# Nature for People: The Importance of Green Spaces to Communities in the East Midlands of England

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#### Introduction

Organisations involved with nature protection or the conservation of biodiversity are generally interested in wildlife and in meeting the requirements of legislation on biodiversity. Recently, organisations such as English Nature, the government agency responsible for biodiversity protection in England, have been given responsibility to obtain data on how the environment contributes to people's social well-being and quality of life.

In urban landscapes, particularly those that have been disturbed by large-scale industrial processes, natural areas defined in strict ecological terms hardly exist. In Britain there is a significant amount of land that has been disturbed to a greater or lesser degree over the last 200 or more years as a result of many industrial processes. Much of this land has been recycled for other uses including agriculture, housing, industry, open space, parks and woodlands. In some places natural regeneration into early successional woodland has taken place but usually quite a heavy series of interventions such as reshaping of the land, drainage, the addition of soil or soil forming materials and planting of trees and shrubs have been the preferred methods of restoration to woodland (Moffat 1997). In a number of areas in Britain industrial or extractive land uses have been located in rural areas where the restoration has been able to create links with other woodlands existing in the landscape.

This chapter explores the importance of nature to the people living in the East Midlands of England, in terms of its social as opposed to biodiversity or economic value, as experienced through a range of publicly accessible green spaces. The research was undertaken for English Nature by the OPENspace Research Centre based at Edinburgh College of Art/Heriot Watt University. The research project took place over the spring and sum-

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mer of 2003 using a combination of qualitative and quantitative research methodologies.

The aim of the project as specified by English Nature, was "to specify the contribution that 'nature' in green spaces makes to people's social well-being by examining the use people make of, and the feelings that they have towards, a selected number of artificial and more natural green space sites distributed throughout the East Midlands". As this was a regional study, the sites were selected to fall more or less equally in each of the region's counties.

The East Midlands is a region of mixed land use and landscape. It comprises the counties of Nottinghamshire, Derbyshire, Leicestershire, Lincolnshire and Northamptonshire. Lincolnshire is largely an agricultural county with a coastline and Derbyshire includes the Peak District National Park. All the counties apart from Lincolnshire have areas of significant extractive industry, especially deep coal mining and open cast iron ore working. These have left large areas of disturbed land which have often been restored to woodland. Several large cities or towns can be found in the region, with significant proportions of ethnic minorities among their populations. The green spaces available to these populations range from waste land used informally; formal city parks, many dating from the Victorian era; country parks, often established on former industrial land; remnant woodlands now lying within the boundaries of urban areas; nature reserves of woodland, wetland, heathland and coastland; and open upland moorland (in the Peak District).

# Methodology

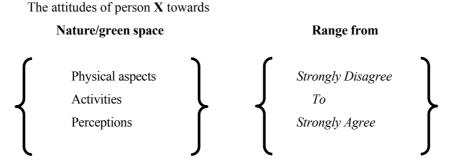
The approach used in this research can be described as "user-led" and was based on Personal Construct Theory (Kelly 1955) and the use of Facet Theory (Canter 1977; Shye 1978; Shye et al.1994; Borg and Shye 1995) in the development of the questionnaire. This approach typically starts by exploring issues with members of the public, especially those representing target groups, for example those of concern to policy makers, such as elderly or disabled people, members of ethnic or socially disadvantaged groups etc. The issues raised by these groups are then used to develop questions applied to a wider population. Contrasting views can be obtained by discussing the same issues with professionals involved in the field of research.

For this project this methodological model was applied through the exploration of key issues with members of the public carried out through a number of focus groups located in different parts of the East Midlands area. The results of the focus group research informed the development of a questionnaire used for data gathering from members of the public visiting a number of different "green" areas widely distributed around the East Midlands. A scoping meeting (another form of focus group) was also held with people concerned with nature conservation, including the management of sites such as nature reserves, woodland and parks.

