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## **Revealing the value of ecosystem services from city parks for nearby residents: a hedonic pricing study in Beijing**

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2021

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### **citation for published version (APA)**

Ma, Y., Koomen, E., & Wang, Z. (2021). *Revealing the value of ecosystem services from city parks for nearby residents: a hedonic pricing study in Beijing*. Abstract from 3rd ESP Europe Conference, Tartu, Estonia.

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environmental management. At the first stage we created a map of urban geosystems of the city based on the concept of geographical systems and approaches to urban morphology. The classification of satellite images of the territory made it possible to calculate the composition of different landcover classes in each contour. A quantitative assessment of the climate-regulating function at the local level was carried out in the InVEST program and the contribution of various geosystems to the regulation of the patterns of climatic variables and heat mitigation was estimated. Air quality assessment was carried out based on field measurements of alkaline-acid conditions and dust content in the snow cover. We also evaluated the recreational service of urban landscapes based on the analysis of green infrastructure availability and the attractiveness of various recreational facilities for citizens.

*Keywords:* urban geosystems, urban ecosystem services, heat mitigation, air quality, recreational services

*15. Type of submission: Abstract*

[B. Biome Working Group sessions: B10 – Designing healthier cities through understanding demand for urban green and blue spaces, and the context-dependent benefits they provide, with tools and models](#)

## **Revealing the value of ecosystem services from city parks for nearby residents: a hedonic pricing study in Beijing**

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Urban parks and public open spaces play an important role in improving the quality of life for city dwellers by offering many different ecosystem services. As the type and magnitude of these services differs between parks, the benefits citizens derive from them are likely to differ too. We assume that the appreciation for these services is reflected in the citizen's willingness to pay for residential property near the parks and apply an economic valuation approach to assess the contribution of different park characteristics that can be associated with the ecosystem services they deliver. We have set up a hedonic pricing study relying on an extensive database of



residential property transactions for the six central districts of Beijing relating to the past 10 years. The characteristics of the parks are inferred from a social media platform that allows users to exchange quality of life experiences. The results of this study are helpful for urban planners and designers to better understand resident's preferences for urban green spaces and may help them to optimize park characteristics and thus the well-being of local residents.

*Keywords:* ecosystem services valuation, hedonic pricing, urban park, green space

*16. Type of submission: Abstract*

[B. Biome Working Group sessions: B10 – Designing healthier cities through understanding demand for urban green and blue spaces, and the context-dependent benefits they provide, with tools and models](#)

## **The impact of biodiversity and urban ecosystem services in real estate. The case of the region Ile-de-France**

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Our research project aims at raising awareness about the value of biodiversity and urban ecosystem services (UES) for the French real estate market, in the private residential housing. Public perception of the environmental risks rose sharply over the last decade. What is the perception of biodiversity and UES in the real estate market? The French Observatory of Sustainable Real Estate analyzed the priorities of employees and companies. The issue of biodiversity was considered as important as water and human rights, but well below energy, business ethics, corporate social responsibility, risk management policy, territorial development, mobility, or comfort. Using GIS data and economic evaluation, by hedonic price methods, we assess the isolated contribution of the explanatory variables of biodiversity and UES on the price of real estate. We analyze the variation of the value for three urban ecosystem services (IDFESE Project, 2019)—flood control, proximity to green spaces and refreshment—on the price of real estate when a property changes ownership. Our modeling and mapping focus on the price of transaction (€/m<sup>2</sup>) at the communal scale from 2014 to 2019. The main variables are internal