Sustainability | Individual communication

IC - (20935) - IMPACT OF SUMMER HEAT ON URBAN PARK VISITATION, PERCEIVED HEALTH AND ECOSYSTEM SERVICE APPRECIATION

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Background and objectives
Urbanization, environmental change and ageing are putting human health at risk. In many cities, heat stress is projected to increase. Urban green spaces may be an important resource to strengthen the resilience of city dwellers against environmental stressors. At the same time urban green spaces are also threatened by challenges related to climate change – such as heat and drought. We aim to present research about the capacity of urban parks to provide ecosystem services under extreme heat and drought conditions.
Process and methods (for empirical research)
We show results of a questionnaire survey conducted under summer heat conditions in two inner-city parks in Leipzig, Germany in 2019. We assessed activity patterns, their satisfaction with the existing natural and built infrastructure, how heat does impair their health, how they change their park use during heat and how they evaluate the role of parks for coping with heat stress.
Main results (or main arguments in the case of critical reviews)
We found that the old-grown, tree-rich park was used significantly more frequently for experiencing nature, while the newer, less tree-rich park developed on a former railway-brownfield site was used more often for socializing and having picnics. The heat stress summary score was significantly higher for participants in the newer, less shaded park. Nearly half of the respondents stated that they used the parks during heat waves as frequently as usual in the summer, while some stated that they adapted their park use behaviour, e.g. by coming later in the evening. When asked about the role of parks under heat conditions, respondents mentioned several benefits matching with regulating and cultural ecosystem services, such as cooling and recreation.
Implications for research and practice/policy | Importance and originality of the contribution
In terms of adapting to climate change, urban planning should preserve older parks with large tree coverage to maintain natural processes and regulating ecosystem services such as cooling, while respecting demands for cultural ecosystem services which might require built infrastructure as well.

Palavras-chave : Urban heat, Health, Urban green spaces, Ecosystem services