



SOWING THE SEEDS

RECONNECTING LONDON'S CHILDREN WITH NATURE

NOVEMBER 2011

LONDON **COMMISSION**
SUSTAINABLE DEVELOPMENT
COMMISSION

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A REPORT FOR THE LONDON SUSTAINABLE DEVELOPMENT
COMMISSION BY TIM GILL

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FOREWORD BY JOHN PLOWMAN

Enormous progress has been made in recent years to improve the protection and provision of green space in London. We need to ensure that these green spaces do not lie idle. In investigating this, we decided to focus on the experiences of children under 12. As well as the potential benefits to their health and well-being, previous research had also found that engaging users at a young age can result in lifelong positive attitudes about nature and the wider environment.

In this ambitious and challenging report, Tim Gill, one of the UK's leading thinkers on childhood, provides a powerful analysis of children's engagement with nature. The Report does this in three important ways:

- Summarising the wealth of previous research into the benefits of children's engagement in nature.
- Analysing the numerous activities to engage children in nature currently taking place in London.
- Recommending a clear vision that every London child has the chance to experience nature as part of their everyday lives, and a range of policy and practical recommendations in order to achieve this vision.

The summer of 2011 saw widespread riots and looting across London. Most of the rioters were not children, and the vast majority of the capital's children had nothing to do with the disturbances. However, some of those involved were under 18, and the events have prompted searching questions about London's children and young people.

This report is not a direct response to the rioting, but it is relevant. It suggests that giving children access to nature promotes their mental and emotional well-being and may have a positive effect on the behaviour of some children. While the causes of urban riots are complex, the measures in this report should be seen as one response that improves the health and life chances of urban children.

We are grateful to Tim Gill and to all those who have contributed to this report. We have been impressed by the passion and enthusiasm demonstrated by those working in this area, and their willingness to donate their time and effort. In particular, we would highlight the positive energy demonstrated at our consultation event held on 20 July 2011. The benefits of gaining early input to the draft report cannot be emphasised enough. The event also helped us to refine the recommendations and demonstrated an early commitment from a range of organisations to help in achieving them.

This Report is just the first step in the realisation of our aim to reconnect London's children with nature. A small group of representatives from all relevant sectors will be invited to help develop an Action Plan to deliver these recommendations. We hope that you will join us in whatever way you can in this worthwhile endeavour.



John Plowman
Chair, London Sustainable Development Commission



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EXECUTIVE SUMMARY

This report was commissioned by the London Sustainable Development Commission to explore how children in London can be reconnected with nature, and the benefits that may be experienced as a result. The report focuses on children under the age of 12 and on nature that has the potential to be experienced as part of children's everyday lives (rather than in one-off residential trips or adventure activities).

Most children have a natural affinity with nature. Surveys consistently show that they would like to get outdoors more, and that they value the chance to have contact with nature; views that are also held by their parents. Two thirds of London's area is made up of green spaces or water, and ten per cent is designated as Metropolitan Open Land, yet children's experiences of natural places in the capital have been in long-term decline, as a result of societal changes that have been unfolding for many years. Statistics suggest that one third of London's families visit natural places only every two months or less frequently. One in seven had not made a single visit over the course of a year.

The decline is steeper for children in poorer families and some Black and Minority Ethnic Groups. Children in London face additional barriers compared to those in many other parts of the UK, as a result of high population densities, pressure on green space, deficiencies in green space in many areas and poorer access to private gardens.

Some of London's children depend for their experiences of nature on the work of a range of organisations. Research found initiatives taking place in schools, early years and childcare settings, parks and green spaces, woodlands, nature reserves, adventure playgrounds and city farms. They vary widely in scope, reach and cost (see Table ES1). However, the fieldwork confirmed that collectively they reach only a small proportion of the capital's 1.1 million children under the age of 12: potentially as low as 4 per cent.

A review of empirical studies was carried out, which found good evidence for a range of benefits arising from children spending time in nature. Contact with nature can be seen as part of a 'balanced diet' of childhood experiences that promotes children's healthy development, well-being and positive environmental attitudes and values.

The literature review also found evidence that the benefits of more play-oriented engagement – through free play, exploration, leisure activities and child-initiated learning – were particularly significant. Consequently, this report focuses on the goal of offering children 'engaging everyday nature experiences' – defined as experiences that involve repeated visits to the same site, and give children exploratory, play-oriented, hands-on contact with nature, not just didactic or curriculum-oriented activities.

Initiatives are fragmented, and grappling with complex issues and challenges. These include parental and public attitudes, diversity and inclusion, funding, planning issues, qualities and characteristics of sites, different philosophies and styles of delivery, risk management, learning outside the classroom agendas and marketing and promotion.

This report puts forward 12 recommendations to address these issues, and to make contact with nature a part of everyday life for more of London's children. The first, fundamental recommendation is to establish a shared vision. Recommendations 2 – 6 focus on policy and strategy developments to achieve this vision. Recommendations 7 – 12 suggest ways of supporting practice and delivery. These recommendations, listed in Table ES2 below, are designed to prompt action that can be started now, but with the timeframe of a generation or more in mind.

Table E51: Interventions compared

	School grounds project	Forest school programme	Programme at staffed nature reserve	Natural play at adventure playground	Natural public play space	Programme at city farm	After school nature club	Programme at Cubs/Brownies/Woodcraft	Programme at unstaffed nature area
Styles of engagement	Formal and informal learning; play	Child-initiated learning	Formal and informal learning; play	Play	Play	Structured activities; play	Informal learning; structured activities	Games; structured activities	Formal and informal learning; play
No. of possible sites/settings in London	1900 inc nurseries	1900	40 - 80	80	1000s	16	1000	1500	100 - 500
No. of existing examples in London	50-100	100-150	40 - 80	25	10-20	16	10	Hard to estimate	Hard to estimate
Current numbers of children enjoying everyday nature experiences	10000-20000	5000-7500	Hard to estimate	10000	500-1000	Hard to estimate	200	Hard to estimate	Hard to estimate
Comparative cost of extending such experiences to 100 more children for 10 years	£20k-£50k and £5k-£50k upkeep	£4k start-up and £1k-£100k revenue	£180k	£12k	£100k and £10k upkeep	£30k	£35k	Unclear - some training and support	£145k
Scope for expansion (Low/Med/High)	Medium	High	Medium	Low	Low	Low	Unclear	Unclear	Medium
Scope for geographical targeting (Low/Med/High)	High	High	Low	Low	High	Low	High	Medium	Medium
Key constraints on expansion (aside from funding)	Lack of understanding of benefits; upkeep and liability	Suitable interested staff and settings	No. and resilience of suitable sites	No. of suitable sites	Upkeep and liability concerns	No. of suitable sites	Unclear level of interest	Finding suitable sites; unclear level of interest	No. and resilience of suitable sites

A fuller version of this table is given in Section 3 – see page 29

Table ES 2: Recommendations 1 – 6 (vision, policy and strategy)

Recommendation	Key organisations
<p>1: Adopt a clear vision Lead organisations should establish a shared vision that all children in London have good access to sites where they can experience nature as part of their everyday lives, and have engaging everyday nature experiences in such a site, beginning in their early years.</p>	<p>London Sustainable Development Commission, Greater London Authority/Mayor, other key partners</p>
<p>2: Partnership working across London A Londonwide steering group on children and nature, building on existing structures, along with similar partnerships in each Borough, should be developed to work towards the vision set out above.</p>	<p>London Sustainable Development Commission, Greater London Authority/Mayor, London Boroughs, other key partners</p>
<p>3: Embed children and nature aims in relevant Londonwide policies and strategies The presence of the outdoor child should be seen as one indicator of site significance, and more broadly as a measure of environmental value. London's planning system and relevant strategy documents should be reviewed to explore the implications of this position.</p>	<p>Greater London Authority (including Children & Young People's Unit), London Borough planning departments, Transport for London, Londonwide health and education sector organisations, London Wildlife Trust, London Biodiversity Partnership</p>
<p>4: Identify geographical priorities using new GIS analyses New GIS analyses should be carried out to identify geographical priorities for action, taking better account of the types of space that could benefit children, children's more limited mobility, and relevant population data.</p>	<p>Greater London Authority, Greenspace Information for Greater London, Play England, London Boroughs</p>
<p>5: Measure progress and set goals to drive delivery Key organisations should work with others to draw up an action plan with milestones and performance measures to drive engagement and delivery.</p>	<p>London Sustainable Development Commission, Greater London Authority/Mayor, Greenspace Information for Greater London, Natural England, other key partners</p>
<p>6: Pilot health interventions for targeted groups of children Pilot preventative and therapeutic programmes should be initiated and evaluated, targeted at specific groups of children with support from health organisations.</p>	<p>Greater London Authority (including Children and Young People's Unit), health and well being boards, other London health sector organisations</p>

Table ES 2 continued: Recommendations 7 – 12 (practice and delivery)

Recommendation	Key organisations
<p>7: Promote effective children’s participation Children should be appropriately and meaningfully involved in developing initiatives, and should be given the chance to influence policy priorities.</p>	<p>Greater London Authority (including Children and Young People’s Unit), delivery organisations, other key partners</p>
<p>8: Promote risk-benefit assessment Risk-benefit assessment should be promoted as the appropriate approach to managing risk in settings and locations where children’s engagement with nature is being encouraged.</p>	<p>London Boroughs, London Play, London Parks and Green Spaces Forum, landowners, schools, education and childcare providers, nature conservation organisations, insurers</p>
<p>9: Promote hands-on, play-oriented experiences and interventions Those working in and managing sites where children come into contact with nature should maximise opportunities to provide exploratory, hands-on, play-oriented experiences.</p>	<p>Nature conservation organisations, landowners and managers, Registered Social Landlords, London Play, adventure playgrounds, London Borough parks departments, ‘Friends of’ groups</p>
<p>10: Promote better use of accessible green space Research should be carried out, and programmes supported and evaluated, on promoting the use of under-used accessible green space by organised groups and the public, with a focus on engaging parents.</p>	<p>Nature conservation organisations, London Borough parks departments, Greenspace Information for Greater London, community and youth groups, landowners and managers, Registered Social Landlords, London Play, British Trust for Conservation Volunteers</p>
<p>11: Promote forest school and similar approaches Forest school and similar approaches to learning in the outdoors should be promoted and supported Londonwide to the conservation, education and childcare sectors.</p>	<p>London Borough education departments, Londonwide and Borough childcare organisations, forest school organisations, nature conservation organisations, other key partners</p>
<p>12: Promote engaging everyday nature experiences in school grounds Schools and early years settings should give greater emphasis to offering children engaging everyday nature experiences within their grounds, where possible allowing access by the wider community.</p>	<p>Educational settings, Learning through Landscapes</p>



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CHAPTER ONE

INTRODUCTION

London is one of the greenest big cities in the world. Two thirds of its area is made up of green spaces or water, and ten per cent of its urban area is designated as Metropolitan Open Land¹. London is also a world leader in managing and protecting its green and natural spaces for the benefit of wildlife.

Talk to almost anyone over the age of 25 who grew up in London about the kinds of places they used to explore and enjoy when they were young, and woodlands, rivers and canals, overgrown corners of parks, abandoned building sites and neglected railway sidings are likely to feature prominently. By contrast, children today are living lives that are ever more remote from everyday contact with nature. One study by Natural England in 2009 found that only 10 per cent of children play in woodlands, countryside and heaths. By comparison, 40 per cent of their parents' generation did so when they were young².

Concern has been growing about children's health, well-being and quality of life. Childhood obesity has been rising for decades, at a rate that has alarmed public health experts and politicians – and London's children have higher obesity rates than those of any other English region³. As they grow up, children in the UK have been showing signs of worsening levels of mental health⁴. Some international comparisons of children's well-being have given the UK a poor ranking⁵.

This report looks at why it matters for children to have experiences in nature. The project brief was to 'investigate the most effective ways to encourage access to nature amongst young people, and the benefits that may be experienced as a result.' It focuses on the experiences of children under the age of 12, in keeping with research pointing to the greater value of such experiences in early childhood⁶.

Context for the project

No-one argues that children's health and well-being are solely a result of their experiences of nature. However, the relationship between the two has been the subject of growing concern and debate⁷.

Most children have a natural affinity with nature that cuts across place, time and culture. Surveys consistently show that children would like to get outdoors more, and that they value the chance to have contact with nature. What is more, their wishes are echoed by the views of parents. Yet children's experience of natural places has been in long-term decline⁸.

'There is a wide range of evidence showing that contact with nature enhances children's education, personal and social skills, health and wellbeing, leading to the development of responsible citizens. However, research also shows that the connections between young people and nature are weaker now than in the past. Children are becoming disconnected from the natural environment. They are spending less and less time outdoors. In fact, the likelihood of children visiting any green space at all has halved in a generation. Young people themselves say that outdoor space is one of the things that they need to 'feel good and do well.'

DEFRA (2011) *The Natural Choice: Securing the value of nature* p.12

The immediate reason for this decline is clear. Children today do not enjoy the same everyday freedom of movement as previous generations, and this loss of freedom has been particularly dramatic for children of primary school age. However, the underlying causes of this change are complex, and linked to wider changes in society, including increasing car ownership and use, loss of green spaces, longer parental working hours, rising fear of crime, changing

Figure 1: Family visits to natural places in the last year



Source: Natural England

cultural attitudes about parenting and children, and the growth of indoor, screen-based leisure activities⁹.

‘Many among the current generation of young people are spending less and less time outdoors, as a result of the use of new technologies, concerns over child safety and the decrease in urban greenspace.’

UK National Ecosystem Assessment 2011

The UK National Ecosystem Assessment: Synthesis of the Key Findings p.10.

A large proportion of families in London make only rare visits to natural places such as parks, nature areas and the wider countryside, if they visit at all. What is more, they make fewer visits than families in other parts of the country. Natural England carried out a new analysis for this report of its ‘Monitor of Engagement with the Natural Environment’ dataset, to explore the visit patterns of parents in London with children under 16, and to compare these with those across England as a whole. Fully one third

of parents in London visited natural places very infrequently (once every two months or less often). The picture was better across England as a whole, with only about one fifth of parents visiting very infrequently. One in seven London parents (14 per cent) had not made a single visit to a natural place in the previous year. By comparison, across England as a whole the picture was again better, with only 6 per cent of parents having made no such visits in the previous year¹⁰.

