

Discovering User Recreational Values for Local Public Services: Attitudes and Perspectives regarding A Country Park's Facilities

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This paper provides a snapshot of people's attitudes regarding the facilities housed at Brandon Country Park, a local amenity located in Thetford Forest, Suffolk. Using both short answer face-to-face surveys and a computer-based 'management task', this project invited respondents to indicate whether they felt the park managers were maximising this public amenity and, if not, where alterations could be made to more efficiently utilise this space. Our results indicate that people are reasonably content with the services provided, yet some small improvements could be made to raise the park's appeal and/or efficiency. Alterations could include raising car parking charges and considering more carefully how to target the accessibility of the Park. For the latter, this concerns both the type of activities held and the respective transportation links. The objective of the project was to investigate how Brandon Country Park can operate more effectively. However, it is our belief that these surveys can serve as useful tools for a much wider spectrum of environmental public amenity managers creating some first insights regarding they could perform and take forward key investment and planning decisions.

JEL classification codes

D71, H4, Q23, Q26, Q28, Q57

Keywords

Collective Decision-Making, Local Public Goods, Forest Management, Environmental Sustainability, Biodiversity Conservation

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Discovering User Recreational Values for Local Public Services:
Attitudes and Perspectives regarding A Country Park's Facilities and its Implications for Future
Management and Investment

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Abstract

This paper provides a snapshot of people's attitudes regarding the facilities housed at Brandon Country Park, a local amenity located in Thetford Forest, Suffolk. Using both short answer face-to-face surveys and a computer-based 'management task', this project invited respondents to indicate whether they felt the park managers were maximising this public amenity and, if not, where alterations could be made to more efficiently utilise this space. Our results indicate that people are reasonably content with the services provided, yet some small improvements could be made to raise the park's appeal and/or efficiency. Alterations could include raising car parking charges and considering more carefully how to target the accessibility of the Park. For the latter, this concerns both the type of activities held and the respective transportation links. The objective of the project was to investigate how Brandon Country Park can operate more effectively. However, it is our belief that these surveys can serve as useful tools for a much wider spectrum of environmental public amenity managers creating some first insights regarding they could perform and take forward key investment and planning decisions.

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Section 1: Introduction

This project's aim was to discover the amenity values for Brandon Country Park in order to improve its efficiency in the provision of recreational services. Such investigations are increasingly important given the public funding pressures such parks find themselves under². Indeed, subsequent to the rejected proposal to sell off public forestry³, the UK Government is now regularly seeking to find alternative ways to run such amenities effectively. The study sought to uncover a deeper understanding of who uses Brandon Country Park and with what frequency, before combining this with attitudinal information regarding why people use this amenity and how they perceive it could be improved. By doing so, this study hoped to give park managers some direction regarding how to heighten the park's appeal and profitability. To achieve these results, two surveys were conducted. Firstly, 100 face-to-face attitudinal surveys sought to understand the user demographic and discover what changes they would welcome. Secondly, we devised a computer-based experiment which took the form of a game. Here, 31 respondents were asked to act as the manager of Brandon Country Park. Constrained by a finite budget, this task asked them to choose what they prioritised within the park, forcing them to make trade-offs between potential services. This aimed to further our understanding of what visitors valued through a more inadvertent method.

The project was conducted during June of 2014. Overall, our results indicate that some pivotal yet relatively minor changes are likely to be the most efficient way for park managers to proceed, at least in the short run. However, some of the most crucial recommendations regarding marketing, access and service use could have more widespread application, and we believe that the use of such methods to elicit people's value for local environmental amenities could be highly insightful for other management bodies in making cost-effective adjustments to the facilities they offer. The remainder of this paper is set out as follows; Section 2 introduces the motivation for the paper and looks more broadly at public good provision and its associated literature. Section 3 provides information regarding our particular survey's conduct before Section 4 presents our preliminary results. Section 5 discusses these findings, giving some recommendations for park improvement before Section 6 concludes.

Section 2: Forest Recreation and the Use of these Amenities

The literature regarding the use of forests as public recreational amenities is vast, with traditional methods to capture this value stretching across both revealed preference (Willis & Garrod; 1991, Willis; 1991, Englin & Mendelsohn; 1991) and stated preference (Tyrväinen & Väänänen; 1998, Boxall & MacNab; 2000) studies. The literature has uncovered the wide range of use values which public woodlands provide to people. These may take the form of physical activities such as walking, cycling and orienteering, individual or group actions including nature watching, photography and conservation volunteering or simply offering a different environment for socialisation and relaxation. This range of activities also indicate the multi-dimensional advantages that woodlands can potentially afford the public, and by 'connecting' with this environment users can receive physical, mental or emotional benefits (Dutcher et al; 2007, Dolan et al; 2008).

² <http://www.telegraph.co.uk/news/health/elder/11189980/Parks-and-leisure-centres-under-threat-as-ageing-population-swallows-council-budgets.html>

³ <http://www.independent.co.uk/news/uk/politics/government-plans-huge-selloff-of-britains-forests-2115631.html>

However, another important element to this type of amenity is its public good nature. Typically, economists have understood that the under-investment in pure public goods arise through their characteristics of non-excludability of use and non-rivalry in consumption. Public woodlands exhibit these attributes to a great extent – whilst country parks may have defined borders and entrances, often there are only very limited ways of preventing people using what is a free and publicly accessed facility and the marginal impact of extra consumers of this forestry is negligible on incumbent users.

Despite this, we frequently see instances where people expend time, money and/or effort when both accessing and using these public goods. Many papers explain this by questioning the ‘purity’ of the facility and argue that contributions can occur when there is a private motive for enjoying a public good which is ‘impure’ (Cornes & Sandler; 1994, Kotchen; 2009) or when some exclusion converts the amenity into a ‘club good’ of limited membership (Buchanan; 1965, Boadway; 1980, Manzi & Smith-Bowers; 2005). Furthermore, some explanations also exist for positive contributions even when a public good retains its ‘purity’, with historical suggestions pertaining to altruism (Andreoni; 1990), reciprocity (Sugden; 1984) and empathy (Batson et al; 1995).

From a policy perspective, this combination of factors could prove highly insightful for the manager of a facility such as a country park. On the one hand, their amenity holds attributes associated with a public good and free-riding will mean that some degree of Government funding is warranted to ensure its viable operation and maintenance. By the same token, the amenity is likely to hold some attributes which can attract revenues and contribute towards the day-to-day operation of the facility. Elements such as car parking, gift shops and catering outlets are all complementary services which exhibit more ‘private goods’ qualities and can relieve the financial burden which accompany running the public woodland itself.

With this theoretical framework in mind, our study sought to provide some preliminary insights into what aspects of a local country park are most valued by its existing customer base and what improvements could be made. This exercise is not only helpful in that it should reveal how to increase the cost-efficiency of the park, but it also give some indication of how to best promote such a facility. This relates not only to a target demographic (i.e. would the park be more viable if run as a tourist site or that which services community needs), but also how and where to market the amenity and what strategies need to be planned in the short, medium and long term to achieve a reliable revenue stream from a sustainable clientele.

Section 3: Survey Conduct and Methodology.

