

SOCIAL DYNAMICS OF LONDON'S TREES, WOODLANDS AND GREEN SPACES

LIZ O'BRIEN
ROZ OWEN
JASBER SINGH
ANNA LAWRENCE















MAYOR OF LONDON





CONTENTS

	Background	1
	Introduction	3
	1. The urban woodland and green landscape	4
	2. People's experiences and perceptions of urban woodlands	7
	3. Striving to be inclusive	9
	4. Participation and decision-making	12
	5. What progress can be made by woodland practitioners and managers?	14
	Appendix 1: Useful websites	17
	Appendix 2: Publications	18
	Acknowledgements	21

BACKGROUND

This document focuses on broad issues for woodland management arising from the social dynamics of human interactions with woodlands in urban areas. A range of social problems and barriers to accessing and enjoying woodlands that can occur in urban areas are discussed and suggestions of ways in which these might be addressed are outlined. Case study research from the Capital Woodlands Project briefly highlights specific site problems and the importance of woodlands to local residents.

The Capital Woodlands Project (CWP) is a three-year London Biodiversity Partnership programme of work running from 2006–2009, supported by the Heritage Lottery Fund. The project is managed by Trees for Cities, which works in partnership with the Greater London Authority, the Forestry Commission (FC), British Trust for Conservation Volunteers, the London boroughs of Bromley, Croydon, Haringey, Merton and Redbridge, and the Peabody Trust.

The CWP aims to raise appreciation of London's woodlands and increase public benefit and participation by undertaking access, biodiversity, community and training work both in six 'flagship' woodlands¹ and throughout the capital. The project is a significant mechanism for delivering the objectives of the London Tree and Woodland Framework. The overall goal of the Framework is to deliver the Mayor's vision for London of maximising the contribution of trees and woodlands to Londoners' quality of life.

1. Coldfall Wood, Peabody Hill Wood, Morden Park Wood, Birch and Rowdown Wood, Claybury Wood and Scadbury Park Wood. <http://www.capitalwoodlands.org/>



social dynamics of London's trees, woodlands and green spaces

INTRODUCTION

The importance of urban woodlands is illustrated in this document by interviews undertaken with users and non-users of the CWP sites as part of a case study research project. A broad range of previous evidence is also drawn on, which provides an understanding of the ways in which people experience trees and woodlands as part of their everyday lives.

Three residents of the Peabody Hill Estate summarise some of the benefits of their local CWP site, Peabody Hill Wood, in the following statements:

‘It’s great to explore the woods as there’s always something new to see’

‘The woodlands give you a country feeling within the city’

‘The greenery adds a sense of living environment’.

Before the CWP began, a range of work was undertaken at the six woodland sites to understand the views of local communities and barriers to accessing the woods. Work was also carried out to explore the threats to the woods in terms of lack of management and resources, and to understand their archaeological and heritage importance.

Through the CWP, improvements have been made to the infrastructure of these six woodlands, such as easy-access trails, improved footpaths and entrances to the woods, and the creation of nature trails and new interpretation leaflets. Coppicing work and the removal of rubbish and invasive species have also been carried out. A range of community events and activities has been organised to try and reach new audiences, and build closer relationships with local schools.

Throughout the wider London region, work has included the dissemination of good practice in the management of London’s woodlands, training in woodland management skills, strengthening of links between woodlands and communities, supporting the educational use of woodlands in London, and recruiting and supporting woodland conservation volunteers.

Woodlands can be considered dynamic places, changing and evolving along with the communities that use them. People make these places what they are through using them and, in turn, are influenced by the natural environment. It is the exploration and understanding of the social aspects of woodlands and their importance to local communities in London that informs the CWP, woodland practitioners and managers of ways to work with local communities to increase public benefit from woodland.

1. THE URBAN WOODLAND AND GREEN LANDSCAPE

Over 80% of Britain's population live in urban areas. London is home to just over seven million people, 29% of whom are from minority ethnic groups. Woodland covers 8% of the city's land area across a diverse range of sites, the equivalent of over forty square miles. Public spaces, including woodland, contribute greatly to the character and identity of the city.

