

# Out of Bounds

## Equity in Access to Urban Nature

An overview of the evidence and what it means for the parks, green and blue spaces in our towns and cities



## Introduction

During the Covid-19 pandemic, many people have become more aware of the nature on their doorstep and more dependent on it for recreation, exercise, and social contact. But the benefits of spending time in nature are not distributed equitably, with many losing out because of a lack of suitable, good-quality local provision or more complex societal barriers.

Urban nature takes many forms, including:

- **green spaces**, such as parks, nature reserves, community gardens, city farms, and woodland
- **and blue spaces**, such as rivers, lakes, ponds, canals, and the sea.

This evidence review is particularly interested in publicly accessible green or blue space which everyone is entitled to make use of, rather than private spaces such as gardens or golf clubs.

This report is designed as an overview of the evidence on equity in urban green space for anyone involved in the planning, design or management of parks, green spaces, and blue spaces. It will also be relevant to policy makers interested in social justice in public space and connected issues such as community cohesion and health inequalities.

This evidence review was produced by Groundwork UK following discussions held by a task and finish group on equity in access to urban green space reporting to the National Outdoors for All Working Group. It seeks to bring together the evidence and form the basis for a common narrative on inequity in access to urban nature as a social justice issue. The individuals and organisations involved have committed to addressing the structural roots of this inequity and this report represents a basis for further work.

## Contributors

Gavin Atkins, Mind

Maxwell A. Ayamba, Sheffield Environmental Movement & PhD Research Student in Black Studies, University of Nottingham, M4C/AHRC

Richard Bashford, RSPB

Delia Beck, Sport England

Emma Burt, RSPB

Imogen Clark, Make Space for Girls

Philip Clark, Cambridgeshire County Council

Anna Denham, Disability Rights UK

Graham Duxbury, Groundwork UK

Liz Ellis, National Lottery Heritage Fund

Trudi Else, Sport England

Tom Fewins, Wildfowl & Wetlands Trust

Natalie Ganpatsingh, Nature Nurture

Helen Griffiths, Fields in Trust

Dominic Higgins, the Wildlife Trusts

Stephen Higham, Canal and River Trust

Stephanie Kynnersley, Youth Hostel Association

Alan Marchant, The Conservation Volunteers

Carey Newson, Centre for Sustainable Healthcare

Marcus Nyman, RSPB

Zoe Palmer, Girlguiding UK

Michelle Roberts, The Richmond Group of Charities

Mark Sears, The Active Wellbeing Society and Human Rewilding Company

Carolyn Sharpe, Public Health England

Iesha Small, Youth Endowment Foundation

Dave Solly, Natural England

Susannah Walker, Make Space for Girls

Cheryl Willis, Natural England



Published by Groundwork UK

Author: Fay Holland.

May 2021

## What do we know about who benefits?

People from all walks of life place a high value on access to nature and green space, with only 5% of adults saying that it has never been important to them (The Ramblers, 2020). Urban residents value parks and green spaces more than other people (Fields in Trust, 2019). Visits to urban parks account for over a third of all visits to the natural environment, underlining the importance of these local spaces for health and exercise, relaxation, spending time with friends and family and a whole range of other activities (Natural England, 2019). There is currently 32.94 square metres of green space provision per person in the UK, but 2.69 million people do not live within a 10-minute walk of a green space (Fields in Trust, 2020).

One in eight households has no access to a private or shared garden and this is particularly likely to be true of people living in urban areas – for example, 21% of Londoners do not have a garden. In England, Black people are nearly four times as likely as White people to have no access to outdoor space at home. Even comparing people of similar age, social grade and living situation, those of Black ethnicity are 2.4 times less likely than those of White ethnicity to have a private garden (Office for National Statistics, 2020).

When it comes to publicly accessible green space, this inequality persists. Almost 40% of people from ethnic minority backgrounds live in the most green-space deprived areas, compared to 14% of White people (Friends of the Earth, 2020). People from ethnic minority backgrounds are less likely to live within a 5-minute walk of a green space than people that identify as White (39% compared to 58%), less likely to report that there are good walking routes where they live (38% compared to 52%) and less likely to report a variety of different green spaces within a walking distance of where they live (46% compared to 58%) (The Ramblers, 2020).

