog didn't want to fetch it – might be a bit deeper for the dog.

\*3.57 (woodland area near the bird sanctuary)

- 2 people were having a photoshoot session. A lady was lying on her front on top a fallen tree branch while the man was taking pictures with a camera.
- A family consists of a man, a lady a young boy and a dog were walking on the path. The child was still learning how to walk, he kept sitting on the ground and the man had to pick him up. 4.01: the man was

holding the boy and both had a stick on their hands. The man tapped a tree trunk with his stick gently and then the boy followed his move.

\*4.07 – 4.43 (bench on the open grass area near the intersection of the bird sanctuary)

- A young girl playing by stepping onto the puddles on the footpaths.
- A group of 3 ladies with a stroller passed.
- The dogs of 2 different dogwalker groups interacted.

\*4.10

- A group of people with stroller = II
- A group of 2 = IIIII, with a dog = I
- A group of people (<2) = I
- Cyclist = I

\*4.24

- No one on the paths or the grassland.
- Appeared near the bushes on the grassland = female blackbird, magpie, squirrels – all came out to feed on the ground.

\*4.32

- A couple sat on the bench
- A robin appeared on the ground near the bushes. Shortly after, another robin appeared, there were also woodpigeon, squirrel – all under/near the bushes. At this point, nobody was walking on the path.

\*4.48 (bench on the intersection near the 2 main entrances)

- Family = III
- Couple = III
- A group consists of a man, a teen and supervised a child that was trying to go up the steep area.
- A family brought a scooter and a skatingboard.
- A child was reading the sign board.
- A family was walking out of the Park, the man and the child were holding a big walking stick.
- A family was leaving the park until the boy decided to climb on to the top of the hilly steep area. One of the ladies shouted at him to come down after she counted until 3 (and other 'threats', but the boy just sat there. The shouting lady went up there to pick him up, while the rest of the family followed and waited.

**Date and Time:** Sunday, 18<sup>th</sup> August 2019, 16.10 – 17.00 (70 minutes)

**Location:** Pearson Park – footpaths, grassland, Prince Albert statue

**Temperature:**

**Field Notes:**

\*4.10: walked around until the end of the park (near the big gate located). The park was crowded, there was 2 kids on the tree at the end part of the park, quite isolated. They were just chatting. People were walking around using the paths and cycling. An elder was on the path with the scooter.

\*4.20 (prince albert statue):

- unattended children walking, playing and cycling around the park.
- the 2 boys on the tree were walking home (previously observed).
- there were about 5 different group of people on the grass.
- few elders (about 3) were observed, one of them was a grandma holding onto the wheelchair while holding onto the grandpa as well as being held by a man, walking around the park slowly.
- 2 kids on a bike doing a frontie.
- several cyclists observed.
- about fifty-fifty the number of dogs on leash and not.

\*4.30

- 2 adults and a kid on toy motorcycle
- 2 ladies taking pictures
- dogwalker with a small dog and a big stick
- people looked like preferred to be in the shade – either near the trees or under, if not they will be walking around.
- 1 kid and 1 teen cycled through the grass.
- only few people that were walking alone.

- a topless man was exercising, jumping around.

\*4.40 (pond area):

- a child was chasing a duck and throwing things into the pond.
- a family brought KFC and ate it on the bench.
- four late middle aged men sat on the bench.
- observed few families with strollers going around the park (around 3).
- someone shouted and all the pigeons flew.

\*4.50:

- several people were walking or cycling around the park, including dogwalkers were present.
- the pigeons were scared of the crowded area.
- a lady and 2 kids were looking at the pond.
- there was a construction going on, and the pond was heavily impacted by the eutrophication (judging from the noticeable oil slick layer on top of the water and algal bloom). The algae were covering half of the right pond side, and no ducks were near the impacted area.

**My interpretation + comments:**

Even though it was a relatively short observation, but within the time frame, there were various of activities that was observed. It shows how the park is heavily used at this time of the day. From the start of the observation, it seems like every corner of the park was being used or at least people were interacted with the environment, such as the 2 kids on the tree. They were not like the other people who were mainly on the grassfield doing their activities. Despite the construction work going on, people weren't deterred by it and it shows that the management team might have thought about it thoroughly (working on the time that might not obstruct people's way in carrying activities). In terms of the eutrophication, I'm not sure the cause of it – whether it's from the construction or from the visitors. The pond was quite far however from where renovation work was taking place.

The place demonstrated its accessibility from the presence of elders, especially with scooter.

**Date and Time:** Friday, 23<sup>rd</sup> August 2019, 11.04 – 12.00 (54 minutes)

**Location:** Pearson Park Wildlife Garden

**Temperature:** 27/15 C (hot weather)

**Field Notes:**

- 11.04: A lady with walking a dog together with a boy entered the Garden but left when she saw me (I assume). Shortly, they came back again and walked around– only around the pond and vegetable patch area (no more than 3 minutes).
- Nobody else's here. The shrubs are lush and untamed. There are remnants of fruit eaters (animals). Lots of insects (bees, bumblebees, woodlice, etc) and birds (pigeons, robin, blackbird??).
- 11.42: A family of 3 – lady, man, and a boy walking around the whole Garden areas. He was holding a camera and the kid was eating an ice cream.
- 11.49: A car reversed inside the gated parking area.

**Date and Time:** Saturday, 24<sup>th</sup> August 2019, 12:38 – 15:45 (187 minutes)

**Location:** East Park – grassfield, water areas

**Temperature:** 27/15 C (hot weather)

**Field Notes:**

\*12.38 – 12.50 (grassfield near gazebo)

- A group of Arabic family are having a picnic under a tree (looking from their outfit and my general knowledge of the Arabic culture).
- There are a lot of family hanging around the park (looking from the children that are present). They are either on the field playing football or running around. There are several children (with or w/o an accompanying adult(s) having soccer ball with them.
- Other activities recorded: scootering, cycling, picnic, dogwalking (few observed) – cycling and picnic for both adults and children.
- A big group of family playing football.

\*12.51 – 13.10

- Parent(s) observed playing with their children = III, one of them had a ball that went up on the tree (minor damage to the leaves, they were falling). Not long after that, another ball hit up the tree.
- Several people with strollers walking by observed.
- Few mobility scooters passing by were observed, 2 of them with mental disabilities (apparent).
- Few people are using the gym facility (it was probably too hot).
- There are a group of children, accompanied by adults, playing children cricket (?).
- A man and a child are playing catch with a small ball.
- A woman and a child playing a children rugby (?).

\*13.19 Going around - Entering Khyber Pass, a girl teen picked up a berry and asked if it was edible, the mum said no, and the girl obeyed. I saw the playground was packed with children.

\*13.22 Near the playground, there was a circular hilly area where a family consist of man and woman teaching a little boy how to ride a bike, they eventually went away because the boy wanted to go somewhere else, he dismounted the bike before leaving.

\*13.23 Beside the hilly hills, there was a man letting 2 boys running around the woody path near the lake while giving them positive encouragement. He smiled at me while I passed them.

\*13.24 I was beside the lake and saw a woman, a small child and an old man were sitting on the footpath that was overlooking the lake – they were eating and observing and looking at the surroundings. They looked happy being there.

\*13.26 On the lake, there were several swan boats. One of them has a man and a child crying. 1 rowing boat was present.

\*13.31 Back to the hilly area, another man and woman were giving encouragement to their small daughter being on a tricycle, going around then out to the big street.

\*13.33 I saw on the end of the Khyber Pass, 2 teens went up the stairs behind it and climb on top of the structure despite of the sign “do not climb”. On the opposite side, there was a station for donkey ridings, not far was a girl digging a soil out into a bucket presumably for the donkeys.

