

BOOK OF ABSTRACTS

This Book of Abstracts provides a comprehensive overview of the session content and is structured into three main sections:

- I. Session Description** – an introduction to each session, including its objectives and expected outputs
- II. Session Program** – a detailed schedule for each session, including speakers and timing
- III. List of Abstracts** – a complete compilation of all accepted abstracts

I. SESSION DESCRIPTION

ID: T20d

Green Gentrification: Critical Perspectives on Ecosystem Services Justice

Hosts:

	Name	Organisation	E-mail
Host (s):	Ernesto Lopez-Morales	The Land Appraisers Association	fondecyt.pvivienda@gmail.com
Co-host(s):	Luis Inostroza	Mendel University in Brno	luis.inostroza@mendelu.cz
	Felipe Benra	Leuphana University Lüneburg	felipe.benra@leuphana.de
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Abstract:

Gentrification has been studied for over 60 years. Ecological or green gentrification has gained attention since the mid-2000s due to its link to environmental injustices. As demand for green areas grows worldwide, investments in ecosystem restoration, urban greening, and climate adaptation increase, aligned with sustainability strategies. However, research shows these efforts can reinforce inequalities across distributional, procedural, and recognitional dimensions. Green gentrification connects ecological improvements with land markets and regulation, leading to displacement, exclusion, and profit. These processes impact inner cities, peri-urban areas, rural landscapes, and regional areas amidst planetary urbanisation. Methods for assessing ecosystem services are not neutral; they shape which benefits are visible and valued, varying with different approaches, making methodological awareness vital in green gentrification.

This session aims to explore how ecosystem services (ES) science can enrich, and eventually transform, the concept of green gentrification. While earlier discussions emphasised visible urban green spaces, such as parks and waterfronts, ES approaches measure and value the manifold benefits that society receives from well-functioning ecosystems—such as carbon sequestration, water regulation, and scenic landscapes—often through valuation schemes that express such contributions in monetary terms. This introduces new perspectives on understanding the exchange and use value of land and advocates for expanding the concept of the “rent gap”, as green gentrification enables developers, investors, and conservationists to capture ES values, leading to the emergence of a “green rent gap”.

These processes prompt important critiques: ES commodification may mask relational and cultural values, favour actors with technical or financial capacities, and justify the displacement or exclusion of less favoured actors using sustainability rhetoric. By examining how ES valuations alter the dynamics of accumulation and dispossession (especially in urban, peri-urban, and rural settings), this session emphasises the political economy of “green rents” and the impacts on environmental justice. It highlights the need to reassess distributional, procedural, and recognitional dimensions.

We welcome contributions that critically examine the political economy of green transformations. We are interested in contributions that:

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1. Interrogate the green rent gap dynamics of ecological improvements: showing how ecosystem restoration, climate adaptation, and greening projects produce or widen rent gaps in both urban and regional contexts.
 2. Critically assess ecosystem services (ES) valuation approaches: examining how various methods (monetary, intrinsic, relational, or assemblage-based) reveal complementary aspects of green gentrification.
 3. Document social consequences of green gentrification: tracing processes of displacement, exclusion, and dispossession, while highlighting distributional, procedural, and recognitional injustices.
 4. Bring comparative and cross-scalar perspectives: from different geographical locations, and across inner-city, peri-urban, and rural/landscape contexts of extended urbanisation.
 5. Explore alternatives and counter-narratives: investigating governance arrangements, grassroots mobilisations, or policy frameworks that resist commodification and seek more just ecological futures.
 6. Analyse the role of stakeholders: in either promoting or preventing green gentrification by examining their interests, values, and actions that influence the conditions for engaging in green gentrification and environmental justice.

Contributions must clearly and substantially demonstrate the links to ES science, either conceptually or operationally.

This session aims to produce a coherent body of publishable research for a special issue on green gentrification in the *Ecosystem Services* journal (IF 6,6 – Q1).

Goals and objectives of the session:

1. Advance critical debates on green gentrification by integrating ecosystem services (ES) science with urban political economy and environmental justice perspectives.
2. Reframe the rent gap in light of ecological valuation, showing how ES can both reveal and reshape mechanisms of accumulation, dispossession, and spatial exclusion.
3. Bridge conceptual and empirical work across different geographies and scales — from inner-city greening to peri-urban and rural landscapes under extended urbanisation.
4. Foster interdisciplinary dialogue among scholars of urban studies, political ecology, ecological economics, and planning, to enrich the analytical toolkit for studying green transformations.
5. Generate publishable outputs that consolidate this emerging research field, aiming toward a special issue or collaborative publication on ES and green gentrification.

