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A MODEL FOR URBAN FOREST MANAGEMENT PLANNING: ISTANBUL CASE STUDY

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Abstract

Urban forests have become important elements of cities' green fabric providing many ecosystem services including recreation. In this study, we proposed a model for urban forest management planning in the example of Istanbul, where urban sprawl has transformed the green infrastructure of the city dramatically. To this purpose, a total of 201 surveys were conducted through face-to-face interviews including those working as managers and technical staff in the forestry organization in Istanbul, academicians and NGOs. Subjects to be surveyed were determined according to the layered-simple random sampling method. The data were evaluated by descriptive statistics based on a variety of opinions about urban forest management planning in Turkey along with various socio-economic variables (gender, profession and experience). Whether there was any statistically significant difference between the groups was determined by Kruskal-Wallis H-Test. In case a difference was found, Duncan's Multiple Range Test was applied to detect the group(s) significantly different from each other. The results revealed that mainly males agreed on the purpose of urban forests as addressing recreational and social needs. All groups highlighted the lack of coordination and poor management system as main problems, while experienced and male subjects addressed that a new urban forest law is necessary. Mainly academicians and representatives of NGO's and related institutions suggested redefining the concept and restructuring the legislation concerning urban forests. In terms of activities, the majority favored *hiking and sightseeing activities* (51%), *photography* (42%), and *extreme sports* (37%). There was an emphasis on the need for sufficient number of *hiking, climbing and cycling trails and botanical gardens*. As a result, a model plan based on sustainable resource management ensuring multi-purpose utilization was proposed.

Key words: multi-purpose use, sustainability, urban forest governance, urban forest management planning, urban forestry

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