Given the aims of the study, it was decided that a variety of survey methodologies should be conducted at the park in order to more extensively uncover the views and opinions of participants.

Two different questionnaires were therefore designed; from this point onwards these are simply referred to as the ‘short survey’ and the ‘long survey’. Survey duration was in itself a key motivation for producing a two-tiered questionnaire format. By conducting both a brief and also a longer survey, our research looked to strike a balance between ensuring access to the greatest range of park users possible whilst not doing so at the expense of losing detailed feedback. To exemplify this, had only the detailed survey been produced, there existed the possibility that this would only be completed by those with relatively lesser time constraints (e.g. people who were retired or on vacation). This in turn produces a sample bias by neglecting other groups (e.g. families with young children) who have a greater tendency to be under more stringent time pressures. We envisage that

these latter groups require a very different set of needs from a park, and thus omitting their responses would give a skewed impression of the overall requirements of ‘park users’ as a collective group. Furthermore, these two surveys enabled a range of quantitative and qualitative responses to be drawn, something which the field of social sciences is recognising as an ever more essential facet when seeking to provide detailed and robust research evidence (Jick, 1979; Tashakkori & Teddlie, 2010).

The ‘short survey’ was formed of an eleven-question tick-box exercise, alongside a socio-demographic section to receive some impression of sample representation. A sample survey is contained within Appendix 1. The researcher read questions aloud to respondents so as to prevent any issues of non-completion through question omission or illiteracy. All respondents were provided with the same (verbal) instruction regarding the questionnaire’s purpose, with the inference that their responses could contribute towards future park management decisions. They were also assured of response anonymity and that answers would be used purely for this research project and therefore would not be passed on for any third party analysis. This survey took the average participant no longer than 5 minutes to answer, and as reward for successful completion it was agreed with the park that each respondent would be given a voucher for a hot drink at the café which was redeemable within a set and stated timeframe. Given the duration and nature of the survey, this reward method seemed more appropriate than any form of corresponding financial incentive, which could ‘crowd out’ or distort their motivation for responding (Frey & Jegen, 2001). Furthermore, this gave the park an opportunity to promote its café facilities, implying these vouchers seemed both a cost-effective and mutually beneficial system of reward.

The ‘long survey’ involved a computer-based exercise, whereby respondents were asked to act as the park manager. Each participant was provided with a short tutorial explaining the aims of the study, although this time all information, including the associated instructions on how to complete the task, were presented on a laptop screen whilst simultaneously read aloud by the researcher. The task was to indicate the thresholds at which a user would ideally like to see the park’s amenities exist at, and essentially they were offered the chance to trade-off various amenities under the assumption of a fixed budget which they could not exceed. Attributes were multi-tiered, and their associated levels could be viewed via drop-down menus on the computer screen. Each time a respondent selected an attribute at a given threshold, the budget adjusted, indicating how much money they had left to spend on the facilities which they were yet to attend to. At any time, they could re-adjust an attribute’s threshold if they recognised that (a) the current bundle of amenities they had selected would cause them to exceed the budget or (b) such an alternation would enable them to obtain a more preferable bundle of facilities within the budget. An example template screen is given in Appendix 2. Whilst budgetary figures were stylised and simplified, their relative magnitudes did aim to realistically convey to respondents that this was a credible exercise, attempting to ensure that trade-offs were contemplated seriously and that the degree of ‘hypothetical bias’ associated with such a choice-based exercise were minimised (Bateman et al. 2002, p269). A matrix of attributes and their levels are provided in Table 1 below:

Attribute	Levels	
Gift Shop	No (£0)	Yes (£800)
Information Centre	No	Yes

	(£0)	(£800)				
Daily Parking (£)	0.70	1.00	1.50	2.00	2.50	5.00
Hourly Parking (£)	0.50	1.00	1.50	2.00		
Play Area	None (£0)	Basic (£500)	Intermediate (£1000)	Advanced (£1250)		
Short Cycle/Walking Routes	0 (£0)	1-2 (£150)	3+ (£200)			
Medium Cycle/Walking Routes	0 (£0)	1-2 (£200)	3+ (£250)			
Long Cycle/Walking Routes	0 (£0)	1-2 (£250)	3+ (£300)			
Children's Events	None (£0)	1-2 per year (£50)	3-4 per year (£100)	1-2 per month (£150)	1-2 per week (£200)	
Social Events	None (£0)	1-2 per year (£50)	3-4 per year (£100)	1-2 per month (£150)	1-2 per week (£200)	
Sports Events	None (£0)	1-2 per year (£50)	3-4 per year (£100)	1-2 per month (£150)	1-2 per week (£200)	
Wildlife Events	None (£0)	1-2 per year (£50)	3-4 per year (£100)	1-2 per month (£150)	1-2 per week (£200)	
Family Events	None (£0)	1-2 per year (£50)	3-4 per year (£100)	1-2 per month (£150)	1-2 per week (£200)	
OAP Events	None (£0)	1-2 per year (£50)	3-4 per year (£100)	1-2 per month (£150)	1-2 per week (£200)	
Hot Drinks	Yes (£-50)	No (£50)				
Cold Drinks	Yes (£-50)	No (£50)				
Sandwiches	No (£50)	No (£50)				
Cold Snacks	Yes (£-25)	No (£25)				
Hot Meals	Yes (£-100)	No (£100)				
Hot Snacks	Yes (£-50)	No (£50)				
Ice creams	Fresh (£-75)	Pre-packed (£-50)	No (£50)			
Food Price Level (example prices were given)	1	2	3	4	5	6 7 8 9 10

Table 1: Attributes and Levels in the 'Long Survey'

Once satisfied with the combination of amenities chosen, a respondent had to select the 'OK' button to confirm their final choices. If attempted for a mix of attributes which exceeded the budget, the 'OK' button could not be pressed and the budget box appearing in red to indicate why this was so. This survey was run in Microsoft Excel, and one handy design feature of this package is its ability to save and store respondents' choices in a data file as soon as the 'OK' button had been activated. Each respondent was then asked for some socio-demographic details, again with the same data protection reassurances as the short survey.

This task required a greater degree of comprehension, instruction and effort, and as a consequence the average survey duration now lasted between 10- 20 minutes. As compensation for this greater level of exertion, participants were this time rewarded with a voucher that entitled them to both a hot drink and a cake from the café. Whilst no official check was made to verify that no respondent had completed both the short and a long surveys, the decision was taken to run the two types of questionnaire on separate days. This meant that multiple responses from one participant would require them to have attended Brandon Country Park on two different survey days. The primary intention of preventing multiple responses is of course to ensure the widest range of users have their opinions voiced. However, this also lessened the potential for respondents to simply complete a survey in order to receive a voucher. The researcher deliberately did not mention the voucher incentive to any potential respondent until a questionnaire had been completed, thus preventing this becoming a primary focus for survey participation.