Planned output / Deliverables:

1. Special Issue proposal in a high-impact journal (e.g. *Ecosystem Services*), consolidating the session's contributions into a coherent body of publishable research on green gentrification and ES.
2. Research network building: to establish an international working group on Environmental Justice, Ecosystem Services, and Green Gentrification to foster collaboration beyond the conference.
3. Policy-oriented output: to collectively produce a short position paper or commentary targeted at urban planners, environmental NGOs, and policymakers to highlight the risks of ES commodification and promote just ecological futures.

Session format:

1. Introduction by the convenors (5 minutes) to frame the aims of the session.
2. Paper presentations (4–5 papers, 12 minutes each)
3. Discussant commentary (10 minutes) to synthesize key insights, highlight theoretical connections and open pathways for debate.
4. Open Q&A and plenary discussion (20 minutes) to foster critical dialogue among presenters, discussant(s), and the audience.

We believe this format ensures a balanced allocation of time for in-depth presentations and interactive exchange. If scheduling permits, we are open to a double session (two linked slots) to expand the number of contributions and deepen comparative perspectives.

Related to ESP Working Group:

[TWG 20 - Equity in ES research](#)

II. SESSION PROGRAM

Room: A3

Date of session: Wednesday 20, May 2026

Time of session: 16:45 – 18:15

Timetable speakers:

Time	First name	Surname	Organization	Title of presentation
16:45-16:48	Ernesto	López-Morales		Introduction to the session
16:48–16:58	Melissa	Checker	City University of New York	A mixed-method approach to Assessing Environmental Gentrification in New York City
16:58–17:08	Ernesto	López-Morales	The Land Appraisers Association of Chile / Fondecyt Project 1241521	Green Rent Gaps: Ecosystem Services Science as a Lens on Gentrification Beyond the City
17:08–17:18	Helena	Duchková	Global Change Research Institute CAS	Between neglect and value: perceptions of formal and informal urban greenery
17:18–17:28	Peter	Olson	Department of Earth and Environmental Sciences, Lund University, Lund, Sweden	Justice, hot and cold spots of ecosystem services in functional urban areas
17:28–17:38	Juan	Pérez-Ventura	Universidad Complutense de Madrid	When "nature-positive" becomes exclusionary: Evaluating green gentrification through the Potential Risk of Gentrification Index (PRG)
17:38–17:48	Juan Pablo	Pacheco	Aarhus University, Department of Ecoscience, Denmark	Green gentrification drives socio-cultural shifts from provisioning to cultural valuation of ecosystem services
17:48–17:58	Tarin	Karzai	Institute for Ecological Economy Research, Berlin	Using rental data to inform policy makers about green gentrification
17:58–18:15	Convenors	All		Discussion + Q&A

III. ABSTRACTS

The first author is the presenting author unless indicated otherwise

1. Green Rent Gaps: Ecosystem Services Science as a Lens on Gentrification Beyond the City

First author: Ernesto Lopez-Morales


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Gentrification is most often approached from sociological perspectives as a process of upward class replacement within urban neighborhoods. From a materialist political-economic perspective, however, it is more fundamentally a problem of land rent formation and distribution. Rent gap theory has been central to this view, conceptualizing gentrification as a process of dispossession in which real estate capital captures differential or monopoly rents by closing the gap between actual and potential ground rents.

Since the early 2000s, debates on green or environmental gentrification have shown how access to ecological improvements can induce displacement and exclusion, foregrounding distributive environmental justice. Yet this literature remains strongly



urban-centered and often weakly connected to land rent theory. This limitation becomes increasingly problematic under conditions of planetary urbanization and climate change, where rent-driven displacement linked to ecological value unfolds far beyond cities, across regional and rural landscapes.

This paper introduces the concept of “green rent gap” to capture this broader dynamic. In regional or rural contexts, ecosystem services science provides a powerful analytical entry point for examining how ecological value is translated into land rents. Its systematic and exhaustive classification enables identification of which ecosystem services are readily appropriable and capitalized into potential rents, which are ignored or suppressed by markets, and which may even operate as counter-gentrifying services by sustaining local livelihoods and ecological reproduction. Drawing on illustrative examples from southern Chile, the paper reconnects classical rent theory—from the Physiocrats to Marx, Ricardo, and George—with the science of ecosystem services. In doing so, it reframes green gentrification as a distributive problem rooted in land rent formation, advancing a more precise understanding of environmental justice under contemporary urbanization.