The central objectives of the project as provided in the brief were used as starting points from which to develop the focus group discussions and to understand key issues that were raised. Once identified, usually as the result of the frequency with which people raised the same issue in different groups, the key issues concerning the use people make of, and the feelings they have towards, green spaces were classified into three categories as follows:

- The physical aspects of green spaces
- The activities that people engage in related to green spaces
- The perceptions that people have about green spaces

Table 1 shows these categories and the issues raised in the focus groups which formed the basis of the questionnaire. The questionnaire was constructed from the issues listed in Table 1 using the Facet approach. This uses a "mapping sentence" to construct statements to which interviewees are requested to state levels of agreement or disagreement, along a numerical scale. The scores obtained from this scale then permit statistical analysis. The construction of a mapping sentence is shown in Fig. 1.



**Fig. 1.** Construction of the mapping sentence using Facet Theory. Person X is defined using the background information

**Table 1.** Main issues that people raised about the use they make and the feelings they have towards green spaces, from the focus groups

Physical aspects of the	Activities that occur in	The Perceptions that peo-
green space	green spaces	ple hold about green
		spaces
Information about nature	Education	Spiritual
is present	Walking alone	Magical
Tidiness	Relaxation	Boring
Urban/Rural	Viewing wildlife	Peaceful
Advertised	Exercising	Feel "free"
Accessible	Stress relief	Feel "vulnerable"
Man made	Meeting people	Feel "energetic"
Proximity to home	Community events	Close to nature
Signage to direct to site	Conservation work	Commercial
Maintenance	Being reminded of child-	Owned by community
Wardens present	hood places	Important
Well known to individual		Adventure
		Vandalism
		Comfortable
		Relevant to lifestyle

#### Results

## **Scoping meeting**

A number of themes emerged from the meeting. Many people shared similar concerns and opinions regarding the subject of the study. Most expressed the view that there is not a single definition of nature, as it depends on a person's educational, ethnic and cultural background. However, they all agreed that the definition of "nature" should not be limited to the physical environment, since it includes "anything that is living", and that the term is wider than "wilderness". They also stressed that nature should not be always associated with the countryside as the former is wider and more embracing than the latter.

Another recurring theme was the social benefit of nature. Attendees listed a wide range of social benefits such as flood management, water quality, recreation, health and wellbeing, arguing that nature can break down barriers by being available to everyone. They realised, though, that there can be an elitist quality in gaining access to nature, as access to some areas has been restricted to long-standing, close-knit groups. Until very recently, many nature reserves were seen as 'out of bounds' and this is still sometimes the case. Fortunately, the situation is improving and wider sec-

tions of the community will now visit nature reserves regardless of this perceived elitism or exclusivity. In the East Midlands there are large areas of intensively managed, privately owned farmland with little public access, which leads to an attitude that such places are sterile. As a result, nature has less value in people's minds in the East Midlands.

In conclusion, everyone agreed that nature contributes to the quality of life by making people feel good, giving them a sense of place and an experience that cannot be derived elsewhere. Nature provides a vitally important sense of freedom from the stresses of modern life caused by offices, deadlines, computers, traffic congestion, noise and consumerism.

# **Focus groups**

The main purpose of the focus group research was to gain a qualitative insight into the ways in which people value nature in the study area, and to inform the questionnaire survey designed to cover a wider geographical area. The location of each group and potential target populations (namely the general public but, in particular, to include people with disabilities, minority ethnic groups, women, the elderly and young people) were agreed by the client and the steering group before the inception of the project. The groups took place in six different locations across the East Midlands: Nottingham, Leicester, Mansfield, Corby, Matlock and Spilsby. The focus group discussions were recorded and analysis of these discussions was undertaken by comparing the opinions of the different groups and the frequency with which certain issues were raised across each of the groups. The qualitative nature of the results was reinforced by the inclusion of quotations from some of the group members.

Key points from the discussion of "what is nature?" and "what is green space?" are summarized below:

- The terms "nature" and "green space" are very hard to define.
- Definitions are influenced by cultural perceptions of the natural environment.
- Nature cannot be considered in isolation from the world of human activity.
- Green space can be land over which residents feel they have little or no control.
- Green space can be a small pocket of land in an urban area that is badly maintained and unsafe to use.
- Green spaces can also be very precious.

