



TIMON McPHEARSON

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Education:

PhD, Ecology, Evolution, and Natural Resources, Rutgers University, 2004

B.S., Environmental Biology, Taylor University, 1997

Professional Positions:

Faculty Affiliate, *Beijer Institute of Ecological Economics, Royal Swedish Academy of Sciences*, 2021-present

Senior Research Fellow, *Cary Institute of Ecosystem Studies*, 2017-present

Associate Research Fellow, *Stockholm Resilience Center, Stockholm University*, 2017-present

Visiting Research Fellow, *Humboldt University*, Berlin, Germany, 2017

Professor of Urban Ecology (w/tenure), *Environmental Studies, The New School*, 2016-present

Founder and Director, *Urban Systems Lab*, The New School, 2015-present

Chair, *Environmental Studies Program, The New School*, 2015-2017

Research Faculty, *Tishman Environment and Design Center, The New School*, 2008-present

Assistant Professor of Urban Ecology, *Environmental Studies, The New School*, 2008-2016

Visiting Assistant Professor of Ecology, *Earth Institute, Columbia University*,
2008-2009

Columbia Science Fellow (Post-doctoral), Ecology, Evolution, and Environmental Biology (E3B), *Earth Institute, Columbia University*, 2005-2008

Selected Professional Honors:

2024 *Geo for Good Impact Award, ClimateIQ, Google*

2023 *Sustainability Science Award, The Ecological Society of America (ESA)*

2022 *Gulbenkian Prize for Humanity*. Sixth Assessment Report (AR6), “Climate Change 2022: Impacts, Adaptation and Vulnerability”

2021 *BiodivERsA Prize*, “Enabling Green and Blue Infrastructure Potential in Complex Social-Ecological Regions” (ENABLE Project)

2020 *NYC Climate Heroes Award*, NYC Department of Transportation and Human Impacts Institute

2019-2021 *University Fellowship*, The New School

2019 *Sustainability Science Award*, Ecological Society of America

2019 *Innovation in Sustainability Science Award*, Ecological Society of America

2018 *BiodivERsA Prize*, “Urban Biodiversity and Ecosystem Services” (URBES Project)

2017 *Distinguished University Teaching Award*, The New School, New York

2017 *Civic Liberal Arts Sustaining Partnerships Residency*, Eugene Lang College, The New School

2014 *Visiting Research Fellow, Stockholm Resilience Center*, Stockholm University, Sweden

2005-07 *Columbia Science Fellowship*, The Importance of Cooperation in Ecological Communities, Columbia University

2006 *Young Scientist Award*, World Knowledge Dialogues, Crans-Montana, Switzerland

2006 Official Selection, SCINEMA Festival of Science Film, *Lemurs of Madagascar: Surviving on an Island of Change*, American Museum of Natural History

Research Interests and Activities:

My interdisciplinary scholarship, teaching, and community engagement addresses the interacting social-ecological-technological processes that drive urban system dynamics and impact human wellbeing in order to plan and design more equitable, resilient, and sustainable cities. My research utilizes both empirical (e.g. data science, AI, modeling, experiments) and theoretical approaches (complex systems and resilience theory) to advance research to support development of an urban systems science for improved urban planning, policy, design, and management at local, regional and global scales. See UrbanSystemsLab.com for more information.

My research focuses on advancing knowledge and impact in five overlapping areas:

1. Social vulnerability, equity and urban climate risk
2. Social-ecological-technological systems and urban resilience
3. Nature-based solutions for climate change adaptation
4. Data visualization and science communication
5. Modeling, data science, and spatial analytics

Selected Publications:

Braneon, C., Ortiz, L., Bader, D., Devineni, N., Orton, P., Rosenzweig, B., **McPhearson, T.**, Smalls-Mantey, L., Gornitz, V., Mayo, T., Kadam, S., Sheerazi, H., Glenn, E., Yoon, L., Derras-Chouk, A., Towers, J., Leichenko, R., Balk, D., Marcotullio, P.,

& Horton, R. (2024). NPCC4: New York City climate risk information 2022—observations and projections. Annals of the New York Academy of Sciences. <https://doi.org/10.1111/nyas.15116>

Balk, D., **McPhearson, T.**, Cook, E. M., Knowlton, K., Maher, N., Marcotullio, P., Matte, T., Moss, R., Ortiz, L., Towers, J., Ventrella, J., & Wagner, G. (n.d.). NPCC4: Concepts and tools for envisioning New York City's futures. Annals of the New York Academy of Sciences, n/a(n/a). <https://doi.org/10.1111/nyas.15121>

Creutzig, F., Becker, S., Berrill, P., Bongs, C., Bussler, A., Cave, B., M. Constantino, S., Grant, M., Heeren, N., Heinen, E., Hintz, M. J., Ingen-Housz, T., Johnson, E., Kolleck, N., Liotta, C., Lorek, S., Mattioli, G., Niamir, L., **McPhearson, T.**, ... Zekar, A. (2024). Towards a public policy of cities and human settlements in the 21st century. *Npj Urban Sustainability*, 4(1), 1–14. <https://doi.org/10.1038/s42949-024-00168-7>