Keywords: Green gentrification, green rent gap, ecosystem services valuation, land rent, environmental justice

2. A mixed-method approach to Assessing Environmental Gentrification in New York City

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While scholarship on green gentrification is not a new phenomenon, methodologies for measuring it are still emerging. Rare among these are mixed method approaches that combine empirical data with nuanced ethnographic understandings. This paper discusses a recent attempt to combine quantitative and qualitative research approaches and bring them to bear on environmental gentrification in New York City.

Several years ago, I partnered with a geo-spatial analyst and a data visualization expert to create and map a small-scale index of green gentrification across New York City. We wanted to create a base map that could be overlaid with additional map layers portraying various types of environmental gentrification, including “green,” “brown,” and industrial improvements. In this paper, I describe our process, which first required developing a gentrification index that accurately portrayed the dynamics of gentrification across the city. After mapping the index, we combined it with the locations of major park renovations and developments. We then mapped the location of brownfield sites – or formerly contaminated sites that were remediated and repurposed. Along the way, we used qualitative data to develop the index and map layers, as well as to overcome several pitfalls and missteps.

Turning to the larger stakes of our findings, I will next describe how we identified specific inequities in contemporary ecosystem planning which have significant implications for health disparities. I will also discuss how our findings point to the role of green gentrification in exacerbating the affordability crisis in New York City. Here, I illustrate my arguments with examples from my ethnographic research with environmental justice activists in gentrifying neighborhoods. I conclude with some examples of community resistance to green gentrification, where local activists partnered with NGOs and public agencies to ensure that low-income neighborhood residents would benefit from ecosystem services for decades to come.

Keywords: gentrification, environmental justice, equity, spatial analysis, mixed-methods

3. Between neglect and value: perceptions of formal and informal urban greenery


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Urban greenery provides multiple benefits to residents, but it is not equally distributed across a city. Moreover, formal urban greenery (e.g. parks, street trees) is associated with higher property prices and therefore not equally accessible to all socio-economic groups. Informal urban greenery (e.g. brownfields, vacant lots), on the other hand, is often located in disadvantaged neighbourhoods. Informal urban greenery is rarely documented in cities’ maps, and thus, its potential importance goes unnoticed. This study investigates perceptions of various urban socio-economic population groups towards formal and informal greenery and examines how these perceptions relate to people’s relationship with nature. Empirical data are collected via a quantitative online questionnaire survey conducted in urban areas of the Czech Republic. The analysis compares perceptions of diverse urban residents towards formal and informal greenery in terms of provision of ecosystem services and disservices, use, accessibility and attractiveness, personal values to nature and perceptions of



biodiversity. The findings of this study contribute to a more nuanced understanding of justice dimensions in urban ecosystem service science and highlight the importance of recognising informal urban greenery as a meaningful component of socio-ecological urban systems.

Keywords: Informal urban greenery; urban green spaces; Values; Ecosystem services and disservices

4. Justice, hot and cold spots of ecosystem services in functional urban areas

First author: Peter Olsson

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Ecosystem services are often available beyond the production site. The extent of their availability, however, varies between services in both physical spatial patterns and in affected populations. Carbon sequestration, for example, is available on a global scale, while cooling usually is only available on a short distance from the service production sites. Thus, there are production areas and service sheds that can have different reaches on different scales and in some cases also are directional (e.g. run-off reduction of storm water). From a justice perspective, it is possible that even if the production sites are not equally distributed, the service sheds may be. In urban areas, green infrastructure (GI) naturally provides such services, and ecological principles are often used to infer that the connectedness of GI will help to improve biodiversity and ecosystem services delivery. In this study we identify and map hot and cold spots of GI which provide biodiversity, climate, and community well-being ecosystem services across 12 functional urban areas (FUA) in Europe and the Americas. Based on hot and cold spots, we assess characteristics of people having access to services.

Keywords: Nature-based solutions, connectivity, multifunctionality, biodiversity

5. When "nature-positive" becomes exclusionary: Evaluating green gentrification through the Potential Risk of Gentrification Index (PRG)

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Urban greening has become a flagship component of sustainability transitions worldwide, promoted through nature-based solutions, climate adaptation programmes and ecosystem service enhancement. Yet the distributive effects of these interventions remain uneven, often producing socio-ecological exclusions commonly described as green gentrification. This paper contributes to emerging debates on ecosystem services justice by applying the Potential Risk of Gentrification Index (PRG) as a multidimensional framework to critically evaluate how "nature-positive" interventions may reinforce rather than reduce urban inequalities.