Urban areas can comprise a large range of green spaces, such as woodlands, public parks and gardens, playing fields, derelict land, wetlands, farmland on the borders of urban areas and coastal areas. All of these different types of green spaces contribute to people's perceptions and experiences of nature. This document focuses primarily on woodlands, but reference is also made to the importance of a range of other green spaces.

In the 1980s and 90s, there was a major decline in green space quality, particularly in urban areas. A report by CABI Space (2004) documents the background to the decline, defining the key issues as follows.

- The quality of urban green spaces is often a low priority for local governments, an issue compounded by a lack of local political support and decreasing levels of funding.
- The general lack of community engagement in urban green space provision and management has resulted in low demand and aspirations.
- The management of green space is often split over several departments of the managing authority, resulting in a poorly integrated approach.
- As the quality of public green space has declined, so has the public perception of green space, with both real and perceived problems of crime and vandalism colouring people's opinions.



Providing and maintaining woodlands and green spaces, urban or otherwise, is not a statutory duty of local authorities. Despite the provision, conservation and enhancement of quality green spaces in the urban environment being promoted by planning guidance notes, local authorities have not given a high priority to the implementation of these policies (Edwards and McPhillimy, 2003, English Nature, 2003).

More recently, however, there is a significant move towards the 'greening' of public spaces in an attempt to reconnect people with nature, while simultaneously trying to meet environmental and economic goals. In Britain, 33 million people make a total of 2.5 billion visits to urban green spaces every year (The Royal Commission on Environmental Pollution, 2007). The Park Life Report (Green Space, 2007) found that overall public opinion of green space in the United Kingdom was positive and that over 80% of respondents believed that green spaces were a focal point for the social life of communities. Many studies have emphasised the importance of trees



and woodlands in urban areas and the benefits they can provide for communities in terms of recreational opportunities, health and well-being benefits, education and learning opportunities, and enhanced community cohesion (Kuo and Sullivan, 2001; O'Brien, 2006). Woodlands also act as bio-diverse networks and provide important services in terms of air filtration, regulation of the microclimate, noise reduction and surface water drainage.

The Urban Green Spaces Task Force, which highlighted the decline in investment outlined above, suggested in their final report (2006) that there is a growing awareness across the country of the value of good-quality green space, and recognised their potential to contribute to the social and environmental justice agenda. The social importance of woodlands and other green space is also moving up the political agenda through Government priorities, such as improving public health and encouraging the use of the outdoors for education and learning (O'Brien, 2005; Bell et al., 2008).

CASE STUDY MORDEN PARK, MERTON:

The importance of facilities to older visitors and young people's issues with territoriality

Morden Park covers 25 hectares and includes 5 hectares of woodland in a borough that contains very little woodland. The park has therefore been designated as a Site of Borough Importance for Merton and is part of a local nature reserve.

As part of the research project mentioned previously, interviews were undertaken with older adults over fifty-five and young people. MIND, a charity working on mental health issues in the UK, takes groups on walks in green spaces in the Merton Borough. A researcher joined an older MIND group at Morden Park Hall, which is a National Trust property near to Morden Park. Many of the participants preferred meeting at Morden Park Hall due to its café, which acted as a focal point for socialising. This was the case even though Morden Park was closer to where most of the participants lived, which illustrates the importance of facilities such as cafés, meeting places and benches for older groups in enabling social interactions to take place. As one male participant stated, the walks



'exercise the body and tongue'. Another emphasised the importance of group activity 'when something is laid on it's a good thing, no one is going to get lost or attacked'. The group felt that reducing violence and vandalism were important issues in both parks, as well as having dog-free zones and opportunities for young people to engage in activities, such as football.