People from low-income households are also less likely to have good access to green space. People on low incomes are less likely to live within a 5-minute walk of a green space (46% of those with an annual household income under £15,000 compared to 70% of people with an annual household income over £35,000), less likely to live somewhere where

the streets are green (27% compared to 53%), and less likely to report that there are good walking routes where they live (42% compared to 59%) (The Ramblers, 2020). Research in Sheffield found that urban deprivation was more likely to affect people's contact with nature for wellbeing than ethnicity; parks, neighbourhoods, roadsides and through-routes in deprived areas were more often described as having rubbish and not being looked after, which put some people off walking, cycling and visiting green spaces near where they live (Improving Wellbeing through Urban Nature, 2019).

The presence of urban nature has a positive impact on the local economy, bringing greater footfall to local businesses and making neighbourhoods more desirable. In England and Wales, houses and flats within 100 metres of public green space are an average of £2,500 more expensive than they would be if they were more than 500 metres away (Public Health England, 2020). While this reflects the positive benefits that urban nature creates, this housing premium can leave communities vulnerable to displacement over time as the presence of green space prices them out of their neighbourhood, a process that has been described as “eco-gentrification” (Kabisch & van den Bosch, 2017). This underlines the importance of addressing inequalities in the quality and quantity of green space in different neighbourhoods, so that the benefits of proximity to urban nature are felt by every community.

This inequality in access is reflected in trends for visits to green or blue space in urban areas. There had been a notable increase in adults spending time outdoors at least once a week in the decade leading up to 2019, up from 54% to 65%. However, there were larger proportions of infrequent visitors among the oldest age groups, people from lower socio-economic groups and people from ethnic minority backgrounds. 69% of White people reported visiting natural spaces at least once a week compared to 41% of Black people and 38% of people from an Asian ethnic background. 74% of people from the highest socio-economic groups reported visiting natural spaces at least once a week compared to 53% of people from the lowest socio-economic groups (Natural England, 2019).

Evidence also suggests that urban nature is less accessible to disabled people. A survey found that 47% of adults with a long-term illness or condition had made a visit in the last 14 days, compared to 62% without a long-term illness or condition. 29% of those living with a long-term illness or condition said they had not visited a natural space in the previous month, compared to 18% of those without a long-term illness or condition (Natural England, 2020d).

## What are the barriers?

Inadequate provision of green and blue space in an urban area is an obvious barrier to local people accessing its benefits. If people are forced to travel a long way or spend money to visit natural environments in their town or city, it is not surprising that they will tend to visit less often. However, there are additional barriers that may mean people are prevented from benefiting from the green and blue space close to their home. Some barriers may be particularly significant for certain demographic groups, and individuals may be part of multiple groups and experience multiple intersecting barriers to accessing urban nature.

Habits formed in childhood often have consequences for adult engagement with nature. A study of the benefits of green spaces for wellbeing in Sheffield found that the presence or absence of positive childhood memories associated with green spaces had a significant influence on their use throughout adulthood (Improving Wellbeing through Urban Nature, 2019). People who are not used to visiting natural environments may be more uncertain about what is 'allowed' in a particular setting and therefore less confident about visiting or more likely to come into conflict with others with different ideas about what the space is for.

If people do not feel comfortable in their communities, they will not feel comfortable using their local green and blue spaces. Social isolation, loneliness and illness can be barriers to accessing nature as much as they are to accessing other services and provision; these issues are more prevalent in deprived areas and sometimes prevent people from all backgrounds from leaving the house and exploring the outdoors (Improving Wellbeing through Urban Nature, 2019). A study in Glasgow found that perceptions of social cohesion and the level of integration and inclusion felt by individuals in their communities was an important predictor of

To compound these issues, pressure on urban green space is likely to grow in future as the UK population increases; by 2040 it is estimated that the amount of green space provision per person will have reduced by 7.6% and that in over 100 local authority areas the provision per person will fall by more than 10% over that period (Fields in Trust, 2020).

park use. The belief that parks were dominated by unsupervised older children and adolescents was a barrier to their use for some people and led to increased supervision of younger children (Seaman et al, 2010).

Girls and young women often report feeling unsafe when spending time in public spaces such as parks and green spaces. A survey conducted by Girlguiding found that 41% of girls aged 11 to 16 feel unsafe when they go outside, rising to 49% of young women aged 17 to 21. 22% of girls aged 11 to 16 said that they are often stared at and receive unwanted attention when they are outside, increasing to 41% of young women aged 17 to 21. All these measures were higher for girls and young women who identify as disabled or LGBTQ (Girlguiding, 2020). Some have pointed out that provision for young people in parks is often geared towards the preferences of boys and young men, with most investment going towards skate parks, multi-use games areas and BMX/pump tracks. These are facilities which can be dominated by groups of boys and young men, which can make the environment less appealing to girls and young women (Walker & Clark, 2020).