\*13.36 I then walk to the lake side with fences and a popular site for people to feed the ducks. There were 2 groups of people with children that were feeding the ducks with actual bird food. One of them was taking pictures. A boy was feeding the ducks by carefully putting all the food on the concrete edge of the lake. He then chased off some pigeons.

\*13.45 (The Animal Education Centre)

- People were trying to communicate with the birds, also correcting behaviour observed e.g. gate climbing.
- An autistic man was observed- the 2 carers talked about the un-mowed grassland.
- Going into the bird cage, they observed the peacock then the water fountain/waterfall.
- There was another family with a boy shouting some random words. The dad took a photo of them and before going out, he held the door for the autistic man, however one of the children from another family just passed through ad the father apologised.

\*13.54 Out from the bird cage – There were 2 ladies with few kids, they're sitting while the kids were mesmerised by the emu.

\*14.02 Out of the Animal Education Centre and walked around beside the lake towards the other side - a man and a boy were fishing on the big lake.

\*14.09 Three teen boys were playing football, and it looked like they brought a compact goal post and one of them was using a whistle.

\*14.11 Two ladies (one is on wheelchair) were strolling on the side with a dog. It then jumped onto the pond and tried to come near me after coming out but the lady on wheelchair corrected the behaviour. They walked further and then the dog jumped onto the pond again and tried to get out but the wall was too high, so the woman had to try to lead the dog to the area that has less taller edge.

\*14.12-14.40 RESTING\*

\*14.41 (grassfield near smaller pond, under the tree)

- A dog dripping with water just walking around without a leash. 15.02: The dog was seen to be walking the same path again, alone. 15.08: I moved place from under the tree to the bench beside the pond and saw an elder man with a ball stick and appeared to be the owner of the dog.
- Maintenance staffs with a small open car-truck going around near the pond and the parking area; picking up rubbish and changing the bin bags.
- Minor noise disturbance from children screaming.

- There were few people in 'working' attire passed the field.
- \*15.08 (bench near the smaller pond)
  - A woman and 2 children were catching 'fish' with nets (I overheard they word 'fish' few times). I walked around the pond and when I went behind them, she looked at me.
  - A ripped topless man was waiting beside the pond while his bulldog was playing on top of a big log inside the pond. The dog was biting onto it while trying to stay afloat. The man was on his phone most of the times. After a few minutes, he dragged out the dog and left.
  - A nearby neighbourhood bordering with the parking lot, I can heard a woman doing a karaoke.
- \*15.29 (grassfield – before the main big path near entrance where the tree corridors are): a group of people playing softball, might be uni students. There were at least 6 of them or more.
- \*15.30 A man was sunbathing topless but woken up by a family of a man, woman and a little boy that was being cranky, she wasn't sure what he wanted – judging from their behaviour.
- \*15.34 (near the big path, grassfield, rows of trees): A boy and a man was playing catch with the man's hat.

**Date and Time:** Thursday, 5<sup>th</sup> September 2019, 15.49 – 16.15 (26 minutes)

**Location:** Pearson Park Wildlife Garden

**Temperature:**

**Field Notes:**

- 15.56 On the bench near the woodland where the grass has been cut, there was a guy in his 50s or late 40s, dressed up quite posh, was sitting and vaping. Beside him was a big bottle of some kind of beverage and a small mineral water bottle but the cap was off and the substance was yellow. He looked a bit depressed and sad. He has a tidy haircut.
- 16.12 The man left and bin his stuff at the bin provided near the entrance gate. I checked the bench not long after that and not litter was left behind, only a bit of liquid spilled on the bench.

**Date and Time:** Thursday, 5<sup>th</sup> September 2019, 16.27 – 16.38 (11 minutes)

**Location:** Pearson Park

**Temperature:**

**Field Notes:**

**4.27**

- 2 children were feeding the pigeons and a girl was feeding the ducks. Another girl came with a bike and chased the pigeons away. The boy took out another piece of bread and started feeding again and the pigeons came back.
- Older women were hanging out in the ice cream area. The area was surrounded by children. 2 kids were eating ice cream.
- In the bench area: a young black couple sitting together, an older couple (late 40s or 50s), 4 middle age men sat together.

**4.35**

- 5 people with strollers passed, a kid was playing ball with her mother (with a stroller), few dogwalkers, 4 teen girls walking a husky, 3 foreign teen boys walking through, few cyclist passed, very few that were playing on the playground.
- 2 police cars were present – there seemed to be an incident earlier, an ambulance was present and an area was lined.

Stopped observation because it was starting to rain

**Date and Time:** Friday, 6<sup>th</sup> September 2019, 16.04 – 16.34 (30 minutes)

**Location:** Pearson Park Wildlife Garden

**Temperature:**

**Field Notes:**

There wasn't anyone in the park, so we left to Pearson Park to get more substantial data.

**Date and Time:** Friday, 6<sup>th</sup> September 2019, 16.40 – 17.00 (20 minutes)

**Location:** Pearson Park

**Temperature:****Field Notes:**

4.40

- Activities observed: dog playing, cyclist passed, an older pair bringing groceries with food stroller, a group of youth (black) kicking ball, dad with 2 kids playing on the grass (for about 5 mins).
- A group of teens still wearing uniforms were playing with balloons (some filled up with water).
- 2 people were sitting, another 4 cyclists passed, a family dogwalking (daughter older teen), 3 teens were running around the park (still jogging until 5 minutes later), 3 kids and 1 adult were playing football together, a dogwalker passed.

4.47

- 3 teen boys were standing near the edge of the park, one of them smoking. At 5.00 they sat on bench after they were playing wrestling with each other.
- A couple walking around the grass, arms linking.

4.50

- A disabled man walking through the park with a big blue bucket
- 2 teens from the previous uniform group approached a tree and stared at the bottom.
- Another 3 cyclists passed, 2 benches are occupied, someone walking around.

4.55

- A woman on bike stopped in the middle of the grass and just sat down.
- Two late teen boys, one with a bike, were playing frisbee.
- A dogwalker passed.
- A mother with 2 boys were walking, but then the older boy did something that made the younger one to cry, while mum was busy on her phone.
- 2 adults were walking, 1 was vaping and the other one was carrying a big package.

5.00: 2 kids were hanging around, the really small boy tried to climb the tree while the girl pointed at something up there. The girls pulled things out of the tree – maybe leaves, and the boy stomped on something. They then went to a nearby spot to kneel down and observed something. Their mother was talking to a guy which then parted not long.

**Date and Time:** Saturday, 7<sup>th</sup> September 2019, 15.30 – 17.00 (90 minutes)**Location:** Queen's Gardens**Temperature:** 15°C/9°C**Field Notes:**

3.30-3.40

- The circle fountain: few groups of youth hanging around.
- White monument: a pair sitting on a bench, a guy sitting by the pond, several groups of people walking through (mostly with shopping bags). Mixed ages. There is a lady playing with a dog. Also a lady with 3 children, 2 of them were curious about the man by the pond, one of them was pointing at him.
- There's a lot of pigeons and the air smells faintly like urine. The park itself is in quite a good condition (except the air), bit of barriers on (?).
- Two ladies with a stroller stopped in front of the monument but was observing the floor for few seconds.
- Other activities observed: smoking, playing with phone, drinking.

3.41-3.50

- Activities observed: cycling, few groups of people walking, the previous man that was drinking took his top off and changed into a different outfit, teens were taking selfies, a man binning his can.

3.51-4.00 (fountain area)

- Activities observe: a teen couple was laying down on the grass, separate 2 men were sitting on the bench, 3 older men were walking through, a cyclist passed, a group of youths sitting on the bricks, a dogwalker passed.
- Another 2 cyclist and several people walking through.
- A person was on his phone that might be playing pokemon go judging from the music and the way he circled the space.
- One of the groups looked like they're shooting a video (with equipment such as the fluffy mic).