A youth-work team for Merton conducts work with young people who use Morden Park. Interviews with some of these young people highlighted that, as for the older group, using the park for socialising was especially important. The young people often frequented Morden Park in the school holidays and some of them had appropriated space within the woodland area where they would sit on benches and drink alcohol. However, recent territorial clashes with young men from another area in south London caused tensions and altercations, which has led to these young people using the park less. Territoriality is a social system where control of an area is claimed by one group and defended against other groups. One of the young women highlighted the problem: 'The ***** wallies come down. A couple of months ago three people went into hospital. There was trouble in the park, with others coming into the park'.

Recent research on the issues of territoriality in urban areas has identified the need for diversionary activities such as sport, education and conflict resolution to try and address these issues (Joseph Rowntree Foundation, 2008).



2. PEOPLE'S EXPERIENCES AND PERCEPTIONS OF URBAN WOODLANDS

Woodlands mean different things to different people. For some they are places for healthy exercise; for others, somewhere to unwind and walk in the fresh air, a place to walk the dog, eat a picnic with loved ones or socialise with friends. For young people they can be places to 'hang out', experiment and escape from the public gaze. Woodlands also provide opportunities for education and learning: the CWP has facilitated and encouraged a variety of activities including Forest School, for example, and environmental volunteering. It is clear from previous research and research carried out for this project that people and communities' value woodland in a wide variety of ways and that woodland can provide multiple benefits, as illustrated in Table 1.

How people perceive, and benefit, from woodland is linked to how that space is used, or not used. Many women and other under-represented user groups feel unsafe in green spaces and this is often related to how they feel in wider society (Women's Design Service, 2007).

Table 1. Benefits of public engagement and involvement in urban woodland

Benefits to the public	Engagement and involvement
Health and well-being	Provision of space for physical activity, such as walking and cycling, and for mental relaxation and recuperation.
Education and learning	A resource for learning about the environment; a place to volunteer, acquire skills and to play in nature.
Culture, landscape and heritage	A place for events and festivals or to participate in traditional woodland management activities, such as coppicing; a place to enjoy woodlands as part of the wider city or town landscape.
Social cohesion and community development	The chance to participate and be involved; a place to make friends, socialise and develop new social networks.
Economies and livelihoods	Community enterprises, attainment of transferable skills, employment, contribution to the wider economy.
Recreation and accessibility	Space for a range of activities to take place, such as picnicking, walking and sitting.
Environmental sustainability	Promoting sustainable behaviour linked to climate change adaptation, e.g. through conservation work such as tree planting.

Ward Thompson et al. (2004) state that encounters with vandalism or other anti-social behaviour serves as a deterrent to accessing woodland (see Case Study Morden Park). Understanding why some spaces feel safer than others is important when developing management plans for urban woodland.

The values people associate with woodlands and green space and any barriers to accessing them should be an important consideration for land managers. It is common for people to protest when public spaces change, so a better understanding of the varying values attached to specific places could be useful in reducing tension and conflict.

Research has also highlighted a range of barriers to accessing and using woodland and green space (O'Brien and Tabbush, 2004; Weldon et al., 2007). These are illustrated in Table 2.

Table 2: Barriers to accessing, using and enjoying woodland

Barriers to access	Reasons
Negative perceptions, fear and safety concerns	Worries about anti-social and criminal behaviour; concerns about vandalism and lack of social control within sites.
Under-represented groups feeling unwelcome	Feeling out of place; concerns about not fitting in with the existing profile of users; lack of confidence to use spaces without the support of others.
Lack of knowledge	Not knowing where spaces are, what to expect from a particular space, or what facilities are available.
Physical accessibility	Woodlands may not be near to people; busy roads may have to be negotiated to reach a space; paths and facilities on site may not be suitable for wheelchair users or the elderly and infirm.
Lack of motivation	Lack of time, influence of bad weather, having no one to go with.
Lack of reasonable facilities	This can include a lack of toilets, signposts, information and play areas for children.
Conflicts of use	Potentially these can arise between people who have different needs and use woods in different ways from each other.



