



Research Note

Understanding and enabling access to woodlands for diverse publics

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Access to woodlands benefits mental and physical wellbeing; it also increases connection to nature, which can be linked to pro-environmental behaviours. This Research Note presents findings from literature reviews, interviews, creative workshops, and a survey of groups that are underrepresented as woodland visitors, focusing on their motivations, the additional barriers they face and what opportunities might support greater woodland access. The literature reviews highlighted five demographic groups as being underrepresented in woodlands: ethnic minorities, people in poor health, people with disabilities, people on lower incomes, and LGBTQIA+ people. Access meant a range of things to different people and understanding of access terms (such as public rights of way) also differed significantly. Nevertheless, most participants associated access to woodlands with positive benefits, particularly for health and wellbeing. Barriers to access for underrepresented groups were often overlapping and could be physical, psychological, institutional, and cultural in nature. These related to transport, cost, infrastructure, facilities, awareness, information, motivation, support needs, perceptions of other people, safety, and lack of early life woodland experiences. There are very few long-term evaluations of interventions to improve woodland access for underrepresented groups. Therefore, this research suggests access interventions should target pre-visit awareness and confidence, travel, and woodland experience. These opportunities could target individuals at different life stages, including children, adolescents, parents, carers, and older adults. Evaluation of these interventions is critical to increasing our understanding of how public access to woodlands can be widened, which is essential given the strong evidence for its health and social benefits.

Introduction

Access to woodlands

Given the range of benefits associated with access to trees and woodlands, the England Trees Action Plan (published under the 2019 to 2022 Johnson Conservative government) aimed to support access to trees and woodlands by ensuring safe and appropriate public access to as many woodlands as possible. However, there are gaps in the existing evidence base relating to how best to support such access.

Public access in England can take three legal forms: public rights of way, open access, and permissive access, but access also has different meanings beyond the legal definition to actual and potential woodland visitors.

Many factors impact access to woodlands, including distance, cost, woodland quality, infrastructure, and facilities. Access to woodlands is also affected by intangible factors such as awareness, sense of belonging, confidence, and perceptions of risk.

Box 1 Types of woodland access in England

Public rights of way: footpaths, bridleways, restricted byways, byways open to all traffic

Open access land: mapped areas of mountains, moors, heath, and downs as well as registered commons and woodlands dedicated by landowners for open access

Permissive access: where a landowner has granted permission for access

Underrepresented groups in woodlands

Access to greenspace, including woodlands, has repeatedly been found to vary across socio-economic groups. For example, the nationally representative People and Nature Survey (PANS) found that low visitation was associated with being female, a member of an ethnic minority, of lower socio-economic status, older, and in poor health, along with living in a deprived area or one with a low level of green or blue space (Boyd *et al.*, 2018). There was specific evidence in the literature review that demonstrated links between rates of woodland visitation and health, disability, gender, sexuality,

socio-economic background, age, ethnicity, woodland quality, and time and distance to woodland (Pearson *et al.*, 2023).

As a result, the research reported here focused on five underrepresented groups, these were people:

- who identify as being in poor health
- with disabilities
- from ethnic minority backgrounds
- who identify as LGBTQIA+
- on lower incomes

Public access research

The overall aim of this research was to explore how to enable and encourage access to woodlands for diverse publics.

Our research questions were:

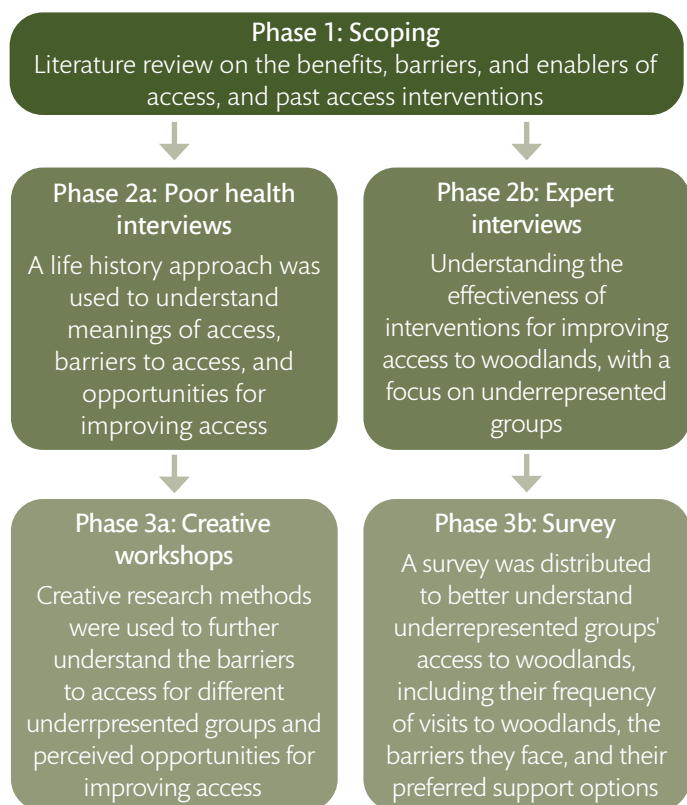
- What does access to woodlands mean for diverse publics, particularly since the COVID-19 pandemic and recent technological advances?
- What are the most effective approaches for enabling underrepresented groups to access woodlands?
- What information, guidance, and outreach approaches could be used to engage underrepresented groups with woods, which might lead to access?