In total, 100 short surveys and 31 long surveys were completed over the two weeks in June 2014 when the study took place. Naturally, all surveys were undertaken at Brandon Country Park to ensure that all respondents knew the site in question and held an interest for expressing their opinions over how the park could or should be operated. Surveys were conducted over 8 days, and these were split equally between weekdays and weekends. To maintain an optimal balance, short and long survey days were equally split over these weekdays and weekends also. This again sought to minimise any biases and maximise the range of users questioned. The response rate was good, certainly exceeding the average for either electronic (Cook et al, 2000) or traditional (Heberlein & Baumgartner, 1978) surveys of this nature, and, anecdotally, there seemed to be few objections regarding either the topic or the duration and required comprehension for either task.

Section 4: Results

a) Short Survey Results

Of our 100 participants, 60% were female. Regarding age, we saw an over-representation of older people relative to the region's population, with the youngest adult groups typically under-represented. A table of these comparisons are given in Appendix 3 (Table 3.1). This is perhaps not surprising given the amenity being considered, yet it would have been useful to have a relatively comparable bank of data for user groups for this type of recreational facility for this region. 76% of respondents did not have children and all people interviewed said that they would visit Brandon Country Park again. Of the two-thirds of respondents who disclosed their post-tax household income, 22 people received less than £20,000, with half of these being over 55 years old.

In response to, 'On average how often do you visit?' the most popular response was 'At least once a week' with 36%. A reducing pattern ensued, shown in Figure 1. 13 users were visiting the park for the first time.

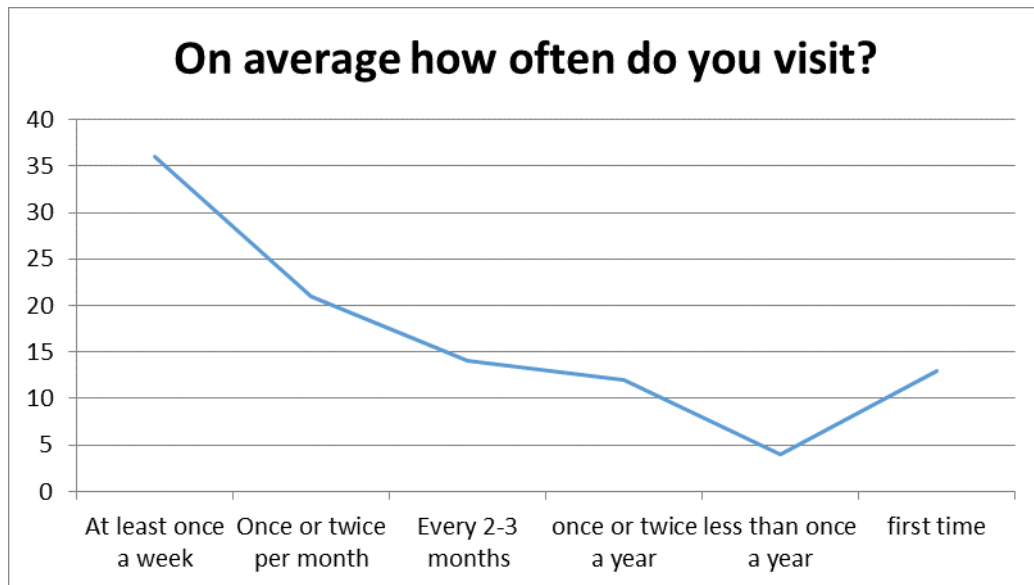


Figure 1: Visitation Frequencies

Figure 2 illustrates the type of use values that people obtained from Brandon Country Park. Whilst the most common function of the park was to utilise the public woodlands for walking, it is noteworthy that our complementary private amenities (i.e. the café) also receive a substantial proportion of users. Combining this aspect with the frequency with which people visited the park showed that 61% of cycle/sport users went at least once a week. Furthermore, of those who accessed Brandon Country Park at least once per week (36 participants), 56% were tea room customers and 53% went walking or dog walking.

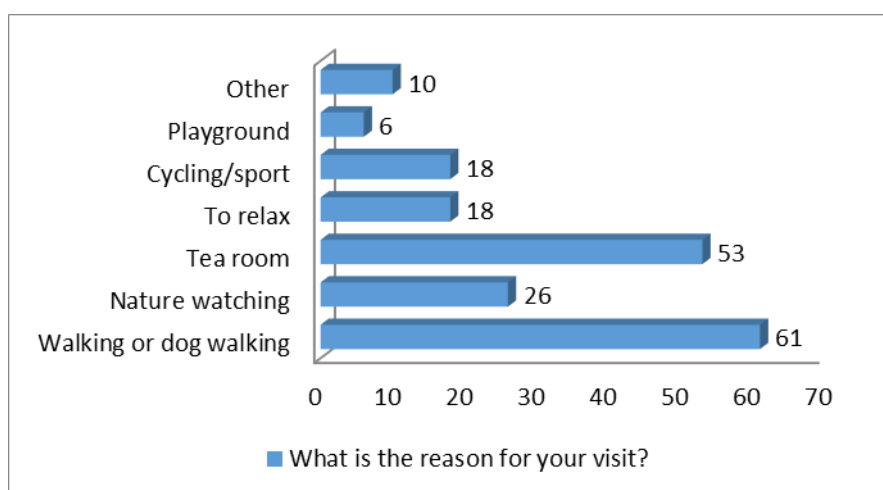


Figure 2: Reasons for Visiting the Park

Distances travelled were distributed relative evenly, with the highest proportion of those sampled (26%) living within a mile. However the second highest grouping lived further than 20 miles away. This is particularly useful to note given that the existing literature recognises that travel costs often constitute a major determining factor in dictating people's choice of where and whether to use forestry (Willis & Garrod, 1991; Boxall & MacNab, 2000). Combining these results with those of the previous question revealed that for those living within 1 mile, 81% would utilise this space for at least one of the activities of walking & dog walking or visiting the tea room (57% and 69% exclusively).

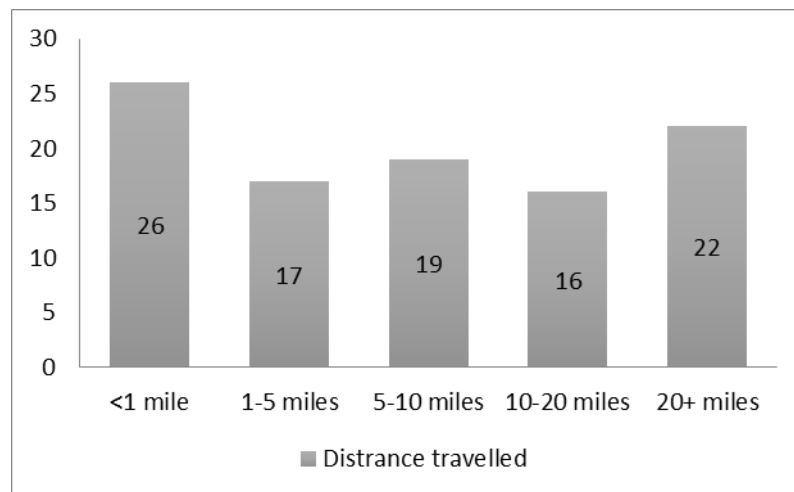


Figure 3: Distances Travelled

Figure 4 clearly indicates three major areas where people can see the potential for Brandon Country Park to entice more visitors. These are through providing more benches/BBQ stands, offering a wider range of food and having a greater degree of wildlife and biodiversity present on-site. All other suggestions received a lot less attention. This is again potentially quite insightful from a management perspective, illustrating the inter-play of the facilities' 'impure public goods' nature. By this, we mean that whilst some public good aspects (i.e. wildlife) are important to attend to, other are inviting possible enhancements to revenue streams which the park can take advantage of.