Key points from the discussion on "what is social benefit?" are as follows:

- The key forms of anti-social behaviour are fly-tipping, litter, vandalism, dogs (mess and running loose) and intimidation from large groups of young people.
- Anti-social behaviour can prevent the implementation of green initiatives.
- Management must be visible whilst at the same time being sensitive to the location.
- There is currently an imbalance between preservation and access to sites of special interest.
- Children are not encouraged to explore and take an interest in nature.
- Parental attitudes towards, and ability to undertake, nature education have changed significantly over the last 50 years.
- The educational system must take responsibility for nature education.
- There is a lack of effective interpretation.
- Green initiatives instill a sense of ownership and encourage responsible behaviour.

Key points from the discussion about the importance of having green spaces nearby are as follows:

- There are many social, mental and physical benefits that can be derived from access to nature and green spaces.
- All the participants felt that access to nature was important, although in some cases the knowledge of nearby nature and green spaces was enough to instill a sense of wellbeing.
- Members of minority ethnic groups are rarely approached to take part in green initiatives and are unsure of where to obtain information.
- Sign posting and information given at sites is often inadequate and not very informative.
- All attempts to provide inclusive access should be sensitive to the location.

The following quotes give a flavour of the way people expressed their feelings about nature:

"Isn't it mean to control somebody through their adolescence to the rooms of the house and the immediate area of the street outside? It's inhumane, it's like imprisonment and I think green open space is a place that they should be able to get into and use. [...] You can't manufacture it; it needs to be random space that they find themselves just as we did when we were young ... a place to light bonfires {laughs}" (Elderly Male, Mansfield, 13/03/2003).

"I think you work better if you've got some green space surrounding you, a few trees and that. Probably at lunch time, it doesn't have to be a big area and you can go and sit on a bench and have your sandwiches rather than be forced to stay inside, and I think it's very beneficial. I think you probably work better after you've had your lunch or your tea break, it doesn't have to be a large area" (Male, Mansfield, 13/02/2003).

"The belief is that if you plant a tree or a sunflower then you are bound to look after it because it is your baby... Sometimes you get minibuses to take people to the countryside, I mean what do they expect people to do; you can't take them to the countryside and just leave them. You have to put it in context. For people to look after the environment it has to be in context with where they are coming from" (Female, Leicester, 22/03/2003).

## **Questionnaire survey**

The questionnaire data was collected at 16 different sites around the east Midlands. The selection was made from a candidate list provided by members of the East Midlands Regional Biodiversity Action Forum and selected to represent a geographical spread and a spectrum from the "wild" to the "urban". These included sites in the Peak District national park, nature reserves, country parks, woodlands, town/city parks and small-scale local green spaces.



**Fig. 2.** Chaddesden Wood, Derby is an old broadleaved woodland heavily used by local people



**Fig. 3.** Bourne Woods lie on the outskirts of a small country town and are considered as the local community woodland



**Fig. 4.** Victoria Park in Leicester is a typical Victorian formal urban park



**Fig. 5.** Brocks Hill country park is a newly developed area on the edge of Leicester, using a combination of restored derelict land and old farmland

Over 460 interviews were carried out. The interviewers asked people to respond as they left each site following a visit. A target of 30 interviews was set as a minimum. A range of people was wanted, so the interviewers tried to balance the age, gender and other attributes of the sample as they selected people. The questions were, as described above, devised as a set of statements which people were asked to agree or disagree with using a seven-point scale. The data was analysed using the analysis package SPSS. The analysis examined the make-up of the sample in comparison to the poulation as a whole, to see who visits these sites and who does not, then the main attitudinal questions were examined in terms of different demographic variables. Those that proved to be significant as univariate statistics (with a Kruskall Wallis P value of less than 0.05) were examined in more depth. A factor analysis was also carried out across all the attitudinal data to see what groupings of themes emerged. Ten factors were identified, such as "lifestyle", "relax/nature", "welcome" or "childhood/community".