Methods

The research began with two literature reviews focused on diverse publics and access to woodlands, with a social science and economic focus respectively (Pearson *et al.*, 2023; Gardner, 2023). Following this scoping of the existing evidence, the research questions were explored using a mixed-methods and iterative approach to enhance understanding of access from different angles (Figure 1).

While the qualitative data provided rich, in-depth understandings of an individual participant's experiences of access to woodlands, the quantitative data helped to test for statistically significant differences across groups of people. This research is indicative, exploratory, and based on relatively small sample sizes for each of the five groups of interest; causal claims from the survey should not be made based on the data discussed here.

Figure 1 Flow diagram showing the research phases



Qualitative research

The qualitative research used a range of approaches, including semi-structured interviews, life history interviews, and creative approaches to engage different groups with issues of public access in workshops. Interview and creative workshop protocols and documentation were developed and adapted from the results in the literature reviews.

Seven interviews were undertaken with experts in a range of roles, including public organisations that own or manage woodland, networks, social enterprises, and university academics working in applied research. The interviews drew on organisations' and individuals' experiences of supporting public access and exploring whether they knew of interventions with a lasting impact on access. This served to complement the literature review, capture experiences that had not been published, and inform the subsequent research design.

Twenty-four interviews were undertaken with members of the public who self-identified as being in poor health and as rarely or never visiting woodlands. This group was chosen as there is little evidence on their access experiences and needs (Pearson *et al.*, 2023). A life course approach was used to explore what access means to them, the barriers they faced in accessing woodlands, and anything that enabled them to access these spaces. A market research company was contracted to recruit

the interviewees, and the participants were diverse in terms of age, sex, ethnicity, education, and employment status.

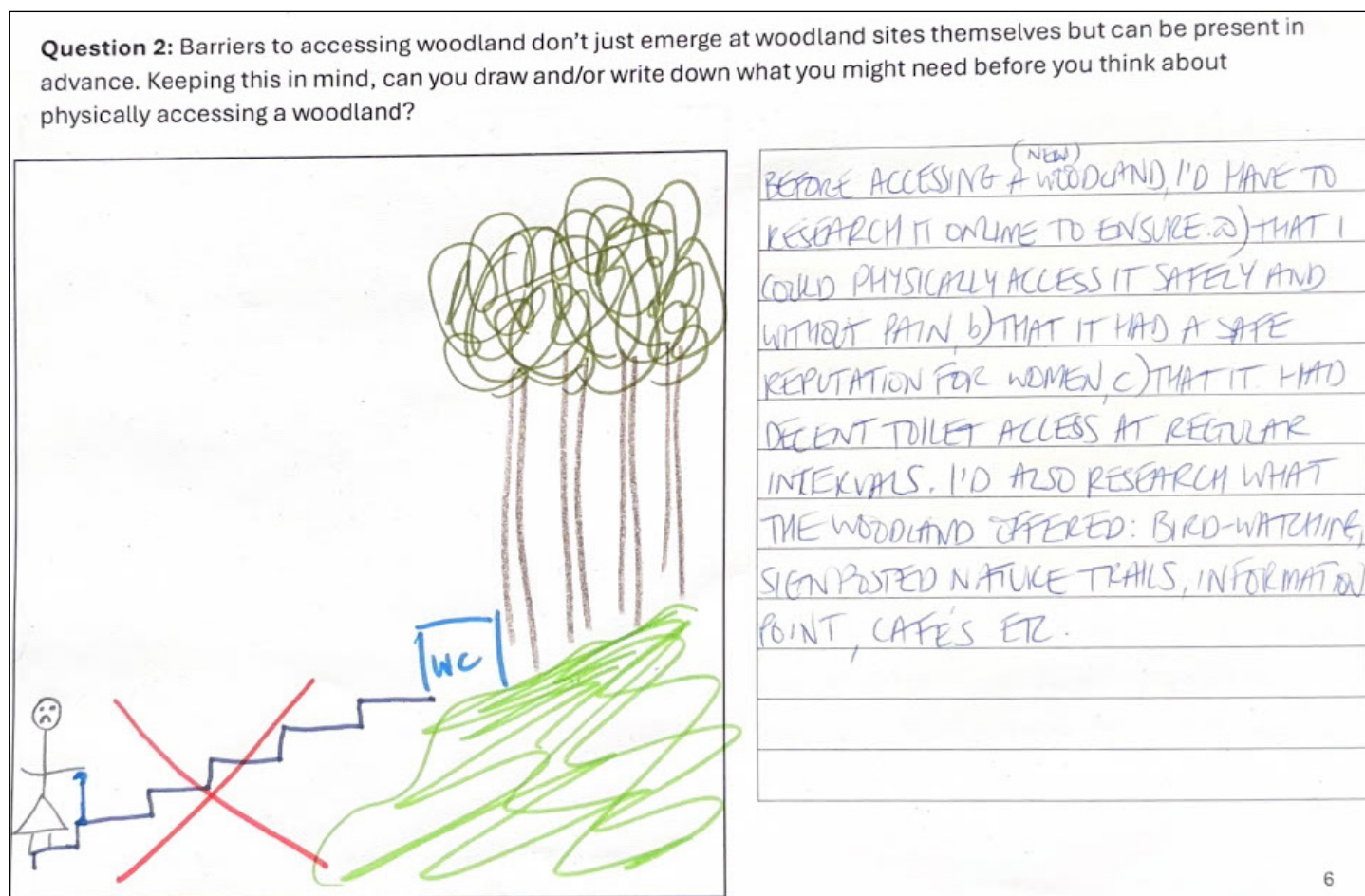
The two sets of interviews highlighted the intersectional nature of barriers to access. For example, access for people in poor health may also be influenced by their ethnicity, sexual orientation, and socio-economic background. Acknowledging this, the third stage of qualitative data collection took a broader perspective and sought to understand the access experiences of people who identify with one or more of the five underrepresented groups, using creative methods-based workshops with a storyboard activity.