3. STRIVING TO BE INCLUSIVE

It is important that all sections of society have the opportunity to enjoy urban woodlands. Legislation in the UK requires organisations, in particular public authorities, to actively eliminate unlawful discrimination and promote equality of opportunity concerning the six strands of equality: age, gender, religion and belief, race, disability, and sexual orientation, and therefore there needs to be a much greater understanding of these issues in the management of woodlands.

The **Use of Public Parks** report (Moore, 2003) for England highlighted that the disabled, retired, black and minority ethnic communities, those aged 45–64 years old, women and those from the more deprived social groups, were all under-represented users of green space in proportion to their presence in surrounding residential areas. Particular deterrents for under-represented groups were identified as vandalism, graffiti, dog mess and perceived safety and racial issues. Defra (2008) has recently published an action plan to increase the number of people from under-represented groups

who access the natural environment, whether it be in the countryside or urban green spaces. Below we explore three aspects of equality to illustrate some current issues of relevance.

Race

The modern multicultural character of urban societies creates opportunities and challenges. London is diverse; 78% of Black Africans and 61% of Black Caribbeans in the UK live in London. Evidence from America suggests that there are differences in the preferences of African Americans and White Americans for urban parks and woodlands (Elmendorf et al., 2005). For example, African Americans preferred developed facilities and services, whereas Whites preferred more wild and natural habitats; unfortunately there are few studies of this kind in the UK. However, there is evidence suggesting that some minority groups view green spaces as a location for socialising, whilst others do not.

Johnston and Shimada (2004) outline that racial discrimination can exist in urban woodlands and such views can affect people's decision-making and opportunities to participate in the use and enjoyment of these spaces. What is clear is that some woodlands are more diverse and inclusive than others. It is this distinction that requires greater understanding.

Disability

Research carried out in Scotland and England into disabled access to woodlands identified from disabled participants that barriers to accessing woods included a lack of relevant information, attitudes towards disability and lack of public transport. Interviews with woodland managers revealed that issues around land management, information and communication, and knowledge of disability are implicitly linked to access to woodlands for disabled people. The research also found



that small changes to the physical landscape, such as improving pathways, could improve access for some disabled users (Bowmand and Bell, 2007). The research also highlighted that good community engagement with a range of disability groups was a way of understanding and improving access for these groups. Importantly, the research indicated that changes to woodland management are linked to issues of social inclusion.

Young people

The media focus on young people often portrays them as a ‘problem’ and talks about ‘gang’ culture, which heightens the fear of some adults when encountering these groups. Young people are often labelled as anti-social when they congregate in large groups in urban spaces such as parks, woods or shopping areas. A recent report for the Joseph Rowntree Foundation (2008) highlights that territoriality is part of everyday life for some young people in cities and that territorial behaviour emerges when young people’s identities are closely associated with their neighbourhood (see Morden Park case study). Boys aged 13–17 years old were most involved in territorial behaviour; girls and younger children less so. Men in their 20s also showed territorial behaviour, particularly where it was associated with drugs and criminality.

Research has also indicated that young people view green spaces as places to socialise away from adults. It is important to recognise gender differences amongst young people as recent evidence indicates that young women are less likely to participate in outdoor activities.



CASE STUDY

PEABODY HILL WOOD, LAMBETH:

Estate residents' thoughts about safety issues and improvements to their local wood

Peabody Hill is a 4.5 hectare woodland separating the Peabody Hill and Rosendale Estates in Lambeth with surfaced, stepped paths through the woodland linking these two communities. The woodland is a Site of Borough Importance for nature conservation.

Research was undertaken with residents of the two housing estates on either side of the wood to explore the ways in which people valued the woodland and identify any barriers to using it. From the focus groups it emerged that residents had concerns about personal safety and the dumping of rubbish in the woodland. Abandoned cars and overgrown vegetation were also major issues. There was a sense of there being a battle between those who carried out anti-social behaviour in the wood and those who wanted to see improvements made.



Despite their concerns, the residents outlined why the wood was nonetheless important both to themselves and the children on the estates. A Caribbean male resident stated that: 'natural areas are vital to the lives of all people; children especially need to experience this from an early age'. It was considered especially important for the woodland to provide benefits for local children in terms of a way for them to have contact with nature and space to learn and play.