4.01-4.10

- The previous man on the bench was still here now on his phone, few cyclists went through (3), group of teens walked through.
- A group of family sat near the fountain while the boy was standing on the edge of the fountain (observing), the mother was taking pictures.
- The previous shooting group moved to another location.
- A teen couple that was walking around sat near the fountain but left instantly. They interacted with the previous family that was taking the photos of the boy and seemed like they then interacted with another group.
- The previous guy that was playing pokemon go was still around.

4.11-4.20

- More people are coming around – several groups of people – with a bike, a stroller, and an old man is watching and interacted with the video group while drinking water.
- A man was sunbathing, laying on the grass.
- A teen couple was kissing and then running around while throwing stuff, which then joined with other people making a group.
- 2 girls were sitting and chatting by the fountain.
- 2 men sitting on the bench.
- A group of family sitting on grassy bricks.
- A family with a girl (kid) was observed, the dad lifted the girl to see the fountain.
- Another 2 ladies were sitting on the grassy bricks.

4.21-4.30

- Several groups of people walking through.
- A man with a pram was hanging around the bushes. He stayed for quite a while, it seemed like he was looking for something.
- 2 asian ladies was walking with a bule alongside 2 asian children. He took photo of one of the lady and she then carried one of the children.
- 2 pairs were sitting on a bench while eating ice cream.
- The previous ladies that were sitting on the grassy brick met up with 2 other ladies.
- A bunch of middle age men walked through.
- 2 people were dogwalking.
- The previous group of teens are hanging around by the fountain. Two of them were laying down doing PDA, and another boy was ‘encouraging’ the boy to get closer with the girl. They all eventually were just sitting and hanging around on the grass.
- A previous cyclist (maybe a teen or older) passed through again.
- A bunch of youth left after hanging around for about 20 mins.

4.30-5.00

I didn't stay too long, I had been in the park quite some time, and I was accompanied by someone and he bought us fish and chips. Some men were staring at us. So we left before 5.

We circled around the space just to see how many people were present and how the place was being utilised. What stood out was that there was a man and a boy walking together, the man was holding a guitar. They circled the whole space and looked like he was checking an area at the end of the park. They then walked around the parking area beside the park and was looking at the cars. Looked a bit dodgy to me.

**My interpretation + comments:**

Waiting space, it makes sense because it is in the city centre. People might not care what they do regardless how open the space is. There's a surge of more people coming/passed through when it hits 4 or more.

**Date and Time:** Sunday, 8<sup>th</sup> September 2019, 15.25 – 17.00 (95 minutes)

**Location:** East Park

**Temperature:**

**Field Notes:**

3.25-3.30 (grass field near rose garden & gym facility)

Few people were observed, several were walking through.

Activities that were observed include:

- group of Lithuanians celebrating something (based on flags, photo-taking, uniformed shirt, tent)

- children roller blading (part of the Lithuanian group)
- dogwalkers
- Several children using the gym facility
- Elder using a walking frame with wheels

3.31 – 3.40

- Children were playing catch with a ball accompanied by an adult, which then played football
- Group of few people were sitting on a ground
- Several groups of people walking
- Few dogwalkers
- Several children using the gym facility
- Several people that were part of the Lithuanians went away
- There were a park ranger picking the bins out
- A boy was learning how to ride a bike

In general, there were a lot of families, groups of young adults, and also middle age people.

3.41 - 4.00 (walkaround – through Khyber Pass then towards the Ings Road area)

Activities observed: cycling, eating ice cream, sitting, children running around, family of three with the mother looking for something near the bushes under the tree while the child had a branch, a pair of teens were doing PDA, fishing activity near the bridge – a man and appeared to be his teen son, children with scooters going around. While we were on the bridge, a boy was trying to climb it, and observed

4.01 – 4.19 (lake side near the rugby pitch)

A group of cyclists passed us, there were also few dogwalkers, few runners, several walkers, people crossing the gated rugby pitch. A group of teens were hanging around, and also a cyclist passed.

4.20-4.30 (walking around) – not really observing

4.31-4.40 (lake side near animal education centre)

There are less people now because it was almost closing time. Many cyclists (including children's), few people were still sitting and talking on the benches, children were interacting with the metal musical instruments, and several people walking by. There were children that were feeding the ducks with the proper food.

4.41-4.50

- A child was chasing a duck and then got scared.
- There were mainly families with children that was still around. The parents were attentive towards their children (i.e. not being left alone, playing with them).
- A lady was saying “no” to her child but still went near the pond and threw a straw into the lake. She didn't really react that much after that happen.
- A girl went to the bin and threw her rubbish, but it didn't go in and she just let it stay like that.
- There were several dogwalkers.

4.51-5.00

There were still children feeding bread to the ducks. Meanwhile, a man with a group of family was trying to interact and feed a squirrel, which he managed to do that while the children spectated. A swift bird flew by. There were few dogwalkers and also some were playing with their dogs.

**Date and Time:** Thursday, 12<sup>th</sup> September 2019, 13.55 – 15.40 (105 minutes)

**Location:** Humber Bridge Country Park – Areas from the entrance until the Bird Sanctuary

**Temperature:** 23/9 C (17 C)

**Field Notes:**

13.57 – 14.20 (Walking in):

- Entering the park from the Tourist Information Centre are. There weren't many people comparing to the weekends or holidays.
- A lady with lanyard walked out, wearing office attire (semi-formal), she might have just finished her lunch break.
- There were few dogwalkers and people walking around. Only 2 dogs that were on the leash.
- An elder couple with 2 baby strollers, observing and pointing at birds to show their grandchildren.
- A lady and a girl were dog walking.

14.21 – 14.30 (Bird Sanctuary): An elder and (uni) adult couple walked around.



14.31 – 14.40 (Bench near the Bird Sanc): An adult couple and a lady were walking their dogs. Another 2 ladies who were dog walking – the bigger dog is on leash while the smaller one is not.

14.41 – 14.50: 2 people walking their dog on leash. Small birds were out in the bushes, and also butterflies were observed.

14.51 – 15.00: Previously seen a lady and a girl (presumably mother and daughter) were walking back to the entrance. The girl is now holding a long stick, and they both were staring at me. When I left the location and walking towards the entrance, she came back and walking in again. The girl politely asked me if I've seen a pair of sunglasses. Mother just gave me a nod or a thumbs up and left, she wasn't showing any emotion.

15.01 – 15.10 (Walking back to go out): 2 ladies dogwalking and a lady runner were observed.

15.11 – 15.20 (Bench outside the top stairs entrance):

- An adventurous looking lady went it (wearing walking boots, woolly outdoor jacket and a rucksack).
- A group of Asian middle age ladies entered (one of them smiled at me).
- A group of middle age lady cyclists passed me (didn't enter).
- Previously seen elder couple dogwalking exited. They were walking on the grass instead of the path, looked like they were following their dog.

15.21 – 15.30 (walking towards the toilet near the Tourist Information Centre through the carpark):

- There were very few people in the area. However, there is this police van (written POLICE on it) and they were beside a car and 2 big motorcycles (men were wearing motorcycle suit). I wasn't really paying attention because I felt I might not supposed to be looking and I knew they were looking at me. Their face wasn't threatening though. From glimpses, I saw the man from the van bringing out big bags and gave it to the man in the car of the motorcycles. The car left, then the van eventually left.

15.31 – 15.40 (toilet, after that I waited for taxi on the picnic table bench):

- 15.35 I went out from the toilet and an really old elder lady came up to me and pointed at a bird on the grass saying "look at that black bird, it's gorgeous isn't it", I said back "It is gorgeous. It's a big bird". She told that It's a lovely day today and I replied agreeing with her. The bird was a crow.
- For the police group, there were only the motorcycle guys left.

