Accepted Manuscript

Title: Can patterns of urban biodiversity be predicted using simple measures of green infrastructure?

Authors: Ane Kirstine Brunbjerg, James D. Hale, Adam J. Bates, Robert E. Fowler, Emma J. Rosenfeld, Jonathan P. Sadler

PII: DOI: Reference: S1618-8667(17)30160-7 https://doi.org/10.1016/j.ufug.2018.03.015 UFUG 26105

To appear in:

 Received date:
 24-3-2017

 Revised date:
 8-3-2018

 Accepted date:
 23-3-2018

Please cite this article as: Brunbjerg, Ane Kirstine, Hale, James D., Bates, Adam J., Fowler, Robert E., Rosenfeld, Emma J., Sadler, Jonathan P., Can patterns of urban biodiversity be predicted using simple measures of green infrastructure?.Urban Forestry and Urban Greening https://doi.org/10.1016/j.ufug.2018.03.015

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



ACCEPTED MANUSCRIPT

Can patterns of urban biodiversity be predicted using simple measures of green infrastructure?

Ane Kirstine Brunbjerg,^a James D. Hale,^{ab} Adam J. Bates,^c Robert E. Fowler,^d Emma J. Rosenfeld,^e Jonathan P. Sadler^{a,*}

^a School of Geography, Earth and Environmental Sciences, University of Birmingham, Birmingham, UK

^b Division of Conservation Biology, Institute of Ecology and Evolution, University of Bern, Bern, Switzerland

^c Biosciences, School of Science & Technology, Nottingham Trent University, Nottingham, UK

^d School of Life Sciences, University of Sussex, Brighton, UK

^e Environment and Sustainability Institute, University of Exeter, Cornwall, UK

* Corresponding author: Tel.: +44 (0)121 41 45776; fax: +44 (0)121 41 45528; e-mail:

E-mail addresses: <u>akb@bios.au.dk</u> (A.K. Brunbjerg), <u>adam.bates@ntu.ac.uk</u> (A.J. Bates), <u>r.e.fowler@sussex.ac.uk</u> (R.E. Fowler), <u>j.hale@bham.ac.uk</u> (J. D. Hale), <u>e.rosenfeld@exeter.ac.uk</u> (E.J. Rosenfeld), <u>j.p.sadler@bham.ac.uk</u> (J.P. Sadler)

Highlights:

- Simple measures of vegetation cover can explain urban biodiversity variation
- Higher urban vegetation cover is associated with higher species richness for multiple taxa
- Bee and hoverfly richness and bat activity were negatively correlated with tree cover
- Bird richness and bat activity were positively correlated with diversity in tree canopy height
- Built surface cover is a poor correlate of tree canopy cover and height variability

Download English Version:

https://daneshyari.com/en/article/6549226

Download Persian Version:

https://daneshyari.com/article/6549226

Daneshyari.com