

CAN AN URBAN WORLD EXIST IN NATURE?

AUGUST
13TH
2015
?

Presentation

1. People
2. Place
3. Nature

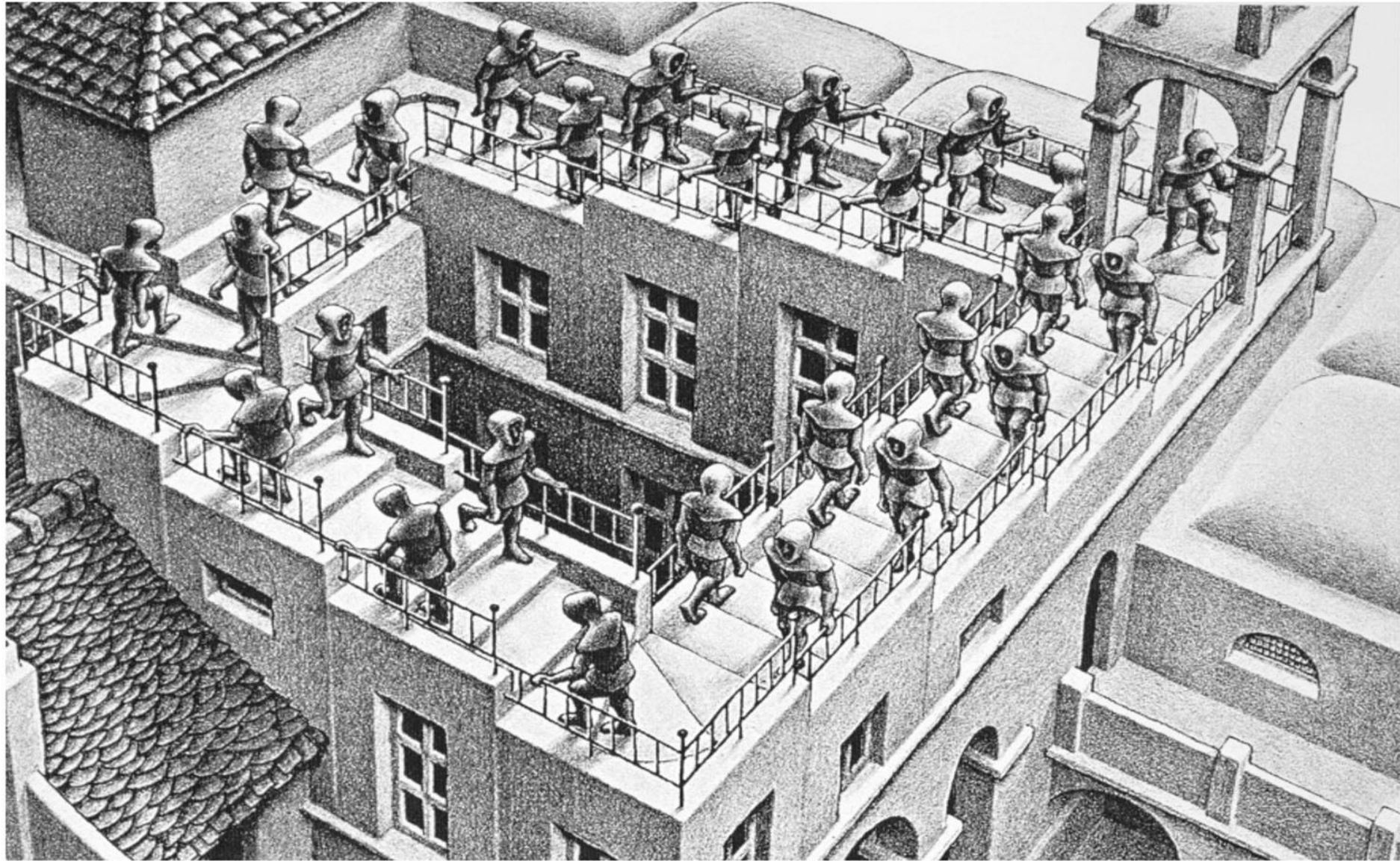


Nick Grayson

Climate Change & Sustainability Manager

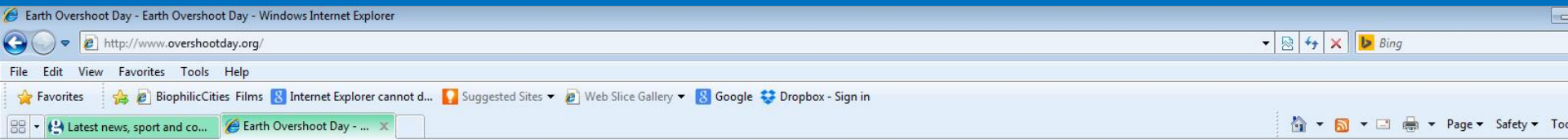


CAN AN URBAN WORLD EXIST IN NATURE?