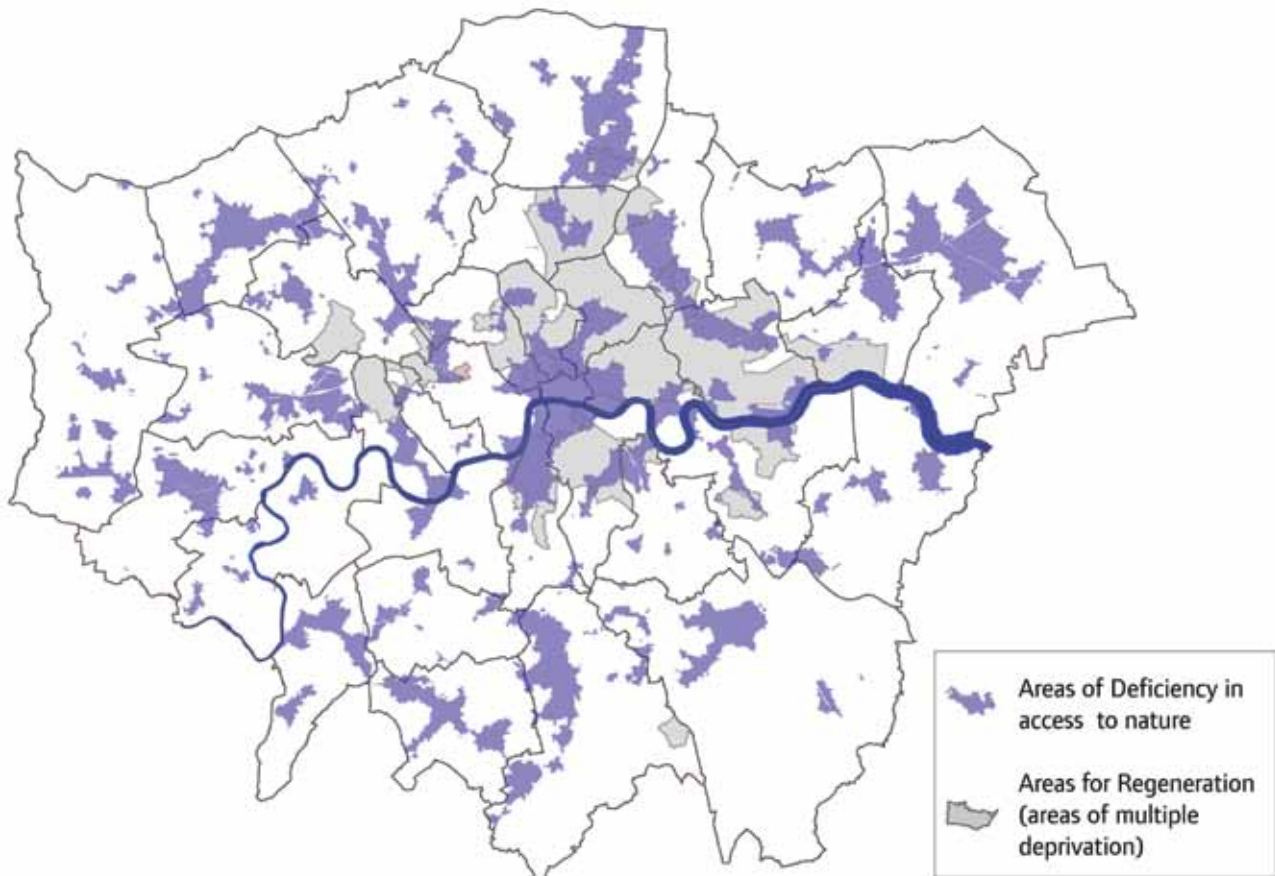
This analysis also shows that in London, family visits make up a greater proportion of overall visits than in England as a whole¹¹. Hence in London, families represent a more significant user group than elsewhere, even though the absolute level of use by individual families is lower in the capital.

Accurate data is not readily available on children’s unaccompanied visits to natural environments. However, children in poorer families are likely to have lower levels of contact with nature. Those in lower socioeconomic groups make less use of parks and green spaces than the more affluent¹² – significant for Londoners, since child poverty in the capital is much higher than the national average¹³. This social class difference may be to do with differences in the quantity and quality of local parks, as wealthier residents generally have better access to green space than those in poorer areas. Ethnicity is also a factor, and Black groups make less use of green space than some other ethnic groups¹⁴.

‘If you live in a deprived inner city area, you have access to five times fewer public parks and good-quality general green space than people in more affluent areas.’

CABE 2010 *Community green: using local spaces to tackle inequality and improve health summary report* p.2.

Figure 2: Deficiency in access to nature and multiple deprivation



Source: Greater London Authority 2007

There are some signs of improvement. Telephone surveys of Londoners' views on parks and green spaces show that perceptions of safety are improving¹⁵. Nonetheless, children in London face additional barriers that limit their contact with the natural world. The capital's 1.1 million children under 12¹⁶ live in the most densely populated region in the UK. This means that its natural spaces have to serve a greater number of visitors and diversity of types of use than in many other parts of the country.

While London is, as already noted, a comparatively green city, its green spaces are not uniformly distributed, and many parts of the city are deficient¹⁷. Moreover, London's population density make it likely that its

families have worse access to private gardens and green space in gardens than other parts of the UK, particularly in Inner London and in areas of deprivation.

The challenges in London

- High population density puts pressure on green spaces
- Families in poverty have poorer access to nature and make fewer visits to parks and green spaces, and London has high child poverty rates – especially inner London
- Black groups use parks and green space less than other groups
- Many parts of London are deficient in woodland and accessible natural space
- Fewer households have access to a garden

The significance of children's experiences of nature has been recognised to a degree in London's decision-making processes. The Mayor's Biodiversity Strategy Connecting with London's Nature highlights children's lack of contact with nature¹⁸ and the 2010 report *Young Londoners* built on the previous Mayor's Children and Young People's Strategy in identifying improvements to parks and green spaces as a priority for the capital's children and young people¹⁹. Moreover, the London Plan – the capital's strategic spatial planning document – contains strong commitments to secure good outdoor space for play, supported by specific supplementary planning guidance that emphasises the design value of natural features²⁰. The Mayor of London's 2010 Health Inequalities Strategy commits the Mayor to work with partners to 'raise awareness of the health benefits of access to nature and green spaces and extend these benefits to all Londoners.'²¹

'Many people living in cities do not have gardens, and miss out on regular contact with the natural world. This is a particular loss for children, who may grow up with little hands-on experience of plants and animals.'

Connecting with London's Nature: The Mayor's Biodiversity Strategy, GLA 2002 p.71

'The health of a family and the environment in which the family lives can have a significant impact on children's life chances – including play space and wider access to parks and green spaces.'

Young Londoners – successful futures: The Mayor's renewed agenda for children and young people, GLA 2010 p.21

This report opens with a literature review that explores why childhood experiences of nature matter. It examines the current state of London children's engagement with nature. Drawing

on fieldwork interviews with practitioners, it describes the different initiatives being undertaken in the capital, and sets out the key issues, opportunities and challenges facing those seeking to reconnect children with nature. It proposes a set of recommendations for action by those who, in different ways, shape the relationship of London's children with the natural world on their doorstep.

Unless otherwise stated, direct quotes are taken from interviewees and were provided as part of the fieldwork for this project.



Golders Hill Park © Tim Gill

CHAPTER TWO

WHY DOES CHILDREN'S ENGAGEMENT WITH NATURE MATTER?

This section sets out the key findings of a review into the evidential support for claims about the benefits of experiences with nature for children. Some strong claims have been made. Natural environments are said to have restorative qualities that help in relaxing and coping with everyday stress. They are claimed to promote adaptive processes in child development (for instance motor fitness, physical competence and self-confidence). They are said to support learning and education. Finally, it is claimed that spending time as a child in green outdoor environments nurtures lifelong positive attitudes about nature and the wider environment²².

These claims were examined in detail in an assessment of the evidence base that was designed to shape recommendations for action, and that aimed to be transparent and authoritative. The literature review is summarised here, and described in more detail

in a separate parallel report²³. In keeping with the project brief, it focused on children under the age of 12. It also focused on what might be called 'nearby nature' – the kind of natural environments that could feature in the everyday lives of children living in London.

A thorough literature search was undertaken for all relevant empirical studies from credible sources. The methodological quality of each study was evaluated, and those with less reliable study methods were excluded. The resulting pool of 61 studies was then analysed to give an indication of the support for claims about a range of benefits, and to explore noteworthy patterns.

Key findings

Taken as a whole, the studies confirm that spending time in nature is part of a 'balanced diet' of childhood experiences that promotes

Table 1: Children and nature – selected studies	
Time in green urban outdoor spaces improves concentration	American researchers found significant improvements in children with Attention Deficit Hyperactivity Disorder (ADHD) after a 20-minute guided walk in a green outdoor space, compared to the same amount of time spent in other settings ²⁴ .
Natural outdoor spaces boost motor development	Two studies have found significantly improved performance in the motor performance of pre-school children with access to natural space, compared to those who use a more conventional playground ²⁵ .
Forest school sessions improve mood	A British study of a forest school programme found significant improvements in mood after forest school, in terms of reductions in levels of anger. The improvement was greatest for children with behaviour problems ²⁶ . See figures 3 and 4 on p.21
Forest school sessions boost physical activity	A Danish study of primary schoolchildren found that activity levels during forest school sessions were twice as high as on normal days, and around the same level as on days with PE lessons ²⁷ .
Childhood visits to natural places are linked to positive adult views of the outdoors	A British study found strong associations between childhood patterns of visits to green places and willingness to visit such places as an adult. People who often visited green places as children are more likely to associate natural areas with feeling energetic, and more likely to visit alone in their adult life ²⁸ .
Hands-on gardening activities improve nutritional attitudes and knowledge	American researchers found that a hands-on gardening programme for primary schoolchildren produced significantly improved knowledge, and also led to improved attitudes to healthy eating, compared to a classroom-only scheme ²⁹ .

children's healthy development, well-being and positive environmental attitudes and values. Table 1 summarises some of the key studies.

The evidence is strongest for claims about health, both physical and mental³¹. In the case of mental health, emotional regulation and motor development, the evidence base includes a small number of more methodologically rigorous, cause-and-effect studies (some included in Table 1).

'Open green space and access to nature is important for children. The quality of their environmental exposure is inextricably linked to their wellbeing. Children's relationship with nature is a fundamental part of their development, allowing opportunities for self-discovery and natural environmental experience. The outdoor environment is perceived as a social space which influences their choice of informal play activities and promotes healthy personal development. Nature allows unstructured play, generating a sense of freedom, independence and inner strength which children can draw upon when experiencing future incidents of stress.'

UK National Ecosystem Assessment 2011

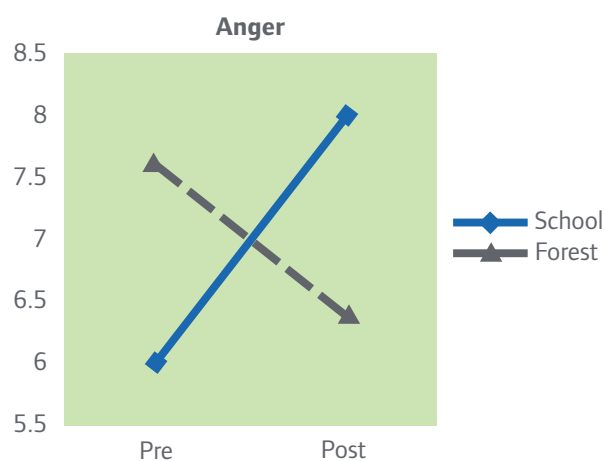
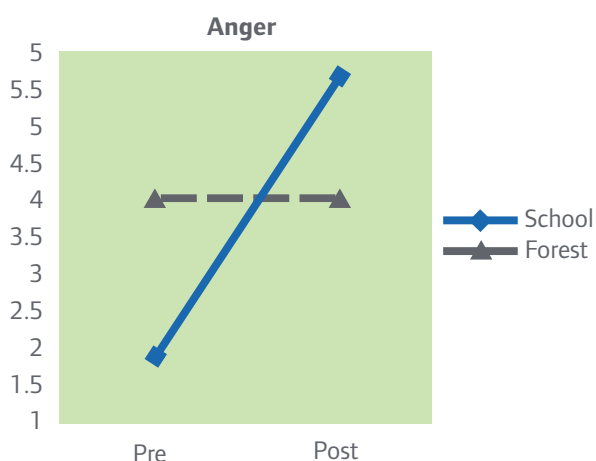
The UK National Ecosystem Assessment: Synthesis of the Key Findings p.82

There is also good evidence of a link between time spent in natural settings as a child, and positive views about nature as an adult³². The evidence base for these benefits covers a comparatively broad range of children from different countries and backgrounds. However, not all children are equally keen on nature and the outdoors. Studies have found that a lack of regular positive experiences in nature is associated with the development of fear, discomfort and dislike of the environment³³.

'The level of direct contact with nature is a factor in influencing attitudes towards it, and childhood experience plays an important role in shaping attachment to place. People are more likely to support and care about the establishment and maintenance of an ecological network if they have direct experience of wildlife and are aware of the benefits they receive from it.'

Making Space for Nature: A review of England's Wildlife Sites and Ecological Network [The Lawton Review], DEFRA 2010 p.52

Figures 3 and 4: Effect of forest school on mood of children with 'significant behaviour problems' (left) and 'mental disorder' (right) - before and after a typical day at school versus forest school³⁰



Finally, some studies suggest that natural environments lead to an improvement in the quality of children's outdoor play, and to improved self-confidence, language/communication skills and psychosocial health. The evidence base for these claims is more modest than for those discussed above.

One further finding emerged from the literature review, which points to the value of more play-oriented engagement styles such as free play, exploration, leisure and child-initiated learning. Across the pool of studies analysed, these styles were associated with both health benefits and positive environmental attitudes. However, less play-oriented styles such as school gardening projects and field trips were mainly associated with educational benefits³⁴. This finding is supported by qualitative research for the Countryside Council for Wales on visitor experiences at a nature reserve³⁵.

Consequently, the project fieldwork and the discussions and recommendations in this report focus on the goal of offering children 'engaging everyday nature experiences'. These are defined as experiences that involve repeated visits to the same site and that give children hands-on contact with nature, in which the engagement style is play-oriented or exploratory, not just didactic or curriculum-oriented.

'Your job isn't to hit them with another Fine Educational Opportunity, but to turn them on to what a neat world we live in.'