Experiences of harassment or abuse can also prevent people from ethnic minority backgrounds from choosing to spend time in green or blue space. The perception that these spaces are dominated by White people and the experience of racism in these spaces can have an impact for several generations, as people take their lead from their parents' use or lack of use of them (Collier, 2019). The presence of racist graffiti or experiences of racist abuse can be major barriers to the use of urban green space for ethnic minority groups (Seaman et al, 2010).

The way that urban natural spaces are designed can also reinforce barriers to use for people from

ethnic minority groups. A study on the Queen Elizabeth Olympic Park in London found significant differences between the spatial practices and preferences of local people along ethnic lines (Snaith, 2015). Another study of two community gardens in London found that people from Asian and African ethnic backgrounds were less likely to be attracted to the 'wildness' of a green space than White participants; use of obvious symbolism was not necessarily a primary means of encouraging users from a wide range of ethnic backgrounds and appreciation was more dependent on the quality and good management of the green spaces (Rishbeth, 2004). Other studies suggest differences between the propensity of people from different ethnic backgrounds to see natural spaces as spaces for large family or social gatherings or for individual recreation and exercise, and therefore space and seating suitable for such gatherings can make green spaces more relevant and appealing to a broader range of people (Forest Research, 2006).

Urban green and blue spaces can be disabling environments for people with impairments. Studies of the experiences of people with a mobility impairment found that the interviewees placed a high value on physical closeness to nature and that a lack of accessibility could lead to negative experiences of exclusion from green spaces. The structural constraints to spending time in natural spaces identified included lack of information about accessibility and physical constraints in terms of paths, obstacles, parking, and toilets (Corazon et al, 2019). Disabled people who use bikes as a mobility aid report being excluded from green and blue spaces where cycling is prohibited and feeling uncomfortable and 'othered' by the attention their mobility aids attract (Inckle, 2019).

Different impairments affect disabled people's access to natural spaces differently. The Sensing Nature project developed a guide to designing green spaces with sight impairment in mind. Barriers

to accessing urban nature identified included a lack of talking/tactile maps, natural seasonal changes, public transport links, and having to walk along busy roads or cross large open areas which can be hard to navigate. Materials that could help people familiarise themselves with the space before the visit, as well as provision of tactile maps with clear visual information at entrances, good lighting, and removal of obstacles such as benches and bins from the path itself, were identified as some of the ways these barriers could be broken down (Bell, 2018). It is important to note that barriers to accessing green space were found both within the spaces themselves and in the infrastructure of the surrounding neighbourhood.

Parents of disabled children have reported encountering 'barriers to fun' when trying to spend time with their children in designated accessible natural play areas; research found that while green and blue spaces could facilitate joyful family experiences, parents often spoke of the 'hard work' involved in facilitating their disabled child's access to nature and anxieties about not living up to ideals of childhood outdoor play (Horton, 2017). Interviews with staff at environmental centres about access for disabled children found that most reflected a medical understanding of disability, focused on the barriers generated by children's impairments, rather than the social model of disability which understands barriers as products of the social reaction (or non-reaction) to impairment (von Benzon, 2010).

Cuts to park budgets and the make-up of the green and blue space management workforce may contribute to some of the barriers discussed in this evidence review, impacting the quality of urban natural spaces and making them a less welcoming environment for some people. Structural issues in the sector, including an ageing workforce of limited diversity may also have an impact, impeding the introduction of new ideas and approaches which might make urban nature more accessible and relevant to



a wider range of people (The Landscape Institute, 2020). The study of Queen Elizabeth Olympic Park referenced above concluded that the culturally situated actions and assumptions of designers and decision-makers who create, and control park space are part of the reason that people from ethnic minority backgrounds do not make use of the park as much as White British people (Snaith, 2015).

