



## Guideline application Greenspace Hack



### What is Greenspace Hack?

Greenspace Hack consists of an app and a website and is a project of the University of Oxford and Oxfordshire County Council to collect experiences with greenspaces. In the app of the same name, data about greenspaces can be collected quickly and easily using a survey designed specifically for greenspace. This data is then added to a map and shared publicly with other users. The goal of Greenspace Hack is to provide insights for better design of green spaces that promote human health and well-being as well as ecological diversity. The project relies on citizen participation to capture information about their local green spaces and describe their personal impressions. Those interested in learning more about the project can find even more information on the website as well as in the app under "about the project."

### What is being measured and why?

Greenspace Hack was developed to make it easy for citizens to map and develop a better understanding of green spaces in their neighborhoods. This is because recent evidence suggests that green spaces, whether used for recreation or physical activity, can improve mental health and well-being. In fact, people who use green spaces or exercise in green spaces have fewer mental health problems, less anxiety and depression, and healthier cortisol levels.

Greenspace Hack therefore aims to provide insights into which features of green spaces people value most and which help promote a healthier urban environment at the individual and local level. In the future, more ecological factors will be surveyed and the link to human health and well-being will be explored.

Everyone can participate in Greenspace Hack by mapping the green spaces on their doorstep. The user-friendly app enables a complete survey of parks, playgrounds, forests and other local green spaces in just a few minutes. The survey developed for this purpose consists of simple multiple-choice and free-text questions designed to help urban and landscape planners, local councilors and other stakeholders understand the key characteristics of green spaces.

## Importance of green spaces in the city

Urban and village green spaces include not only parks, forests, green corridors, cemeteries, bodies of water, bicycle and hiking paths, sports fields and playgrounds, but also small areas such as green strips, planted traffic islands and even green roofs are important elements of urban green spaces. If green spaces are maintained in a natural way, they develop into habitats for a variety of plants and animals in addition to their use by humans. Ideally, they form a "green network" that runs through the entire settlement area. Green spaces are therefore essential for sustainable settlement development and an important component of modern urban planning.<sup>1</sup>

Urban greenery is an asset particularly worthy of protection and should not only be preserved, but also further promoted and better protected. In addition, urban greenery makes our cities more resilient to heat waves and heavy rainfall events. This is particularly important in light of climate change, as such extreme weather events are forecast to increase in the future. Green spaces therefore play a central role in adapting to climate change. To this end, both the distribution, design and species composition of our green spaces and the water supply must be rethought and adapted accordingly.<sup>2</sup>

Green spaces in the city also play a key role in the quality of life of residents. More green spaces in the city mean a cooler urban climate and consequently improved living conditions - especially in phases of extreme heat. Especially green roofs and facades, avenues, large parks and water elements have a cooling effect and can reduce the temperature in inner-city areas by several degrees. Appropriate stormwater management also contributes to cooling and should be increasingly promoted, especially in new urban districts.<sup>3</sup>

In addition to these important functions in terms of climate adaptation, green spaces also serve as recreational areas for residents and visitors to cities, as mentioned above.

In addition to the potential to contribute to the improvement of physical and psychological well-being, they also fulfill a number of other important functions in relation to social coexistence, which is becoming increasingly important in the context of urbanization.

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<sup>1</sup> Stadt Beckum (o.D.): Grünflächen für Lebensqualität und Klima, in: beckum.de, [online] <https://www.beckum.de/index.php?id=25>, [retrieved on: 21.12.2021].

<sup>2</sup> Petzold, Stefan (o.D.): Städte gut entwickeln – so grün wie möglich, so dicht wie nötig, in: NABU.de, [online] <https://www.nabu.de/umwelt-undressourcen/bauen/hintergrund/innenentwicklungversusgr%C3%BCn.html> [retrieved on: 02.12.2021].

<sup>3</sup> Stopfer, Eveline (2017): Welchen Wert haben Grünflächen, in: Stadtmarketing.eu, 16.05.2017, [online] <https://www.stadtmarketing.eu/gruenflaechen-in-der-stadt/> [retrieved on: 02.12.2021].