Deborah Churchman, quoted in Louv R (2005) *Last Child in the Woods* p.171.

CHAPTER THREE

LONDON-BASED INITIATIVES

This section describes the current state of London children's engagement with nature, as mediated through different interventions and organisations. It also sets out the main issues, opportunities and challenges facing those who are working to offer children greater contact with nature as part of their everyday lives.

Fieldwork completed for this report found that children are being offered engaging everyday nature experiences in schools, early years and childcare settings, parks and green spaces, woodlands, nature reserves, adventure playgrounds and city farms and gardens. The fieldwork suggests that only 4 per cent of London's children are being reached by existing initiatives, so there is great scope for expansion. The main approaches, which vary widely in scope, reach and cost, are described below. Comparative data is presented after the descriptions in Table 2 at the end of this section.

School grounds

Many school, nursery and children's centre grounds include some kind of natural habitat or wildlife area such as a pond or wildlife garden, and such features are a common component of improvement projects. An evaluation by the Food for Life Partnership (FFLP) found that 76 per cent of schools in England had an existing garden. However, almost a third 'lacked green space features on site such as hedges, trees, shrubs and wild flower or rough grass areas.' FFLP took a whole-school, multi-faceted approach, including food preparation, growing and school visits, and the evaluation does not allow for detailed information on the specific influence of school grounds, nor of how they were used. It was found that garden enhanced education was the single aspect of the programme that was most likely to be identified as successful, suggesting that it had a key role. Not surprisingly, gardens were

mainly used for growing activities. Some schools also allowed informal access³⁶.

Although accurate figures are not available, only a small number of educational settings in London are likely to be offering engaging everyday nature experiences³⁷. This is because even where settings have suitable sites, they are sometimes only accessible on a very limited basis – for instance, only for supervised classroom sessions. Nonetheless, the fieldwork found that such projects are likely to be reaching more children than any other type of intervention.

Three school ground initiatives

Kate Greenaway Nursery, Islington

- Refurbished outdoor space in an early years setting
- A 'green sanctuary' that contrasts with its urban context
- Cost £150-£170k; additional running cost £2k/year

Argyle Primary School, Camden

- Grounds include a green play space, a growing plot and a wildlife area with pond
- Strong links to curriculum activities
- School employs two part-time gardeners at a cost of around £15k/year

All Saints Primary School, Barnet

- Has opened up a spinney within the school grounds for use during play time
- Children allowed to play freely (2 year groups at any one time)
- Capital cost for measures to open up the spinney: £5-6k

'Our outdoor space had fallen into disrepair, and was the site of a lot of challenging behaviour. After the refurbishment it became a calming environment. Having seen the changes, I'm now more convinced of the

romantic idea of children having an innate affinity with nature – that it’s something they relish and enjoy.’

Julian Grenier, former headteacher, Kate Greenaway Nursery, Islington

‘The green space in the playground is a peaceful and quiet area – children use it in a different way.’

Zinath Begum, Teacher, Argyle Primary School, Camden.

‘When I joined the school the children’s one desire was to be able to go to the spinney. It’s criminal not to use our natural outdoor space, especially here in London. It’s a peaceful, rich place, with massive potential for play, communication, cooperation and learning. Children need to have the chance to take sensible risks, so there has to be an element of risk. Children are keen, and parents understand.’

Christine Read, Head, All Saints School, Barnet.

Forest school

Forest school is a child-centred educational approach that sees natural settings as rich opportunities for learning. It was inspired by practice in Denmark and other Scandinavian countries and began to be introduced to the UK in the 1990s. Programmes are typically devised and led by trained educators. They involve repeated, regular visits to the same natural location, usually off-site (though sometimes within the grounds of the setting). During the course of a session children might explore the site, play games and carry out activities such as den-building, mini-beast hunts and fire making, facilitated by adult leaders.

In London most programmes are for pre-school children, but some focus on older children at risk or with additional needs. Although the

basic concept is consistent, different settings vary in the way that programmes are delivered. For example, some run programmes using their existing staff team (perhaps with help from volunteers), while others depend upon supply teachers or specialists, which increases the costs.

The last five years has seen very significant growth in forest school and related activity in London. In 2005 the capital had no active programmes³⁸. Five years later, this report found evidence of up to 150 schemes. Programmes are running in around 15 London Boroughs, with high levels of activity in Greenwich, where over 60 initiatives are operating³⁹.

There are now a growing range of different models and programmes – some with different names – and a lively debate about values, approaches, relevant qualifications and practice. New variations on the model are emerging. For instance, out-of-school childcare programmes are being planned that give children regular opportunities to spend time away from school sites at nearby natural green spaces⁴⁰.

Eastwood Nursery School, Centre for Children and Families, Wandsworth

- Based in one of largest housing estates in Europe, with significant deprivation
- Programme reaches all of the Centre’s 152 children on roll
- Forest school site is in the grounds of Roehampton University, walking distance from Centre
- Each child has 6 half-day sessions: 2 per week over 3 weeks
- Start-up cost of around £2500 (forest school training for 3 educators)
- Minimal running costs (no transport costs, and no additional staffing costs as ratios can accommodate programme – though this is dependent on recruiting volunteers and student placements)

- Programme includes activities aimed at parents eg 'Parents and Parks' day in nearby Richmond Park

'Matilda attended Forest School last term and absolutely LOVED every minute of the experience. She is not naturally very bold or fearless and definitely someone who prefers indoor activities, but her experience on Wimbledon Common really helped her love of the great outdoors [...] Without doubt her independence has grown, which I am particularly pleased about with 'big school' coming.'

Parent of 4-year-old child who took part in Bayonne Forest School.

Nature conservation projects

There are between 40 and 80 staffed nature conservation projects in London⁴¹. Apart from the London Wetlands Centre (a major visitor attraction in its own right), most are located in smaller nature reserves with basic facilities and room/s suitable for educational visits. Most are voluntary-sector based and depend heavily on volunteer input; many are run by the London Wildlife Trust. Most run a range of programmes that include repeat sessions offering play-oriented activities, as well as one-off events and curriculum-oriented visits. Initiatives are also run by nature conservation organisations on sites that do not have dedicated visitor facilities. These offer a similar, though usually more limited, programme.

A staffed nature reserve

East Reservoir Community Garden

- Purpose-built visitor/learning centre in 1/2 ha site by an old reservoir in Hackney, with limited access to a larger area beside the water
- Opened in 2008; building cost of £110,000

- Runs an after-school club 1 day a week, and a playscheme 3 days a week for 2 weeks (free of charge to families)
- Provides structured curriculum activities (eg bug hunts, pond dipping)
- Has run a family learning programme for parents and toddlers, though funding has now ended
- Outreach activity programmes with a small number of schools
- Assists with 4-6 small-scale school grounds projects a year
- Open for informal visits by the public

Parks and green spaces

London's parks and green spaces make a significant contribution to children's experiences of nature, but one that is hard to measure. One recent development has been the creation of a 'natural play' approach to the design of public play areas. This involves a move away from reliance on standardised fixed equipment, and the introduction of natural features such as logs, boulders, changes in level, planting and loose materials such as sand and water. The last Government's play strategy and funding emphasised this approach, and London Play has produced practical guidance in support of it⁴².

Natural play has been understood differently by different providers and at different sites. In many locations, the resulting designs show a modest move towards nature, for instance the inclusion of some climbable boulders or a fallen tree alongside conventional equipment. A smaller number of sites have gone further.

Two natural play spaces

Grovelands Park play area, Enfield

- Aims to encourage children to have more contact with nature by using challenging play equipment located in an unfenced woodland context
- Unsupervised (daily site inspections)

- Project-managed by LB Enfield with support from a wide-ranging partnership
- Capital cost £50k, funded through the last Government's Play Strategy
- Wardens report high levels of use (60+ children at times) and satisfaction

Eric Street Estate Community Play Garden, Tower Hamlets

- Aims to give children and families a doorstep play space with a taste of nature
- Landscaped green space with modest use of equipment and growing beds
- Created in 2010 at a capital cost of £20k
- Project-managed by East End Homes, funded through corporate sponsorship
- Developed in two months through a collaboration with residents
- Play Association Tower Hamlets runs supervised play sessions to build up familiarity and use

'It's pretty cool that it's in the woods'

Alison (7 years old);

'It's very beautiful'

Alison's mother (describing the natural play area at Grovelands Park, Enfield).

Other initiatives

Initiatives from a diverse set of sectors add to the picture. Amongst them are community-based projects such as staffed adventure playgrounds, city farms, community gardens, horticultural projects, after-school programmes, play ranger schemes, one-off events and the activities of community-based youth organisations such as the Scouts, Guides and Woodcraft Folk (all of whom run local groups for children under 12).

Around 25 adventure playgrounds in London include significant green, natural space⁴³. Some local authority play services and voluntary play organisations also run 'play ranger' schemes in parks and green spaces, involving a regular programme of drop-in play sessions facilitated by trained playwork staff. The activities and offers made will vary at different sessions, but some are likely to involve hands-on contact with nature.

'Everyone's always following me if I'm angry and asks me about things. I can't say then. I feel like hitting someone. I want to be on my own until later. If I'm in the bit where the trees are, at the back and no-one comes, that's all I want. I'll talk to you after.'

Leon, aged 9 [not his real name], adventure playground user, speaking to Lucy Benson, Islington Play Association 'Finding Nature through Play' project.

London's 16 city farms offer a spectrum of opportunities for children to engage with nature. Many offer local children volunteering opportunities after school and at weekends. Children help with practical activities involved in the running of the farm, such as caring for animals and gardening. Some farms also run structured programmes such as riding clubs, arts and cooking activities after school and in weekends and holidays. Like staffed nature reserves, they also typically run regular school visit programmes.

'Our younger children tend to be ones who may not find it so easy to form friendships at school or their local club/community centre. They seem to find other friends here, friendships that last for years. For children who don't just want to be inside all day at home, the farm offers them open air, and a freedom in a safe environment that they may not be able to find elsewhere, at

least not for free. At the same time they really enjoy looking after the animals and the sense of responsibility this gives them.'

Simone Uncle, Play Development Coordinator,
Kentish Town City Farm.

Scouts, Guides, Woodcraft Folk and other youth organisations reach thousands of children across London: for instance, the capital has over 14,000 Rainbows and Brownies (girls aged 5 – 10). It is not possible to estimate the degree to which these children are being offered engaging everyday nature experiences. Some children clearly engage in relevant activity: typically groups go out of doors once a month, and some of these outings involve walks, cycle rides or other experiences in local natural areas. For instance, a cub group that meets at Coram's Fields in Camden maintains a small wildlife and growing area in one corner of the site.

Cost, coverage and potential of interventions

Table 2 compares the main interventions covered by the fieldwork. It looks at the engagement styles, cost, coverage and reach of each approach, and at the potential impact of additional investment. Appendix 1 gives more detail on the interventions surveyed and the methodology used. Appendix 2 gives more information on the sources for, and assumptions behind, the data presented in Table 2.

Table 2: Interventions compared

	School grounds project	Forest school programme	Programme at staffed nature reserve	Natural play at adventure playground	Natural public play space	Programme at city farm	After school nature club	Programme at Cubs/Brownies/Woodcraft	Programme at unstaffed nature area
Styles of engagement	Formal and informal learning; play	Child-initiated learning	Formal and informal learning; play	Play	Play	Structured activities; play	Informal learning; structured activities	Games; structured activities	Formal and informal learning; play
No. of possible sites/ settings in London	1900 inc nurseries	1900	40 - 80	80	1000s	16	1000	1500	100 - 500
No. of existing initiatives in London	50-100	100-150	40 - 80	25	10-20	16	10	Hard to estimate	Hard to estimate
Current numbers of children enjoying everyday nature experiences	10000-20000	5000-7500	Hard to estimate	10000	500-1000	Hard to estimate	200	Hard to estimate	Hard to estimate
Comparative cost of extending such experiences to 100 more children for 10 years	£20k-£50k (1/2 cost of a project) and £5k-£50k upkeep	£4k trainees £1k-£100k transport, staff cover	£180k (supervised programmes)	£12k (site works and training)	£100k (2 new spaces) and £10k upkeep	£30k (supervised programmes)	£35k	Unclear - some training and support	£145k (supervised programmes)
Scope for expansion (Low/Med/High)	Medium	High	Medium	Low	Low	Low	Unclear	Unclear	Medium
Scope for geographical targeting (Low/Med/High)	High	High	Low	Low	High	Low	High	Medium	Medium
Key constraints on expansion (aside from funding)	Lack of understanding of benefits; upkeep and liability	Suitable interested staff and settings	No. and resilience of suitable sites	No. of suitable sites	Upkeep and liability concerns	No. of suitable sites	Unclear level of interest	Finding suitable sites; unclear level of interest	No. and resilience of suitable sites

See Appendix 2 for sources and notes to this table



Nature play area, Lloyd Park, Waltham Forest © Tim Gill

CHAPTER FOUR

ANALYSIS: ISSUES, OPPORTUNITIES AND CHALLENGES

Overall levels of engagement

The overall picture from the fieldwork is that initiatives are reaching perhaps 30,000–40,000 children under 12: less than 4 per cent of London's total population of that age range. It is likely that children in poorer parts of inner London have lower levels of engagement. They are less likely to live near publicly accessible natural environments⁴⁴ and school grounds in inner London are likely to be smaller and have less room for natural green space⁴⁵.