Park visitors value the presence of staff to welcome them to a space, activate it through activities and events, and address any anti-social behaviour

that might occur. However, cuts to park budgets over many years have made it difficult for parks managers to resource this sort of on-the-ground service, with staff and skills lost. The changing nature of parks funding has also meant parks managers have had to develop a wider range of skills with financial management, sourcing external funding and partnership working becoming more important alongside more traditional skills such as horticulture, landscape design and ecology (The National Lottery Heritage Fund, 2016).

## The impact of Covid-19

The Covid-19 pandemic has made many people more conscious of the importance of the urban nature on their doorstep: in a survey undertaken in July 2020, 46% of people said that they were spending more time outside than they had previously and 50% of adults reported a visit to urban green spaces in the previous month (Natural England, 2020a). Park managers have reported visits from new audiences, with more people socialising in their local parks and green spaces rather than in town centres (feedback given to the Covid-19 Urban Parks Stakeholder Group and Landscape Institute Parks and Green Space Network).

Despite these positive developments, the pandemic has both highlighted and exacerbated inequalities in access to green and blue space. Evidence from Scotland suggests that use of green space was polarised during lockdown: while some people increased their frequency of visits, many people made fewer or no visits to local green space and the most marked reduction in time spent in green space was among older people. People from higher social grades were more likely to report increased use of green spaces and associated benefits for mental health. People from an ethnic minority background were more likely to report greater benefits to their mental health from green space and open space during lockdown than people identifying as White (S&SR Environment and Spaces Group, 2020).

Surveys from England suggest a similar picture. Natural England found that when their survey respondents estimated how often they usually visit natural spaces and how often they visited during the spring 2020 lockdown, there were larger differences for low-income groups, those

with lower levels of education, and those living in the most deprived areas (Natural England, 2020d). 60% of children were found to have spent less time outdoors since the start of the Covid-19 pandemic but this varied across the population: 71% of children from ethnic minority backgrounds reported spending less time outside compared to 57% of White children and 73% of children from households with annual income below £17,000 spent less time outdoors, compared with 57% from households with an annual income above this level (Natural England, 2020b).

New Economics Foundation's analysis of the People and Nature Survey found that, although 42% of British people believe that visiting local green and natural spaces like parks and beaches has become even more important to their wellbeing since the pandemic began, around 40% of people are concerned about overcrowding and not being able to keep a safe distance from others. 12.5% of people do not believe that their local green space is of a high enough standard to want to spend time in (Chapman & Phagoora, 20 January 2021).

The Covid-19 pandemic has introduced additional barriers to spending time in green space for some people. In a survey of the general population conducted in July 2020, reasons given for not spending time in green space within the previous two weeks included concerns about catching or spreading Covid-19, worries about over-crowding and inability to social distance, and fear of breaking coronavirus restrictions. Worries and concerns about visiting green and blue spaces that are not specific to the pandemic included encountering anti-social behaviour or poorly maintained sites (Natural England, 2020a).

## Why does it matter?

Equitable access to public space is a right protected by law. The Equality Act 2010 prohibits direct and indirect discrimination on grounds of any protected characteristic<sup>1</sup> in the provision of services and facilities. Local authorities and other public bodies managing urban green and blue spaces have a duty to advance equality of opportunity in access to those spaces. All those providing services such as parks or nature reserves which are open to visitors must ensure no one is discriminated against (directly or indirectly) when accessing those services and make reasonable adjustments to ensure that disabled people are able to use them to the same standard as non-disabled people.

Access to nature is also very important to people in their everyday lives. The evidence reviewed here consistently found that people from all walks of life place a high value on access to nature (Natural England, 2020a; The Ramblers, 2020; Inckle, 2019). There is a clear appetite for inclusion and nature connection among groups that currently experience barriers to spending time in urban green and blue spaces.

These reasons are sufficient to make equity in access to urban green and blue space a priority for those interested in social justice. However, there are a wide range of additional benefits that increasing access to nature can bring. Parks and other forms of green and blue space in urban areas can help to address other areas of policy where inequalities are evident, including:

- **Strengthening the local economy**, through attracting investment, regenerating town centres and increasing property values
- **Improving health and wellbeing**, through enabling physical health and promoting good mental health
- **Supporting social connections**, through enabling socialising, community activities and volunteering
- **Tackling climate change and protecting the environment**, through reducing air pollution, flooding, and urban heat, and promoting carbon capture

This means that parks can play a role in enabling both targeted, place-based improvement and wider population measures focused on prevention (The Parks Alliance, 2020). Increasing access to urban green spaces can and should form part of strategies to address inequalities in health, social fragmentation, and environmental injustices such as the greater exposure of less affluent communities to air pollution.