**Date and Time:** Friday, 13<sup>th</sup> September 2019, 14.34 – 17.00 (154 minutes)

**Location:** Pearson Park Wildlife Garden

**Temperature:**

**Field Notes:**

It was a sunny day, a bit cloudy and windy. There were several birds, butterflies, squirrels, various kinds of insects, and a cat observed in the space.

14.41– 14.40: empty

14.41 – 14.50: 14.44 There's a middle age man that was walking out that didn't seem to be walking around the area– I would've have spotted him. I was sitting on the bench near the stone oven.

14.51 – 15.00: Apparently it was one of the YWT staff. He came back bringing a bag of crisp. He unlocked the door to the office and asked me whether I was looking for Andy. He wasn't wearing any recognisable uniform/lanyard. I went to the front of the office to get a better look.

15.01 – 15.10: empty

15.11 – 15.20: Literally it was only me and the staff, he went out and was on his phone.

15.21 – 15.30: empty. I was sitting on the chairs in front of the office.

15.31 – 15.40: 15.39 An elder lady went in and walk around with two walking sticks.

15.41 – 15.50: 15.46 The elder lady stood near the middle part (Herb Garden) and it seemed like she was staring at me – didn't really smile or say hi. She left not long after that. I think she was walking quite fast for someone with two walking sticks.

15.51 – 16.00: 15.56 A really late middle age man went it carrying a worn out Tesco plastic bag and was wearing sunglasses (or the built-in one glasses). He looked a bit a worn out as well.

16.01 – 16.10: 16.01 The man was looking around the planted pots near the Herb Garden before he left the area. Perhaps he was reading the signs? There were small, black board signs punctured onto the soil. He was slightly leaning his body where it looks like he wanted to see something better.

16.11-16.30: empty

16.31 – 16.40: 16.42 An early elder lady was walking her dog.

16.41 – 16.50: 16.50 The lady left the area.

16.51 – 17.00: empty

**Date and Time:** Saturday, 21<sup>st</sup> September 2019, 15.41 – 17.00 (79 minutes)

**Location:** Pearson Park

**Temperature:**

**Field Notes:** The weather was very nice – sunny, just a little bit windy.

I sat in the seating area for the ice cream shop. It was a really nice day so I decided to get one as well. There were a lot of children and families (mostly foreigners – from their language). A lot of people were buying ice cream, mostly for their children. I sat here for about 20 minutes (15.41 – 16.01). The table beside me had a pair of elders sitting down. The grandpa was with a walking stick while the grandma was with pushable walking chair. The grandpa bought 2 ice creams for both and they were just observing the scenery – judging from how they were looking at the sky/pond. They stayed for about 10 minutes, then the grandpa helped the grandma to wear her jacket. They were very old (70s or more) judging from how slow and frail they are, and not much conversation was being passed.

Other things that caught my attention was I saw 2 different children (not the same group) collecting conker seeds (inside clear plastic bag and in a small bucket). The benches near the pond were occupied most of the time including the ice cream shop seating area. From my observation, there were several elders (only few stayed) assisted with a walking device which I think most likely were English. At some point, there was a group of foreign family that were sitting on the table next to me. One of the young men (looked like on his late teen) asked me if I had a lighter. They were able to find something to light up their cigarettes, and there were about 2 people smoking. What was concerning for me was that there was a baby present, he/she was just calmly sitting on the lap of a woman. Another weird encounter was that a random man walked passed me and suddenly just turned to me and gave a thumbs up while smiling.

I then left to head for the grass area. There was a lot of activities going on – mostly by children. From a quick glance, the activities that could be observed were: flying kite, football, picnic, teens were grouping and chatting. On the footpaths, there were typical dogwalkers and cyclists, however not many people walking pass. After about 10 minutes, I was then called by another fellow Indonesian that was just passing through. He lives in the Pearson Park area. We were then had a long conversation about the area and what could we observed. There were few things that were the points of interest for us:

1. Group of teens (height, appearance, clothing style), there were about 8 people, sitting on the bench, and one of them was holding a baby (stroller on the side). The baby was carried around by their mates – taking turn. I wasn't sure whether they were English because I was too far to hear them. They were there for quite a long time, even before I was in that position and until I left. Right across them were 3 young teens (maybe 11-13), one of them with a bike, and they were wacking the leaves of a tree with their bag and a long stick (branch). Initially, we thought they were trying to get their ball back, but it could also be they were trying to collect some conker seeds. At some point, the younger teens eventually joined the big group of teen. There were having conversations and one of them helped them with the tree wacking.
2. Group of young foreign men were playing football not far from us. The ball kept going away and it almost hit nearby people that were sitting or walking pass. Some of the times, they expected one of us to kick the ball back, only few times my friend did. I feel like they were misplaced in their chosen location as mild disruptions were happening for quite a while.

**Date and Time:** Sunday, 22<sup>st</sup> September 2019, 16.00 – 17.00 (60 minutes)

**Location:** Pearson Park

**Temperature:**

**Field Notes:**

16.00-16.10 (Grass area near the gym)

- Many people walking through – looks like they're leaving the park as well.
- The weather was a bit cloudy and rain intermittently.
- Several people with bikes on side or were cycling – one from a group that was playing football, one was from a group that were just chilling under the tree.
- There's a man (late teens maybe) with an electric bike.
- \*A group consist of a man and 2 children were playing football.
- A pair of middle age man and woman were making out in the bench.

- Group of teens was just hanging around beside the gym.
- Few children were using the gym.
- Looks like a Uni guy was sitting on the bench while on his phone.
- 1 family with assumingly a dad, mum, and a child were around a tree and the dad was beating the leaves with a long stick.
- 2 children were playing somekind of catch using bats and a ball.
- Mostly foreigners that were present – from the language spoken.
- A man was smoking
- A lady was sitting on the bench while the man is feeding the birds with bread.
- \*A family was walking around, the mother was holding a stick.

16.11-16.20 (Walking from grass area to the pond area)

- A different guy went around with the electric bike (might be the same bike but the person has a different skin colour).
- 2 children (early teens maybe) passed me, one has a football and the other was with a bike. I overheard the conversation, “if you have a gun and there’s nobody around, would you shoot someone?” I couldn’t hear the rest of the conversation.
- \*The football group is growing, there were the 2 children previously observed and additional woman.
- 2 middle age men were walking pass.
- \*A group consist of a middle aged man and a pair of elders were walking around the grass, one of the elders was on a wheelchair.
- \*The family with a stick, the girl was sitting on the rock beside the pond.
- A lady with a pram walking around with another young child beside her, he was wearing an oversized backpack.
- \*The ball from the football group went away and a lady in headscarf kicked it back to them and they said thank you. The lady was passing through with a man.
- \*The elders group stopped in a spot and the grandpa stood up in struggle.
- Many people were walking through.
- The same man previously first observed in an electric bike appeared again. He went around the park and was staring at my side.
- Another guy appeared to be using an electric bike but it looked like he was trying out for short distances, he used it to go near the group of teens that are hanging around in the gym, previously observed. Just talking to each other.
- A rat came out of the hedge near the pond then went it again. This rat was observed few times in this session.
- A guy was sitting on the bench but far away hidden, behind the renovated area of rose garden. This man did stared at my side or area as if he knew I was looking.

16.21-16.30

- A lady and a man were sitting on the bench just chatting.
- Two men were on the bench while drinking desperados.
- A guy just passed on a bike but wearing motorcycle helmet, he turned around and stopped at the end of the lane and stared at this bird with a red beak. I am not sure what kind of bird is it.
- A late middle age man was just walking around.
- Few people were buying ice cream.
- A teen and his mum were standing under a tree, he was just pulling a branch down multiple times while mum supervised.
- A group of family that was seen from the start of the observation was chatting in front of the playground. They're wearing formal clothes, especially the men (with suit and tie and vest).

