

# Forest Landscapes and Global Change

New Frontiers  
in Management,  
Conservation  
and Restoration

Abstracts

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**BENEFITS OF URBAN GREEN SPACES IN NOISE, AIR QUALITY AND THERMAL COMFORT: THE CASE STUDY OF BRAGANÇA**

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Urban green areas provide multiple environmental services, contributing to high-quality environments in our cities. With the purpose of evaluating the influence of urban green spaces in air quality, noise and thermal comfort, a research was developed throughout the last 4 years in the city of Bragança, Portugal. All these aspects were approached from physical and social perspectives. The physical approach involved several studies at urban and green space scales. Field experiments covered such areas as measurements of air pollutants concentrations (ozone, nitrogen dioxide, volatile organic compounds and PM10), sound pressure levels, meteorological and other parameters related to thermal comfort. The social approach consisted in assessing perceptions of citizens over green spaces and their influence on the environment, alongside with the assessment of their attitudes towards those spaces, by means of specific questionnaires applied to a representative sample of local inhabitants. Results showed the relevance of the green spaces in contributing to ameliorate air quality, create more pleasant soundscapes and provide better thermal comfort conditions, especially in spring and summer. Relations between benefits of green spaces and their size, their physical and biological diversity, and their location were found. These characteristics were also identified by respondents as key factors in a moment of selecting a green space to pass the time and to enjoy part or all services it can provide. In the opinion of the respondents, those factors are crucial in maximizing many environmental and social functions of urban green spaces.

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**FIRE - CRIME OR "AGRICULTURAL IMPLEMENT"**

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Fire is to rural mountain community's more than one element. Thus, as water and wind are used for mills and land provides the livelihood, Fire has its role in the rural cycle. Fire has always had an imperative role in shaping the traditional agro-ecosystems. The last decades have witnessed a growing bureaucracy and ban its use as an "agricultural implement". Policies shouldn't prohibit this management tool but rather to support those who are still in possession of this empirical knowledge. The legislation would have to get closer to rural needs and not vice versa. The "level" in which it is locate requires "steps" that do not exist or are invisible by the recipients, preventing them from manage their lands legally. The current bureaucratic system unworkable and constantly changing, in addition to the lack of resources and support, carry the local people to wear the role of criminals and resorting their actions to a fire inappropriately and bewildered, reflected in spectacular numbers of ignitions and burned area. The most effective and feasible way to restore and manage an agricultural ecosystem must pass by the stakeholders involved, because they are those that with the use, give it life and sustainability.