The green spaces used in the survey were chosen to be very different in character. Figures 2–5 show some of the sites.

## **Results and conclusions**

What has been discovered about the social value of nature to the people of the East Midlands of England?

## Who is visiting and what do they do?

Many people visit all type of sites, regardless of age or sex. However, there are disproportionately low numbers of people from black and ethnic minorities and people with disabilities. While many people visit on their own, couples and families make up the majority of visitors, the latter especially at the country parks and other sites with special facilities and animals or birds.

Women visitors are under-represented in comparison with the general population, and children formed a smaller proportion than might have been expected given the times of survey. Comparatively low numbers of unemployed people visit; those in employment are mainly in lower supervisory and technical occupations or lower managerial and professional occupations. Many retired people also visit green spaces. The findings about women seem to confirm previous studies that found that women tend to be significantly less frequent visitors than men to woodland or countryside sites (Burgess 1995; Ward Thompson et al. 2002). It may reflect the concerns expressed by women in the focus groups over safety, and women's responses in the attitudinal section of the questionnaire, where feelings of vulnerability were also rated strongly.

Teenaged children are also infrequent visitors compared with younger children. One of the possible causes of this is that what urban teenagers frequently consider "outdoor" places to visit are in fact indoor spaces such as arcades and malls (Travlou 2003). It may be a particular phenomenon of this age group. Læssøe and Iversen (2003), in an in-depth qualitative study of the importance of nature in every-day life, found that youth generates a discontinuity with the nature relationships of childhood because a lot of energy is put into social relations during this phase. The findings also bear out other research into the relationships teenagers and children have with outdoor places such as woodlands (Bell et al. 2003, 2004).

There were few people from black and ethnic minorities visiting any of the green spaces. This seems to follows a common pattern in the UK, as there is a range of evidence from the literature that black and minority ethnic communities in Britain do not participate in visiting the countryside and other natural open spaces, and related activities, proportionate to their numbers in society.

Furthermore, fears of racial and/or sexual attack, of being alone in an unfamiliar environment and worries regarding dangerous flora and fauna, all seem to contribute to a sense of unease in countryside and other natural open spaces (Chesters 1997; Groundwork Blackburn and Manchester Metropolitan University 1999; Slee et al. 2001).

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The main reasons people visit green spaces are to walk the dog, to gain exercise, and for the pleasure of being in a park or close to nature. Dog walking is most popular at local sites and in woodlands, also at country parks, but less frequent at nature reserves. Reducing stress and relaxing are significant reasons for visiting green spaces and represent one of the main social values. The importance of dog walking in relation to green spaces has been corroborated by other studies (Ward Thompson et al. 2002; Countryside Agency survey 2003), and cannot be underestimated. A study by Bauman et al. (2001) found that 41 per cent of dog owners walk, on average, 18 minutes per week longer than people without dogs and that if all dog owners regularly walked their dogs, the resulting boost in physical fitness across the community would save Australia's health care system about \$175 million every year. In this study, focus groups identified dog fouling as being a key form of anti-social behaviour, so the tensions found elsewhere between dog-owners and other green space users seemed to surface here too (Ward Thompson et al. 2002). One of Tidy Britain Group's surveys found that 80% of people questioned were "greatly concerned" by dog mess, an indication that problems caused by dog fouling are all too common (Tidy Britain Group 1999) and some type of balance has to be achieved. This, however, is not the only problem associated with dogs; a study by Madge (1997) showed that the fear of coming into contact with animals, and in particular dangerous dogs, was much higher for African-Caribbean and Asian groups than white groups.

Many respondents were members of conservation organisations but do not necessarily take an active part in conservation activities.

People think of nature in quite a broad way. They find the term "green space" a difficult term. Nature includes physical characteristics, wildlife and also perceptions and emotions, especially peacefulness and other terms associated with the calming or de-stressing value of nature. Professionals have contrasting views of the distinction between "nature" and "country-side", for example, and they use the term "green space" more widely than the public understanding of the term.