The PRG integrates economic, symbolic, social and ecological dimensions to assess transformation pressures in neighbourhoods undergoing revalorisation. Focusing specifically on variables related to ecological improvement, green amenities and environmental branding, the paper examines three contrasting global cities—Paris, Mexico City and Johannesburg—where green corridors, park renewals, riverfront regeneration and climate-oriented urban programmes have been implemented over the last decade.

Drawing on qualitative scoring of PRG variables, policy documents, planning narratives and secondary literature, the analysis reveals a recurrent pattern: environmental improvements enhance ecosystem services but simultaneously raise land values, attract external investment and reshape commercial and residential landscapes in ways that disproportionately benefit higher-income groups. These dynamics are intensified in contexts marked by informality and structural inequality, where green interventions interact with long-standing socio-spatial vulnerabilities.

The paper argues that evaluating sustainability initiatives primarily through ecosystem service gains risks obscuring their exclusionary outcomes. By foregrounding socio-ecological justice, the PRG framework offers a critical tool to anticipate displacement pressures, identify inequitable benefit distribution and support more inclusive, justice-oriented pathways for green urban transitions across diverse contexts of the Global North and Global South.

Keywords: green gentrification, ecosystem services justice, urban sustainability, PRG Index, socio-ecological inequality

6. Green gentrification drives socio-cultural shifts from provisioning to cultural valuation of ecosystem services

First author: Juan Pablo Pacheco

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Gentrification influences the social distribution of Ecosystem Services (ES), which can affect their use, perception and valuation, and lead to socio-ecological conflicts. This is particularly evident in coastal urban areas, where local underprivileged communities depending on ES for their livelihoods are often displaced due to real estate and tourism activities. Here, we analyse the use, perception and valuation of ES regarding the socio-economic status in a gentrified coastal area in Uruguay with an on-going plan of urban transformation. We combined semi-structured interviews, participatory observation and mapping, for the identification, valuation, frequency of use, main pressures and trade-offs of ES. We evidenced a contrasting use and valuation of ES between neighbourhoods of different socio-economic status. Affluent neighbourhoods mainly recognized cultural-recreational ES, with sporadic use during summertime. Contrarily, residents of underprivileged areas identified a wider range of ES, used all year long, and had a higher valuation of provisioning ES due to their high dependence for basic needs. Accelerated gentrification, driven by the local urban management plan might exacerbate ES distributive inequities, and raise environmental justice concerns due to the restricted access to ES by the highly reliant underprivileged residents. This might induce a homogenisation in the use and valuation of ES towards cultural-recreational ones, more used and valued by affluent users. We emphasise the need for inclusive urban planning that acknowledges and integrates the diverse values and dependencies on ES across different socio-economic groups, to ensure sustainable and equitable development, preserve local livelihoods, and maintain ecological integrity.

Keywords: Socio-ecological conflicts; Coastal gentrification; Segregation; Coastal grabbing; Latin America; Global South; Green gentrification

7. Using rental data to inform policy makers about green gentrification

First author: Tarin Karzai

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In the face of climate change, cities are increasingly promoting green infrastructure, which contributes to the adaptive capacities of cities and has further benefits for the environment and urban population. However, a substantial proportion of these benefits only arise at a local level. Consequently, access and proximity to green infrastructure can affect the housing market and rental prices. This effect can lead to green gentrification and exacerbate the existing unequal distribution of urban ecosystem services.

In the interdisciplinary project Value of Green Urban Spaces III (Stadtgrün wertschätzen III) we investigate the effects of green infrastructures in German cities. In this context, a representative survey was conducted, with a focus on identifying usage patterns and access to green infrastructure, as well as willingness to pay for the creation of such infrastructure. Furthermore, information regarding the participants' residences and rental costs was collected and linked with the documented location of the participants. This allows for the application of a spatially explicit hedonic pricing analysis used to determine the extent to which green infrastructure influences rental costs in German cities.

The survey results will be incorporated into an integrated online assessment tool that will provide spatially explicit information on the effects of additional green infrastructures in a 500 x 500-metre grid for 193 German cities. The tool's primary purpose is the quantification and valuation of regulating as well as cultural ecosystem services provided through the creation of green infrastructures. In addition, the results from the hedonic pricing analysis can be integrated into the tool to inform about the potential effect of green infrastructures on rental prices. This comprehensive overview of the impacts of green infrastructures will support policy makers and urban planners to promote the creation of green infrastructures while preventing green gentrification and enhancing environmental justice.

Keywords: green infrastructure, hedonic pricing analysis, rental costs, green gentrification, online tool for decision making