Storyboards are a means of visualising and understanding narratives that, in this case, are experiences of (in)access to woodlands, and imagined future scenarios in which woodlands become more accessible (Berbes-Blazquez *et al.*, 2021). Storyboards have many evidenced benefits as a creative method for qualitative data collection that are relevant to and important for the current research, for example, they can:

- help participants to communicate personal experiences from their own perspective (Ayob and Omidire, 2021);
- rely on a combination of both visual and written mediums, which can support sharing of experiences better than using words alone (Ford *et al.*, 2017);
- allow participants to convey personal and emotional experiences in a more comforting and less threatening way, making for a more positive research experience for participants, particularly when discussing sensitive or personal issues (Cross and Warwick-Booth, 2016);
- be helpful in eliciting experiences of marginalised communities or of those in poor health (Medina-Munoz *et al.*, 2016; Chongo *et al.*, 2018).

Two creative workshops were held, one in Birmingham and one in London. Ten people were involved in each workshop, which lasted for two hours. Participants were recruited using a market research company. The Birmingham workshop focused on people with disabilities, poor health, and on lower incomes, while the London workshop focused on people from ethnic minorities and LGBTQIA+ individuals, although there were also intersectionalities across the workshops. In the creative workshops, participants were asked to draw and/or write responses to questions on their best/worst experience in woodlands, solutions to barriers that occur before physically accessing woodlands, solutions to barriers faced on the journey to woodland, and solutions to address barriers people may face when in woodlands. This was a more inclusive approach to allow people to respond in the way they were most comfortable with. An example workbook page is shown in Figure 2.

Figure 2 Example workbook page from the creative workshops. This participant has chosen to draw and write in response to the question.



The interview and workshop discussions were transcribed, and these transcripts were analysed in NVivo 14 using a thematic analytical approach, with each sentence/paragraph being read and coded. These codes were then grouped into higher level themes that addressed the research questions.

Quantitative research

A survey was designed to address the research questions in relation to the five underrepresented groups, drawing on findings from the literature reviews. Survey respondents were recruited using two approaches. Firstly, a market research company was contracted to recruit participants from an existing online panel to complete the survey ($n = 500$). The contractor ensured that a sample of 100 was reached for each of the five underrepresented groups of interest. Secondly, a snowball method was used, where the research team distributed the survey to relevant organisations and on social media ($n = 125$).

The survey data was analysed using descriptive statistics, factor analysis, cluster analysis, linear regression, and multiple regression. This analysis focused on significant correlations

between demographic groups, frequency of visits, barriers to access, woodland recreation interest and participation, information needs, understanding of access terms, and preferences regarding opportunities to improve access. Questions that allowed open text responses were analysed thematically and in terms of word frequency.

Results

Meaning of access

In relation to the wider literature on access to woodlands, only two pieces of literature we identified explicitly included meanings of access in their studies, warranting further exploration of this topic. Kessel *et al.*, (2009) found that use of woodlands was preceded by perceptions and understandings of what is being accessed and how it should be used, alongside more practical factors such as physical distance to greenspace. Gittins *et al.*, (2023) additionally found in a longitudinal study that introducing woodlands as spaces for wellbeing can help

individuals to understand access as personal and foster feelings of belonging.

Given the lack of literature found in relation to this topic, participants in the poor health interviews were asked about their own thoughts on what access to woodlands means, and access was found to have a range of meanings for different individuals. The interviews commonly identified access as being related to feelings of freedom. Participants referred to having the ability to move freely through woodlands with ease, without restrictions on movement and without cost (in terms of free access to the woodlands themselves, as well as free parking). Despite all interviewees identifying as being in poor health, a minimal number of them referred to health support needs in relation to the meaning of access. Such provisions were typically only mentioned when prompted to reflect on how access could be improved. These findings may indicate that while those living in poor health experience barriers to accessing woodlands and can think of ways to overcome these, they do not view these challenges as an intrinsic part of access itself, perhaps due to feeling that access to woodlands is not inclusive of those with additional access needs. When some participants were asked what access means to them personally, they drew together considerations of nature, health, and wellbeing as inherent components of access.