This figure underestimates London children's engagement with nature, because it does not take into account access to private gardens and children and families' independent visits to natural areas in parks and other publicly accessible natural green spaces. Good data is not available on children's access to gardens, though this is likely to be poorer in London than elsewhere, and particularly poor in disadvantaged areas. Similarly, good data is not available on children's unaccompanied visits

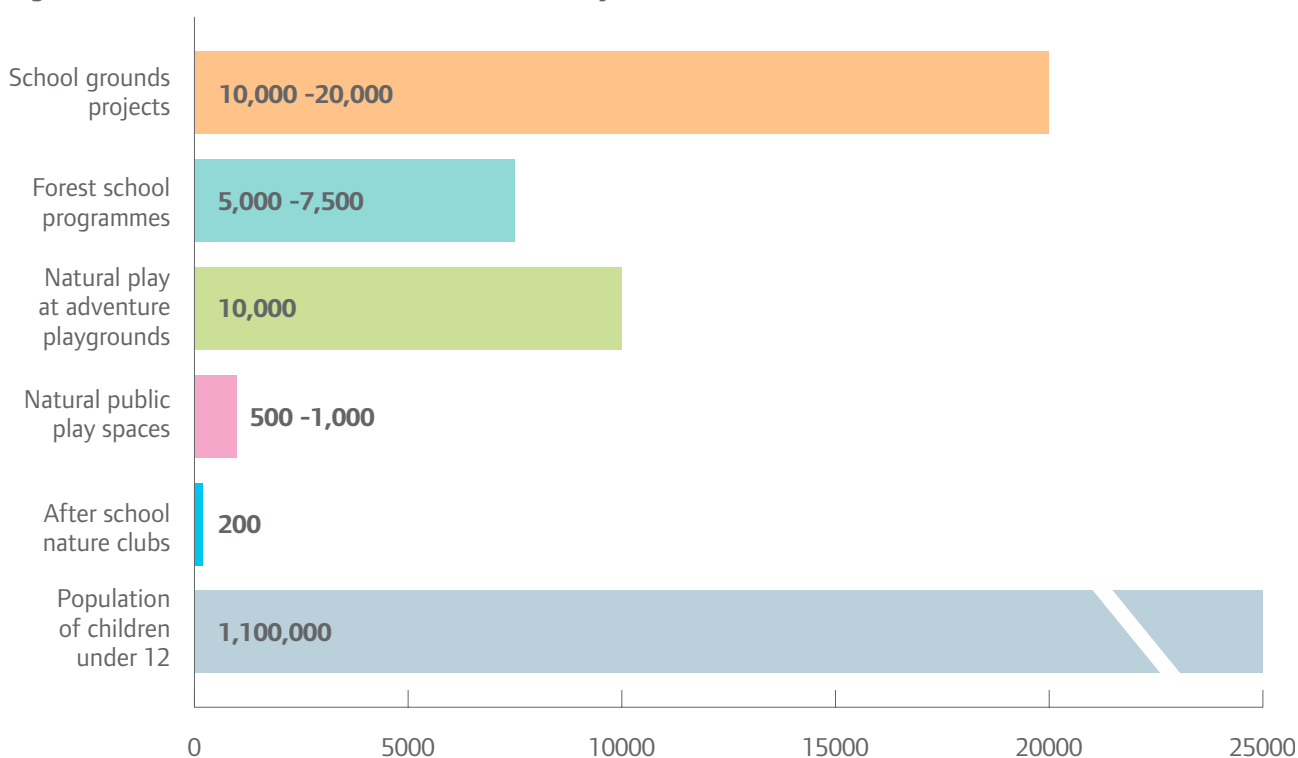
to natural places, though this is likely to be low for children under 12. As discussed in the Introduction above, data on parents shows that a third of London's families make only a few visits to natural places over the course of a year. Hence it is likely that hundreds of thousands of children in London – perhaps as many as 200,000 – have no meaningful regular contact with nature⁴⁶.

Moreover, interventions are fragmented and uncoordinated, involving a wide range of different sectors and interest groups, often acting independently. Such a patchwork of responses is to a degree inevitable. But with no overall direction the risk is that where there are gaps, children will be dependent upon local initiatives to fill them – and in many such areas, local energy and resources are in short supply.

Funding and resources

Lack of funding and resources is a major barrier to improving children's engagement with nature,

Figure 5: Numbers of children in London reached by initiatives



especially in the changed economic climate. The last Government's play strategy provided some funding opportunities⁴⁷, as did Natural England's lottery-funded Access to Nature programme⁴⁸ and the BBC's Breathing Places initiative⁴⁹, but these were all time-limited and had ended by 2010.

Almost all interviewees were clear that in the short-to-medium term, public sector sources of funding are likely to be limited. Many existing national and Londonwide stakeholder organisations have more limited capacity for developmental work, and some have closed altogether. Likewise at the local level, interested organisations are in many cases struggling simply to preserve their existing programmes of work. It is significant that – despite the good evidence that a range of health benefits are associated with children's contact with nature – the health sector has had little involvement in supporting, funding or collaborating with interventions and initiatives⁵⁰. The Government's health reforms⁵¹ – including the creation of local health and well being boards with ring-fenced budgets – will create new opportunities.

Despite the economic climate, new projects are coming forward. Play England has received a £500,000 grant from Natural England to promote nature play across England. This will create opportunities for collaboration; for instance, one proposal is that a new nature play forum for London is set up. At Sutton House in Hackney, the National Trust is planning to invest £100,000 from donations and fundraising to create a new natural play space that will be accessible free of charge to local children and families. The site is in one of Hackney's most deprived wards, and an area that is deficient in public play space⁵².

The priorities of some funding streams have led to children being offered experiences that,

while of educational value, may have limited the opportunity for having engaging experiences with nature. A funding emphasis on curriculum links can lead to the predominance of short, one-off, structured visits.

'Environmental educators would like to move away from the formula of '45 minutes on Key Stage 2 biodiversity & living things'. But this needs an impetus, and funding.'

Anna Portch, London Environmental Education Forum.

Where new funding has been made available, a partnership approach has often been adopted. This has helped to build shared values and understandings, and to share successful solutions on issues such as fear of litigation, and marketing and promotion⁵³.

One further resource issue concerns the mix between capital and revenue, especially in connection with play, park and green space projects. Play projects in particular are often constrained by tight limitations on revenue funding. When combined with short project timescales, this pushes project managers towards capital expenditure and high-cost, low-maintenance, off-the-shelf items that have high replacement costs when they eventually wear out. This limits the scope for exploring other approaches that spread expenditure more evenly over a number of years⁵⁴.

Planning, land use and biodiversity policy

Spatial planning initiatives such as Natural England's Access to Natural Greenspace Standard, the Mayor of London's Biodiversity Strategy and the Woodland Trust's access standard⁵⁵ have all set standards to improve the availability and accessibility of natural green spaces. Each has tried to reflect the value of nearby natural space, and detail the

additional barriers faced by those who live at some distance from suitable sites. For children, distance is particularly important, and the younger the child the more significant the barrier created by distance – especially in poorer areas where families are less likely to have access to a car. Distance is a factor whether children are being taken to sites by their families, on a forest school-style programme, on an educational trip or exploring their neighbourhood unaccompanied⁵⁶.

‘The poor quality of facilities and lack of accessibility of some open spaces present barriers to certain groups of Londoners, such as older people and children, who are less likely to travel large distances for recreational purposes.’

GLA 2010 *The London Health Inequalities Strategy* p.33

‘The majority of parents are unwilling to allow their children to be unaccompanied more than 300m from home.’

Natural England 2010 *Nature Nearby: Accessible Natural Greenspace Guidance* p.12

Existing work on biodiversity has tended to focus on habitats and environment of significant nature conservation value. For instance, the London Biodiversity Strategy’s work on areas of deprivation takes into account higher-grade sites, but excludes lower grade ones such as local nature reserves⁵⁷. Improving and enhancing lower grade sites, and promoting their use, creates new opportunities to bring nature closer to many communities and families. This may also take some of the pressure off sites that have greater nature conservation value, helping to manage conflicts around access.

Several interviewees highlighted how children’s access to nature can be damaged due to the

unintended consequences of other decisions and policies. One example is school building projects, which often result in reductions in outdoor space in school grounds. Others include brownfield site development on overgrown or derelict land (which can still be a significant location for outdoor play) and poor walking, cycling and public transport infrastructure in and around green spaces⁵⁸. New developments can also increase pressure on green and natural space.

‘The college across the road has expanded from 2,000 to 7,000 students in the last few years. This has involved major building works, so there are now far more students with far less green space on the college site. As a result, many more are spending time here, adding to the pressure on our outdoor space and facilities.’

Niki Barnett-Henry, Play Services Coordinator, Calthorpe Project, Camden.

Hence policy on planning and land use is crucial to creating and safeguarding natural spaces. Good data is available on London’s natural habitats and green spaces⁵⁹. These datasets make it relatively straightforward to reanalyse patterns of deficiency to reflect policy changes (such as the inclusion of areas of lower biodiversity value, or the adoption of shorter distance thresholds). Data can also be combined with GIS data on child population, population density and poverty. This makes it possible to produce analyses that identify geographical areas that could be priorities for future improvements – for instance, areas that are both deficient in green space and have high numbers of children in poverty.

Planning and land use policies can only address the availability of suitable spaces. Providing accessible spaces is necessary, but it is not

sufficient to improve children's access to nature. In many parts of London, the challenge is not the supply of space, but encouraging and enhancing the use of existing spaces.

Diversity and inclusion

A mixed picture emerges around issues to do with diversity and the inclusion of disadvantaged groups of children such as those with disabilities and special needs. Some professionals who work with disabled children feel that play and learning for this group is particularly affected by excessive risk aversion⁶⁰. Moreover, the design of outdoor places does not always address inclusion and cultural difference.

'School grounds, early years settings and community play spaces don't always cater effectively for children's wide ranging needs. They are not 'naturally inclusive'. Disabled children are frequently excluded from opportunities to play together with their friends and sometimes have a restricted menu of experiences, through insensitive design and/or play practice.'

Robinson and Browning (2011) *Naturally Inclusive: A new approach to design for play*

Many members of settled ethnic communities, with generations born here, see horticultural and gardening work and the cultural and practical knowledge and skills they carry as an opportunity to build connections within their families, giving children and parents the chance to explore the meaning and significance of agriculture, nature and landscape for themselves and the wider community. However, it was suggested that attitudes of some parents from some ethnic groups (perhaps new arrivals with a background of rural poverty) are a barrier, because such activities are associated with hardship within

the lifestyles and societies that they felt they have progressed from⁶¹.

'With younger children, parental context matters, and repeat visits, parental support and intergenerational work are all important. This is equally true across different cultural groups.'

Judy Ling Wong, Black Environment Network.

Projects are emerging that tackle cultural barriers to the use of green space. One scheme, run by a teacher at Mowlem Primary School in Tower Hamlets, aims to promote the use of nearby Victoria Park by addressing culturally-specific fears and anxieties about dogs held by many Asian children⁶².

Natural qualities of sites

Organisations that work to improve access to nature have grappled with questions about the physical and other qualities that make up a worthwhile natural environment. Natural England's definition talks of 'places where human control and activities are not intensive so that a feeling of naturalness is allowed to predominate'⁶³. The GLA's work on access to nature discusses sites that may have high ecological value but that 'do not provide significant 'hands on' experience of nature to be counted as accessible nature.'⁶⁴

Such judgements are to a degree subjective. So it is not surprising that the fieldwork for this project found differing views on the importance of different features. For instance, some emphasised the value of a feeling of wildness, and others the importance of grassy open spaces for running around.

'Having a woodland setting like this one in Wimbledon Common is crucial. It's not on children's everyday routes, so it encourages



A Bayonne Nursery forest school session at Wimbledon Common © Tim Gill

them to get out of their comfort zones – to operate at the edges of their current body of learning.’

Jo Skone, Bayonne Nursery Forest School leader, Hammersmith & Fulham

and children of certain faiths who need to wash with running water before meals etc), no coppicing (for woodland/bush crafts) and absolutely no campfires.’

Katherine Milchem, Eastwood Children’s Centre, Wandsworth.

Reflecting on the qualities of sites that are particularly relevant to children, two conclusions can be drawn. The first is that smaller sites may have untapped potential. Children, especially young children, can gain a sense of naturalness from places that are too small to foster the same response from adults. The second is that the importance of species diversity may be overemphasised. Sites that offer little of interest to the wildlife conservationist may nonetheless be ideal locations for children to play, learn, explore, have adventures and gain hands-on contact with nature.

Site design, facilities and management

Site design, facilities and management can have a major influence on accessibility, levels of use and the experiences on offer to children. On the one hand, the absence of key facilities such as level access or toilets can rule out some sites altogether for some groups of children. On the other, sites can be opened up for children through thoughtful approaches to design and management. One detailed observational study of use at a destination play park in North Carolina, USA, found that a naturalistic ambience and rich planting were seen as attractive by visitors, while an inclusive approach to design appeared to succeed in promoting high and diverse usage patterns⁶⁵.

‘Management rules and by-laws often mean restricted access and limitations on what you can do. It may mean that no structures can be built or left (such as a child’s den or rope swing), there is nowhere to store equipment, no toilets/sinks (important for young children

For instance, den-building is a simple, popular, successful activity for engaging children and parents. At some locations, such as at Richmond Park, a culture of den-building is well established and supported through the Royal Parks’ woodland management practices. At others, it is restricted or prohibited, even where there are no conservation grounds for doing so. Even at sensitive sites there may be scope for taking a more permissive approach, for instance encouraging den-building in some parts of a site, while discouraging it in other parts⁶⁶.

Concerns were raised from some interviewees about the impact of children’s use on rare or precious habitats or species, and there were also worries about straightforward ‘wear and tear’ and erosion. There are tensions between the goals of supporting biodiversity and of increasing children’s access to nature. However, at a deeper level, the two issues are intimately connected. Many, perhaps most, conservationists and wildlife enthusiasts first discovered their enthusiasm and concern for nature through their childhood experiences in natural environments. One key implication from the literature review is that the nature conservation movement should be at the forefront of action to reconnect children with nature, if they want their work to continue being supported by future generations.

‘Although there will be some occasions where access needs to be controlled to avoid damaging or disturbing wildlife, providing

opportunities for people to experience nature can also benefit wildlife.'

Making Space for Nature: A review of England's Wildlife Sites and Ecological Network [The Lawton Review], DEFRA 2010 p.52.

Green spaces in and around housing estates are particularly poorly valued by residents,⁶⁷ and their design and management rarely make the most of the opportunities they present⁶⁸. Natural Estates, an initiative that aims to support and encourage social landlords and residents to make better use of such sites, was funded in 2010 from Natural England's Access to Nature programme to support work across London⁶⁹.

Children's participation

There is widespread support for the value of involving children and young people in decisions that affect their lives, and a solid body of principles and good practice. Some projects to engage children with nature have involved children in designing programmes, spaces and activities in different ways. Meaningful participation needs careful thought and preparation, along with a commitment to debate. It means recognising that different children have different perspectives, life experience and capacity to share their views. When poorly carried out, consultation can be tokenistic or mechanistic, and can limit the scope for creative dialogue that brings out the best from both adults and children.⁷⁰ Participation Works, a national initiative supported by six children and young people's organisations, offers guidance, support and resources for the effective involvement of children and young people.⁷¹

Risk management

Successive governments have signalled a move towards a more balanced approach to children's safety, and to health and safety more

widely⁷², and the government's 2011 Natural Environment white paper has stated that government will work with the Health and Safety Executive to remove unnecessary rules and other barriers to learning in the natural environment⁷³. Despite these positive developments, concerns and anxieties about risk and liability are widespread amongst practitioners and managers⁷⁴. Professionals involved in corporate health and safety and risk management within schools, local authorities and other public bodies are a major barrier. They can have great influence over practice on the ground, yet tend to focus only on the downside of risk⁷⁵.