For example, green spaces can provide opportunities for social interaction in the neighborhood and cultural exchange by offering a place for different social classes to meet.<sup>4</sup>

## Why do we want to collect data in ParKli using the Greenspace Hack app?

Within the framework of our research project ParKli, we would like to contribute to the adaptation of local green spaces to the consequences of climate change. To do this, we first need a good database on the current state of our local environment so that we can investigate short- and long-term changes. In order to achieve the broadest possible and regular monitoring of local green spaces, we rely on the support of committed climate detectives. Together with you, we would like to go on a search for clues and use the Greenspace Hack app to collect data on the quality of local green spaces. Using the app, you can record observations in your forests, parks, or other green spaces. The data summary is posted on the Greenspace Hack website. How exactly to use the app is described in the following guide in clear sub-steps. Simply install the free app on your smartphone and record green spaces with the app during your next walk.

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## Quick guide Greenspace Hack

### Download the application (app):

You can download the app via [App Store](#) or [Google Play Store](#).

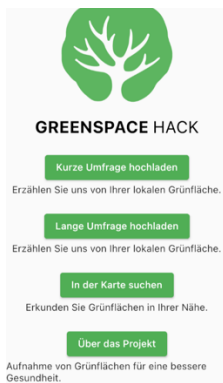
More information can be found on the Greenspace Hack website:  
<https://www.greenspacehack.com>

In general, this guide is based on app version 1.0.2 and uses the display on mobile devices with the Android operating system, so minor deviations may occur on devices with a different operating system or version.

You can choose between a short and a long survey.

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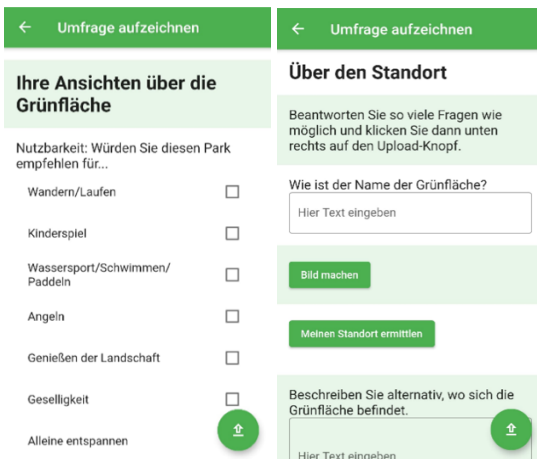
<sup>4</sup> Bundesministerium für Umwelt, Naturschutz, Bau und Reaktorsicherheit – BMUB (2015): Grün in der Stadt – Für eine lebenswerte Zukunft, in: Grünbuch Stadtgrün, [online] [https://www.bmi.bund.de/SharedDocs/downloads/DE/publikationen/themen/bauen/wohnen/gruenbuch-stadtgruen.pdf?\\_\\_blob=publicationFile&v=3](https://www.bmi.bund.de/SharedDocs/downloads/DE/publikationen/themen/bauen/wohnen/gruenbuch-stadtgruen.pdf?__blob=publicationFile&v=3) [retrieved on: 06.12.2021].



## Short survey

Once you have downloaded the app, you can choose to take a short or long survey about a local green space of your choice. The short survey consists of about 10 questions and you can also provide a picture and location information about the selected green space.

As many questions as possible should be answered in the survey, as a complete data set offers the greatest potential for analysis. Therefore, provide as much information about the green space and local conditions as possible. Once you are done, you can upload the document by pressing the upload arrow and save it centrally. Note that you should only submit the survey if you have answered the most questions.




## Long survey

If you want to describe a green space in more detail, choose the long questionnaire. The long version also asks more detailed questions about the green space, providing researchers with even more data to investigate scientific questions. In addition, you can provide your contact information in the long survey - of course, only if you agree to do so.

This voluntary information allows researchers to contact you if they have questions.

## Browse the map



Here a green area in the surroundings can be searched and discovered. The GPS symbol can be used to search for the current location. In the area of Stuttgart and surroundings several green spaces are already indicated, which can be explored and discovered. With a click on a location  the survey with the answers about the respective green space is displayed.

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For more questions about the app and or about what ParKli does with the data collected through EyeOnWater, feel free to check out our [website](#) or contact us by email at [parkli@os4os.eu](mailto:parkli@os4os.eu).