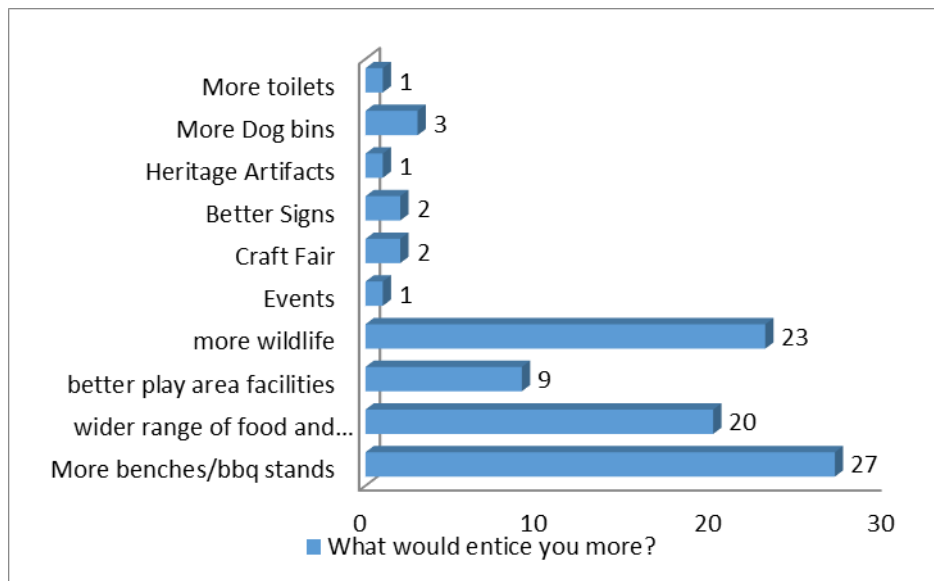


Figure 4: Possible Improvements

Respondents were asked to rate the park on a range of areas listed in Figure 5 below. Each were assessed on a Likert scale ranging between 1 (bad) to 5 (good). All characteristics received a positive response average of between 4 and 5. The highest average (4.51) was 'Ease of Access' with 64% giving it a score of 5. The lowest, quality and range of food, still obtained a respectable score of 4.18. Yet this received the lowest proportion of respondents awarding it a '5' (46%).

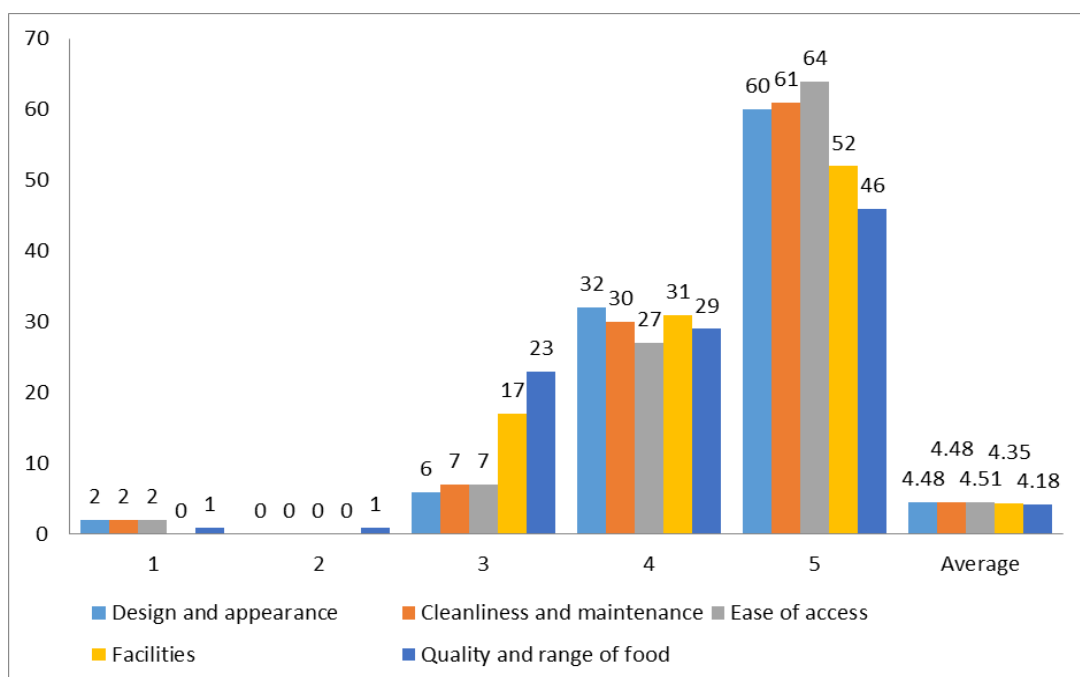


Figure 5: Park Attribute Ratings

Figure 6 provides the results from asking participants to express their level of agreement with a range of attitudinal statements. Again these were posed along a Likert Scale which ranged

from 1 ('Strongly Disagree') to 5 ('Strongly Agree'). 'Effective country park management is important to me' and the 'Park should aim to cater for all' generally received positive feedback, with averages of 4.65 and 3.83 respectively. Indeed, 75% of respondents gave the former reason a score of 5. On the other hand, 'Current facilities need to improve' and 'Raising car park charges would be suitable' received less support, with an average of 2.84 and 2.27 respectively. This question also served as a nice check of people's attention given that some were positive and some negative statements. These patterns seem consistent with the type of response which a relatively content user of the park may elicit and potentially imply that respondents were therefore engaging with the survey.