16.31 - 16.40

- A man sat on the bench with a canned drink and having a phone call.
- A man was carrying his child and his other child was standing beside him, they were observing the pond. They came with bikes – the boy had his own, as well as the dad that’s also attached with a mini tent cycle where the smaller child would have sit.
- A kid is shouting "mama" on repeat, then just weird noises. Sound like he was just looking for attention.
- A middle age man was pushing a pram and then stopped near the pond. He kneeled down and smoked, the baby was chill.

- Few cyclists passed.
- A man with a bike stopped in front of the pond and was just observing.
- A family of 2 kids were hanging around the pond, the dad helped the girl to stand on the rocks.
- A middle age man with a toddler were hanging around the pond. The toddler said hi to a pigeon and picked up a fluff of feather and blow it and tried to pick it up. Dad wasn't looking impressed with it.
- The uni man with headphones is around again, just sitting on the bench on the pond area middle bit while on his phone.

16.41-16.50

- The previous dad and the kid went to get ice cream. Joined by another kid and their mum with ice cream as well. They're reading the renovation board sign. They preceded to go around the middle bit and observe. Before joining, the mother picked something up and showed it to the daughter and throw it away. It's something small.
- The previous family of 2 kids went back again on the path and looked like they're going back but the daughter just stopped in front of the ice cream shop and didn't want to go, the mother had to pull her away but she resisted.
- The previous teen on bike went around the corner again, this time on the phone.
- A group of ladies and bunch of kids sat on the bench. The kids and one lady were feeding the ducks with bread. Mainly littering on the pavement. Another boy joined and litter more with crisp, looked like he just wanted to join in. Two girls were on the side and playing catch with football. They're foreigners. The pigeons weren't coming back despite the food they're throwing on the pavement. Their mother appeared to not allow them to go near the pond, only 2-3 meters away that was allowed.
- The previous man with canned drink is joined with another middle age man on the bench. Just chatting while looking at the pond.

16.51 -17. 00

- A lady was carrying a kid and a boy on the side. They're just looking at the pond and then went to the ice cream shop.
- A uni pair was walking near the pond.
- A girl was walking a dog that was leading her. Joined by her mother and a boy, they then get ice cream
- The previous big group are now letting the children to feed the ducks in the pond.
- Few cyclists passed.
- Group of teen girls just dillydallying around the grass area
- A ball went across the barrier of the renovated area and wasn't retrieved.
- A middle age man was littering the middle bit with paratha bread in big chunks on the grass.
- A lady went and sat on the middle bench. Looks like a uni student. She was then joined by an older pair. The mother was tasting something with spoon while the man (looks just a bit older than her) drinking something in a Styrofoam cup.
- The family group was hanging around, one of the girls put some bread on top of the rock and showed it to her family, maybe hoping that one of the ducks with go up and eat

## Observation Data

Most popular activities ranked:

EAST PARK	Rank	Activities	Specific category (from the most observed to least; or equal in quantity)
	1	Interacting with surrounding	Environment; Feeding (animal); Researcher; Observation (animal); Appreciation (animal); Chasing (animal); Communicate (animal); Others
	2	Assisting or Supervised	Youths; Adults
	2	Others	Litter picking/binning; Gym user; Fishing; Sunbathing
	3	Dogwalkers	Walking; Playing
	3	Playing	Climbing; Ball; Others
	4	Walking	Group; General walking; Alone; Prams
	5	Sports game or exercise	Child present; Football; Others; Cricket
	5	Cyclist	General cycling; Learning; Exercise
	6	Other means of transport	Playful; Others; Mobility Scooter; Wheelchair; Walking device/frame
	7	Sitting	Group; Children & Youths; General Sitting
	8	Running or Jogging	Group; Playful; Alone; Exercise
	8	Consuming	Picnic; Eating; Ice Cream
	9	Hanging out	Mix-age Group; All youths
9	Using mobile phones	Taking Photos/selfie; General Usage	

PEARSON PARK	Rank	Activities	Specific category (from the most observed to least; or equal in quantity)
	1	Walking	Group; Prams; General Walking; Alone; Stick Possession
	2	Interacting with surrounding	Environment; Vegetation; Researcher; Others; Sign or Information Board
	3	Cyclist	General cycling; Youths; Playful
	3	Sitting	Group; Alone; Children & Teens; General Sitting
	4	Hanging out	Mix Age; All Youths; All Adults
	5	Dogwalkers	Walking; Playing; Interaction
	5	Playing	Others; Ball; Kite; Climbing
	6	Consuming	Eating; Ice Cream; Drinking; Picnic
6	Others	Smoking/vaping; Gym user; Uncategorised Others; General helping; Litter Picking or Binning	

	7	Assisting or Supervised	Youths; Elders
	8	Running or jogging	Exercise; Alone; Playful; Group
	8	Sports game or exercise	Football; Child Present; Alone; Group
	9	Using mobile phones	General Usage; Taking Photos/selfie
	10	Other means of transport	Walking Device/frame; Wheelchair; Mobility Scooter

PEARSON PARK WILDLIFE GARDEN	Rank	Activities	Specific category (from the most observed to least; or equal in quantity)
	1	Walking	Alone; Group
	1	Consuming	Eating; Drinking; Ice Cream
	1	Others	Camera usage; Binning; Smoking/vaping
	2	Dogwalkers	Walking
	2	Interacting with surrounding	Researcher; Environment; Sign or info board
	3	Sitting	Alone
	3	Using mobile phone	General usage
3	Other means of transport	Walking device/frame	

HUMBER BRIDGE COUNTRY PARK	Rank	Activity	Specification (from the most observed to least; or equal in quantity)
	1	Walking	Group; Stick possession; Alone; With stroller
	2	Playing	Rock; Others; Climbing; Ball
	3	Dogwalkers	Walking; Playing; Interaction
	3	Interacting with surrounding	Sign; Researcher; Environment; Vegetation; Animals – Appreciation; Observation
	4	Assisting or Supervising	Youths (Teenagers, Children)
	5	Sitting	Group; Children and teenagers
	6	Cyclist	Commute; Exercise; Playful
	7	Others	Camera used; Unidentified intention
	7	Other means of transport	Playful
	8	Running or jogging	Alone; Exercise
8	Using mobile phones	Taking photos or selfie	

QUEENS GARDEN	Rank	Activity	Specification (from the most observed to least; or equal in quantity)
	1	Walking	Group; Pram; Alone: General walking
	2	Sitting	Group; Alone; Children and teens
	3	Others	Litter picking or binning; Smoking or vaping; Unidentified intention; Sunbathing; General helping; Uncategorized others
	4	Using mobile phones	General usage; Taking photos or selfie
	5	Hanging out	All youths
	5	Cyclist	General cycling
	5	Interacting with surrounding	Environment; Others; Researcher
	6	Dogwalkers	Walking; Playing
	6	Consuming	Drinking; Eating; Ice cream
	7	Playing	Others
	8	Other means of transport	Mobility scooter; Wheelchair
	8	Running or jogging	Group; Playful
	8	Assisting or supervised	Youths