The quality and characteristics of a green or blue space play an important role in producing this benefit for health and wellbeing. For example, a study of 12 urban parks in Bradford found that the level of biodiversity of a given park was a key determinant of the restorative benefits felt by users of that park (Wood et al, 2018).

Urban nature can be inclusive and welcoming, providing an environment for casual sociability, facilitating shared experiences, and helping people to build friendships outside their immediate cultural groups. Urban parks can play important functions in the lives of migrants, refugees and newcomers: building emotional wellbeing for children and families, providing restorative environments and social experiences for migrants, and facilitating belonging, social relationships and the creation of positive memories in a new place (Dobson et al, 2019).

Green and blue spaces also have a significant economic value. The Total Economic Value of parks and green spaces to an individual has been estimated at £30.24 per year, including benefits people gained from using their local park and green space and non-use benefits such as the preservation of parks for future generations. The value is higher for individuals from lower socio-economic groups and people from ethnic minority backgrounds. The wellbeing value associated with frequent use of parks and green spaces is worth £34.2 billion per year to the UK adult population and is estimated to save the NHS £111 million per year through a reduction in GP visits (Fields in Trust, 2019).

<sup>1</sup> Protected characteristics: age, gender reassignment, being married or in a civil partnership, being pregnant or on maternity leave, disability, race (including colour, nationality, ethnic or national origin), religion or belief, sex, sexual orientation.

## Equity and standards

People have a wide range of intersecting needs when it comes to accessing urban green space, and what works for one person or community may not work for another. However, several common factors are frequently referenced as a way of building confidence among those people who may feel excluded from public spaces. These include the presence of parks staff, the involvement of diverse communities in planning, and inclusive community events to help mitigate anti-social behaviour (Dobson et al, 2019). Above all, in-depth consultation with both users and potential users is essential to developing green and blue space that meets the needs of the whole community.

Equal right of access to urban nature needs to be embedded in standards and frameworks affecting green space design and management, such as the new Green Infrastructure Standards being developed by Natural England. The evidence review published as part of the work to develop these standards suggests that the type, amount, proximity, and quality of green infrastructure are key factors in the health and wellbeing outcomes that it produces. While noting that the evidence base is incomplete, Natural England suggests the following considerations are important (Natural England, 2020c):

- Provision needs to contain a mix of green infrastructure types, for example publicly accessible green space such as parks and nature reserves, domestic and shared gardens, green routes, and street trees.
- Green spaces should be close to homes and workplaces – but accessibility is dependent on more than just physical closeness and the

perception of proximity is as important as objective proximity.

- Better quality and well-maintained green infrastructure is associated with better health and wellbeing outcomes – but what people think of as ‘quality’ can vary.
- The value of different types, amounts and locations of green infrastructure for health and wellbeing is likely to be highly contextual, meaning that a solution that works in one place may not work in another.

Issues of equity and inclusion are critical to the way parks and green spaces are managed, maintained and ‘activated’ through organised events. The criteria for the Green Flag Award provide a guide to the attributes that make up a good quality green space and include ensuring local people are involved in making decisions about the development of a site and that parks and green spaces offer recreational facilities and activities for all sectors of the community.

Incorporating a rights-based approach to the planning, design and management of urban green and blue spaces can help to combat existing inequities. This means recognising the rights of marginalised groups to equal access to public spaces and consulting those groups specifically on design and management issues. For example, some cities across Europe are using ‘gender mainstreaming’ to make sure that urban spaces are designed to meet the needs of everyone (Walker & Clark, 2020). Learning from these approaches and ensuring that meaningful community consultation is part of the design and management of urban green and blue spaces is one way to tackle current inequities.

## What does this mean for the urban nature sector?

The evidence presented in this review demonstrates that access to green and blue space in urban areas is an important social justice issue with implications for health and wellbeing and social participation.

Based on this evidence the task and finish group concluded that:

- 1. We need to reimagine urban nature to ensure that it meets the needs and desires of communities today.**

All those involved in planning and managing green and blue spaces in towns and cities should ensure that social equity is at the forefront of policy and practice, embedded in community consultation, landscape design and green infrastructure management and underpinned by a commitment to diversifying the workforce.

