Real availability of public open areas

Introduction

Many scientific studies have shown that greenery has a major impact on the quality of life of urban residents. Greenery provides the human with so-called ecosystem services whose value can be measured and financially valued. The ecosystem services that green spaces provide us include air cooling during hot days, cleaning of air, reducing noise, increasing the mental and physical well-being of the population, beautifying of urban spaces with a variety of structures, shapes or colours, and providing living space for different animals or plants. As well as the presence of green areas in cities, their effective management ensuring the functioning of the ecosystems, is important as well.

Learn about the problem

Use the internet, (scientific / popular) literature, or in collaboration with experts to find available information on importance of greenery in public spaces. Also focus on the following questions:

• What is the proportion of green areas in the urban area of your city?
• Which of these areas are open to the public?
• Are public green spaces located so that they are in a suitable walking distance for any inhabitant?
• Who is maintaining the public greenery?
• How does your city deal with substitute planting?

Recommended resources

Source 1:
'People-first' for greener, liveable cities

Source 2:
Better planning and methods needed to restore nature

Source 3:
How to make cities 'green'

Verify the occurrence of a problem in your area with your own research

Goal

Students can name the benefits of green spaces and know the recommended availability of public green areas. They can determine the area of the selected green space and calculate its availability from a set starting point.

Tools & Materials

• online maps with area size calculation function (e.g. Google maps)
• GPS device with the possibility to record the distance walked
• recording card
• a board / flipchart / tablet or similar
• camera / mobile to record activity

Implementation

When we use the term public green areas we are referring to public parks, gardens, private green areas open to the public and cemeteries, school yards, sports fields or playgrounds where there is plenty of greenery. According to the recommendations of the European Union, public green areas from 0,5 to 2 hectares should be available within 300 meters (about 5 minutes walk) and public green areas over 2 hectares up to 800 meters. Before starting the measurement, agree on starting points from which you will measure the availability

of public green areas. It can be your place of residence or any place within the residential area. Then use online maps or walk around and identify the public green areas around the specified starting point. Insert individual green areas into the recording card - specify their name (or street). Fill separate recording card for each starting point.

Measurement

Use the "measure distance" function within the Google Maps to determine the area of the identified green areas. Right-click on the map to launch the feature and then click to create space boundaries. Transfer the result to hectares and write them to the record card. Determine the type of public green space (park, garden, private area, school yard, cemetery, sports field, playground) and the required availability (up to 300 meters or up to 800 meters). For areas smaller than 0.5 hectares, just write "unmonitored" and do not work with them further.

In the second step it is necessary to verify the real availability of public green areas larger than 0.5 hectares. Using a GPS device (such as a mobile phone with a distance tracking application downloaded), measure the distance from the starting point to the border of public green area. Measure while walking. If you have a fence in your path, include this route as well. As a result, you will calculate the amount of green space available.

Finally, find out who is maintaining the space and optically evaluate the state of greenery (excellent, good, satisfactory, poor, bad).
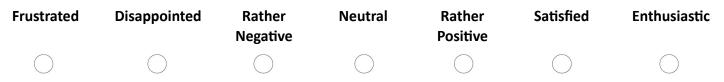
Analysis of results and proposal of solution

Has there been at least one public green space available within 300 metres with size 0.5 - 2 hectares and up to 800 metres with size over 2 hectares from the chosen starting point? How would you improve the availability of green spaces? Do existing green areas require better care? What didn't you like in a specific green space? How would you suggest improving a particular public green space? Write down your ideas and select the ones you can implement.

Implementation of the solution and evaluation

Did you implement the selected solution? If so, what result did you get? Did your school, family or community help with the implementation of the solution? How did they react to your initiative? Have you managed to increase the availability of green spaces? Do you think there is a better / more effective solution for the problem?

How would you evaluate your feelings after implementing the selected solution?

Frustrated	**Disappointed**	**Rather Negative**	**Neutral**	**Rather Positive**	**Satisfied**	**Enthusiastic**
◯	◯	◯	◯	◯	◯	◯

Publicity

Record and share photos on social networks with #mybioprofile during the activity.
Help others to join us.

TEACHING
G R E E N

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Example

Recording Card	
Class	8.A
Schol	Leonardo´s Elementary School
City	Florence
Starting point	2nd Yellow street
Monitoring period	25.-26.06.2019

Name of public area (or street)	Area (ha)	Type of green public area	Required availability[1] (m)	Real availability (m)	Evaluation of greenery	Responsible for maintenance
park Main street	0,4	park	unmonitored			
school yard Green street	0,3	school yard	unmonitored			
park Hills	3	park	up to 800 m	1245	good	municipality

[1] – Use only these 3 types:

unmonitored – for areas smaller than 0.5 hectares

up to 300 m – for areas between 0.5 to 2 hectares

up to 800 m – for areas over 2 hectares

Recording Card - Real availability of public open areas

Recording Card						
Class						
Schol						
City						
Starting point						
Monitoring period						
Name of public area (or street)	**Area (ha)**	**Type of green public area**	**Required availability [1] (m)**	**Real availability (m)**	**Evaluation of greenery**	**Responsible for maintenance**