## Functions of the Space:

EAST PARK	Rank	Specific category	Value	Example
	1	Youth & Children	Community	<i>I saw on the end of the Khyber Pass; 2 teens went up the stairs behind it and climbed on top of the structure despite the sign "do not climb".</i>
	2	Shared activity	Community	<i>A big group of family is playing football.</i>
	3	Family	Community	<i>A group of Arabic family are having a picnic under a tree (looking at their outfit; based on my general knowledge of the Arabic culture).</i>
	4	Shared Activity	Physical Health	<i>Three teen boys were playing football, and it looked like they brought a compact goal post and one of them was using a whistle.</i>
	5	Shared Space	Community	<i>A man was sunbathing topless but woken up by a family of a man, woman and a little boy that was being cranky, she wasn't sure what he wanted – judging from their behaviour.</i>
	6	Shared Space	Physical Health	<i>Several children using the gym facility.</i>
	6	Learning	Community	<i>Back to the hilly area, another man and woman were giving encouragement to their small daughter being on a tricycle, going around then out to the bigger path.</i>
	6	Leisure	Environment	<i>I was beside the lake; a woman, a small child, and an old man were sitting on the footpath that was overlooking the lake – they were eating and observing and looking at the surroundings. They looked happy being there.</i>
	7	Entertainment	Environment	<i>A boy chased off some pigeons.</i>
	8	Others	Environment	<i>Litter picking by staff; family of three with the mother looking for something near the bushes under the tree while the child had a branch</i>
8	Accessibility	Community	<i>Few mobility scooters passing by were observed, 2 of them with mental disabilities (apparent).</i>	
9	Learning	Environment	<i>A teen girl picked up a berry and asked if it was edible, the mum said no, and the girl obeyed (Khyber Pass).</i>	



PEARSON PARK	Rank	Specific category	Value	Example
	1	Share Activity	Community	Previously observed, the big group are now all playing crickets (it was divided into cricket and football game) and it has now become 9 people now (it was previously 8).
	2	Family	Community	a family brought KFC and ate it on the bench.
	3	Youths & Children	Community	A group of teens still wearing uniforms were playing with balloons (some filled up with water).
	4	Shared Space	Community	Interactions with researcher; A lady pasted a piece of paper (it was the rose garden announcement for taking out the rose for the week after) and then two previous dogwalkers interacted with her.
	5	Shared Activity	Physical Health	A man and two kids were playing a kite on the grass area.
	6	Shared Space	Physical Health	Three dog-walkers with a boy that uses the gym.
	7	Leisure	Environment	2 different children (not the same group) collecting conker seeds (inside clear plastic bag and in a small bucket)
	8	Others	Environment	A teen and his mum were standing under a tree, he was just pulling a branch down multiple times while mum supervised.
	9	Accessibility	Community	A group consist of a middle-aged man and a pair of elders were walking around the grass, one of the elders was on a wheelchair.
	10	Learning	Community	They [family] are reading the renovation board sign.
	11	Entertainment	Environment	Another girl came with a bike and chased the pigeons away.
12	Others	Others	A cyclist took my flask that I accidentally left under my bench.	

PEARSON PARK WIDLIFE GARDEN	Rank	Specific category	Value	Example
	1	Family	Community	<i>A lady with walking a dog together with a boy entered the Garden but left when she saw me (I assume). Shortly, they came back again and walked around– only around the pond and vegetable patch area.</i>
	1	Youth & Children		
	1	Shared Activity		
	2	Shared Activity	Physical Health	
	2	Accessibility	Community	<i>An elder lady went in and walk around with two walking sticks.</i>
	2	Learning	Community	<i>The man was looking around the planted pots near the Herb Garden before he left the area. Perhaps he was reading the signs?</i>
2	Shared Space	Community	<i>Apparently, it was one of the YWT staff. He came back bringing a bag of crisp. He unlocked the door to the office and asked me whether I was looking for Andy. He wasn't wearing any recognisable uniform/lanyard. I went to the front of the office to get a better look.</i>	

	2	<b>Learning</b>	<b>Environment</b>	<i>The man was looking around the planted pots near the Herb Garden before he left the area. Perhaps he was reading the signs? There were small, black board signs punctured onto the soil. He was slightly leaning his body where it looks like he wanted to see something better.</i>
	2	<b>Others</b>	<b>Environment</b>	<i>The man left and bin his stuff at the bin provided near the entrance gate. I checked the bench not long after that and not litter was left behind, only a bit of liquid spilled on the bench.</i>
	2	<b>Leisure</b>	<b>Environment</b>	<i>A family of 3 – lady, man, and a boy walking around the whole Garden areas. He was holding a camera and the kid was eating an ice cream.</i>

HUMBER BRIDGE COUNTRY PARK	Rank	Specification	Value	Example
	1	<b>Shared Activity</b>	<b>Community</b>	2 children are looking into the sign accompanied by an adult.
	2	<b>Family</b>	<b>Community</b>	A family consists of a man, a lady a young boy and a dog were walking on the path. The child was still learning how to walk, he kept sitting on the ground and the man had to pick him up. 4.01: the man was holding the boy and both had a stick on their hands. The man tapped a tree trunk with his stick gently and then the boy followed his move.
	3	<b>Youth &amp; Children</b>	<b>Community</b>	There are 8 children, they are throwing rocks into the pond, 1 is utilising a big stick as a walking stick. It was given to another younger child.
	4	<b>Learning</b>	<b>Community</b>	A pair of man and woman was with a young child. The kid was holding hands with the man, and then was supervised by both when the kid was climbing up the stairs.
	5	<b>Entertainment</b>	<b>Environment</b>	Children are throwing rocks and sticks into the pond.
	6	<b>Learning</b>	<b>Environment</b>	The previous girl had a stone that she had previously thrown into the pond but weren't allowed to pick it up.
	6	<b>Shared Space</b>	<b>Community</b>	A man and woman came with a child. The kid looked into the board, not sure whether he was able to read already or not. The man was staring into the pond which then called the child to approach the pond. Meanwhile, the woman appeared to be taking photos with her phone. The man was still observing the pond which then called the lady and pointed to something on the pond. (After they left, we found that there are small fishes living in the edge of the pond in which might be the one that the man was observing).
	7	<b>Shared Space</b>	<b>Physical Health</b>	2 ladies dogwalking and a lady runner were observed.
	7	<b>Shared Activity</b>	<b>Physical Health</b>	4 cyclists went through the path; one was doing tricks on the grass.
8	<b>Leisure</b>	<b>Environment</b>	2 young girls are using nets to pick up something from the pond. They then shouted to the ladies (presumably their mothers) if they can touch the water because the dog is in the pond. They appeared to have a bucket, 2 plastic bottles, a net and a shovel.	

	9	Others	Environment	I went out from the toilet and a really old elder lady came up to me and pointed at a bird on the grass saying “look at that black bird, it’s gorgeous isn’t it”, I said back “It is gorgeous. It’s a big bird”. She told that It’s a lovely day today and I replied agreeing with her. The bird was a crow.
	9	Others	Others	There were very few people in the area. However, there is this police van (written POLICE on it) and they were beside a car and 2 big motorcycles (men were wearing motorcycle suit). I wasn’t really paying attention because I felt I might not supposed to be looking and I knew they were looking at me. Their face wasn’t threatening though. From glimpses, I saw the man from the van bringing out big bags and gave it to the man in the car of the motorcycles. The car left, then the van eventually left.

