Naturalness and perceived safety in urban green areas. Case study from Tallinn, Estonia

Mart Reimann, School of Natural Sciences and Health Tallinn University, mart@tlu.ee Piret Kuldna, Stockholm Environment Institute Tallinn Centre Helen Sooväli-Sepping, School of Natural Sciences and Health Tallinn University, Helen Poltimäe Stockholm Environment Institute Tallinn Centre, Meelis Uustal Stockholm Environment Institute Tallinn Centre

Introduction

The importance of human-environment interactions taking place in urban green areas is increasing continuously. Naturalness and perception of safety in urban green areas can be two indicators that influence visitor recreational patterns, but their impact may vary (Kabish 2015, Kronenberg 2015). Unmanicured areas with wilderness elements within cities may evoke negative experiences such as fear, disgust, or an uncomfortable feeling because of high-dense vegetation and unmanicured look (Heyman 2012; Bixler and Floyd, 1997). Differently from the mainstream some studies have found that despite dense vegetation considered being less safe it is not less preferred and more naturalistic vegetation can be introduced into parks and green spaces without necessarily making the parks appear unsafe (Wang et al 2017; Jorgensen 2007).

Sites and Methods

The current study provides an overview of the visitor survey of three different urban green areas in Estonian capital Tallinn: 1) historical and most prominent urban park Kadriorg; 2) former strictly closed Soviet military area Paljassaare which is still very wild looking and basically unmanaged; 3) mixed area which has one part of wetland and shrubland in former inaccessible coastal area and another part of classically managed park Rocca Al Mare. Similar areas can be found all over Eastern Europe where Soviet Army established strictly closed areas close to the strategically important cities and after the fall of the Iron Curtain those areas turned into the no man's land with criminal elements. Those areas can still be called as new public recreational areas, because it took time to create minimal safety and develop the basic access and infrastructure during the transitional time of the countries. The study explores two main questions – what are the expectations of urban park visitors to urban greenery and related to that: how people perceive safety and natural hazards in different areas. These questions are studied from perspectives of nationality, gender, age, visiting history and habits. The study is based on on-site interviews carried out in September 2016 (n=470). All people visiting the area alone or in pairs were interviewed. In case of groups one male and one female from a group were selected.

Results and Discussion

The results about the expectations of urban park visitors to urban greenery show that in case of naturalness 81% of respondents in Kadriorg and 79% in Rocca al Mare considered that the enough (question was referring to the recreational infrastructure area is developed development and manicuring of the green area) (Table 1). The most divergent opinions can be observed in Paljassaare: 52% answered that the site has been developed enough, while in the opinion of 48% respondents – too little. Respondents who were satisfied with the current development, pointed out: 1) if there was more development, also more people would come to the site which is not desirable; 2) a big bonus that the site is not developed; 3) there is no need at all to develop the site more; 4) good that the site is not very developed – it is possible to discover it by yourself and enjoy the wilderness; 5) development is not necessary, don't want more people here. Those who wished more development indicated that: 1) the site has not been developed at all and wanted to open a good café at the parking lot on weekends; 2) to provide places to sit; to keep toilet and changing cabins on the beach available after summer too.

Results about how people perceive safety and natural hazards in different areas show that respondents are most concerned of safety in most unmanaged area Paljassaare (score 3,5 in 5 steps likert scale). Most managed area Kadriorg got 4,1 and the highest score 4,2 belonged to Rocca al Mare. According to the nationality Russians generally have the highest average assessments of the different aspects of nature management and access, and the nationality group "other" has the lowest assessments. Only perceived safety stands out with a different pattern: other nationalities have assessed the safety in Kadriorg as being the highest (4,75), and Estonians the lowest (4,03).

Table 1. Appearance and development level of study areas.

APPEARANCE

84%

	Natural enough	Too wild	Too urban	Developed enough	Developed too little	Developed too much
PALJASSAARE	72%	24%	4%	52%	48%	0%
ROCCA AL MARE	77%	6%	17%	79%	17%	4%

12%

81%

4%

Conclusions

KADRIORG PARK

Results show that respondents are most satisfied with attractiveness and nature conservation, but most concerned of safety in most unmanaged area Paljassaare, but they do not feel themselves the safest in the most managed area Kadriorg. There were some visitors in each area who were concerned of the safety. Majority of the visitors in the least managed area Paljassaare did not still want the area to be developed more and were very passionate to defend their opinion. It is also obvious that different recreational areas attract different visitor groups with different preferences and profiles; as distances in Tallinn are not too big people with different desires can find appropriate recreational area. The current study shows that a big part of the population in Tallinn has become fond of the neglected and wild green areas, although those areas have been considered shameful by several professionals. This study shows that in the future development different kind of nature management for recreation is accepted in Tallinn, including wild and unmanaged nature and it can be considered in the future policies on recreation.

References

Bixler, R.D., Floyd, M.F. (1997). Nature is scary, disgusting, and uncomfortable. Environment and Behavior, Vol. 29, 443–467.

Heyman, E., 2012 Analysing recreational values and management effects in an urban forest with the visitor-employed photography method. Urban Forestry & Urban Greening, Vol. 11, 267–277

Jorgensen, A., Hitchmough, J., Dunnett, N., 2007. Woodland as a setting for housing appreciation and fear and the contribution to residential satisfaction and place identity in Warrington New Town, UK. Landscape and Urban Planning 79,273–287.

DEVELOPMENT

16%

3%

Kabisch, N., Qureshi, S. & Haase, D. (2015). Human-environment interactions in urban green spaces — A systematic review of contemporary issues and prospects for future research. Environmental Impact Assessment Review, 50, 25-34.

Kronenberg, J. (2015). Why not to green a city? Institutional barriers to preserving urban ecosystem services. Ecosystem Services, 12, 218-227.

Wang, R., Zhaob, J., Meitnerc, M. J. (2017). Urban woodland understory characteristics in relation to aesthetic and recreational preference Urban Forestry & Urban Greening 24 55-61