This should include sharing good practice, while recognising that copy-and-pasting an approach from one neighbourhood to another may not work



and contextualisation will be needed. The principles of community development and the social model of disability should be applied across the green space sector, with resource focused on ensuring all members of a community are supported and feel able to play a full role in the design and management of these vital assets.

**2. We need to rebalance power in the management of green and blue spaces and build better partnerships.**

This means organisations working together more effectively and working more closely with the communities they exist to benefit. Many people who would benefit most from natural spaces are not being included in conversations and initiatives designed to improve and manage them and competition for resources too often leads to a duplication of efforts. Effective community engagement needs to lead to genuine community empowerment so that more people from a more diverse range of backgrounds have a stake in what happens in their local area. This means putting more emphasis on how voluntary organisations such as Friends groups are supported so that they become more resilient and better able to diversify their membership base. It also means supporting young people to get their voice heard as park users and to engage them as future guardians of our natural environment.

**3. We need to integrate urban nature solutions fully into efforts to tackle health inequalities, climate change and biodiversity loss.**

We know that access to nature can provide significant social benefits to those who are most disadvantaged. We also know that the climate and nature emergencies impact most on those in society who are already vulnerable or marginalised. Turning this around involves providing more support and training to help frontline health and care professionals embed activity in green and blue spaces into the service they provide to their clients. It also requires us to resource more inclusive green/blue space management into plans to tackle climate change through nature-based solutions, particularly in areas vulnerable to flooding, air pollution and extreme heat, which are more likely to affect those already suffering wider social inequalities.



## References

---

Bell, S. (2018), *Sensing Nature: Designing urban green space with sight impairment in mind*, available at <https://sensing-nature.com/>

---

Chapman, A. & Phagoora, J. (20 January 2021), 'Escaping green deprivation', *New Economics Foundation Blog [online]* <https://neweconomics.org/2021/01/escaping-green-deprivation>

---

Collier, B. (10 October 2019), 'Black absence in green spaces', *The Ecologist [online]* <https://theecologist.org/2019/oct/10/black-absence-green-spaces>

---

Corazon, S. et al. (2019), 'I Would Really like to Visit the Forest, but it is Just Too Difficult: A Qualitative Study on Mobility Disability and Green Spaces'. *Scandinavian Journal of Disability Research*, 21(1), pp. 1–13. DOI: <https://doi.org/10.16993/sjdr.50>

---

Dobson, J. et al (2019), *Space to Thrive: A rapid evidence review of the benefits of parks and green spaces for people and communities* <https://www.heritagefund.org.uk/publications/space-thrive>

---

Fields in Trust (2019), *Revaluing Parks and Green Spaces*, <http://www.fieldsintrust.org/revaluing>

---

Fields in Trust (2020), *Green Space Index*, <http://www.fieldsintrust.org/green-space-index>

---

Forest Research (2006), 'Race Equality and the Forestry Commission: Final Report', [https://www.forestresearch.gov.uk/documents/1395/FR290807\\_RESFinalReport.pdf](https://www.forestresearch.gov.uk/documents/1395/FR290807_RESFinalReport.pdf)

---

Friends of the Earth (2020), *Access to Green Space in England – are you missing out?*, <https://friendsoftheearth.uk/nature/access-green-space-england-are-you-missing-out>

---

Girlguiding (2020), *Girls' Attitudes Survey 2020: A snapshot of girls' and young women's lives* <https://www.girlguiding.org.uk/girls-making-change/girls-attitudes-survey/>

---

Horton, J. (2017), 'Disabilities, urban natures and children's outdoor play', *Social & Cultural Geography* 18(8), pp.1152-1174 <https://doi.org/10.1080/14649365.2016.1245772>

---

Inckle, K. (2019), 'Disabled cyclists and the deficit model of disability', *Disability Studies Quarterly* 39(4) <https://dsq-sds.org/article/view/6513/5468>

---

Kabisch N., van den Bosch M.A. (2017), 'Urban Green Spaces and the Potential for Health Improvement and Environmental Justice in a Changing Climate'. In: Kabisch N., Korn H., Stadler J., Bonn A. (eds), *Nature-Based Solutions to Climate Change Adaptation in Urban Areas. Theory and Practice of Urban Sustainability Transitions*. Springer, Cham [https://doi.org/10.1007/978-3-319-56091-5\\_12](https://doi.org/10.1007/978-3-319-56091-5_12)