QUEENS GARDEN	Rank	Specification	Value	Example
	1	Shared Activity	Community	<i>One of the groups looked like they’re shooting a video (with equipment such as the fluffy mic).</i>
	2	Youth & Children	Community	<i>A group of youth left after hanging around for about 20 mins.</i>
	3	Family	Community	<i>A group of family sat near the fountain while the boy was standing on the edge of the fountain (observing), the mother was taking pictures.</i>
	4	Shared Space	Community	<i>There is a food festival currently happening so the area is crowded. Not a lot of people settle (i.e. not sitting down, just passing) as it might be because of the weather – very windy (21C), and might be because that it is the last day of the festival. However, a constant wave of people keeps on coming in by every hour (might be because of lunch time).</i>
	5	Shared Space	Physical Health	<i>Another 2 cyclist and several people walking through.</i>
	6	Others	Others	<i>We circled around the space just to see how many people were present and how the place was being utilised. What stood out was that there was a man and a boy walking together, the man was holding a guitar. They circled the whole space and looked like he was checking an area at the end of the park. They then walked around the parking area beside the park and was looking at the cars. Looked a bit dodgy to me.</i>
	6	Leisure	Environment	<i>A family with a girl (kid) was observed, the dad lifted the girl to see the fountain.</i>
	6	Others	Environment	<i>Two ladies with a stroller stopped in front of the monument but was observing the floor for few seconds.</i>
	6	Accessibility	Community	<i>There are many of children, dog-walkers, elders, and people with visible disabilities (including wheelchair and mobility scooter users).</i>
6	Learning	Community	<i>People, including children, were throwing away their rubbish into the bins provided.</i>	



# Observation Data

## Nodes

Name	Description	Files	References
<b>Activity</b>	<b>Defining the activities observed.</b>	<b>1</b>	<b>531</b>
Assisting or supervised	Individuals assisting or being assisted doing an activity; includes behaviour correction -assuming that the adult figure is giving the attention	1	31
Children	Below 12 years old (based on the researcher's assumption); mainly being assisted by a parental figure(s)	1	27
Elders	Above 65 years old (based on the researcher's assumption); mainly being assisted by an adult figure(s)	1	2
Consuming	Individuals having to drink or eat on site	1	29
Alone	Individual carrying out the activity	1	1
Drinking	Having to swallow liquid	1	8
Eating	Having to masticate food	1	5
Group	Individuals more than 2 people gather on the park to consume; can include children	1	2

Name	Description	Files	References
Having ice cream	Including the activity of buying and eating	1	10
Picnic	Individuals sitting on the ground covered with a cloth and food sprawled on top of it; usually done in group	1	3
Cyclist	Individuals moving through the park by bicycle; individual walking through the park with a bike	1	46
Commute	Moving towards the other side of the park	1	31
Exercise	Going around the park, indicated by sporty attire/equipment	1	2
Playful	Doing tricks; chasing around	1	4
Youths	Age less than 18; usually forming a group that settles in the park	1	5
Dog-walkers	Individuals accompanied by (pet) dog moving through the park	1	66
Alone	Individual carrying out the activity	1	7
Group	Consist of 2 or more individuals; can include children	1	15
Interaction	Any kind of interactions between dog-walkers; either between dog or walkers	1	4
Others	Appear to be doing something else other than playing or walking	1	2

Name	Description	Files	References
Playing	Engaging the dog with a toy or in a playful manner; dog playing - assuming owner let the dog (e.g. going into the pond)	1	10
Walking	Moving around the park for the dog's purpose	1	26
Fishing	Individuals utilising specific equipment and having to interact with waterbodies to assumingly catch fish	1	3
Group	Consist of 2 or more individuals	1	3
Hanging out	More than one individual being in a shared space to gather; including mix age; can include children	1	29
Adult	Including >18-year-old, middle age, elders; all adult group	1	6
Youth	Teenagers, under 18s; all youths group	1	13
Interacting with surrounding	Individuals engaging with the biotic or abiotic components within the park	1	44
Animals	Individuals having direct interaction or creating a reaction out of it	0	0
Appreciation	Verbally expressed	1	4
Chasing	Running towards the animals	1	5
Feeding	Giving food directly to the animals	1	9
Observation	Appear to be staring in focus at the animals	1	4

Name	Description	Files	References
Others	Any other interaction that does not fit in categories above	1	3
Environment	Habitat components; either doing something to it or interacting in a way of observing	1	21
Others	Any other components within the park that is not part of the any categories	1	4
Researcher	Interaction that was made by individuals towards the researcher	1	14
Sign or info board	Any that contains official information from the managing body	1	5
Vegetation	Including trees, flowers, shrubs, grass, etc.	0	0
Observation	Appear to be staring in focus at	1	1
Others	Any other interaction that does not fit in categories above	1	7
Stick possession	Holding a part of the tree branch with the assumption that it is collected from park; could be by the humans or dogs	1	2
Other means of transport	Individuals moving through the park with the aid of some sort of transport vehicle, or utilising an item with wheels	1	19
Mobility scooter	Usually utilised by elders	1	3
Others	Any other vehicle that does not fit in the other categories	1	3



Name	Description	Files	References
Playful	Not necessarily needed for moving; includes skaters, scooters	1	6
Walking device or frame	Usually utilised by elders	1	3
Wheelchair	Any range of age	1	4
Others	Any other activities that does not fit in the other categories	1	31
Camera used	Based on the gesture or holding the equipment that appears ready to be used; visible presence of a camera - person holding	1	2
Gym user	Individuals utilising the gym facility on the park; to exercise	1	7
Litter picking or binning	Individuals picking up rubbish on the ground or outside the bin and putting it in, usually repeatedly being done – depends on the surrounding; any activity of binning own's rubbish	1	7
Smoking or vaping	Individual inhaling and exhaling substances	1	1
Alone	Individual carrying out the activity	1	4
Group	The smoker is part of a group; the people in the group are all smoking	1	4
Sunbathing	Individuals sit or lie underneath the sunshine	1	2
Playing	Individuals utilising an item to engage in a playful manner; can be alone or group; not including dog	1	47

Name	Description	Files	References
Ball	Any kind of ball, including sporty equipment	1	9
Climbing	Holding onto a medium to go up/vertical	1	7
Kite	Flying a kite	1	3
Others	Any items that is utilised; any kind of playing activities	1	21
Rocks	Utilising rocks; not purposely to hurt something or someone	1	4
Sticks	Utilising parts of branches in a playful manner	1	2
Running or jogging	Moving through the park by feet faster than walking	1	19
Alone	Individual carrying out the activity	1	3
Exercise	Indicated by sporty attire; going around the park	1	7
Group	Consist of 2 or more people	1	3
Playful	Being in a game of chase; usually with someone else; playful expressions	1	4
Sitting	Individuals being in a position where one's weight is supported by one's buttocks; e.g. on the ground, bench, etc,	1	36
Alone	Individual carrying out the activity	1	11
Group	Consist of 2 or more people	1	21

Name	Description	Files	References
With child	Adult with child/children; children themselves hanging out	1	11
Sports game	A group of people (2 or more) engage in a sporty activity	1	15
Child present	Any kind of sports game that has child/children involve, including teenagers.	1	1
Cricket	Group of people engage in a game with a special ball and bat in a formation	1	2
Football	Group of people engage in a game with a football in a formation	1	10
Others	Other sports activity that utilises specific equipment	1	2
Using mobile phones	Individuals interacting with their phones; general usage	1	19
Calling	Phones being held near the ear or using earphones, engage in conversation	1	1
Taking photos or selfie	Judging from the act of looking into the camera, and paused movement with phone being held away from face	1	8
Walking	Individuals moving through the park by foot	1	97
Alone	Individual carrying out the activity	1	18
Group	Consist of 2 or more people; could be a family, friends, strangers, or with children; mix of adults, children, youths	1	52
Stick possession	Utilising stick (i.e. tree branch) for walking, not utilising in a playful manner	1	6

Name	Description	Files	References
Pram	Showing certain function/aim – baby prams, prams for carrying food shopping, etc	1	16
<b>Value</b>	<b>The function of space from how it is used.</b>	<b>1</b>	<b>687</b>
Community	Creating social networks - urban parks can promote social cohesions; influenced by the design and the attachment towards the place (Peters et al., 2019).	1	453
Accessibility	Specifically for disabled people and in need of walking aid; not including strollers	1	12
Family	Parental figure and children engage in an activity	1	89
Learning	Individuals (at least 2) engage in an activity with the intention of gaining knowledge; e.g. being explained about birds, learning how to ride a bike	1	22
Shared activity	Individual (at least 2) engage in the same activity	1	121
Shared space	Individuals from the same group engaging in different activities at the same time, e.g. mother relaxing while children playing around the pond	1	96
Youth	Consist 2 or more individuals below 18 years old engage in the same activity	1	113
Environment	Providing opportunities for interaction with the habitats and its components present - natural components in urban parks can help	1	63