A key development in the management of risk in play, learning and leisure contexts is risk-benefit assessment, which promotes a balanced approach⁷⁶. This method of risk management incorporates considerations about benefits into the process, thus allowing providers to balance risks against benefits. It was developed by the play sector for use in play provision, and has been endorsed by the Health and Safety Executive and the Government. In 2010 London Play published a Natural England-funded guide to river restoration and natural play that took a risk-benefit assessment approach⁷⁷.

'I believe that with regard to children's play we should shift from a system of risk assessment to a system of risk-benefit assessment, where potential positive impacts are weighed against potential risk... I would like to see [this idea] developed more widely.'

Lord Young (2010) *Common Sense, Common Safety*, Cabinet Office p. 37

In interviews, examples were given of worries about den-building in woodlands, allowing tree-climbing in nursery grounds, and problems due to Criminal Records Bureau checks that were perceived to be unnecessary. However,

a number of interviewees thought that the climate was beginning to improve and that local authorities and other organisations were becoming a little less restrictive.

‘There were some concerns from local authority officers concerned about liability in the event of injuries, for instance from the den-building, and about damage to the woods themselves. However, with careful planning we were able to overcome this.’

Paul Green, organiser of Wild Zone day at Abbey Wood, Greenwich.

Approach of staff and volunteers

At supervised locations, the approach and attitudes of staff and volunteers strongly shape children’s experiences. Many sites are failing to make the most of the opportunity to create more engaging, play-oriented, hands-on activities. This is to an extent a result of risk aversion and fear of litigation (discussed above). With school-based interventions, curriculum considerations are another factor. For instance, some involved in forest school identified a lack of understanding about the nature and benefits of that approach.

‘Some education managers think that they cannot support forest school, as it would be a form of pedagogical favouritism, or because it is not felt to support national attainment targets. But forest school is compatible with a range of pedagogical approaches, and is very effective in promoting early learning goals.’

Katherine Milchem, Eastwood Children’s Centre, Wandsworth.

Amongst interviewees, there was support for the idea that people involved needed to be ‘good all-rounders’: people with a ‘can-do’ attitude who are able to engage children – some

of whom may take some encouragement and persuading. Two disciplines that reflect aspects of this approach are ‘earth education’⁷⁸ and environmental playwork⁷⁹. A genuine interest in nature and the outdoors was also felt to be important .

‘While, for those adults involved, passion for a subject is extremely important, children are very intuitive and can tell the difference between genuine and fake interest. Genuine interest and knowledge, along with shared experiences are vital for encouraging a love for nature and the outdoors.’

Lorna Fox, Senior Education & Young People’s Officer East London, London Wildlife Trust.

Several interviewees expressed worries about the attitudes of young adults beginning their professional careers to nature, adventure and the outdoors⁸⁰. Some saw signs of the consequences of more constrained childhoods. However, one interviewee felt there were signs of improvement.

‘We’ve been hosting teacher training sessions for about 5 years and take about 90 each year. At the start, there was not a lot of enthusiasm for the outdoors, but things have improved over the last year or two, and there’s more appetite for it.’

Alexandra Robb, Richmond Area Manager, London Wildlife Trust.

Promoting the use of sites

Many of London’s natural green spaces are underused, even where they are physically accessible. Analysis of London parental visits to natural places carried out for this project by Natural England found that time was the biggest barrier to visiting sites more often⁸¹. Surveys of parental attitudes to outdoor play



Pond dipping at East Reservoir, Hackney © Tim Gill

show that fear of traffic and fear of crime are also major disincentives⁸².

Despite these barriers, there are some grounds for taking an optimistic view of the potential for growth in use. Parents appear to be more supportive of the value of challenge and adventure in their children's lives, and more positive about risk and the outdoors. One 2010 survey found that three-quarters of parents believed schools were too concerned about health and safety during playtime⁸³. Several books have been published for parents over the last few years promoting outdoor play and contact with nature⁸⁴.

Some interviewees gave examples of parents having unhelpful attitudes – for instance, resistance to children being outside in cold weather, or concerns about mud on shoes or clothing. But others had observed a greater appetite for the outdoors, and more willingness amongst parents to let their children explore, compared to a few years ago.

'There is growing recognition of the value of children being out of doors, and parents are more outside than a few years ago.'

Sandra Campbell, Head, Church Hill Children's Centre, Waltham Forest.

There is potential for some supervised sites such as adventure playgrounds, city farms and staffed nature reserves to be more widely used. For instance, many adventure playground sites are unused during the school day. Such sites may be suitable for forest school-style programmes and for preventative and health interventions working with specific groups of children.

Simple design and signage measures can give signals to children, parents and the wider community that a green space is playable.

Experience from the Forestry Commission and National Trust has shown that the introduction of low key, low-cost play structures into natural environments can be the catalyst for a dramatic increase in play and exploration by children and families.⁸⁵ London Play has produced simple 'Play Priority Area' signs that allow site managers to make a clear statement about playability.

At many underused, unsupervised sites, it is unrealistic to expect usage to rise spontaneously, given the restrictions on children's mobility and the fears of many parents. Some sites will need a significant sympathetic adult presence to encourage children and families to visit, at least initially. At other locations, there is scope for building up usage through organising occasional events and facilitated activities. Such initiatives could be taken on by the local authority, or by 'friends of groups, conservation groups and other voluntary action. In some cases, this activity could be self-sustaining and sufficient to ensure that sites become well used and well cared for over the long term. But in others, ongoing financial support will be needed to maintain momentum.

'Most residents hardly ever go into the woods. But on the day of our event, there was a lot of interest and enthusiasm from local people, and over 50 turned up. One family spontaneously decided they'd use the day to celebrate their child's birthday. Many were disappointed that the intervention was only temporary.'

Paul Green, organiser of Wild Zone day at Abbey Wood, Greenwich.

Many conservation, education and environmental organisations are engaged in marketing and promoting their activities and sites to schools, families and local community



© London Play (signs available from www.londonplay.org.uk)

groups, in London and nationwide. One interesting model with its origins in the US and Canada is the ‘family nature club’ in which local groups of families organise joint trips, outings and projects⁸⁶. Further work is needed to find out how effective these activities are.

‘Some parents simply aren’t sure what to do with the children in natural environments, so we give them ideas: picnics, flora or fauna searches, creative play, outdoor games and most importantly we suggest that they follow their child’s interests.’

Katherine Milchem, Eastwood Children’s Centre, Wandsworth.

Digital, online and mobile technology is increasingly integrated into the everyday lives of children and parents. Hence web-based resources and mobile applications may provide new opportunities to promote sites and activities. One example is geocaching (a GPS-based hybrid of orienteering and treasure hunts). Another is ‘Mission: Explore’: a project that uses the internet and mobile technologies to give children ideas for ‘missions’ that they can undertake in outdoor places. For instance, children are invited to find a dead animal or bug, and carry out a ‘crime scene investigation’ to try to work out how it died⁸⁷.

School grounds

Recent years have seen a steady increase in interest in learning outside the classroom, and a parallel interest in the grounds of schools and early years settings. While this growth in interest is encouraging, school grounds are still undervalued and underused, and there are still many barriers to action. This is especially true in relation to play and break times, which is rarely seen as a priority compared to curriculum initiatives, and where key staff such as mid-day supervisors may not have access to relevant

training and support. Even where improvements have been made, they are often dependent upon the commitment of one individual, and are hence vulnerable to change.

‘97 per cent of teachers believe that schools need to use their outside spaces effectively to enhance their pupils’ development, but 82 per cent do not agree that their own school is making as much use as it can of this valuable resource.’

2008 & 2009 Ipsos MORI surveys of teachers⁸⁸

‘The barriers for schools? Maintenance, space for ball games, sight lines and supervision, protection for trees/shrubs, mud and parental concerns, and some resistance from some mid-day supervisors. Also, head teachers may need to feel that projects fit with their objectives on attainment if they give the engagement process a lot of curriculum time.’

Felicity Robinson, Consultant and landscape architect, Landscapes Naturally.

Projects have typically been modest in scope and size, focusing on the creation of small habitat areas or growing beds that are mainly or solely experienced as part of the classroom curriculum. Where more ambitious projects have been taken forward, they have often taken the form of conventional play areas (often with high capital costs). There is scope for influencing such projects, so that they make a bigger contribution to children’s everyday engagement with nature.



Westonbirt Arboretum play structure © Forestry Commission

CHAPTER FIVE

RECOMMENDATIONS: HOW TO RECONNECT LONDON'S CHILDREN WITH NATURE

This section pulls together findings from the literature review and fieldwork to propose a set of 12 recommendations for action to reconnect London's children with nature. The recommendations are set out and discussed below, and summarised in Table 3 at the end of this section.

These recommendations focus on the age range that was also the focus of this report: children under 12. As this agenda is taken forward, efforts should be made to ensure that children's opportunities for contact with nature are sustained as they enter adolescence, and relevant organisations should be involved.

Effective interventions are already taking place across London. However, only a small fraction of the capital's child population is being reached. Without further coordinated action, existing initiatives will fail to make up the deficit. Children in poorer areas, where there is less available green space, are doubly disadvantaged.

'If access to nearby nature is indeed a protective factor, contributing to the resilience of children and youth, then if nearby nature is lacking, it is one more strike against poor children who already face tremendous disadvantage.'

Wells and Evans (2003) *Nearby nature: A buffer of life stress among rural children*. Environment and Behaviour 35 (3) p.326

Towards a vision

This report's first recommendation is that London's leaders adopt a clear vision for the capital's children: that every child has the chance to experience nature as part of their everyday lives, and has engaging everyday nature experiences, beginning in their early years. The vision aims to be the catalyst for action by Londonwide bodies, including the

LSDC and Mayor, who are well placed to take on a leadership role.

This vision should recognise the importance of early experiences of nature in shaping children's later lives. It should reflect the academic evidence on the benefits of engaging everyday nature experiences. Finally, it should emphasise nearby natural environments as part of the fabric of public assets that London's families have a right to expect.

Recommendation 1: Adopt a clear vision

Lead organisations should establish a shared vision that all children in London have good access to sites where they can experience nature as part of their everyday lives, and have engaging everyday nature experiences in such a site, beginning in their early years.

- Key organisations: LSDC, GLA/Mayor, key partners

Policy and strategy

A Londonwide steering group

It is recommended that an interim steering group be convened to make longer-term proposals and develop an action plan to realise the vision outlined above. A similar approach should be taken at the level of the London Boroughs, with the aim of identifying the most appropriate structures for taking forward the work. Partnerships at a more local level (eg neighbourhood- or estate-based) should be piloted.

This model will allow historically distant and diverse sectors to work more closely together towards shared goals. One priority is for the public health and child health sectors to have a greater role, expanding on the work already being carried out in other sectors.

The key sectors and stakeholder interests that should be represented on a 'children and nature in London' steering group include:

- Nature conservation and biodiversity
- Education (pre-school, primary and possibly secondary)
- Public health and child health
- Local government
- School grounds
- Parks and green space
- Play
- City farms and community gardens
- Voluntary and community (including uniformed groups)
- Woodland and forestry
- Planning and land use

Recommendation 2: Partnership working across London

A Londonwide steering group on children and nature, building on existing structures, along with similar partnerships in each Borough, should be developed to work towards the vision set out above.

- Key organisations: LSDC, GLA/Mayor, key partners, London Boroughs

Planning, biodiversity and other key policies

Engagement from the planning, health, education, conservation, transport and biodiversity sectors needs to be further developed and consolidated. This is best done through building on existing policies and strategies, crucially those linked to London's planning framework.

It is recommended that the presence of the 'outdoor child' be seen as one measure of the significance of a site, and more broadly as a measure of the environmental value of neighbourhoods, local authorities and London as a whole, as is the case with other 'indicator

species'. Sites that are used by children should be protected from development pressure, as is already the case with playing fields and sports pitches. Children's independent mobility should be promoted through policies on walking, cycling and public transport. In keeping with the government's 'biodiversity offsetting' proposals in its Natural Environment white paper, where development takes place on sites used by children, compensatory sites should be created⁸⁹.

Major development proposals should be reviewed and where appropriate revised to enhance children's experiences of nature (opportunities include the Olympic site and the Thames Gateway). Funding previously earmarked for biodiversity and environmental initiatives should be considered for projects that aim to reconnect children with nature⁹⁰.

The benefits of giving children access to nature will also be of relevance to other sectors, and the topic should be addressed in all relevant Londonwide strategies. These include the London Plan, Children's Strategy and the Biodiversity Strategy and Action Plan.

Recommendation 3: Embed children and nature aims in relevant Londonwide policies and strategies

The presence of the 'outdoor child' should be seen as one indicator of site significance, and more broadly as a measure of environmental value. London's planning system and relevant strategy documents should be reviewed to explore the implications of this position.

- Key organisations: GLA and London Borough planning departments, parks and education departments, GLA Children & Young People's Unit, Transport for London, Londonwide health and education sector

organisations, London Wildlife Trust, London Biodiversity Partnership

Suitability and geographical distribution of sites

It is recommended that new GIS analyses are undertaken to show where significant numbers of children are missing the chance to experience nature, and hence highlight areas that should be a priority for action. The distance threshold of 1km to determine areas of deficiency used in the Biodiversity Strategy should be reviewed, as it may be too high to be the most appropriate benchmark for children⁹¹. Further work should also be done to explore how current and proposed datasets can be used and developed, and to gather more detailed information on existing initiatives and interventions.

Recommendation 4: Identify geographical priorities using new GIS analyses

New GIS analyses should be carried out to identify geographical priorities for action, taking better account of the types of space that could benefit children, children's more limited mobility, and relevant population data.

- Key organisations: GLA, Greenspace Information for Greater London, Play England, London Boroughs

Setting goals and measuring progress

It is recommended that discussions be initiated with key partners across sectors on appropriate measures, ensuring that these address diversity and inclusion. Greenspace Information for Greater London and Natural England should be involved at an early stage in these discussions, given the breadth and depth of their datasets, and their expertise in data collection and analysis.