Residents outlined opportunities for improving the wood, which included removing rubbish, cutting back vegetation and providing seats and benches. As part of the CWP, Trees for Cities organised a woodland clearance and tree planting day in the wood with music, food and face painting for the children. This cleared away some of the rubbish and cut back overgrown vegetation that was of concern to residents. Over fifty people, including thirty young people, got involved in the activities.

4. PARTICIPATION AND DECISION-MAKING

Recognition of the importance of public participation in the environment has arisen through Local Agenda 21, which emerged from the Rio Earth Summit in 1992. In 2008 the Government produced a White Paper called Communities in Control: real people, real power (DCLG, 2008). This outlines increased support for people to have a greater input into decision-making in their local area. The White Paper also highlights the importance of volunteering by citizens. Participation in environmental decision-making is seen as fundamental to sustainable forest management and is a part of FC policy. Participation can range from decision-making about how new woodlands should be created to how they can be managed and what activities and facilities might be made available (see Peabody Hill Wood Case Study, above). A range of tools can be used to facilitate public participation, for example citizen's juries and panels, participatory video and theatre, deliberative focus groups, community 'drop in days' and Planning For Real². These processes can facilitate social learning and capacity building, as well as the

sharing of both expert and lay knowledge. Participation can also empower individuals and communities if they feel that their suggestions are being considered and addressed.

Many London woodlands have 'Friends of' groups that get involved in a range of activities including volunteer work. It is important that a diverse range of people get involved in participation processes to aid social inclusion and ensure that a greater understanding of diverse needs is recognised. A recent meeting held by the FC with six 'Friends of' woodland groups in London, highlighted issues of importance and concern for these groups. The FC is keen to encourage these types of groups as an important aspect of improving standards of woodland access and infrastructure in London. When asked what their groups wanted from woodlands, a range of issues emerged, such as places for children to play, an escape from the urban built environment, and protection for wildlife habitat and biodiversity. Concerns centred on motorbike use in woods, dumping of rubbish and intimidating youths. The groups highlighted that minority ethnic groups and women were largely under-represented in the use of their woodlands. Improved facilities such as cafés, visitor centres, footpaths and, in some areas, increased openness were seen as key factors that could improve local woods. The groups gave a high priority to counteracting social problems such as vandalism and anti-social behaviour by improving policing through links with police community support officers and providing safe environments through activities such as enhanced wardening and understorey management.

2. Planning for Real is a nationally recognised process of community consultation
<http://www.nif.co.uk/planningforreal/>



CASE STUDY

BIRCH AND ROWDOWN WOODS, CROYDON:

Concerns about motorbike use in the woods

Birch and Rowdown Woods comprise 30 hectares of woodland located in the Croydon wards of Field Way and New Addington. The woods, which are linked by a grassland area, are designated a Site of Borough Importance.

Research was carried out at two community festivals, one held in the woodland and the other in a community centre. Festival participants spoke about the community spirit of the area and how the woodlands gave the place a countryside feel within the city. People who used the woods described walking their dogs and teaching children about wildlife. One man stated: 'I like the scenery. People need to be more aware that this is a place to go to and enjoy and not be afraid. The more people go, the safer it will be. When you go, you meet other people and don't feel alone'. This man highlights the potential to create a virtuous circle in which



increased use by the local community can help reduce problems of anti-social behaviour. However, for some residents, lack of facilities in the woods were a problem, as one man highlighted: 'Don't use it, because there is no reason and nothing to go for. Nothing is there'.

Key problems in the woods were identified as illegal motorbike and car usage and rubbish dumping. Motorised use of the woods has been a difficult issue for practitioners to deal with and lack of resources have been an inhibiting factor. Through the CWP, fences and gates have been erected so that pedestrian access is encouraged, rather than motorised access. As one male resident suggested 'It sends out a message things are changing, a positive message...turning these areas that have been perceived as no go into places that are turned round into the complete opposite'.