Sauer, J., Grimm, N. B., Barbosa, O., Cook, E. M., Mustafa, A., Kunkel, K., **McPhearson, T.**, & Ballinger, A. (2024). Estimating Combined Effects of Climate Change and Land Cover Change on Water Regulation Services of Urban Wetlands in Valdivia, Chile. *Earth's Future*, 12(5), e2023EF003801. <https://doi.org/10.1029/2023EF003801>

Grilo, F., **McPhearson, T.**, Nunes, A., Aleixo, C., Santos-Reis, M., & Branquinho, C. (2024). Where the not-so-wild things are in cities? The influence of social-ecological factors in urban trees at multiple scales. *Science of The Total Environment*, 172552. <https://doi.org/10.1016/j.scitotenv.2024.172552>

Pickett, S. T. A., Frantzeskaki, N., Andersson, E., Barau, A. S., Childers, D. L., Hoover, F.-A., Lugo, A. E., **McPhearson, T.**, Nagendra, H., Schepers, S., & Sharifi, A. (2024). Shifting forward: Urban ecology in perspective. *Ambio*. <https://doi.org/10.1007/s13280-024-02007-6>

Andersson, E., **McPhearson, T.**, & Pickett, S. T. A. (2024). From urban ecology to urban enquiry: How to build cumulative and context-sensitive understandings. *Ambio*. <https://doi.org/10.1007/s13280-023-01959-5>

Pickett, S. T. A., Simone, A. T., Anderson, P., Sharifi, A., Barau, A., Hoover, F.-A., Childers, D. L., **McPhearson, T.**, Muñoz-Erickson, T. A., Pacteau, C., Grove, M., Frantzeskaki, N., Nagendra, H., & Ginsberg, J. (2024). The relational shift in urban ecology: From place and structures to multiple modes of coproduction for positive urban futures. *Ambio*. <https://doi.org/10.1007/s13280-024-02001-y>

Frantzeskaki, N., Childers, D. L., Pickett, S., Hoover, F.-A., Anderson, P., Barau, A., Ginsberg, J., Grove, M., Lodder, M., Lugo, A. E., **McPhearson, T.**, Muñoz-Erickson, T. A., Quartier, M., Schepers, S., Sharifi, A., & van de Sijpe, K. (2024). A transformative shift in urban ecology toward a more active and relevant future for the field and for cities. *Ambio*. <https://doi.org/10.1007/s13280-024-01992-y>

McPhearson, T. (2024). Greener cities: A necessity or a luxury? *Nature*, 626(8000), 713–715. <https://doi.org/10.1038/d41586-024-00477-y>

Mustafa, A., Kennedy, C., Lopez, B., & **McPhearson, T.** (2023). Perceived and geographic access to urban green spaces in New York City during COVID-19. *Cities*, 143, 104572. <https://doi.org/10.1016/j.cities.2023.104572>

Chester, M. V., Miller, T. R., Muñoz-Erickson, T. A., Helmrich, A. M., Iwaniec, D. M., **McPhearson, T.**, Cook, E. M., Grimm, N. B., & Markolf, S. A. (2023). Sensemaking for entangled urban social, ecological, and technological systems in the Anthropocene. *Npj Urban Sustainability*, 3(1), Article 1. <https://doi.org/10.1038/s42949-023-00120-1>

Hirye, M. C. M., Alves, D. S., Filardo Jr., A. S., **McPhearson, T.**, & Wagner, F. (2023). Assessing Landslide Drivers in Social–Ecological–Technological Systems: The Case of Metropolitan Region of São Paulo, Brazil. *Remote Sensing*, 15(12), Article 12. <https://doi.org/10.3390/rs15123048>

Hoover, F.-A., Meerow, S., Coleman, E., Grabowski, Z., & **McPhearson, T.** (2023). Why go green? Comparing rationales and planning criteria for green infrastructure in U.S. city plans. *Landscape and Urban Planning*, 237, 104781. <https://doi.org/10.1016/j.landurbplan.2023.104781>

Wang, J., **McPhearson, T.**, Zhou, W., Cook, E. M., Herreros-Cantis, P., & Liu, J. (2023). Comparing relationships between urban heat exposure, ecological structure, and socio-economic patterns in Beijing and New York City. *Landscape and Urban Planning*, 235, 104750. <https://doi.org/10.1016/j.landurbplan.2023.104750>

McPhearson, T., Kabisch, N., & Frantzeskaki, N. (2023). Towards mainstreaming nature-based solutions for achieving biodiverse, resilient, and inclusive cities. In *Nature-Based Solutions for Cities* (pp. 363–375). Edward Elgar Publishing. <https://www.elgaronline.com/edcollchap-oa/book/9781800376762/book-part-9781800376762-28.xml>

McPhearson, T., Kabisch, N., & Frantzeskaki, N. (2023). Nature-based solutions for sustainable, resilient, and equitable cities. In *Nature-Based Solutions for Cities* (pp. xviii–11). Edward Elgar Publishing. <https://www.elgaronline.com/edcollchap-oa/book/9781800376762/book-part-9781800376762-8.xml>

McPhearson, T., Andersson, E., Grilo, F., Lopez, B., & Zein, N. (2023). Urban ecological resilience: Ensuring urban ecosystems can provide nature-based solutions. In *Nature-Based Solutions for Cities* (pp. 49–81). Edward Elgar Publishing. <https://www.elgaronline.com/edcollchap-oa/book/9781800376762/book-part-9781800376762-13.xml>