It is premature to make firm proposals at this point, as the brief for this project recognised. However, some tentative proposals are made that address both London's supply of suitable sites, and activity levels and usage. Two proposed indicators are the proportion of the population with a 'site for engaging nature experiences' within 400m of home, and the numbers of parents visiting parks with their children once a month or more. These and other proposals are discussed in Appendix 3.

Recommendation 5: Measure progress and set goals to drive delivery

Key organisations should work with others to draw up an action plan with milestones and performance measures to drive engagement and delivery.

- Key organisations: LSDC, GLA/Mayor, key partners, Greenspace Information for Greater London, Natural England

Health interventions for targeted groups of children

It is recommended that pilot preventative and therapeutic interventions for targeted groups of children be carried out and evaluated, with support from the proposed health and well being boards in each London Borough, and other health sector organisations. This should embrace initiatives aimed at local populations of children (targeting neighbourhoods with poor child health outcomes), and those aimed at children with additional needs such as those with ADHD, emotional/behavioural problems and other specific disabilities and/or special needs. Adventure playgrounds and city farms, which are typically located in deprived areas and have good facilities in place, should be considered first for pilot projects. In the medium term further opportunities for new schemes should be considered linked to major

developments at the Olympic site and in other parts of East London. Evaluation methods will need to recognise the challenges raised by projects that may have multiple drivers and outcomes across health, education and environmental domains.

**Recommendation 6:
Pilot health interventions for targeted groups of children**

Pilot preventative and therapeutic programmes should be initiated and evaluated, targeted at specific groups of children with support from health organisations.

- Key organisations: GLA (including Children and Young People’s Unit), health and well being boards, other London health sector organisations

Practice and delivery

Six further recommendations for action on practice and delivery are proposed. These are partly based on opportunistic considerations, and partly on the findings on cost, reach and scalability set out in Table 2 above. Most of these recommendations are strong candidates for corporate support, as they offer opportunities for visible, practical support from brands and businesses to help to reconnect children with nature.

Children’s participation

It is recommended that the emerging Steering group considers at an early stage how best to engage and involve children in taking the work forward, so that they can have appropriate, meaningful opportunities to shape initiatives and to influence policy. One opportunity is to create ‘Young London Leaders’ along the same lines as the LSDC’s London Leaders programme.

**Recommendation 7:
Promote effective children’s participation**

Children should be appropriately and meaningfully involved in developing initiatives, and should be given the chance to influence policy priorities.

- Key organisations: GLA Children and Young People’s Unit, key partners, delivery organisations

Risk management

It is recommended that risk-benefit assessment be promoted more widely as the most effective and appropriate approach to risk in the context of children’s play and learning. The main focus for training and dissemination should be those involved in corporate health and safety and risk management within schools, local authorities and other public bodies.

**Recommendation 8:
Promote risk-benefit assessment**

Risk-benefit assessment should be promoted as the appropriate approach to managing risk in settings and locations where children’s engagement with nature is being encouraged.

- Key organisations: London Boroughs, London Play, London Parks and Green Space Forum, landowners, nature conservation organisations, insurers

Play-oriented approaches and interventions

It is recommended that people and organisations working to offer children experiences of nature promote a play-oriented, hands-on, exploratory, ‘can do’ approach. In some locations this will require a balanced, thoughtful approach to potentially conflicting uses. Different approaches to budgeting should

be explored that allow more flexibility about capital/revenue mix, for instance in connection with play space projects.

**Recommendation 9:
Promote hands-on, play-oriented experiences and interventions**

Those working in and managing sites where children come into contact with nature should maximise opportunities to provide exploratory, hands-on, play-oriented experiences.

- Key organisations: Nature conservation organisations, community & youth organisations, landowners & managers, Registered Social Landlords, London Play, adventure playgrounds, London Borough parks departments, 'Friends of' groups

Promoting use of accessible green space

It is recommended that further research is carried out into what works in promoting use of green space, with a focus on parents. Pilot programmes should be carried out and evaluated, and the results widely shared. Deprived areas and groups that are underrepresented amongst users, such as BAME children and disabled children, should be priorities for action. Action should be taken across a range of types of site, including parks, amenity space and public nature reserves.

**Recommendation 10:
Promote better use of accessible green space**

Research should be carried out, and programmes supported and evaluated, on promoting the use of under-used accessible green space by organised groups and the public, with a focus on engaging parents.

- Key organisations: Nature conservation organisations, London Borough parks

departments, Greenspace Information for Greater London, community and youth groups, landowners & managers, Registered Social Landlords, London Play, British Trust for Conservation Volunteers

Forest School and similar approaches

It is recommended that forest school and similar approaches be promoted and supported, targeting London Boroughs where activity is low and with a focus on areas of deficiency and disadvantaged groups. The potential for programmes at adventure playgrounds and city farms should be explored. Support should include help to facilitate discussions with landowners and site managers over practical issues such as access, conservation and allowable activities, and to tackle risk management, liability and insurance concerns.

**Recommendation 11:
Promote forest school and similar approaches**

Forest school and similar approaches to learning in the outdoors should be promoted and supported Londonwide to the conservation, education and childcare sectors.

- Key organisations: Key partners, London Borough education departments, Londonwide and Borough childcare organisations, forest school organisations, nature conservation organisations

School grounds

It is recommended that schools and early years settings give greater emphasis to offering children engaging everyday nature experiences within their grounds. This should be done through the creation of natural play spaces and more extensive and easily accessible habitat

areas, and though tackling the barriers that prevent sites from being used more effectively. A whole-school approach, backed by senior management and involving non-teaching as well as teaching staff, is needed to ensure that changes are supported in the playground, and last over time. Where possible, grounds should be also be opened up to the local community.

Recommendation 12: Promote engaging everyday nature experiences in school grounds

Schools and early years settings should give greater emphasis to offering children engaging everyday nature experiences within their grounds, where possible allowing access by the wider community.

- Key organisations: Educational settings, Learning through Landscapes

Table 3: Recommendations 1 – 6 (vision, policy and strategy)

Recommendation	Key organisations	Short/medium/long term	Quick wins	Outcomes
1: Adopt a clear vision	LSDC, GLA/Mayor, key partners	S	Support from Mayor	Ongoing support for vision, backed up by measurable progress towards it
2: Partnership working across London	LSDC, GLA/Mayor, key partners, LAs	S	Draw up funding proposal and business plan	Ongoing strategic focus supported by key partners
3: Embed children and nature aims in relevant London-wide policies & strategies	GLA and LA planning departments, GLA Children & Young People's Unit, Transport for London, London-wide health and education sector organisations, LWT, London Biodiversity Partnership	M	None identified	Key strategies address the issue
4: Identify geographical priorities using new GIS analysis	GLA, GiGL, Play England, LAs	S/M/L	Geographical analysis identifying target neighbourhoods	Fewer areas of deficiency and fewer children living in such areas
5: Measure progress and set goals to drive delivery	LSDC/GLA, key partner organisations, GiGL, Natural England	S/M/L	Agreement with key partner organisations to take forward work developing indicators	Set of indicators with broad political and key partner organisation support
6: Pilot health interventions for targeted groups of children	GLA (including Children and Young People's Unit); health and well-being boards, other London health sector organisations	M/L	Pilot schemes at adventure playgrounds and city farms	Successful interventions are adopted by health professionals

Table 3 (continued): Recommendations 7 – 12 (practice and delivery)

Recommendation	Key organisations	Short/medium/long term	Quick wins	Outcome/s
7: Promote effective children's participation	GLA Children and Young People's Unit, key partners, delivery organisations	S/M/L	Creation of 'Young London Leaders' programme	Children are meaningfully involved in the design and delivery of projects, and have the chance to influence policy and practice
8: Promote risk-benefit assessment	LAs, London Play, LPGSF, landowners, schools, education and childcare providers, nature conservation organisations	S/M	Seminar on risk-benefit assessment aimed at LA corporate risk managers	Risk-benefit assessment is universally adopted
9: Promote hands-on, play-oriented experiences and interventions	Nature conservation organisations; LAs, community & youth organisations, landowners & managers, RSLs, London Play, adventure playgrounds, LA parks departments, 'Friends of' groups	S/M	Uniformed organisations make commitment to build relevant activities into their regular programmes	All relevant organisations offer play-oriented, engaging, hands-on experiences
10: Promote better use of accessible green space	Nature conservation organisations, LA parks departments, GiGL, community and youth groups, landowners & managers, RSLs, London Play, BTCV	S/M/L	Programme set up focusing on BAME children	Sound, widely understood knowledge base amongst providers about effective ways to promote and sustain usage
11: Promote forest school and similar approaches	Key partners, LEAs, Londonwide and Borough childcare organisations, forest school organisations, nature conservation organisations	S/M	London forest school conference aimed at decision makers in the education and childcare sectors	All London children are offered forest school or similar sessions during their early years
12: Promote engaging everyday nature experiences in school grounds	Educational settings, Learning through Landscapes	M/L	None identified	Every educational setting offers engaging everyday nature experiences

CHAPTER SIX

CONCLUSION

Too many of London's children have little or no meaningful contact with natural places in the city. As a result, they may be denied the many and varied benefits that experiences in nature bring: experiences that many adults understand at a deep emotional level from their own childhood memories. They may also grow up indifferent to nature, and unsupportive of the need for environmental stewardship.

A more positive future is within London's collective reach. Interest in children and nature is growing, and is fuelling many local initiatives from a wide range of interest groups.

Reconnecting London's children with nature will take many years. As each cohort of children is born and grows up in the capital, the opportunities and experiences they are offered will need to be improved above and beyond what has gone before. Hence a timeframe of a generation or more needs to be adopted.

This report aims to promote action to improve the quality of life and prospects of the capital's children. Its recommendations are largely incremental and evolutionary, building on existing good work and achievements and aligning them towards a shared goal. Yet taken together they have the potential to make a real difference to children's relationship with the natural world, and also to their relationship with London, for their benefit and for the benefit of future generations.

If this report is acted upon, it will place London at the forefront of efforts to reconnect children with nature. To do so would be a fine legacy for the capital's children, and also a fitting goal for a city that is already a global leader in urban nature conservation.

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APPENDIX ONE

FIELDWORK

This appendix explains the approach taken to fieldwork for the project. A typology of types of intervention was drawn up and discussed with LSDC staff. A list of case studies was identified, based on the report author's knowledge and suggestions from key organisations, including London Play, the London Wildlife Trust and Learning through Landscapes. Table A1 sets out the typology used and the case study projects contacted. Either telephone or face-to-face interviews were carried out. The following questions and issues were discussed:

- Goals/objectives of intervention
- Style and nature of engagement by children
- Staffing and other resources needed
- Catchment area
- Numbers of children under 12 reached per year and typical patterns of use
- Cost to the child/family
- Number/distribution of similar interventions across London
- Success factors, barriers and other observations

Table A1: typology of interventions studied and case studies contacted

Type of intervention	Relevant interventions	Case studies and organisations contacted
School – on site	Curriculum projects School ground improvement projects	BBC Breathing Places - schools Argyle Primary School, Camden Church Hill Children Centre, Waltham Forest Kate Greenaway Nursery, Islington Learning through Landscapes
School – off site	Educational visits Forest school programmes	Bayonne Nursery Forest School Eastwood Nursery School, Centre for Children and Families East Reservoir Community Garden
Childcare/out of school – on site	Adventure playgrounds Out-of-school nature or gardening clubs	Islington Play Association 'Finding Nature through Play' project Eco-kids out-of-school project London Play
Childcare/out of school – off site	After school programmes	East Reservoir Community Garden
Uniformed & youth groups	Cubs, Brownies, Woodcraft Folk	Girlguiding Regional Commissioner for London & South East
Community/ environmental projects	City farms Community gardens Environmental centres	Kentish Town City Farm Calthorpe Project East Reservoir Community Garden London Environmental Educators' Forum
Clubs & hobby groups	Nature conservation organisation membership schemes	RSPB Wild Watch (Royal Society of Wildlife Trusts)
Green/natural public space interventions	Natural public play spaces Public Nature Reserves	Grovelands Park Play Area, Enfield Eric St Community Play Garden, Tower Hamlets Crane Park Island Nature Reserve Sutton House, Hackney (National Trust)
Digital & mobile interventions	Mobile phone apps Geocaching	Geography Collective/Mission:Explore
Other	Events	Wild Zone event, Abbey Wood, Greenwich BBC Breathing Places - communities

APPENDIX TWO

NOTES TO TABLE 2 IN SECTION 3

The basis chosen for calculating costs is the cost of offering a minimum of 6 repeat visits that offer the opportunity for engaging everyday nature experiences, to an additional 100 children a year for 10 years. The ten-year timeframe was chosen as an equitable basis for comparison, given that some interventions primarily involve capital spending, while others primarily involve revenue.

Assessments of the scope for expansion of different types of intervention, and of the scope for targeting them at particular geographical areas (such as disadvantaged neighbourhoods, or areas deficient in natural green space) are based on judgements about the feasibility and viability of significant expansion, and on the likely constraints on such expansion. Forest school-style programmes, for instance, rate more highly on both counts: capital costs are low (in most areas no new sites would need to be secured) and schemes could be started in most parts of London. By comparison, adventure playgrounds and city farms rate lower: significant expansion would require new land and major capital investment, and would be difficult to target.

The assessments and figures in Table 2 should be treated with considerable caution. Many of the figures given for numbers of settings and reach are rough estimates, and the estimates of the cost of extending provision are very approximate, for instance in relation to the cost of materials, running costs and management overheads. Moreover, while the focus has been on the generic concept of engaging everyday nature experiences, the experiences on offer at different initiatives are qualitatively different. Six facilitated 'nature and art' sessions, for instance, offer a different experience to six forest school-style sessions, which is different again to six visits to a natural public play space.

No accurate figures are available on the number of school grounds that have nature areas that are both open at breaks and extensive enough to offer engaging nature experiences. The estimate given is based on the views of staff from Learning through Landscapes. Capital and running costs vary widely due to variations in design and in the use of gardening and horticultural staff and volunteers.

The estimate of the total number of forest school and related programmes is based on information provided by Katherine Milchem, the London region contact for the Forest Education Initiative. It is approximate, and based on her view of the amount of training that has been carried out and the number of programmes that may be running in different London Boroughs. Running costs vary widely due to variations in travel costs and in the use of staff cover and sessional leaders.