'I think it means happiness, it means keeping calm, you know, from a world that's not very calm, from what's going on politically, from work, sometimes family issues. It's, kind of, a throwaway phrase, isn't it, "one with nature", but I think it's quite poignant. You know, you can just breathe in good air and feel better. I think, for me, now I can't kind of get there really, I have to kind of make my own nature at home. Wouldn't it be nice if I didn't have to do that, or did that as well?' – Interview with participant in poor health

Understanding types of access

The survey identified that not all types of access are understood homogeneously. Public rights of way were the most understood type of access, with 45% of respondents feeling confident that they know what this term means. Right to roam was the second most understood term (31% of respondents felt confident), while open access land (22% of respondents felt confident) and permissive access (16% of respondents felt confident) were less well understood.

Significant factors associated with woodland visits

Overall, coming from an ethnic minority group, having a disability or being in poor health, having a lower household income, or being LGBTQIA+ was linked to being less likely to have visited woodlands in the last year compared to the general population. However, interestingly, age, gender, LGBTQIA+ status, ethnicity, employment status, and having a household income below £30 000 did not report significant effects on frequency of visits for those who were already visiting woodlands. Having a disability was positively associated with more frequent visits for those already visiting woodlands.

Interest in different activities differed according to ethnicity, gender, sexuality, income, and disabilities. For example, White respondents were more likely to dog-walk than Black or Black British or Asian or Asian British respondents. Conversely, the highest rated reasons to visit woodlands ('for fresh air or to enjoy pleasant weather' and 'to relax and unwind') were consistent across demographic groups.



Illustrative image: A family walking a dog in woodland

From the survey data, travel time to the nearest publicly accessible woodland proved to be one of the most consistently significant factors affecting frequency of woodland visits. Mode of transport was also important, even when travel time and other factors were accounted for. For example, respondents that walked visited 52% more often than those who did not, while those taking public transport visited 24% less than those who did not.

Interestingly, parents with one child did not visit significantly more frequently than adults without children, but those with two or more visited more than twice as often as participants without children, possibly as woodlands offer greater cost savings compared to alternative days out as family size increases.

There was also evidence that both walking a dog and aiming to achieve a personal challenge increased frequency of visits. However, respondents with high time and responsibility barriers and who visit woodlands to entertain their children (perhaps due to a preference for a variety of experiences) visited less often.

Barriers to accessing woodlands

Although most participants associated visits to woodlands with positive health and wellbeing outcomes, several interacting physical, psychological, institutional, and cultural barriers were reported across all research methods that hinder participants' ability to access woodlands and experience these. The key barriers are summarised here:

- **Lack of awareness and information about access to woodlands:** some participants attributed limited engagement with woodlands to a lack of awareness of where woodlands with public access are. Participants also felt there were deficits in information regarding how to get to local woodlands and what accessible infrastructure and facilities are available there.
- **Links between desire to visit, health conditions, and social support:** for some participants, there was a simple lack of desire to visit woodlands. For others, the lack of desire was associated with their health conditions which place greater burden on them when attempting to visit woodlands (e.g. tiredness, pain, low energy). Such factors mean that people feel they require others to either support them in getting to and around woodlands, or to be there to encourage them to get out and into woodlands.

'And then it's that whole, like, pressure in my head where I'm thinking, well that support system has gone so then how am I going to cope if say I had a trip or like... there is just so much added stress to the fact that there is no one there and then I'm going to be, like, in a remote place, and just that panic in your head.' — interview with individual in poor health

- **Concerns about the perceptions or presence of others:** some participants were discouraged to visit woodlands because of the presence of other people, feeling that busy spaces are less therapeutic and more stress-inducing. Participants were also concerned that other people would judge them due to their physical abilities and felt embarrassed about their health conditions.

'A part of me was embarrassed because I look young... But I thought, I'm going to look stupid. What if there's old people there who really need it [scooter], or people who really- have got limbs missing, and I'm just- I've taken up this scooter, when other people

need it. Because I've got an invisible illness.' — Interview with individual in poor health

- **Safety concerns:** participants mentioned concerns regarding their safety when accessing woodlands due to possibilities of being harmed. For these reasons, they avoid visiting when alone, or at night. Such feelings, for some, were associated with past negative experiences in woodlands, or due to woodlands having a reputation as being unsafe.

'I think there's a different experience between rural woodland and more urban. And urban feels a lot less safe. For instance, drug paraphernalia, that kind of thing, meeting points [for antisocial or illegal behaviour].' — Workshop participant

'I walked into the women's toilets and got told that I shouldn't be in there. And it was like, "Great, what a lovely experience in the park." So, it's things like that, where you just get an idea of, "Okay, am I going to be welcome here or are people going to be hostile to me?" essentially' — Workshop participant

- **Early engagement with woodlands:** some participants felt a lack of engagement with woodlands from a young age prevents people from accessing them later in life. This was often attributed to an increase in children using technology, instead of spending time outdoors.
- **Getting to woodlands:** travelling to woodlands can present barriers to access. Participants mentioned a lack of affordable, reliable, and direct public transport options, having to rely on others to drive them to woodlands and the cost of parking as barriers.