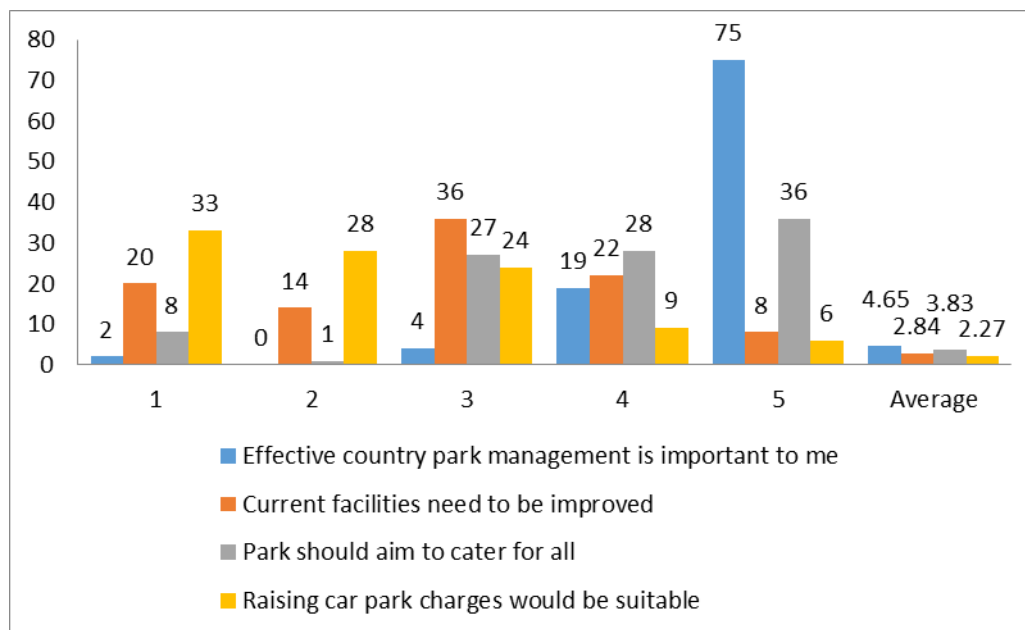


Figure 6: Attitudinal Responses

The average length of stay for a user of Brandon Country Park was 94 minutes. A full decomposition of stay durations is provided in Table 3.2 of Appendix 3. When asked, the majority of people (66%) said they would visit Brandon Country Park at the same frequency level in the summer as they would in the winter. Of more frequent summer users, 8 people come twice as often, 7 three times as regularly and 3 more than triple. 16% would not come in the winter at all.

75% of people used a car to get to the park. Whilst this may be because of the relatively low car park charges relative to nearby comparable amenities (such as 'High Lodge') this is an important aspect for park managers to consider and is something we shall return to in the discussion section of this study. Whilst 22% would walk or cycle as a means of accessing Brandon Country Park, only 3% used public transport.

b) Long Survey Results

Given that only 31 respondents completed this task, this section of our results is far more subjective in nature, and we simply seek to extract the patterns and trends that respondents seemed to make. The consequence of this is that the 'results' of this survey feature far more heavily in the discussion section which follows.

A high number of people opted for an information centre, in contrast with the majority selecting not to have a gift shop. Many respondents chose to sacrifice the latter when they realised they were coming close to their budget or were already exceeding it. This is potentially quite revealing, indicating that the type of user of this particular country park are less likely to be 'tourists' instead comprising regular or local visitors who are not in need of a 'souvenir'. Yet this being said, the provision of information (in the form of upcoming events or possible alternative walking or cycling trails) is still a function they would like to see continue on-site. In keeping with this inferred user profile, most participants opted not to sacrifice walking paths. For those who did, the trend was to discard shorter routes and retain the longer ones.

In terms of car parking charges, the average price per day was £3.15 and the average price per hour was £0.88. The cost for all day parking on the weekends currently stands at £2.50, meaning that, based upon our sample's responses, a 25% increase is feasible. A substitute park 'High Lodge' charges £5.00 per day which may well be impacted upon these responses. Weekday parking charges are considerably lower and lie at £0.70 between Monday and Friday. Keeping this two-tiered system seems sensible, perhaps upon the basis that week-day fees again could rise by 10-25% and remain aligned with the stated (weekend) hourly charge of £0.88.

It is of course natural that those who chose an advanced play area tended to also opt for 'Children's Events' to be conducted by the park. Sports and social events were the least favourable events options within the sample. In fact, the greatest level of frequency that any participant wanted sports or social events to be hosted at was 3-4 times per year. In terms of food, the average pricing level arrived at 4.55 with modal and median scores being at the level 5 threshold. Assuming that respondents perceive level 5 to represent the current situation, this suggests that existing prices are reasonably conducive with people's preferences.

The total budget spent was on average £1816.37. However, it was noted that most people did find themselves going beyond the £2000.00 budget during the survey and therefore had to go back and make some compromises.

Section 5: Discussion

In light of the survey results described above, this investigation now proceeds by making some preliminary conjectures regarding how these responses may translate towards policy-relevant elements towards park management. Of course, our sample size is very small and a greater volume of surveys would need to be conducted in order to test the robustness of these findings and to reinforce the recommendations we make here. Perhaps conducting these over a longer time span could also prove fruitful, enabling Brandon Country Park's managers to try and fully capture the collective preferences of a greater proportion of park users.

Acceptance of Current Services

The first notable element of the survey results is the reluctance of our sample to move away from the 'status quo', suggesting a preference by-and-large to keep the park's amenities at their

current levels. As shown in the previous section, this does not occur in all instances nor to the same degree for all aspects of the services provided at Brandon Country Park. This is particularly interesting when one appreciates that the park contains a diverse set of facilities, many of which appeal to only a small fraction of total users. For example, the children's play area or longer cycle trails will only really be used by families and keen cyclists respectively, yet other park users seem not to prioritise more general services ahead of these. From a public goods perspective, this indicates pro-social or community tendencies may persist here, an important consideration not only for our specific site, but also more widely for this type of amenity financing.

In relation to Brandon Country Park, this 'status quo inclination' signal to the management team that no glaringly obvious objections are raised by our sample in relation to either the day-to-day running or regarding the mix of current facilities which exist at their attraction. To some extent, one could argue this is an inherent bias to the sample used- anybody who chooses to use this public amenity must find it relatively appealing and thus should hold fewer objections to its current state. Nevertheless, these responses illustrate that many of the existing facilities, including the children's play area, recreational routes and the Visitor & Information Centre are deemed acceptable and thus the planned expenditure trajectories regarding these should prioritise visible yet small-scale upkeep and maintenance projects as opposed to more extensive renovations or refurbishments. The Centre itself has recently undergone quite extensive internal restructuring and so an insightful exercise might be to undertake a similar survey at some later date. This would test whether public opinions waver once people have become accustomed to the facility and are then questioning whether fresh changes would be desirable.

On a more general note, this type of status quo bias is a key consideration for any public body or private enterprise when evaluating the construction path of such amenities. It implies that the initial services which are provided may have an important impetus for future opinions surrounding the facility. This particular example demonstrates to a policy-maker that if trade-offs must be made at the time of construction, providing a facility at cost-effective initial levels may instil a long-lasting precedence for the future contentment which a target audience holds for it. This in turn influences how longer-term investment plans are made, where 'starting small' and using remaining revenues or budgets gradually via small but noticeable alterations would be viewed favourably. It would illustrate a willingness to improve a facility but not radically transform what is by then established as an acceptable public amenity.

Car Parking

A common concern for many operators of public amenities in modern-day Britain is whether the charges associated with car parking at their site are levied appropriately. Setting this too low will lead to congestion, or the use of their car park by people who then depart and use alternative or even rival facilities. By the same token, pitch these fees too high and you dissuade the public from using your amenity at all, with a potential sector of your clientele instead opting for rival sites where it is felt that such embedded costs are more reasonable. Studies have shown that parking charges are one of the most effective 'push' measures to dissuade car use (Stradling et al, 2000), mainly due to the refusal to pay excessive parking charges as a cognitive point of principle for UK citizens who feel that the ongoing motorists' costs are already high.

