

## VARIOUS PRESENTATION OF NOISE PERCEPTION IN BYDGOSZCZ GREEN AREAS

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Received: 28.11.2018; Revised: 16.04.2019; Accepted: 3.06.2019

### Abstract

Sustainable management of the city's space becomes vital due to the increasing environmental pollution. Organized urban space is treated as all resources that directly benefit local residents. Proper location and shape have an impact on the comfort of people's rest. Urban noise pollution is gradually increasing, mainly due to rapid industrialization and urbanization. This paper addresses the issue of the interrelationships between the multitude of sounds that occur in selected areas of the greenery and their perception by visitors. The research objects are two parks located in the city centre of Bydgoszcz. The surveys were carried out there to identify the sources and perception of noises. To illustrate the audience's perception, a mental map of the directions of noise inflow was made. A fuzzy cognitive map was also made and exemplary scenarios of actions influencing the formation of the acoustic climate in these areas were presented. The use of various ways of presenting fuzzy information about the prevailing acoustic climate allows us to "shape" properly the space in the noise protection.

Keywords: Acoustic climate; Fuzzy logic cognitive map; Green areas; Mental map; Noise.