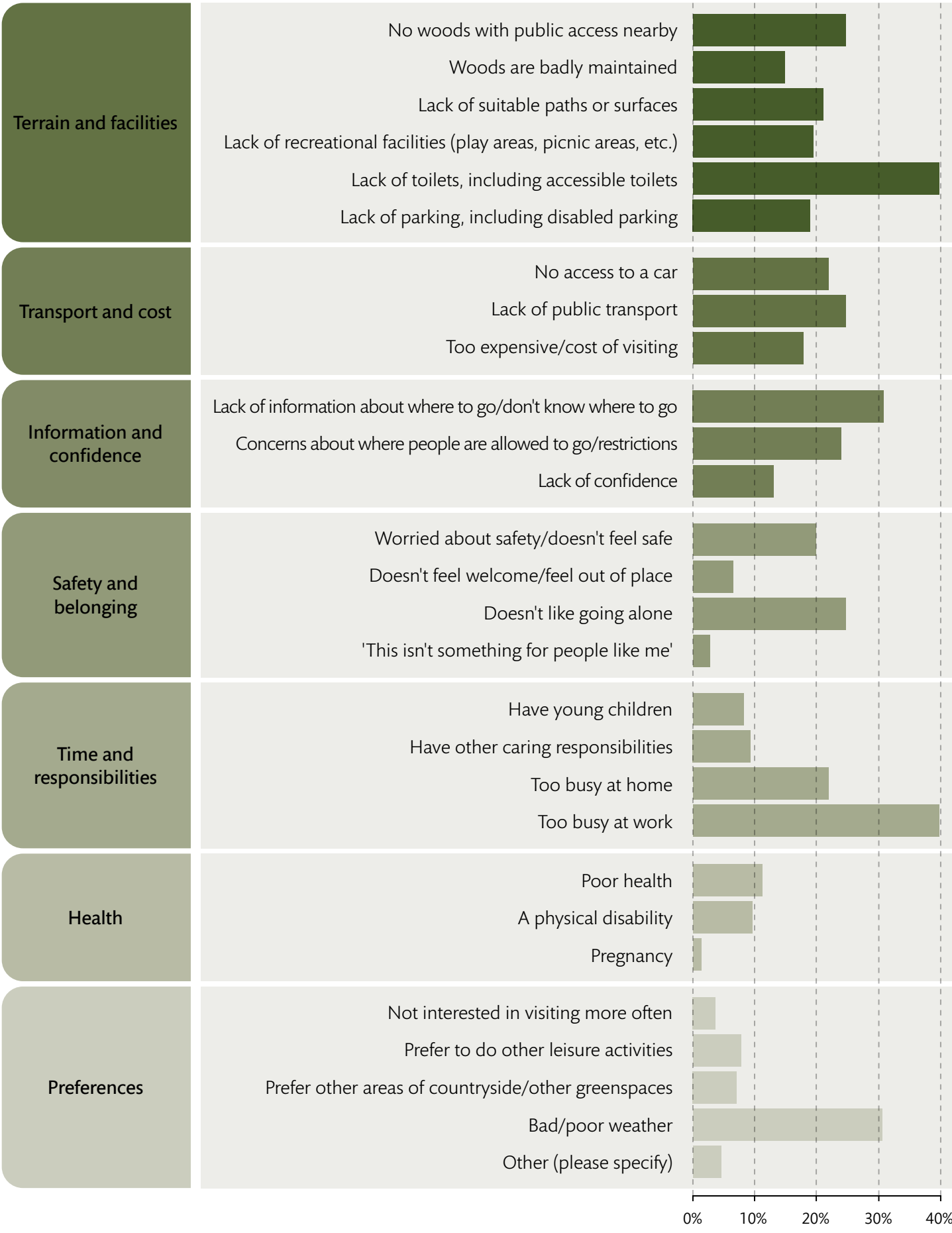
'It's access, it's getting there, you know, if my daughter didn't drive then I wouldn't be able to get there.' — Interview with individual in poor health

- **Infrastructure and facilities in woodlands:** those with physical access needs also cited a lack of accessible infrastructure, such as level pathways, accessible toilets, seating, maps, information, and signage as barriers to accessing woodlands.

'Just anything uneven is what I struggle with. The one that I find difficult is where there are tree roots underneath, because it isn't even, and you could lose your footing as well. That's, I think, what aggravates my joint pain more. So if I could choose, it would be a smooth surface, but I know you don't get that very often.' — Interview with individual in poor health

'I also need to think about stops as well. Is there somewhere that you can just stop and have a bit of a breather? Sometimes, there isn't. I've had to consider all of these things...' — Interview with individual in poor health

Figure 3 Survey results (England, 2024): Bar chart showing percentage of respondents who gave each reason for not visiting woodlands. Lack of (accessible) toilets, being too busy at work, and having a lack of information about where to go were chosen by the most respondents.



'I don't know, sometimes even the toilets are not- they call them disabled toilets but you can't get the wheelchair in. I go into one quite regularly and I can't close the door. Anybody that comes in, I have to actually say, "I'm really sorry, the door doesn't close," because it's not big enough to get the wheelchair in.' — Workshop participant

It is important to note that many of these barriers were impacted by the life stage and health of participants (e.g. whether they have childcare responsibilities, whether they had health 'flare-ups', or whether they have others around to support them). The barriers may also interact, presenting greater challenges to access. For example, poor infrastructure for those with physical health conditions not only makes physically accessing woodlands difficult, but creates a psychological barrier by making them feel that visiting woodlands is unsafe. The survey found similar barriers: a lack of (accessible) toilets, being too busy at work, and having a lack of information about where to go were chosen by the most respondents (Figure 3).