When setting the car parking tariff at a remote location like Brandon Country Park, the decision is devoid of many of these concerns. For example, it has fewer rival amenities, although these do exist in the form of other Thetford Forest recreational parks. Other than by car, there are

also a very limited number of alternative ways to access the park, and local public transport links are very infrequent. Thus, park operatives hold a valid justification for charging users to park at what constitutes a finite space. Yet one could argue this remoteness brings an associated need to scrutinise charges even more severely. This is because the vast majority of park users must confront this issue every time they decide they use the facility, causing it to serve as a constant reminder and one which they will express a repeated grievance over if judged as too high. Furthermore, if people must get into a vehicle to access Brandon Country Park anyway, there may be a tendency to instead travel to alternative sites should the view be that parking costs are excessive. Consequently, gauging public opinion on the most appropriate parking levy was one of the major motivations given by the park for commissioning this type of public survey.

The prior opinion of the park management team was that raising the car-parking fee above its current level would be received with a great deal of hostility. Our long survey's results indicate that, contrary to this perception, our sample not only accepted charges at their current levels, but were even prepared to suggest a small increment in these. One reason for this is that when based against UK averages, the parking thresholds at Brandon Country Park are quite reasonable, and are significantly lower than at the park's nearest substitute site, High Lodge. Brandon Country Park is funded by Suffolk County Council and with the well-publicised requirement for all government services to employ austerity measures, it is perhaps unsurprising that the public concede a willingness to accept small increases in parking fees. It is equally plausible that such support may relate to more private or selfish motivations, with users perhaps realising that artificially low charges create congestion, spoiling the very aspects of the park (like its peace and tranquillity) which they value and attend the facility to enjoy. An interesting methodological point here is that when directly asked through the short survey, few people were willing to express a preference for this increment (see Figure 6) and therefore it may well be that using a revealed preference study for more subtly tease out preferences is more insightful than those traditional formats which require a stated answer to a direct question.

Whichever underlying motive people are driven by, this stance regarding the ability for park operators to retain or even elevate car parking fees should serve as welcome news. It potentially affords them an extra stream of revenue which can be contribute to the ongoing improvement of facilities or towards ensuring that they are able to operate in a more self-sufficient manner. Of equal importance should be a realisation that facilities like Brandon Country Park are unlikely to lose large swathes of customers if they do decide to increase their parking charges by the small magnitudes which both they and the public were envisaging. Whilst anecdotally the public may signal that higher fees would cause them to adjust their behaviour, in reality it appears that their demand for park use is far less price-elastic.

Access & Accessibility to Brandon Country Park

Nicely linked to the preceding sub-section on car parking, the next discussion area relates to the restrictions imposed upon the park courtesy of its remoteness. This potentially causes such as facility to lose out on serving a larger sector of the public due to its lack of connectivity to either public transport or quality road infrastructure.

In a wider debate for this region of East Anglia, the recently completed construction of a dual-carriageway section along the nearby A11 is envisaged to result in a greater number of tourists at a regional and national level. Indeed, the projected economic benefits, which include tourism, are

estimated to be in the millions of pounds because of this improved connection⁴. However, the distribution of these benefits will depend upon site-specific advertising and connection strategies. Location-wise, Brandon Country Park is ideally placed to reap significant benefits, and it lies only a couple of miles from this new dual carriageway. Yet its current transport and communication links mean it still potentially sits at a strategic disadvantage. Even with the A11 improvement, the *type* of users will remain specialised to those either who enjoy walking from nearby Brandon (which is approximately one mile away), or who have access to private vehicles. This has been raised as a concern by our sample, who cite cheap and affordable transportation to the park as something managers should contemplate.

This is a good example of where, although voiced as a concern by existing park users, such feelings could be more intensely felt should non-park users have been interviewed. This is because our sample already held alternative means by which to access the park, meaning that public transport is a lesser issue for them than for somebody who may currently wish to visit the site, or visit it on a more frequent basis, but whose relative immobility prevents them from doing so.

Consequently, it is our advice that remote parks like that at Brandon must seriously consider if (and if so how) they wish to incorporate this 'untapped audience' into their vision for future site improvement. On the one hand they could reject this notion and make no improvement to current transport access and infrastructure. This perfectly legitimate option then requires them to focus more intensely upon the groups of users who do have the means to access the park. With adequate advertising and branding, this could still result in a significant influx of park visitors, especially given the road network improvements which have just been completed. On the other hand, there is the opportunity to diversify park access. This could take various forms, including a shuttle service, requesting a nearby bus stop, or through improving thoroughfares between the park and nearby Brandon. If increasing accessibility is seen as a priority, then of course this will likely come at an initially high fixed cost. Yet, in the long run, this holds the potential for the park to capture a greater client base, increasing the revenues which can be extracted.

The direction which a park wishes to take here is very site-specific, heavily dependent on whether its future vision is more aligned to being a tourist amenity (where the average user is already quite mobile) or whether instead it wishes to act as a community facility, able to embrace the range of people who constitute the local population. This decision of course also has implications for the associated funding trajectories and requirements. However, decision-makers must also recognise that each strategy has implications for aspects such as catering and staffing demand, which will both differ considerably. For the former option (a tourism site), a park must potentially provide a repetitive menu of services which are demanded in seasonal fluctuations. For the latter, a more reliable yet perhaps more varied set of services needs to be offered.

Perceptions of the Park

The final point of discussion which has seemingly arisen from these investigations is how a public amenity such as a country park wants to align itself regarding its public image. Some of the ideas generated here apply to the previous point of discussion regarding access, but on a more general note this section considers (a) the extent to which the managers of a public forest feel a need to make their facility unique or whether they would prefer to establish a more standard and

⁴ www.norfolk.gov.uk

generic amenity and (b) whether people perceive public forests as inferior goods, meaning that usage declines among the wealthier members of society.

Regarding the first of these points, our interviewed sample appear content with the existing facilities at Brandon Country Park. If this represents the wider opinion of park users, then there is no urgent requirement for managers to provide something dramatically different or unique. Indeed, by doing so there is a risk that the park may dissuade its current clientele, which may be very damaging for its long-term sustainability. However, it is logical that park operatives will want to contemplate a longer-term vision for their park. If this is to expand or diversify so as to appeal to a wider or different customer base, then improvements are likely to be necessary with regards to both accessibility and advertising. Only through this combination of changes will a broader spectrum of people feel compelled to visit the park and/or have the means by which to do so.

Given the response of our sample, our recommendation would be a form of short-run compromise. We envisage that making sweeping investments are potentially too risky; it is likely to be hard to defend as a policy and inevitably may result in a wasted expenditure. The results could be even more catastrophic if these changes not only fail to attract new users, but simultaneously cause existing users to be dissuaded from visiting what they currently see as an acceptable recreational outlet. Yet complacency is perhaps not the answer either, and making some alterations so as to illustrate to current users that the park appreciates their custom and wishes to provide them with an expanding portfolio of services is important. Our envisaged compromise suggests that such a park largely retains its facilities in its current variety and condition, but intersperse this 'upkeep' with unique events which can appeal to groups that perhaps are not immediately attracted by the existing offerings. This includes advertising events tailored to local families, the elderly or the disabled. These may be groups who on average do not or cannot visit the park with regularity, but could do so with one-off event initiatives such as subsidised transport. This type of strategy than also potentially 'tests the water' on audience diversification. Measuring success could be done through verbal surveys at aforementioned events, or could be more subtly recorded through gauging whether visitation rates or café revenues rise over subsequent weeks and months. This is a relatively risk-free and cost-effective way of trying to decipher the potential success of park expansion or redirection.

