

Forest facts



What prevents people from using urban greenspace in Sweden?

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— We used an online survey to identify what prevents people from visiting urban greenspace (UGS) in Sweden, and who perceives most problems. A total of 2806 respondents from 208 (of 290) municipalities completed the survey.

— Most respondents identified few or no problems.

— Litter, vandalism, and lack of time were the most frequently identified problems.

— Age, nature-connectedness, distance, and frequency of use were key factors linked to the likelihood of perceiving problems in UGS.



Introduction

Urban greenspace (UGS) is the main supplier of ecosystem services in urban areas for human wellbeing, particularly for physical and mental health. Maintaining UGS and maximising its benefits for increasingly diverse urban populations is a difficult task for urban spatial planners in the face of continued urbanization trends. As well as ensuring the availability and accessibility of high-quality UGS, a core challenge is ensuring that people choose to visit UGS. However, while many studies have explored different factors that influence the use of UGS, few have focused on factors that constrain users' willingness to visit UGS.

Our research questions were: 1) What do people perceive to be the main constraints to using UGS in Sweden? 2) What are the key factors associated with a higher perception of usage constraints? We considered constraints as factors that were perceived to directly hinder usage of UGS (e.g., too far away, etc), as well as problems associated with UGS that make its use less satisfying (e.g. litter, etc).

We conducted an online survey concerning peoples' perceptions and preferences surrounding UGS, as well as questions concerning respondents' socio-demographic profile. The survey included two questions relating to constraints: "What prevents you from visiting nature and green areas in and around your town more frequently?", and "What kind of problems are there in nature and green areas in and around your town?". Respondents could select multiple responses from 22 constraints (Table 1), and/or provide free text responses.

Main constraints for urban greenspace users in Sweden

Our study showed that most respondents perceived few or no constraints. The most commonly perceived constraints were litter, vandalism, and lack of time, while relatively few respondents perceived accessibility, availability, or safety concerns as constraints.

Table 1. Constraint variables were grouped into six main themes relating to incivilities, management, accessibility and availability, personal issues, safety and no perceived constraints.

Constraint Theme	Constraints
Incivilities	Litter
	Vandalism
	Graffiti
	Noisy children and teenagers
Management	Lack of signs; unclear paths
	Overgrown
Accessibility & availability	The area is too far away
	Lack of suitable transport
	Lack of places to visit
Personal issues	Lack of time
	Lack of someone to go together with
	Lack of knowledge about where to go, what to do and see there
	Health issues
	Do not want to
Safety	Feels unsafe
	It is used for criminal activity
	Fire risk
	Dangerous animals or pests
	Danger of injury
No perceived constraints	Poisonous plants
	Nothing stops me
	Do not see any problem



Figure 1. Peri-urban area by the sea. Photo: Pixabay.

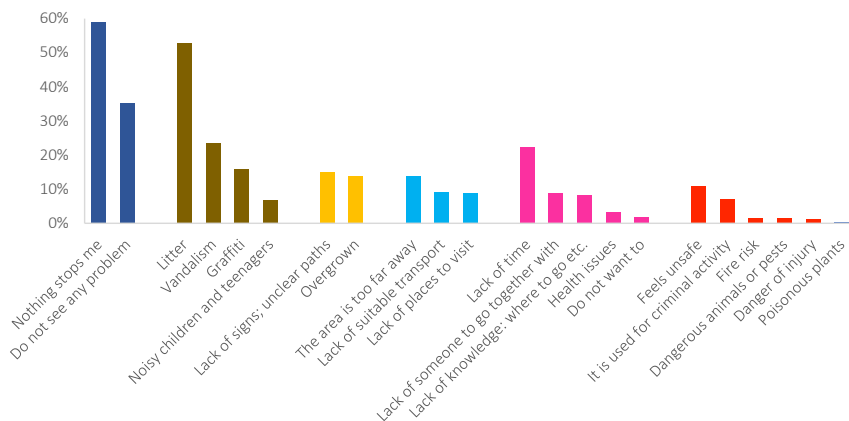


Figure 2. Frequency of survey responses per constraint.

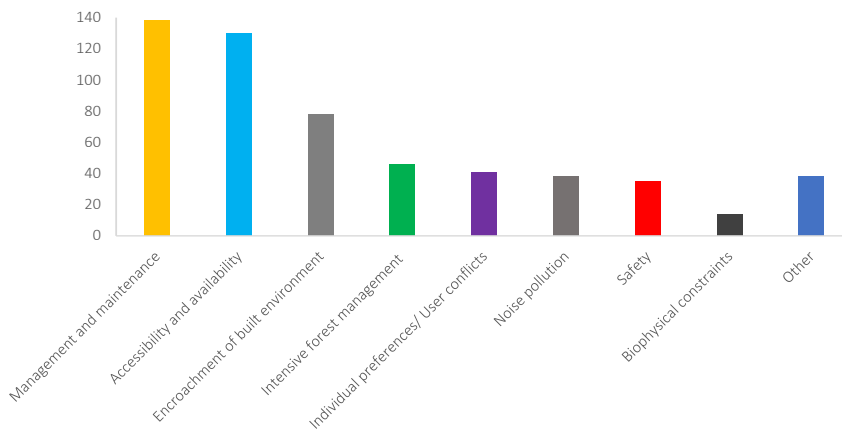


Figure 3. Frequency of constraint themes identified from free-text responses. Many responses were coded as relating to more than one theme.