Enabling access

While some previous and ongoing interventions (such as the Active Forests programme and evaluation; O'Brien, 2019) exist, the literature review highlighted the sparsity of woodland access interventions and related evaluations, particularly for long-term impacts or for addressing institutional barriers and cultural change. In line with this, the expert interviews revealed insights into approaches that have improved access for underrepresented groups. While it was acknowledged that there are examples of short-term evaluations (e.g. visitor surveys and exit interviews), experts agreed that very little medium- or long-term evaluation of access interventions has been conducted, indicating a need for better understanding of what approaches are effective, or not. Experts suggested that the reasoning for such a deficit in longitudinal evaluations is due to sparse long-term funding, something that was viewed as an ongoing issue and a source of frustration.

'Yeah, and I think it is that thing of relationships change. People's interests change and develop. The spaces themselves change, so it's, kind of... I think it's seeing that access isn't a one moment in time, fix, done. It's a constant process of negotiating, and understanding that, and enabling it, I think. It's not like a, "Oh, we've passed our access audit. We can forget about it now.' — Expert interview

Past research (Pearson *et al.*, 2023) has acknowledged a need to better identify how the barriers underrepresented groups face in accessing woodlands may be addressed. The following opportunities for improving access before, en route to, and while in a woodland

were brought up across the interviews and workshops. These vary in their immediate feasibility, with some opportunities requiring systemic, institutional, or cultural changes, as opposed to more tangible improvements to the woodland site itself.

Opportunities for improving access prior to visiting woodlands

- **Raising awareness of woodlands:** many participants felt that more needs to be done to raise people's awareness of publicly accessible woodlands, and the activities that take place within them. Advertising and marketing in places external to the woodlands was a commonly mentioned method of awareness raising.
- **Pre-visit information:** participants similarly felt that it is important to provide people with information regarding the accessibility of a woodland, alongside its facilities, before they visit, so that they can make informed decisions about whether to visit or not. They felt such information should be targeted and disseminated in different ways (e.g. leaflets, online, social media) so that it is available to a range of audiences. Those with disabilities also felt the information should be co-produced with disabled people so that the most relevant and useful information is available.

'Also, there are some woodlands that make it really clear on what's the level path that you can take, or the different routes. Sometimes, if I'm visiting somewhere that I haven't been before, I'll have a look at the- National Trust is really good, because it will show you. There's an accessibility section, so it will show you, "Some areas are steep, especially in bad weather. This area is level." So things like that are really helpful. That would be more helpful for me, definitely, if everyone did that.' — Workshop participant

'Yeah, I put knowledge of the local area, like, how LGBT friendly is it going to be? Just stuff like that, really. If you know the local area, the local community and stuff, the better. Again, I don't know how you would get a feel for that, but it would make you feel more comfortable, I think.' — Workshop participant

- **Engagement with woodlands:** some participants felt that more engagement with woodlands from early years is necessary to encourage woodland use later in life. They felt this could be done through parents and schools visiting woodlands with children. They also felt that greater encouragement is needed to get people motivated to use woodlands, for example, by explaining the health and wellbeing benefits associated with a visit.

Opportunities for improving access on the way to woodlands

- **Public transport:** participants felt that greater provision of reliable, direct, and affordable public transport routes to woodlands would help them to access them more. Such routes need to be clearly labelled so that it is obvious which stop to get off at to visit a specific woodland.

'The route has to be direct as well. So I don't mind sitting on a train for an hour, one train, but I can't take three buses because I might miss one of them.' – Workshop participant

- **Assisted or organised travel:** some participants also felt that the provision of assisted or organised travel that takes people from their homes or local public transport hubs directly to woodlands would enable them to access woodlands more easily. This was particularly the case for those in poor health or with physical disabilities.

'They did used to have, a good few years ago, a shuttle bus that ran from Richmond Station up to the park for those who didn't drive. I think that was stopped, but it would be a good idea.'
– Workshop participant

- **Car parking:** many participants also suggested that car parking should be more available and at no cost. Those