It would also be insightful to know whether people change their intensity of the park use based upon their income. The field of public and environmental economics offers a mixed picture regarding the correlation between income, development and public natural asset value. Whilst overall it is perceived that greater worth is ascribed to protecting biodiversity and conservation as a country improves in its economic development (see Jacobsen & Hanley (2009) for a meta—analysis of this), questions still exist over how income distribution and variations in the type of amenity and its level of use value impact upon this relationship. This is particularly true if we consider notions such as 'connectivity' to exist, because the target population for value elicitation (i.e. local communities) may be very different from those within the type of biodiversity valuation studies contained in the meta-analyses mentioned above. Another economic conjecture would suggest that parks could typify an 'inferior good' because wealthier people have a greater range of alternative recreational activities open to them as so choose to use a free amenity like a country park less often.

Whether this is true has a direct impact upon the amenities which should be provided at parks like that in Brandon. This includes considering the type and pricing of on-site food, the variety of events which should be held and the scale by which prices like parking can be raised. We know from its relative inaccessibility that people visiting Brandon Country Park must be sufficiently

wealthy to on average run a car and accept the park's associated transport costs. In this sense, we can also assess that in its current form Brandon Country Park is not a true public good. However, the income distribution of its users holds great poignancy for the subsequent decision-making of managers, and needs to be something which they consider more carefully if they are to maximise the collective benefits which the park can enjoy.

This point can be applied more generally to publicly financed forests. Parks need to contemplate who they are appealing to and how they can defend their funding levels. If the public on average view parks as nothing more than a free facility used primarily by those on the lowest of incomes, support for funding these facilities could wane considerably as the UK becomes an ever-more wealthy nation and thus forests become used by a shrinking proportion of people. Conversely, as the UK becomes more congested, these amenities will become unique and scarce enterprises. When viewed from this perspective, operatives of country parks will become the managers of a rare commodity that people (irrespective of income) will actively seek as they vie to receive the type of rural tranquillity which such facilities offer. Under this vision, there exists a significant potential for investment, with park managers needing to embrace the opportunities which their forests have in becoming hugely desirable amenities for many years to come and for future generations.

Section 6: Conclusion

This project's aim were to discover the amenity values for Brandon Country Park in order to improve its efficiency in the provision of recreational services. Such investigations are increasingly important given the public funding pressures such parks find themselves in light of UK government austerity measures. Through a combination of short face-to-face surveys and a longer computer based 'management task', the main results and recommendations of these investigations are summarised below:

- (i) Both surveys convey a basic contentment with the current services provision. Therefore, making large or expensive adjustments structurally seem inappropriate and may even deter the park's existing demographic.
- (ii) Whilst an unpopular policy when asked as a direct question, there appears to be a general acceptance to increase car parking charges above existing thresholds. A modest (10-25%) rise in these fees would not be objectionable and could aid the park in its objective to become more self-sufficient.
- (iii) Catering outlets do not need to drastically alter their prices or food quality, but should consider the range of products it sells and the frequency with which menu options are updated if it is to retain existing diners or capture a wider clientele.
- (iv) Accessibility is a key inhibiting factor for such remote sites. The park will need to consider who its future demographic are (i.e. tourists or the local community) and devise strategies to improve the marketing and ease of visitation accordingly. If the latter is preferred, our recommendation would be to host transport-discounted one-off events, designed to attract currently under-represented groups to the site. Not only would this 'test the water' regarding the expansion of a park's demographic, but offers a good opportunity to receive a new wave of feedback in a relatively cost-effective manner.

It is our belief that, by implementing these types of recommendation, managers at parks such as that in Brandon can really start to address their aims of greater self-sufficiency and visitor expansion. These results can also potentially serve as a platform from which a management team can seek to identify a longer-term vision for their park and choose an associated target demographic. Therefore, we hope that such recommendations can serve as vital first steps to achieving a well-supported and yet economically viable public amenity, offering advice on both a localised and more general scale.

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References

- Andreoni J.** (1990) "Impure Altruism and Donations to Public Good: A Theory of Warm-Glow Giving" *The Economic Journal* 100; 464 – 477
- Bateman I., Carson R., Day B., Hanemann M., Hanley N., Hett T., Jones-Lee M., Loomes G., Mourato S., Ozdemiroglu E., Pearce D., Sudgen R. & Swanson J.** (2002) "Economics Valuation with Stated Preference Techniques: A Manual" *Edward Elgar, Cheltenham*
- Batson D.C, Batson J.G., Todd M.R., Brummett B.H., Shaw L.L., & Aldeguer C.M.R.** (1995) "Empathy and the collective good: Caring for one of the others in a social dilemma." *Journal of Personality and Social Psychology* 68; 619-631
- Boadway R.** (1980) "A note on the market provision of club goods" *Journal of Public Economics* 13; 131-137
- Boxall P.C. & MacNab B.** (2000) "Exploring the preferences of wildlife recreationists for features of boreal forest management: a choice experiment approach" *Canadian Journal of Forest Research* 30; 1931-41
- Buchanan J.** (1965) "An economic theory of clubs" *Econometrica* 32; 1-14
- Cook C., Heath F. & Thompson R.L.** (2000) "A Meta-Analysis of Response Rates in Web- or Internet- Based Surveys" *Educational and Psychological Measurement* 60; 821 – 836
- Englin J. & Mendelsohn R.** (1991) "A hedonic travel cost analysis for valuation of multiple components of site quality: The recreation value of forest management" *Journal of Environmental Economics and Management* 21; 275–290
- Frey, B.S. & Jegen R.** (2001) "Motivation Crowding Theory." *Journal of Economic Surveys* 15; 589 – 611
- Heberlein, T. & Baumgartner R.** (1978) "Factors affecting response rates to mailed questionnaires: A quantitative analysis of the published literature." *American Sociological Review* 43; 447-462
- Norfolk.Gov Website:** report on the A11 dual carriageway between Mildenhall and Thetford. Last Accessed on 28.04.2015 <http://www.norfolk.gov.uk/view/NCC161171>
- ONS Website:** <http://www.ons.gov.uk/ons/rel/regional.../portrait-of-the-east-england.pdf>: report on the East Anglian (UK) Population statistics from 2007. Last Accessed on 28.04.2015

Jick T.D (1979) "Mixing Qualitative and Quantitative Methods: Triangulation in Action" *Administrative Science Quarterly* 24; 602 - 611

Manzi T. & Smith-Bowers B. (2005) "Gated Communities as Club Goods: Segregation or Social Cohesion?" *Housing Studies* 20, 345-359

Mitchell R.C & Carson R.T. (1989) "Using Surveys to Value Public Goods: The Contingent valuation Method" *Resources for the Future, Oxford*

Stradling S.G., Meadows M.L. & Beatty S. (2000) "Helping drivers out of their cars Integrating transport policy and social psychology for sustainable change" *Transport Policy* 7, 207-215

Sugden R. (1984) "Reciprocity: The Supply of Public Goods Through Voluntary Contributions" *The Economic Journal* 94, 772 – 787

Tashakkori A. & Teddlie C. (2010) "SAGE Handbook of Mixed Methods in Social & Behavioral Research" 2nd edition SAGE Publications.