5. WHAT PROGRESS CAN BE MADE BY WOODLAND PRACTITIONERS AND MANAGERS?



What this document briefly illustrates is the range of ways in which woodlands are used, perceived and enjoyed by people and how they can make an important contribution to quality of life for local communities. Through interactions and involvement in woodland use, people can become more involved in the management and improvement of their local woodlands.

Through the CWP, improvements have been made to the management and conservation of the six flagship sites and a range of community events and activities has enabled a variety of people to engage with, and enjoy, woodlands across London. However, there is also a range of barriers preventing people from benefiting from these spaces. Practitioners sometimes struggle to balance the needs of their job with trying to deal with conflicts of use, widen access for all and enable communities to feel a sense of ownership of their local woods. The research work undertaken at the CWP flagship sites and wider research on urban woodlands in general highlight a number of key challenges that could start to be addressed in some of the following ways (Table 3).



Table 3: Potential ways of making progress

Programmes that promote social inclusion	Urban woodland management should include programmes that promote social inclusion. The use of outreach workers is particularly important in gaining an understanding of local communities and starting to include more diverse groups. A range of activities could be fostered, such as education, consultation, development of community strategies that promote social inclusion, and engagement of ethnic communities and other under-represented people.
Led events and community activities	Led events, such as walks, and community activities are ways of targeting under-represented groups and motivating and enabling them to access sites by providing support and enabling them to gain confidence and familiarise themselves with local woods. Community events also illustrate the importance of woodlands as social hubs.
Understanding barriers to access	Barriers to accessing woodlands are based on physical issues as well as social and psychological ones, and these need to be addressed holistically. Gaining an understanding of these barriers for different groups of people in the context of their local woodland is an important first step in trying to reduce or remove barriers.
Participation	Engagement and participation can help woodland managers and practitioners to gain a better understanding of the local context and the needs of diverse communities. Taking people's views on board can help to provide a space that is well used and valued by local communities. This process should take place with those who do not use woodlands as well as current users. Engagement can also lead to the development of local capacity through the formation of 'Friends of' groups or volunteer groups that carry out activities in woodlands. These approaches also provide new ways for people to develop a positive relationship with their local woodland.
Sustaining momentum is important	The CWP has spent the past three years undertaking a range of activities and management improvements at the flagship sites and across London. In such cases, the development of an exit strategy is useful for projects that have a specific end date, to outline how work might be continued or supported by volunteers and organisations.

Trying to deal with territoriality	Territoriality can be an important issue in urban space, particularly in relation to young men. Partnership working with youth and community services across boroughs could initiate interventions to reduce conflict. Youth development officers could explore opportunities for positive interactions between young people and woodlands. Diversionary activities, such as leisure activities, education of young people and conflict resolution, can help to tackle some of the issues, but beneath territoriality often lie problems of deprivation and unemployment.
Monitoring and evaluation	Embedding monitoring and evaluation of progress into projects is crucial for practitioners to tell the story of how their project has had an impact on individuals and communities.
Importance of partnership working	The CWP was run by a partnership of organisations. Partnerships can also be developed with local community groups, which can allow for learning and capacity building to take place across partners.



APPENDIX 1: USEFUL WEBSITES

Forest Research has undertaken a range of research to explore and understand the relationship between woodlands and society:

<http://www.forestresearch.gov.uk/peopleandtrees>

Publications from this work, such as a tool kit for involving people in forestry, are available at:

<http://www.forestresearch.gov.uk/fr/INFD-5WBLHH>

Defra, Diversity action plan: Outdoors for all?