For city farms, staffed and unstaffed nature reserves, adventure playgrounds, natural play spaces, after school nature clubs, and Cubs/Brownies/Woodcraft Folk, estimates of number of initiatives, reach and cost are approximate and based on interviews. It was not possible to estimate the reach or scope for expansion of Cubs/Brownies/Woodcraft Folk, because sessions vary widely in content and style.

APPENDIX THREE

MEASURING PROGRESS

This appendix discusses how progress in reconnecting London's children with nature might be measured. For effective action to be taken, meaningful, relevant measures of progress are needed. Metrics and performance indicators would ideally get as close as possible to assessing children's lived experiences of nature (including length of time spent in different types of environment, the types of activity/engagement and so on, alongside age, gender and other demographic data). However, such data would be expensive and difficult to collect. Hence stand-ins or proxy measures need to be used, as well as milestones that help to define paths to ultimate outcomes.

Three types of proxy indicator or metric offer promising approaches. The first – spatial standards – look at the pattern of supply of appropriate natural space. The second – usage or participation indicators – look at numbers of children engaging with different types of intervention. The third – measures of quality – look at aspects of the experiences themselves.

Spatial standards

Several relevant spatial standards are in use. Two are set out in policies that are specific to London: the London Biodiversity Strategy⁹² and the Mayor's Supplementary Planning Guidance on Play⁹³. Two have a nationwide remit: Natural England's Access to Natural Greenspace Standard⁹⁴ and the Woodland Trust's Woodland Access Standard⁹⁵. Their key features are summarized in Table A2 below. All share the aim of influencing planning, land use and service delivery to improve and enhance the supply of spaces and reduce areas of deficiency.

Each of these standards has strengths and weaknesses in relation to children and nature. Existing standards on natural spaces set their benchmark of qualifying sites too high. Sites that do not count under these standards (because they are not classified as woodlands, or are of merely local nature conservation importance) may well have the potential to offer children meaningful nature experiences.

Table A2: Existing spatial standards

London Biodiversity Strategy
<ul style="list-style-type: none"> • Areas deficient in access to nature are defined as those parts of London that are more than 1km walking distance from a publicly accessible Site of Borough or Metropolitan Importance for Nature Conservation. • Sites of purely local importance are not taken into account.
Mayor of London's Supplementary Planning Guidance on Play
<ul style="list-style-type: none"> • Sets quantitative standard of 10 sq m of playable space per child. • Access thresholds are defined by age, and relate to a typology of spaces. • For children under 5 the access threshold is 100m; for those aged 5 – 11 it is 400m.
Woodland Trust Woodland Access Standard
<ul style="list-style-type: none"> • No person should live more than 500m from at least one area of accessible woodland of no less than 2ha in size (0.75ha in urban areas) • There should also be at least one area of accessible woodland of no less than 20ha within 4km of people's homes
Natural England Access to Natural Greenspace Standard
<ul style="list-style-type: none"> • No person should live more than 300m from their nearest area of natural greenspace of at least 2ha in size • At least one accessible 20ha site within 2km of home • One accessible 100ha site within 5km of home • One accessible 500ha site within 10km of home • Provision of at least 1ha of Local Nature Reserve per 1,000 people

The London Biodiversity Strategy standard is problematic because it uses a distance threshold of 1km to determine areas of deficiency. This is likely to be too high to be a useful benchmark for children, given what is known about the mobility of children and families, and London families' access to cars.

The GLA's planning guidance on outdoor play uses more appropriate distance thresholds. However, it does not give adequate recognition to the natural qualities that are needed for engaging everyday nature experiences.

Table A3 below includes a proposal for a spatial standard that avoids the drawbacks discussed above.

Usage and participation indicators

Alongside spatial tools, it is possible to estimate the use by children of some forms of intervention. Educational and staffed natural settings and initiatives are more straightforward, and possible metrics for these are suggested in Table A3 below.

Data on children's use of unstaffed nature areas and public open space is not so readily available. Natural England offers bespoke analyses of its

ongoing, extensive survey and dataset, Monitor of Engagement with the Natural Environment. Some analyses were carried out for this report (see Introduction) and further analyses covering demographics and detailed information on destinations is also possible. Extensive London-specific data on greenspace is collected and managed by Greenspace Information for Greater London (GiGL). GiGL and Natural England should be involved at an early stage in discussions about measuring performance and progress, given the breadth and depth of their datasets, and their expertise in data collection and analysis.

Marketing surveys offer another approach. For example, the GLA's parks telephone survey could be amended to include more information about the usage patterns of children and families. Another tactic is to develop ways of assessing spontaneous/independent use of sites by children, analogous to those used by nature conservationists in connection with indicator species such as otters. For instance, the presence of worn paths, evidence of dens or social use and rope swings are all 'play traces' that point to use by children. Given that sites are regularly surveyed for biodiversity purposes using standardised forms and methods, it should

Table A3: Possible metrics and performance indicators

Access and availability measures
<ul style="list-style-type: none"> • Proportion of the population in a neighbourhood/local authority/London with a 'site for engaging nature experiences' within 400m of home. Suitable sites would include accessible sites of nature conservation importance (SINCs) of any grade, community gardens, city farms, adventure playgrounds or playable natural space; • Number of early years settings/primary schools with a suitable natural green space in its grounds; • Number of staffed adventure playgrounds with a suitable natural green space in its grounds; • Proportion of local authority-run parks and open spaces that contain sites suitable for engaging everyday nature experiences.
Use and activity measures
<ul style="list-style-type: none"> • Numbers of parents visiting parks with their children once a month or more; • Numbers of children taking part in forest school or similar programmes; • Numbers of children having engaging everyday nature experiences at a nature reserve; • Numbers of children having engaging everyday nature experiences as part of an after-school club programme; • Numbers of children in Scouts, Guides and Woodcraft Folk having engaging everyday nature experiences as part of their regular weekly programmes.

be relatively simple to amend the survey tools so that they also capture this information. Over time, this information would make a valuable addition to datasets on London's green spaces.

Measures of quality

There is also scope to explore how existing quality standards and award schemes could be used, revised and adapted to provide a focus on children and nature. Quality in Play, a quality assurance scheme for supervised play services managed by Play England, includes criteria on the physical environment that are relevant to children's experiences of nature. Other schemes such as the Green Flag Award could be revised to include relevant criteria.

APPENDIX FOUR

FEEDBACK

ON DRAFT RECOMMENDATIONS

Introduction

As part of the project, LSDC organised a 'shaping the recommendations' event on 20 July 2011 to gain feedback on the draft recommendations, share findings and build momentum. The programme included substantial time for group discussion and comment, including a request to prioritise the recommendations. Extensive notes were made, and a report was circulated afterwards to all attendees.

The draft executive summary and recommendations were also published online on the LSDC website, with an invitation to comment and a deadline of 1 September. A draft version of the full report was made available on request after the event.

The stakeholder event revealed a high level of interest in the topic, with over 90 representatives from a broad range of organisations and interest groups. Written responses were also received from 14 organisations, most of whom had also attended the July meeting. The organisations that responded are listed below.

Priorities

There was good support both at the meeting and in the written responses for the main thrust of the recommendations. The recommendation to adopt a clear vision was strongly endorsed as the top priority. The two other recommendations that were most strongly prioritised were on risk-benefit assessment and children's participation. The recommendations on promoting hands-on, play-oriented experiences and interventions and promoting better use of accessible green space were also prioritised.

A large proportion of the comments from the meeting and in written responses underscored the recommendations and discussion in the

report, and indeed a number of respondents made significant, specific offers to help take the work forward. This gives increased confidence that the recommendations as a whole enjoy the support of many key interested organisations. It is proposed that these offers of help should be revisited and reviewed at an early stage as this agenda is taken forward.

Other feedback

Some questioned the age focus of the project (a decision taken at its inception), which was also mentioned in some of the recommendations. It was suggested that stakeholders working with older children and young people should be involved to sustain children's engagement through adolescence.

Several respondents were also concerned that any emerging partnerships should have a local impact, avoid duplication and not become talking shops. A number expressed concern about the capacity of existing organisations to take forward this agenda, with some calling for a dedicated post to be created.

Comments and suggestions were made about engaging parents, in relation to a number of the recommendations. Relevant topics included promoting the value of play-oriented approaches, and highlighting the need for balanced messages around risk. There were also calls for greater recognition of the role of parents' trips and visits with their children.

Comments were also made about the challenges in promoting the importance of play-oriented experiences in school. These included involving non-teaching staff and parents, and recognising the importance of senior management support to embed change in the school and to minimise the risk that initiatives would founder with the departure of enthusiastic individuals. Some comments pointed out the value of school-

based food growing projects, and the learning from recent initiatives.

Other comments from the stakeholder meeting and written feedback included:

- The need to signal to children and families that green public spaces are playable;
- Addressing tensions between user groups in public space;
- Reference to Government reforms to public health, specifically the creation of local health and well being boards with significant powers and resources;
- Concerns about the perceived narrowness of the term ‘forest school’. Respondents suggested that more references should be made to other similar approaches, and that

debate should be acknowledged about the different forms and models that are emerging;

- Mention of public transport as well as walking and cycling;
- Expanded discussion about performance measures, making reference to quality.

Several respondents gave information about initiatives and interventions that were relevant to children and nature and that had not been identified in the fieldwork.

Revisions

The table below sets out the main revisions that were made to the report in the light of the consultation responses. Other more minor revisions were also made, responding to most of the comments summarised above.

Table A4: Revisions arising from consultation

Issue	Revision
Age focus	Reference to age in vision statement removed. Expanded discussion of age focus in the body of the report, including text proposing that stakeholders working with older children and young people could be involved.
Partnership	Recommendation amended to propose that a new interim Londonwide Steering group should be convened to make longer-term proposals and firm up an action plan, and that a lead partnership should be identified for each London Borough (preferably an existing partnership). Proposal included that partnerships at a more local level (eg based in estates or neighbourhoods) should be piloted.
Children’s participation	Expanded discussion of recommendation – which is introduced at an earlier point in the report - with more signposting to resources.
Engaging parents	Proposed that new steering group should identify further work on this as part of formulating its action plan, focusing on what works in different contexts, especially for disadvantaged families and areas.
Health involvement & interventions	Recommendation revised to refer to health and well being boards.
Forest school	Terminology changed, and expanded discussion in the text.
School grounds	Recommendation amended to refer to community access, and expanded discussion in the text.

Organisations represented at 'shaping the recommendations' event

AG Planning
All Saints' Primary School
Art in the Park
Avant Gardening
Battle McCarthy
Bayonne Nursery School
Black Environment Network
Brownbaby
Capital Growth
Cause You Can Children's Charity
Chelsea Open Air Nursery School and Children's Centre,
Commission for a Sustainable London 2012
Croydon Xpress
Croydon Youth Forest Project
Department for Education
DRC Vision
Eco-Kids
Energy Saving Trust
Federation of City Farms & Community Gardens
Field Studies Council
Food for Life Partnership
Forestry Commission
Friends of Burgess Park
Friends of the Earth England
Garden Organic
Greater London Authority
Greater London Reserve Forces' and Cadets' Association
Greenwich CDA & Plumstead Common Environment Group
Greenwich Learning & Achieve
Groundwork London
Groundwork Thames Valley
Holland Park Ecology Centre
Islington Play Association
Kentish Town City Farm
L&Q Housing Trust
Landscapes Naturally
Learning through Landscapes
Lee Valley Regional Park Authority
London Borough of Croydon
London Borough of Enfield
London Borough of Greenwich
London Borough of Hackney
London Borough of Islington
London Borough of Lambeth
London Borough of Richmond
London Borough of Tower Hamlets
London Borough of Wandsworth
London Environmental Education Forum
London Health Programme
London Play
London Sustainable Development Commission
London Sustainable Schools Forum
London Wildlife Trust
Meynell Games Group
National Children's Bureau
Natural England
Neighbourhoods Green
New Forest National Park Authority
NHS ELC (City & Hackney)
NHS South East London
Noel's Kitchen Ltd
Play England
Portman Early Childhood Centre
Pre-school Learning Alliance - Lewisham
Rethinking Childhood
Rethinking Cities
RSPB
Stockwell Women Achievement Network
Sustrans
The Garden Classroom
The Scout Association
The Third Space Medical Clinic
Thurrock Borough Council
Time and Talents Association
Walthamstow School for Girls
Wildfowl & Wetlands Trust
You London
50plus Employment Link

Written consultation responses:

Avant Gardening

Chelsea Open Air Nursery

Eco Kids

Enfield London Borough

Federation of City Farms and Community
Gardens

Food for Life Partnership

The Garden Classroom

Learning through Landscapes

London Wildlife Trust

National Children's Bureau

Natured Kids

Neighbourhoods Green

Play England

50plus Employment Link

ENDNOTES

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- 2 England Marketing (2009) Report to Natural England on Childhood and Nature: A survey on changing relationships with nature across generations
- 3 GLA (2007) The State of London's Children Report
- 4 Collishaw S et al (2004), 'Time trends in adolescent mental health' *Journal of Child Psychology and Psychiatry*, 45 (8) pp. 1350–62
- 5 UNICEF (2007) *Child poverty in perspective: An overview of child well-being in rich countries*, Innocenti Report Card 7 (Florence, UNICEF Innocenti Research Centre).
- 6 Woolley H et al (2009) *Children and the Natural Environment: Experiences, influences and interventions*, pp14-15; Bixler R et al (1994) 'Observed fears and discomforts among urban students on field trips to wildland areas.' *Journal of Environmental Education*. 26 (1), pp. 24-33
- 7 One key catalyst of this debate is Louv R (2005), *Last Child in the Woods: Saving our children from nature-deficit disorder*
- 8 England Marketing (2009) *Report to Natural England on Childhood and Nature: A survey on changing relationships with nature across generations*
- 9 Gill T (2007) *No Fear: Growing up in a risk averse society*
- 10 Analysis of data from Natural England's Monitor of Engagement with the Natural Environment, based on data collected between March 2009 to February 2011. Analysis carried out by Stephen Herbert, Natural England.
- 11 For London, 33 per cent of all adult visits were taken with a child in the party. This compares to 22 per cent for England as a whole. Analysis of data from Natural England's Monitor of Engagement with the Natural Environment, based on data collected between March 2009 to February 2011. Analysis carried out by Stephen Herbert, Natural England.
- 12 England Marketing (2009) *Report to Natural England on Childhood and Nature: A survey on changing relationships with nature across generations*; GLA (2010) GLA Telephone Polls Poll 7 – August 2010; Natural England (2010) Monitor of Engagement with the Natural Environment: The national survey on people and the natural environment
- 13 www.londonchildpoverty.org.uk/facts/
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- 17 GLA (2008) *Improving Londoners' Access to Nature*
- 18 GLA (2002) *Connecting with London's Nature: The Mayor's Biodiversity Strategy* p.71
- 19 GLA (2010) *Young Londoners - successful futures: The Mayor's renewed agenda for children and young people* p.21; GLA (2004) *Making London Better for All Children and Young People: The Mayor's Children and Young People's Strategy*
- 20 GLA (2006) *Supplementary Planning Guidance on children and young people's play and informal recreation* p.64
- 21 GLA (2010) *The London Health Inequalities Strategy* p.34
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- 29 Morris J, & Zidenberg-Cherr S (2002) 'Garden-enhanced nutrition education curriculum improves fourth-grade school children's knowledge of nutrition and preferences for some vegetables.' *Journal of American Dietetic Association* 102 (1) pp. 91-93.
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- 32 Gill T (2011) *Children and Nature: A quasi-systematic review of the empirical evidence*, London Sustainable Development Commission
- 33 Bixler R et al (1994) 'Observed fears and discomforts among urban students on field trips to wildland areas.' *Journal of Environmental Education*. 26 (1), pp.24-33
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- 35 OPENspace Research Centre (2005) *Evaluation of Visitor Experience at Ynyslas, Dyfi National Nature Reserve*
36. Orme J et al (2011) *Food for Life Partnership evaluation: Full report*. University of the West of England, Bristol. Food for Life Partnership is a £16.9 million Big Lottery Fund project supported by the Soil Association, Focus on Food Campaign, Health Education Trust and Garden Organic. It runs until the end of 2011.
- 37 Catherine Andrews (Learning through Landscapes) and Felicity Robinson, interviews
- 38 GLA (2005) *Connecting Londoners with Trees and Woodlands: A Tree and Woodland Framework for London*
- 39 In Greenwich, the main initiative has been developed by the Early Years Foundation Stage Team and includes Children's Centres, Day Nurseries, an Independent school, Pre Schools and Foundation Stage 1 and 2 classes. In all settings improvements in learning have been recorded, particularly in early language development skills and personal, social and emotional development. Katherine Milchem (Eastwood Children's Centre), interview; Elizabeth Buck. LB Greenwich, personal communication
- 40 This is a common approach in some Scandinavian countries: see Williams-Sieghfredsen J (2005) *The Competent Child: developing children's skills and confidence using the outdoor environment: A Danish perspective*. British Educational Research Association Annual Conference, 16 September. A Northampton-based Social Franchise promoting sustainable living and environmental awareness is planning to pilot a scheme along these lines at an allotment site (Sara Jones, Eco-kids, interview).
- 41 Lorna Fox and Mathew Frith (London Wildlife Trust) interviews.
- 42 Department for Children, Schools and Families (2008) *The Play Strategy* Sutton A and Murray L (2009) *Children's Tree Swings: A Guide to good practice*; Sutton A, Wheway R and Richardson G (2009) *Fallen Trees as Climbing Structures in Playgrounds*.
- 43 Alan Sutton (London Play) and Lucy Benson (Islington Play Association) interviews (out of a total of around 80 existing adventure playgrounds). Islington Play Association's 'Finding Nature Through Play' project aims to improve children's experiences of nature in that borough's 12 staffed adventure playgrounds, through environmental improvements and training and staff development. Recent years have seen the creation of new staffed adventure playgrounds in Camden, Enfield, Tower Hamlets, Merton and Kensington & Chelsea.
- 44 CABE 2010 *Community green: using local spaces to tackle inequality and improve health*
- 45 Catherine Andrews (Learning through Landscapes) interview
- 46 The 200,000 estimate is tentative, and based on the following assumptions. The Natural England analysis discussed above (see notes 10 and 11) suggests that 1/3 of families with children under 12, or around 370,000, do not make regular visits to natural places. Turning to private gardens, the 2002 GLA report *Connecting with London's nature* states that 'a small proportion of people have access to private gardens,' (p.30) implying that significantly over half do not. Applying this proportion to the 370,000 figure suggests that at least 200,000 children have neither private garden access nor regular experiences of other natural places.
-

- 47 £235m was earmarked for investment in play provision across England between 2008 and 2011. In London, each Borough was allocated around £1.1m to create or refurbish 22 play areas in parks and housing estates, with an emphasis on designs that included natural materials and landscaping. Seven London Boroughs each received an additional £900,000 as Play Pathfinders to create or refurbish an additional 6 play areas, and to create a new adventure playground or refurbish existing ones. Information from Department for Children, Schools and Families (2008) *The Play Strategy* and Alan Sutton (London Play) interview.
- 48 Access to Nature allocated £28.75m of National Lottery funding to projects that improved people's access to nature. The programme closed for applications in 2010, and 12 projects were funded in London. A number of funded projects are aimed at children. In London these include East Reservoir Community Garden and Islington Play Association's 'Finding Nature through Play' project. Information from www.naturalengland.org.uk/ourwork/enjoying/outdoorsforall/accesstonature/default.aspx.
- 49 Breathing Places was a national programme sponsored by the BBC that supported projects promoting biodiversity in schools and communities. It ran from 2005 to 2010 and provided practical support and resources to help schools and communities take simple steps to engage with nature. Breathing Places reached over 9,000 schools across the UK, and around 30 per cent of those were actively engaged. It also invested £8.5 million of National Lottery funding in projects to improve the local environment, supporting over 150 community groups and nearly 16,000 events in communities across the UK, many of which had a strong focus on families. Information from Mark Boyd (Royal Society for the Protection of Birds) and Kelly Brotherhood (Royal Society of Wildlife Trusts) interviews.
- 50 Dr William Bird, former strategic health adviser to Natural England and General Practitioner, personal communication.
- 51 Department of Health (2010) *Healthy Lives, Healthy People: Our strategy for public health in England*. The Stationery Office.
- 52 Christopher Cleeve (National Trust), interview.
- 53 For instance, a number of London Boroughs have adopted play strategies, supported by multi-sector, cross-departmental partnerships (Alan Sutton, London Play, interview).
- 54 Conway M (2010) *Adventure playgrounds: built by communities*, Play England. This report showed that a key success factor was that the playgrounds could decide the mix of revenue and capital according to local needs and in consultation with children.
- 55 Natural England (2010) *'Nature Nearby': Accessible Natural Greenspace Guidance*; GLA (2002) *Connecting with London's Nature: The Mayor's Biodiversity Strategy*; Woodland Trust (2010) *Space for People: Targeting action for woodland access*
- 56 Vehicle hire can make up a significant proportion of the total cost of running forest school programmes; Bayonne nursery spends over £2700 each year on such transport (Bayonne Nursery, interview).
- 57 GLA (2008) *Improving Londoners' Access to Nature*
- 58 Transport for London has been addressing this through its 'Cycling on Greenways' programme, though central funding was ended in 2011.
- 59 The focus for geographical data collection and analysis is Greenspace Information for Greater London (GiGL), the capital's environmental records centre. GiGL's datasets are maintained and updated to a high standard, drawing on site surveys as well as satellite and other data. They include almost all relevant types of green space, including private gardens. GiGL offers partners and clients an increasingly sophisticated set of services, some of which involve combining its data with other geographical data on such topics as population, public health and pollution. It is also working to produce publicly available information on facilities and key features at green spaces, with the All London Green Grid project based at Design for London. In addition, Play England is developing an online, interactive GIS-based map of natural places to play.
- 60 Ball et al (2008) *Managing Risk in Play Provision Implementation Guide*
- 61 Judy Ling Wong (Black Environment Network) and Niki Barnett-Henry (Calthorpe Project), interviews
- 62 Julian Grenier (London Borough of Tower Hamlets), interview
- 63 Natural England (2010) *'Nature Nearby': Accessible Natural Greenspace Guidance*
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- 66 Harrop P (2006) *Rope swings, dens, treehouses and fires: A risk based approach for managers facilitating self-built play structures and activities in woodland settings*, Forestry Commission.
- 67 CABE (2010) *Community green: using local spaces to tackle inequality and improve health*, p.5

- 68 PLAYLINK (2011) *Neighbourliness and the Outdoors: Communal outdoor spaces within social housing and mixed tenure estates*.
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- 71 Participation works is a project hosted by the National Children's Bureau in partnership with the British Youth Council, Children's Rights Alliance for England, National Council for Voluntary Youth Services, National Youth Agency and Save the Children. See also see Tranter P and Freeman C (2011) *Children and Their Urban Environment: Changing Worlds*. The GLA's Children and Young People's Unit is another source of guidance and support on children's participation.
- 72 Department for Children, Schools and Families (2007) *The Children's Plan: Building brighter futures*; Cabinet Office (2010) *Common Sense, Common Safety*. Another example is the system for vetting volunteers and helpers who have contact with children, which has been reviewed and is to be scaled back. www.homeoffice.gov.uk/crime/vetting-barring-scheme/
- 73 Department for the Environment, Food and Rural Affairs (2011) *The Natural Choice: Securing the value of nature* p.47.
- 74 Dillon J (2010) *Beyond barriers to learning outside the classroom in natural environments*
- 75 Ball D, Gill T and Spiegall B (2008) *Managing Risk in Play Provision Implementation Guide*
- 76 Ball D, Gill T and Spiegall B (2008) *Managing Risk in Play Provision Implementation Guide*
- 77 Gill T and Sutton A (2010) *River Restoration Projects and Children's Play*
78. www.eartheducation.org.uk/
79. www.playwork.co.uk/index.asp?page=wap
- 80 This barrier is discussed in Dillon J (2010) *Beyond barriers to learning outside the classroom in natural environments*
- 81 For London parents visiting natural sites once a week or less often, the two most common barriers given were 'too busy at home' (20.8 per cent) and 'too busy at work' (16.4 per cent). Analysis of data from Natural England's Monitor of Engagement with the Natural Environment, based on data collected between March 2009 to February 2011. Analysis carried out by Stephen Herbert, Natural England.
- 82 Department for Children, Schools and Families (2008) *Fair Play: A consultation on the play strategy* p.12.
83. www.guardian.co.uk/education/2010/sep/07/health-and-safety-children-school-play
- 84 Danks F & Schofield J (2005) *Nature's Playground: Activities, crafts and games to encourage children to get outdoors*; Moss S (2009) *The Bumper Book of Nature*; Wilson Smith A (2008) *Nature's Playthings*
- 85 Two leading examples are at Westonbirt Arboretum (Forestry Commission) and Box Hill (National Trust). Both sites use modest, site-sensitive structures, created with volunteer input, to encourage play and exploration. At Westonbirt, the structures include a network of raised tree stump pathways, a den building area stocked with natural loose materials, an area of 'play forts' and a timber bridge over a stream. See Gill T (2010) 'Keeping it real: why and how educators should be expanding children's horizons' in Tims C (ed) *Born Creative*, Demos.
- 86 www.childrenandnature.org/movement/naturalfamilies/clubs/
- 87 Another web-based initiative is the 'Park Explorer' website <http://www.parkexplorer.org.uk>, run by the London Parks & Gardens Trust and funded by the Heritage Lottery Fund. Information from Daniel Raven-Ellison (Geography Collective/Mission:Explore <http://www.missionexplore.co.uk/missions>) and Tony Leach (London Parks and Green Spaces Forum).
- 88 l.tamba.co.uk/news.htm?item=288
89. Department for the Environment, Food and Rural Affairs (2011) *The Natural Choice: Securing the value of nature* p.22. This should apply not only to dedicated play areas, but also to abandoned or neglected outdoor sites where use by children can be identified.
- 90 At times London has not spent all of the existing funding available to support such projects. In one year, according to the London Biodiversity Partnership website, over £400,000 of funds went unclaimed. Information from London Biodiversity Partnership website <http://www.lbp.org.uk/guidancefunding.html>, accessed 1 Feb 2011
- 91 The Mayor of London's planning guidance on outdoor play uses a lower figure of 400m for children under the age of 11: GLA (2006) *Supplementary Planning Guidance on children and young people's play and informal recreation* p.75
- 92 GLA (2002) *Connecting with London's Nature: The Mayor's Biodiversity Strategy*
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- 93 GLA (2006) *Supplementary Planning Guidance on children and young people's play and informal recreation*
- 94 Natural England (2010) *'Nature Nearby': Accessible Natural Greenspace Guidance*
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Vietnamese

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Greek

Αν θέλετε να αποκτήσετε αντίγραφο του παρόντος εγγράφου στη δική σας γλώσσα, παρακαλείστε να επικοινωνήσετε τηλεφωνικά στον αριθμό αυτό ή ταχυδρομικά στην παρακάτω διεύθυνση.

Turkish

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Punjabi

ਜੇ ਤੁਹਾਨੂੰ ਇਸ ਦਸਤਾਵੇਜ਼ ਦੀ ਕਾਪੀ ਤੁਹਾਡੀ ਆਪਣੀ ਭਾਸ਼ਾ ਵਿਚ ਚਾਹੀਦੀ ਹੈ, ਤਾਂ ਹੇਠ ਲਿਖੇ ਨੰਬਰ 'ਤੇ ਫ਼ੋਨ ਕਰੋ ਜਾਂ ਹੇਠ ਲਿਖੇ ਪਤੇ 'ਤੇ ਰਾਬਤਾ ਕਰੋ:

Hindi

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Bengali

আপনি যদি আপনার ভাষায় এই দলিলের প্রতিলিপি (কপি) চান, তা হলে নীচের ফোন নম্বরে বা ঠিকানায় অনুগ্রহ করে যোগাযোগ করুন।

Urdu

اگر آپ اس دستاویز کی نقل اپنی زبان میں چاہتے ہیں، تو براہ کرم نیچے دئے گئے نمبر پر فون کریں یا دیئے گئے پتے پر رابطہ کریں

Arabic

إذا أردت نسخة من هذه الوثيقة بلغتك، يرجى الاتصال برقم الهاتف أو مراسلة العنوان أدناه

Gujarati

જો તમને આ દસ્તાવેજની નકલ તમારી ભાષામાં જોઈતી હોય તો, કૃપા કરી આપેલ નંબર ઉપર ફોન કરો અથવા નીચેના સરનામે સંપર્ક સાદો.

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