'The Independent' Website: article on selling of public woodlands (written 25.10.10). Last Accessed on 28.04.2015 <http://www.independent.co.uk/news/uk/politics/government-plans-huge-selloff-of-britains-forests-2115631.html>

'The Telegraph' Website: article on the budget threats to local leisure facilities public woodlands (written 28.10.10). Last Accessed on 28.04.2015 <http://www.telegraph.co.uk/news/health/elder/11189980/Parks-and-leisure-centres-under-threat-as-ageing-population-swallows-council-budgets.html>

Tyrväinen L. & Väänänen H. (1998) "The economic value of urban forest amenities: an application of the contingent valuation method" *Landscape and Urban Planning* 43; 105 – 118

Willis K.G. (1991) "The Recreational Value of the Forestry Commission Estate in Great Britain: A Clawson-Knetsch Travel Cost Analysis" *Scottish Journal of Political Economy* 38; 58-75

Willis K.G. & Garrod G.D. (1991) "An individual travel-cost method of evaluating forest recreation" *Journal of Agricultural Economics* 42; 33-42

Appendix 1: The Short Survey Template

Survey Number:

Respondent Survey

1. On average, how often do you visit Brandon Country Park? <input type="checkbox"/> At least once a week <input type="checkbox"/> Once or twice per month <input type="checkbox"/> Every 2-3 Months <input type="checkbox"/> Once or twice a year <input type="checkbox"/> Less than once a year <input type="checkbox"/> First time	
2. When visiting Brandon Country Park, what is normally the reason for your visit? (Tick all that apply) <input type="checkbox"/> Walking or Dog Walking <input type="checkbox"/> Nature- Watching <input type="checkbox"/> Tea Room <input type="checkbox"/> To Relax <input type="checkbox"/> Cycling / Sport <input type="checkbox"/> Parkrun Other (please specify) <input type="text"/>	
3. How far away do you live from Brandon Country Park? <input type="checkbox"/> <1 mile <input type="checkbox"/> 1-5 miles <input type="checkbox"/> 5-10 miles <input type="checkbox"/> 10-20 miles <input type="checkbox"/> 20+ miles	
4. What would entice you to Brandon Country Park more often? (Tick 2 max) <input type="checkbox"/> More benches/ BBQ stands <input type="checkbox"/> Wider range of food and drinks <input type="checkbox"/> Better play area facilities <input type="checkbox"/> More wildlife Other (please specify) <input type="text"/>	
5. (a) Do you have any Children under the age of 18? <input type="checkbox"/> Yes <input type="checkbox"/> No (b) If yes, how old are they and did you bring them to the park? <input type="text"/>	
6. Please rate the following for Brandon Country Park (5 being good, 1 being bad) a) Design and appearance 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> b) Cleanliness and maintenance 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> c) Ease of access around the park 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> d) Facilities 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> e) Quality and range of food 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/>	
7. Please indicate the extent to which you agree with the following statements: (1 = Strongly Disagree; 2 = Disagree; 3 = Neither Agree or Disagree; 4 = Agree; 5 = Strongly Agree) a) Effective Country Park Management is Important 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> b) The current facilities need to be improved 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> c) The park should aim to cater for all rather than key audiences 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> d) Raising car park charge to £2.50 every day Would be suitable 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/>	
8. How long is your length of stay? Whole day <input type="checkbox"/> 2-3hrs <input type="checkbox"/> 30mins-2hrs <input type="checkbox"/> <30mins <input type="checkbox"/>	
9. How much more do you come to Brandon Country Park in the summer than the winter? Never <input type="checkbox"/> The Same <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> More than triple <input type="checkbox"/>	
10. How did you get to the park? Walked <input type="checkbox"/> Cycle <input type="checkbox"/> Public Transport <input type="checkbox"/> Car <input type="checkbox"/> Other <input type="text"/>	
11. Would you visit Brandon Country Park again? YES <input type="checkbox"/> NO <input type="checkbox"/>	

12. Gender: ☐ Male
☐ Female

13. Age: ☐ 18-25yrs ☐ 26-35yrs
☐ 36-45yrs ☐ 46-55yrs
☐ 56-65yrs ☐ +65yrs

14. What is your approximate annual (*monthly*) post-tax household income?

<input type="checkbox"/> Below £20,000 (<i>Below £1,667</i>)	<input type="checkbox"/> £60,000 - £69,999 (<i>£5,000 - £5,833</i>)
<input type="checkbox"/> £20,000 - £29,999 (<i>£1,668 - £2,499</i>)	<input type="checkbox"/> £70,000 - £79,999 (<i>£5,834 - £6,666</i>)
<input type="checkbox"/> £30,000 - £39,999 (<i>£2,500 - £3,333</i>)	<input type="checkbox"/> £80,000 - £89,999 (<i>£6,667 - £7,499</i>)
<input type="checkbox"/> £40,000 - £49,999 (<i>£3,334 - £4,166</i>)	<input type="checkbox"/> Above £90,000 (<i>Above £7,500</i>)
<input type="checkbox"/> £50,000 - £59,999 (<i>£4,167 - £4,999</i>)	<input type="checkbox"/> Prefer not to disclose
<input type="checkbox"/>	<input type="checkbox"/>

Appendix 2: A Sample Task Screen

Brandon Country Park

VISITOR/
INFORMATION
CENTRE

YES

GIFT SHOP

NO

CYCLE OR WALKING ROUTES

OR

SHORT (0-2km) TRAILS

MEDIUM (2-5km) TRAILS

LONG (5km+) TRAILS

WITHIN BUDGET

COST PER YEAR

£1,932.50

GO

PARKING
CHARGES

£ 2.00
PER DAY
OR
£ 1.00
PER
HOUR

PLAY AREA

Intermediate

ORGANISED EVENTS!

CHILDRENS EVENTS

SPORTS EVENTS

SOCIAL EVENTS

WILDLIFE/NATURE EVENTS

FAMILY EVENTS

OAP DISCOUNTED EVENTS

FOOD AND DRINK

Put on the menu..

HOT DRINKS	Yes
COLD DRINKS	No
SANDWICHES	Yes
COLD SNACKS	No
HOT MEALS	Yes
ICE CREAMS	No
Fresh Ice cream	

PRICES

LOW 1 HIGH 10

Examples

Hot Drink £2.50

Piece of Cake £3.50

Meal £6.00

Appendix 3: Short Survey Selected Tabulated Results

Table 3.1: Age representations

	<u>Short Survey Sample (%)</u>	<u>East Anglia Population (%)*</u>
18-25 year Olds	3	9
26-35 year Olds	10	15
36-45 year Olds	14	18
46-55 year Olds	14	18
56-65 year Olds	16	15
65 Years old +	43	25
	100	100

** Approximations taken from 2007 statistics: www.ons.gov.uk*

Table 3.2: Duration of Stay Decomposition

<30 Minutes	12%
30 Minutes - 2 Hours	57%
2-3 Hours	29%
The whole day*	2%

** Note that this is to coincide with relative car parking charge thresholds*