<http://www.defra.gov.uk/wildlife-countryside/issues/recreation/diversity-actionplan/index.htm>

OPENSspace is a research centre for inclusive access to outdoor environments:

<http://www.openspace.eca.ac.uk/>

CABE Space promotes well-designed parks, streets and squares in towns and cities:

<http://www.cabe.org.uk/default.aspx?contentitemid=41>

The Outdoor Health Forum provides data on the importance of outdoor nature in urban and rural areas for health and well-being:

<http://www.outdoorhealthforum.com/>

Neighbourhoods Green: aims to highlight the importance of green spaces for the residents of social housing

<http://www.neighbourhoodsgreen.org.uk/ng/>

GreenSpace are a registered charity which works to improve parks and green spaces by raising awareness, involving communities and creating skilled professionals

<http://www.green-space.org.uk/>

APPENDIX 2: PUBLICATIONS



social dynamics of Londons trees, woodlands and green spaces

Bell, S., Hamilton, V., Montarizino, A., Rothnie, H., Travlou, P. and Alves, S. (2008). Greenspace and quality of life: a critical literature review. Greenspace Scotland.

Bowmand, E. and Bell, S. (2007). Accessibility and Disability: A guide to the application of disabled access legislation to Scotland's woodlands. A report by Openspace for Forestry Commission Scotland.

CABE Space (2004). Is the grass greener? Learning from international innovations in urban green space management. Cabe Space, London.

DCLG. (2008). Communities in control: real people, real power. Department for Communities and Local Government, London.

Defra. (2008). Outdoors for all? Department for Environment, Food and Rural Affairs, London.

Edwards, P. and McPhillimy, D. (2003). Woods in and around towns. A report for Scottish National Heritage, Edinburgh.

Elmendorf, W. F., Willits, F., Sasisharan, V. and Godbey, G. (2005). Urban park and forest participation and landscape preference: A comparison between Blacks and Whites in Philadelphia and Atlanta. *Journal of Arboriculture* 31, 318–326.

English Nature. (2003). Accessible natural green space standards in towns and cities: a review and tool kit for their implementation. Report 526, English Nature, Peterborough.

Green Space. (2007). The Park Life Report: the first ever public satisfaction survey of Britain's parks and green spaces. Green Space, Reading.

Johnston, M. and Shimada, L. (2004). Urban forestry in a multicultural society. *Journal of Arboriculture* 30, 185–192.

Joseph Rowntree Foundation. (2008). Young people and territoriality in British cities, <http://www.jrf.org.uk/knowledge/findings/housing/2298.asp> accessed 14/10/08.

Kuo, F.E. and Sullivan, W.C. (2001). Environment and crime in the Inner City. *Environment and Behavior* 33, 343–367.

Moore, S. (2003). The use of public parks in England 2003. Sport England, London.

O'Brien, L. and Tabbush, P. (2004). Accessibility of woodlands and natural spaces: addressing crime and safety issues. Forest Research, Farnham.

O'Brien, L. (2005). Trees and woodlands: Nature's health service. Forest Research, Farnham.

O'Brien, E. (2006). Social housing and green space: a case study in inner city London. *Forestry* 79, 535–551.

The Royal Commission on Environmental Pollution (2007) *The Urban Environment*. Royal Commission on Environmental Pollution, London.

Urban Green Spaces Task Force. 2006. *Green Spaces, better places*. DTLR
<http://www.communities.gov.uk/publications/communities/greenspacesbetter3> accessed 20/10/2008.

Ward Thompson, C., Aspinall, P., Bell, S., Findlay, C., Wherrett, J. and Travlou, P. (2004). *Open Space and Social Inclusion: Local woodland use in central Scotland*. Report to the Forestry Commission.

Weldon, S., Bailey, C. and O'Brien, L. (2007). *New pathways for health and well-being in Scotland: Research to understand and overcome barriers to accessing woodlands*. Report to Forestry Commission Scotland.

Women's Design Service. (2007). *What to do about women's safety in parks*. Women's Design Service, London.



ACKNOWLEDGEMENTS

The Forestry Commission and Capital Woodlands Project are grateful for the support of the Heritage Lottery Fund and the assistance of Liz O'Brien, Roz Owen, Jasber Singh and Anna Lawrence in producing these guidelines.

Design and Production by 22 Design Ltd.
www.22Design.co.uk