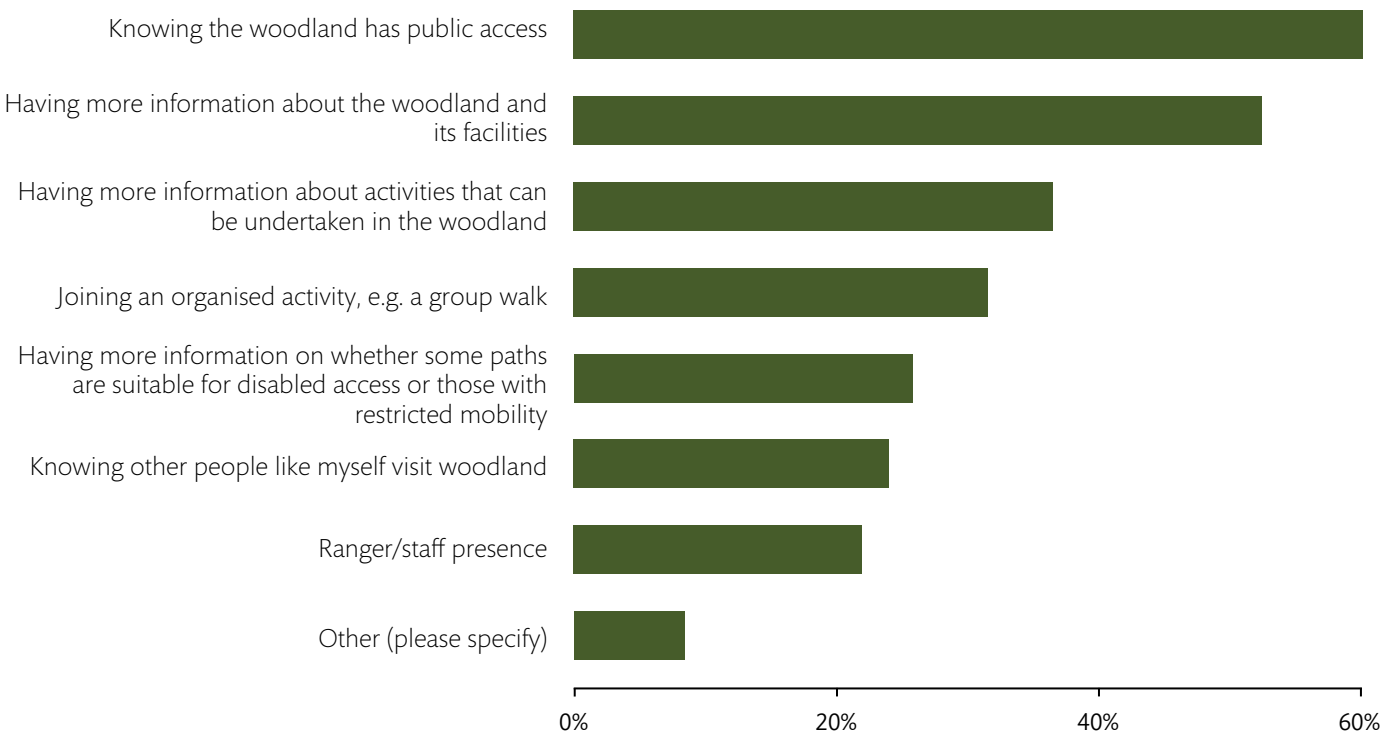
with physical disabilities also desire car parking that is close to woodland access points to reduce the physical burden of walking to the site.

Opportunities for improving access within woodlands

- **Improvements to infrastructure:** those with physical access needs also identified a range of infrastructural improvements needed to facilitate their access to woodlands. These included: step-free, surfaced pathways suitable for wheelchair users or those with limited mobility to use; areas with seating and shelter so that those who cannot walk far or need rests can still enjoy the woodlands; lighting and CCTV cameras to facilitate feelings of safety; and maps and signage to help people navigate the woodlands and locate themselves in emergencies.

'Just somewhere that if someone you knew was very ill or elderly, you could take them and just park up somewhere in your wheelchair with a bench, have a chat and just take in a view, or take in the woodlands itself. That would be perfect. I would definitely go if I was able to do that...' – Interview with individual in poor health

Figure 4 Survey results (England, 2024): Bar chart showing factors that respondents' felt could help them to access woodlands. The top two responses were 'knowing the woodland has public access' and 'having more information about the woodland and its facilities'.



- **Improvements to facilities:** better provision of clean (accessible) toilets was frequently mentioned as a method of improving access. This was raised by people with and without health conditions. People also mentioned having places to cook or buy food (which was particularly important for one man with diabetes). A need for wheelchair charging points was also flagged as important. These facility improvements would help people to better plan their visits and feel more comfortable while visiting.

'At least you could plan your route better. "We can get there because I'll have enough battery to get there." ... Oh, they've got charging points in Sutton Park for cars, so I don't see why they couldn't have charging points for wheelchairs.' — Workshop participant

- **Social infrastructure:** some people flagged a need for social infrastructure such as organised group activities in woodlands, which are catered to those with similar access needs. This would help people with different health conditions feel more comfortable participating in activities and reduce the feeling that they are spoiling the experience for others. There was also a desire for more staff to be present on woodland sites; participants felt their presence would help them to feel safer from crime or from being stranded in an emergency. Others felt they required greater support from others in their lives to encourage or support them to access woodlands.

'But once you have been with someone or a group or something, then you can go back by yourself because that initial visit has given confidence to go back and visit by yourself.' — Workshop participant

The survey also identified opportunities for improving access for the groups underrepresented in their use of woodlands (Figure 4).

Conclusions

There are significant differences in rates of public access between demographic groups, with travel time and mode of transport also being significant predictors of visits. While the needs and interests of groups who are underrepresented in woodlands remain understudied, this research has provided insights into the barriers they face and opportunities for enabling access. Encouragement to visit woodlands and fostering feelings of belonging through community engagement are important for access, because personal needs, recreational interests, and motivations may vary. Approaches to offering support should be tailored to specific groups while also considering inclusivity in relation to intersectionality and life stage. This avoids reducing people to single demographic categories.