Our statistical analyses revealed four key factors that appear to have a particularly strong influence on perceptions of multiple constraints in Sweden:

- *Age* – younger adult users, especially 18–40yrs, were more likely to perceive accessibility/ availability constraints and were more likely to identify several personal constraints compared to older cohorts, including lack of time.
- *Nature-connectedness* – respondents with a stronger connection with nature were much more likely to perceive incivility constraints such as litter, vandalism and graffiti. Respondents with a weaker sense of connection to nature were more likely to select personal constraints such as health issues or lack of someone to go together with. These respondents were also much more likely to

state that they do not want to visit UGS, although relatively few actually selected this response.

- *Distance* – respondents who lived further from UGS perceived more usage constraints and distance appeared to influence perceptions of constraints more generally. For example, we found that those who lived closest to UGS were more likely to perceive fewer or no constraints.
- *Frequency of use* – more frequent users were more likely to state that nothing stops them from using UGS, whilst less frequent users were more likely to perceive several accessibility/ availability and safety-related constraints. Less frequent users were also much more likely to perceive personal constraints such as a lack of time, lack of someone to go together with, and lack of knowledge about where to go and what to do there.

Ensuring adequate supply of available, accessible urban greenspace

Our results appear to confirm the adequacy of supply of UGS in Sweden – a high proportion of respondents perceive few or no constraints relating to usage of UGS (Figure 2). However, our survey received many free text comments suggesting that UGS in Sweden is inadequate given the large number of people that wish to use it, and that the UGS that people want to use the most is often inaccessible without a car. We also found that many Swedish people identify constraints relating to encroachment of the built environment and intensive forest management practices (Figure 3).

Taken together, these findings highlight the increasing challenges facing urban planners due to ongoing demographic trends including urbanisation and population growth, and appear to be at odds with global policy ambitions supporting increasingly compact cities e.g., the United Nations' New Urban Agenda. Increasing pressure on UGS is already an explicit concern in Sweden and other Nordic countries, where today's mostly adequate supply of UGS risks "death by a thousand cuts" due to continued expansion and densification of the built environment. We therefore identify a need to preserve and enhance both large peri-urban UGS, such as forests and nature reserves further from town centres where there is sufficient space for larger numbers of users, and more centrally located UGS such as parks of different sizes, including pocket parks.

Maximising societal benefits of UGS

The prominence of incivilities and management-related constraints among our results suggests that significant improvements to UGS usage in Sweden and similar contexts might be made through management-level interventions. Such interventions might include education and prevention programs aimed at litter, vandalism and graffiti, quicker response rates to rectify these problems when they do occur, and improved signage and

pathways. Yet our results also indicate that certain groups are less likely to want to visit UGS and/or more likely to perceive a range of personal constraints relating to use of UGS, including lack of time, lack of knowledge about where to go and what to do there, and lack of someone to go with. Efforts to address such personal constraints may offer low-hanging fruit. For example, the development of a range of open, group-based activities may address constraints concerning lack of company and stimulate social contacts and integration between different groups. Such efforts may be useful for targeting infrequent users, who are more likely to perceive such constraints. Information/education campaigns aimed at younger people may also be important in this regard. This is especially important given that an engagement in nature is seen as a societal prerequisite for meeting environmental crises linked to climate

change, pollution and loss of biodiversity. More broadly, there is a need for deeper understanding of the personal and/or psychological drivers amongst different groups.

Conclusions

Our findings highlight that different groups of users may have starkly divergent perceptions of constraints relating to UGS. This highlights a need to integrate multiple perspectives in UGS planning and to promote the engagement of local communities to counteract growing social inequalities and promote social cohesion. However, our study also shows the need for further research to navigate conflicts between global policy ambitions supporting increasingly compact cities (e.g., New Urban Agenda) and national level environmental objectives concerning good-quality and accessible natural areas and green spaces.



Figure 4. Students on bikes in an urban forest, Uppsala. Photo: Jenny Svernnäs-Gillner.

Key words: Urban planning; Green infrastructure; Social cohesion; Urbanisation; SDG 11; New Urban Agenda

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A short film about the research project can be found here: <https://www.youtube.com/channel/UCOiGQZ3lg9XTI6IAI4bE0g>

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