Getting away from stress was associated with relaxation and nature – seeing it, being in natural places and learning about it. This suggests that there is a role for natural areas for stress reduction, reflected in other studies where it has been shown that leisure activities in natural settings or exposure to natural features have important stress reduction or restoration effects (Ulrich 1981, 1993; Sheets and Manzer 1991; Kaplan 1995; Parsons et al. 1998; Ulrich et al. 1991).

When talking about "social values" people tended to focus on "antisocial uses". There is a lot of evidence that sites need to be well managed (but not over managed), welcoming, provide information and have a natural appearance if people are to obtain the best value from them.

Sites close to home are preferred, especially by those who used to visit frequently when children. This importance of accessibility to places close to home compared with the site character is reflected in other research (Ward Thompson at al. 2002).

There are significant associations between the type and degree of use of green spaces by people now and how frequently they visited such sites when children. This suggests that if children are not being allowed or encouraged to visit natural areas or other parks by themselves, they are less likely to develop a habit that will continue into adulthood. Those who had visited a lot as children were more likely to find magical and other positive qualities in nature, and to develop a closer relationship with it as part of their lifestyle, than those who did not.

Accessibility and welcome were rated highly and this seems to go with a sense of community ownership of green space, when there is a sense that it belongs to the community as much as to the formal or legal owners.

The sense of feeling uncomfortable or vulnerable was not very wide-spread overall, although it was most significant among the female and older respondents. This sense of vulnerability among women reflects the findings of other research (Burgess 1995; Ward Thompson et al. 2002). An international example of ways of dealing with this issue is the city of Montreal's Women's Safety Audit, which considers that it is vital not only to take into account the specifics of sexes but also the particulars of groups (elderly and disabled people, ethnic and sexual minorities) as well as involving men in their role of father, partner, son or potential victim (Michaud 1993).

The sites that attracted most positive responses to perceptions were the nature reserves, woodlands and urban parks. Local areas were important for some activities but country parks tended to score less highly. Responses in relation to nature reserves were very positive compared with most other sites. This is partly the value of their being good for children to learn about nature, but other values, such as being associated with spiritual qualities, getting free from stress and feeling energetic are also positively associated with nature reserves. Woodlands share many of these attributes. Wild areas and country parks have the most associations with being bored but also have some positive values.

## Lessons for providers

The research has flagged up a number of useful areas for consideration by providers of nature and outdoor recreation:

How do the findings of this research affect the implementation of strategic environmental assessments, part of a recent EU directive due to be implemented soon?

The importance of different kinds of green space and of easy and welcoming access for all, including children, disabled people and people from ethnic minorities, needs to be taken into account in strategies for the regeneration of derelict areas, alongside other social and environmental needs.

Urban parks were highly rated in this study. What are the implications for their funding, regeneration and management?

The implications raised by the findings for regional environmental strategies need to be considered.

Country parks emerged less favourably from the research than some other areas and there are implications for their future. Are there ways to enhance their social value?

# **Lessons for managers**

There are many pointers to things that managers can do to encourage more people to visit green spaces and to ensure that, once there, the visit is a good one.

More and better information is needed, to tell people where they can go, what they can do and how they can get there, orientated towards different groups, such as black and minority ethnic groups, disabled people, older people, socially disadvantaged people etc. This may need to be in different languages, presented in different ways and distributed differently in order to meet the needs of those not reached at present.

Information at sites is also important, possibly presented in new ways and aimed at different groups in what is clearly a fragmented, not a homogeneous population.

More activities and means of engaging children in green spaces should be considered, so that they develop a habit of visiting them. It is important, nonetheless, to understand why teenagers may not want to visit such sites. Working with parents and police/rangers etc. to develop a safer environment so that children are allowed to go out by themselves would be very helpful.

Further development of educational programmes for children is necessary. This was seen by many people as vital yet also seemed not to be widely enough available. Using green areas near schools, which are easier to visit and not necessarily special parks, should be considered.

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