Name	Description	Files	References
	promote opportunities for restorative experiences (Nordh et al., 2011; Nordh and Østby, 2013).		
Entertainment	Individuals engaging with the environmental component (either animals or vegetations).	1	14
Learning	Individuals (at least 2) engage in an activity with the intention of gaining knowledge about the environment of the space	1	9
Leisure	Engaging with the environment for purposes more than just for entertainment, could be for relaxation.	1	20
Others	Any other engagement with environment	1	20
Others	Activities with uncategorised/unknown/unclear intentions	1	27
Physical health	Gaining positive impact for the mind and body through physical activities - <i>“Increased social cohesion can be associated with various physical and psychological health benefits.”</i> UGS can promote health behaviours that can increase physical activities and social engagement (Jennings and Bamkole, 2019).	1	144
Shared activity	Individuals (more than 2) engage in the same physical activity	1	69
Shared space	Doing different activities in the same space; people doing their own thing (physical activity); it could also be different people doing the same thing at the same time but not related or not interacting	1	75

# Interview

## Nodes

Name	Description	Files	References
<b>Use of space</b>	<b>Looking at how the UGSs are used, both by the visitors and park managers.</b>	<b>7</b>	<b>99</b>
<u>Attractions of the UGS</u>	Certain features of the space that may attract people to visit or to do their activities in that space - which construct what is considered as the functions of the UGS. Including: facilities, habitats, etc.	5	24
<u>Management strategy</u>	How the space is managed according to the PMs which may influence how the space is used.	5	54
Safety & Enforcement	Any approaches taken to ensure the safety of the UGSs users (visitors and PMs).	6	24
<u>Visitors' behaviour</u>	Understanding the manners of how visitors use the UGSs; from what the PMs have observed so far.	4	21
<b>PM perception</b>	<b>The perception of the park managers towards various topics - mainly relating to the management of the UGSs and personal preferences. Showing the similarities and differences in park managers' point of views.</b>	<b>7</b>	<b>243</b>
<u>Conflicts &amp; Challenges</u>	The difficulties that PMs encounter or must deal with in everyday management or occasionally.	6	56

Name	Description	Files	References
Between PMs	Any concerns or matters that might be an issue that arise between park managers - either within the same place or different UGSs.	2	2
Between PMs & Users	Any concerns or matters that might be an issue that arise between park managers and the visitors of the UGSs.	5	7
Between Users	Any concerns or matters that might be an issue that arise between different user groups (e.g. fishing vs dogwalkers) or within the same user groups.	2	3
Conservation	Any concerns regarding the urban wildlife conservation topic, specifically within the UGSs.	5	7
Safety	Any concerns or matters that might be an issue in related to the safety of the space and compromises the safety of the users.	1	3
<u>Outside management</u>	Personal opinions or perceptions of PMs towards urban green space in general, or other related things.	4	35
<u>Personal perception</u>	Any personal view of the park managers towards topics relating to UGS, specifically the management of their sites.	6	74
<u>Priorities &amp; Responsibility</u>	Information that describes the role of the park managers, including the responsibilities in managing the space; explains the experience of the managers; also can include personal views of what the future of urban green space should be.	6	48

Name	Description	Files	References
<u>Response to Project</u>	Park manager's response towards the observation data and the research itself.	4	30
Evaluation & Recommendation	Feedback from the park managers towards the project or data presented	2	16
Impact of activities	Personal view towards the impact of visitors' activities	1	2
Nodes	Feedback about the categories of activities observed	1	7
Unexpected order	Response about the rankings	1	4
Usefulness of Project	How this research can/might be beneficial for the managing authorities	3	5
Visitors' behaviour	Comments from the park managers about the visitors observed	4	19
Word Cloud	Comments about the word cloud presented in the brief report	2	3
<b>Orientation of management</b>	<b>Evidence to show the orientation tendency of the park managers. Includes: the impact of the management strategy, any perception outside the management, how the spaces should be managed. Either for the environment (i.e. wildlife - ecocentric) or for the visitors or possibly the staff (anthropocentric).</b>	<b>7</b>	<b>132</b>
<u>Anthropocentric</u>	Responses that are human-oriented; for human purposes	7	64
<u>Ecocentric</u>	Reponses that are wildlife-oriented; for wildlife purposes	7	68



Project: Unifying Environmental & Anthropological Value's of Hull's Urban Green Space [old title]

# URBAN GREEN SPACE NAME

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## INTERVIEW

### Topics highlighted:

- Recap of the topics that were discussed in the previous meeting.
- A.....
- B.....
- C....

### Issues highlighted:

- Recap of the issues related to managing the green space that were discussed in the previous meeting.
- 1.....
- 2.....
- 3.....

## FIELD OBSERVATION

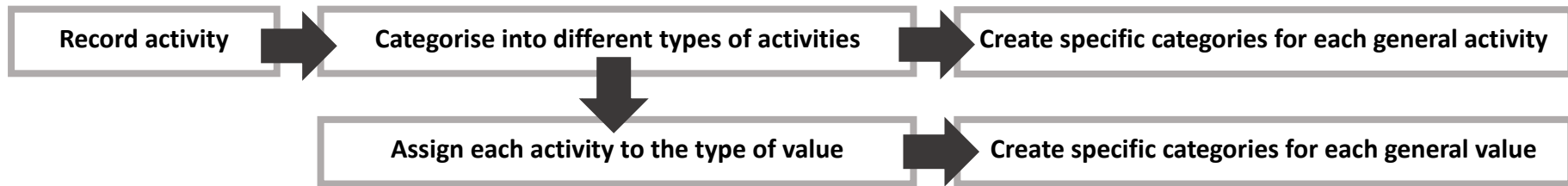
### Time spent for observation:

UGS Name : X minutes = X hours, X minutes (time range A – B)

### Specific location observed:

UGS Name : (example) grass area, pond area, around the big tree, entrance path, ...

### Observation data categorising process:



- **'Activity'** shows how the park is being used – total 14 types of activities observed
- **'Value'** shows the function of the park; what the park offers – 4 general values that can be associated with the activities
- Specific categories help with understanding the variability of the activity and explaining the situation, e.g. 'running' activity can be done either 'alone' or in 'groups', and can also either be 'playful' or to 'exercise'.

Most popular activities ranked (example):

**UGS Name**

<b>Rank</b>	<b>Activities</b>	<b>Specific category</b>
1	Interacting with surrounding	Environment; Feeding (animal); Researcher; Observation (animal)
2	Assisting or Supervised	Youths; Adults
3	Dogwalkers	Walking; Playing
4	Walking	Group; General walking
5	Cyclist	Learning; Exercise
6	Other means of transport	Mobility Scooter; Wheelchair; Walking device/frame
7	Sitting	Group; Children & Youths
8	Consuming	Picnic
9	Hanging out	Mix-age Group; All youths

Functions of the Space:

Values description:

<b>Community</b>	Providing a place to socialise; creating social networks which can increase social cohesion
<b>Environment</b>	Value/function that the environment offers; encouraging engagement between people and the environment – including the habitats, wildlife, vegetation.
<b>Physical Health</b>	Providing a place to engage in any physical activities.
<b>Negative</b>	Other types of values/functions that are not included above.

UGS Name	Rank	Specific category	Value	Example
	1	Youth & Children	Community	<i>Examples taken from observation notes.</i>
	2	Shared activity	Community	
	3	Family	Community	
	4	Shared Activity	Physical Health	
	5	Shared Space	Community	
	6	Shared Space	Physical Health	
	7	Entertainment	Environment	
	8	Accessibility	Community	
	9	Learning	Environment	