This research has also identified tensions between the preferences of different participants. For example, between those who wish for naturalistic spaces vs. more facilities and infrastructure, desire for safety vs. greater privacy, and desiring targeted activities vs. not feeling different to others. Other tensions relate more to financial sustainability under existing funding models, for example, many participants expressed a desire for free or subsidised access while also requesting greater site spending on facilities, infrastructure, and services.

Additionally, participants often praised what might be called destination woodlands (see O'Brien, 2012) which welcome public access, are managed by organisations such as Forestry England, the National Trust, Woodland Trust, or local authorities, and have multiple facilities and good infrastructure. It may be easier to facilitate access needs at these sites and to support those struggling to access woodlands to visit them. However, many of these sites will not be close to where most people live and so would likely only support occasional visits, given that frequency of access is closely correlated with low travel time and mode of transport (particularly walking).

Due to current evidence gaps, many assumptions are made about the access needs of diverse publics. Interventions are needed that are tailored to different demographic groups, communities, and types of woodland site. Additionally, these interventions should be evaluated over a long-term funding period to provide robust evidence of any sustained and meaningful increases in access frequency and quality of experience.

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References

Ayob, S. and Omidire, M. F. (2021) 'Storyboards as a Qualitative Method of Exploring Learners' Experience with the Use of a Multilingual Support Strategy', *International Journal of Qualitative Methods*, 20. Available at: <https://doi.org/10.1177/16094069211034391>

Berbés-Blázquez, M., Bisht, V., Carrillo, R., Franco, M., Kuhn, M., and Morales-Guerrero, J. (2022) 'Designing urban greenspace from the grassroots up', in V. Shandas and D. Hellman (eds.) *Collaborating for Climate Equity*. London: Routledge, pp. 17-35.

Boyd, F., White, M. P., Bell, S. L., and Burt, J. (2018) 'Who doesn't visit natural environments for recreation and why: A population representative analysis of spatial, individual and temporal factors among adults in England', *Landscape and Urban Planning*, 175, pp. 102–113. Available at: <https://doi.org/10.1016/j.landurbplan.2018.03.016>

Chongo, M., Chase, R. M., Lavoie, J. G., Harder, H. G., and Mignone, J. (2018) 'The Life Story Board as a Tool for Qualitative Research: Interviews With HIV-Positive Indigenous Males', *International Journal of Qualitative Methods*, 17(1). Available at: <https://doi.org/10.1177/1609406917752440>

Cross, R. and Warwick-Booth, L. (2016) 'Using storyboards in participatory research', *Nurse researcher*, 23(3), pp. 8–12. Available at: <https://doi.org/10.7748/nr.23.3.8.s3>

Ford, K., Bray, L., Water, T., Dickinson, A., Arnott, J., and Carter, B. (2017) 'Auto-driven Photo Elicitation Interviews in Research with Children: Ethical and Practical Considerations', *Comprehensive Child and Adolescent Nursing*, 40(2), pp. 111–125. Available at: <https://doi.org/10.1080/24694193.2016.1273977>

Gardner, E. (2023) *Enabling and Encouraging Access to Woodlands for Diverse Publics: An Economic Evidence Review*. Farnham: Forest Research. Available at: cdn.forestresearch.gov.uk/2024/02/Public_Access_WP3_Economics_Literature_Review.pdf

Gittins, D. H., Dandy, D. N., Wynne-Jones, D. S., and Morrison, P. V. (2023) "It's opened my eyes to what's out there": How do nature-based interventions influence access to and perceptions of the natural environment? *Wellbeing, Space and Society*, 4. Available at: <https://doi.org/10.1016/j.wss.2022.100125>

Kessel, A., Green, J., Pinder, R., Wilkinson, P., Grundy, C., and Lachowycz, K. (2009) 'Multidisciplinary research in public health: A case study of research on access to green space', *Public Health*, 123(1), pp. 32–38. Available at: <https://doi.org/10.1016/j.puhe.2008.08.005>

Medina-Muñoz, M.-F., Chase, R., Roger, K., Loeppky, C., and Mignone, J. (2016) 'A Novel Visual Tool to Assist Therapy Clients' Narrative and to Disclose Difficult Life Events: The Life Story Board', *Journal of Systemic Therapies*, 35(1), pp. 21–38. Available at: <https://doi.org/10.1521/jsyt.2016.35.1.21>

O'Brien, L., Morris, J., and Stewart, A. (2012) *Exploring the relationships between peri-urban woodlands and health and well-being*. Farnham: Forest Research. Available at: cdn.forestresearch.gov.uk/2022/02/peri-urban_woods_and_health_report_2012.pdf

O'Brien, L. (2019) 'Carrying out physical activity as part of the Active Forests programme in England: what encourages, supports and sustains activity? – a qualitative study', *International Journal of Environmental Research and Public Health*, 16(24). Available at: www.mdpi.com/1660-4601/16/24/5118

Pearson, M., Clements, J., and O'Brien, L. (2023) *Review Summary – Enabling and Encouraging Access to Woodlands for Diverse Publics*. Farnham: Forest Research. Available at: cdn.forestresearch.gov.uk/2023/07/Public_Access_Literature_Review_Summary.pdf

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