---

Landscape Institute (2020), *Greener Recovery: Delivering a sustainable recovery from Covid-19* <https://www.landscapeinstitute.org/policy/greener-recovery/>

---

London Green Spaces Commission (2020), *London Green Spaces Commission Report*, <https://www.kingsfund.org.uk/projects/improving-publics-health/access-green-and-open-spaces-and-role-leisure-services>

---

National Lottery Heritage Fund (2016), *State of UK Public Parks 2016* <https://www.heritagefund.org.uk/publications/state-uk-public-parks-2016>

---

Natural England (2019), 'Monitor of Engagement with the Natural Environment – The national survey on people and the natural environment. Headline report 2019' <https://www.gov.uk/government/statistics/monitor-of-engagement-with-the-natural-environment-headline-report-and-technical-reports-2018-to-2019>

---

Natural England (2020a), 'The People and Nature Survey for England: Monthly interim indicators for July 2020', <https://www.gov.uk/government/publications/the-people-and-nature-survey-for-england-monthly-interim-indicators-for-july-2020-experimental-statistics/the-people-and-nature-survey-for-england-monthly-interim-indicators-for-july-2020-experimental-statistics>

---

Natural England (2020b), 'The People and Nature Survey for England: Children's Survey', <https://www.gov.uk/government/publications/the-people-and-nature-survey-for-england-child-data-wave-1-experimental-statistics/the-people-and-nature-survey-for-england-childrens-survey-experimental-statistics>

---

Natural England (2020c), *A rapid scoping review of health and wellbeing evidence for the Framework of Green Infrastructure Standards*, <https://beyondgreenspace.net/2020/10/05/rapid-review-green-infrastructure-standards/>

---

Natural England (2020d), 'The People and Nature Survey for England: Adult Data Y1Q1 (April-June 2020) (Experimental Statistics)', <https://www.gov.uk/government/publications/the-people-and-nature-survey-for-england-adult-data-y1q1-april-june-2020-experimental-statistics/the-people-and-nature-survey-for-england-adult-data-y1q1-april-june-2020-experimental-statistics>

---

Office for National Statistics (2020), 'One in eight British households has no garden', <https://www.ons.gov.uk/economy/environmentalaccounts/articles/oneineightbritishhouseholdshasnogarden/2020-05-14>

---

The Parks Alliance (2020), *Making Parks Count: The case for parks*, <https://www.theparksalliance.org/making-parks-count-the-case-for-parks/>

---

Public Health England (2020), *Improving access to greenspace: A new review for 2020*, [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/904439/Improving\\_access\\_to\\_greenspace\\_2020\\_review.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/904439/Improving_access_to_greenspace_2020_review.pdf)

---

Rishbeth, C. (2004), 'Ethno-cultural representation in the urban landscape', *Journal of Urban Design* 9(3), pp.311-333

---

Seaman, P.J. et al (2010), 'It's not just about the park, it's about integration too: why people choose to use or not use urban greenspaces', *International Journal of Behavioural Nutrition and Physical Activity* 7(78) <https://ijbnpa.biomedcentral.com/articles/10.1186/1479-5868-7-78>

---

Snaith, B. (2015). *The Queen Elizabeth Olympic Park: Whose Values, Whose Benefits?*. (Unpublished Doctoral thesis, City, University of London) <https://openaccess.city.ac.uk/id/eprint/19291/>

---

S&SR Environment and Spaces Group (2020), *Change in use of green and open space following Covid-19 lockdown 'stay at home' phase and initial easing of lockdown*, <https://www.greenspacescotland.org.uk/news/how-have-covid-19-restrictions-changed-our-use-of-greenspace>

---

The Ramblers (2020), *The grass isn't greener for everyone: why access to green space matters*, <https://www.ramblers.org.uk/news/blogs/2020/september/why-nobody-should-live-more-than-five-minutes-walk-from-green-space.aspx>

---

von Benzon, N. (2010), 'Moving on from ramps? The utility of the social model of disability for facilitating experiences of nature for disabled children', *Disability & Society* 25(5), pp.617-626

---

Walker, S. & Clark, I. (2020), *Make Space for Girls: Everything you need to know in one (relatively) easy document*. <http://makespaceforgirls.co.uk/research/>

---

Wood, E. et al (2018), 'Not All Green Space Is Created Equal: Biodiversity Predicts Psychological Restorative Benefits From Urban Green Space', *Frontiers in Psychology* 9

---