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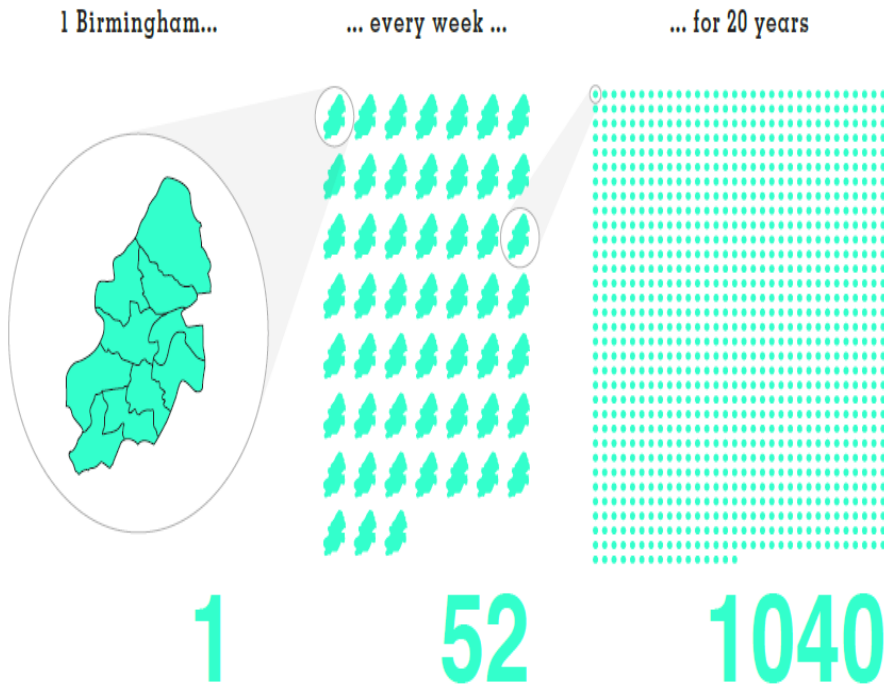
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In 2015, Earth Overshoot Day
lands on August 13.

It takes 1.6 Earths to support humanity's demand on nature.
But we have only one

1.6

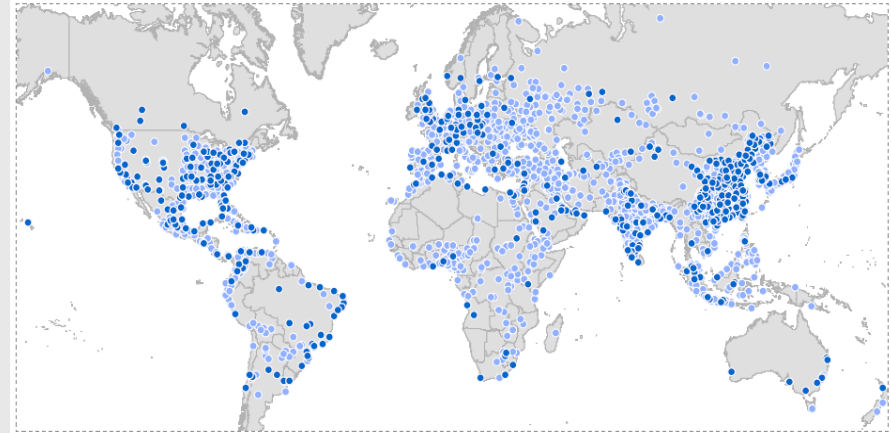
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We need to build the equivalent of one Birmingham a week around the globe for the next 20 years if we are to house the growing urban populations.

The City 600: MGI's Cityscope identifies the world's fastest-growing megacities and middleweights

- The City 600 (600)
- Additional cities in MGI Cityscope (~1,400)



SOURCE: McKinsey Global Institute Cityscope 1.0

20 YEAR PATTERN OF GLOBAL GROWTH

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60,000

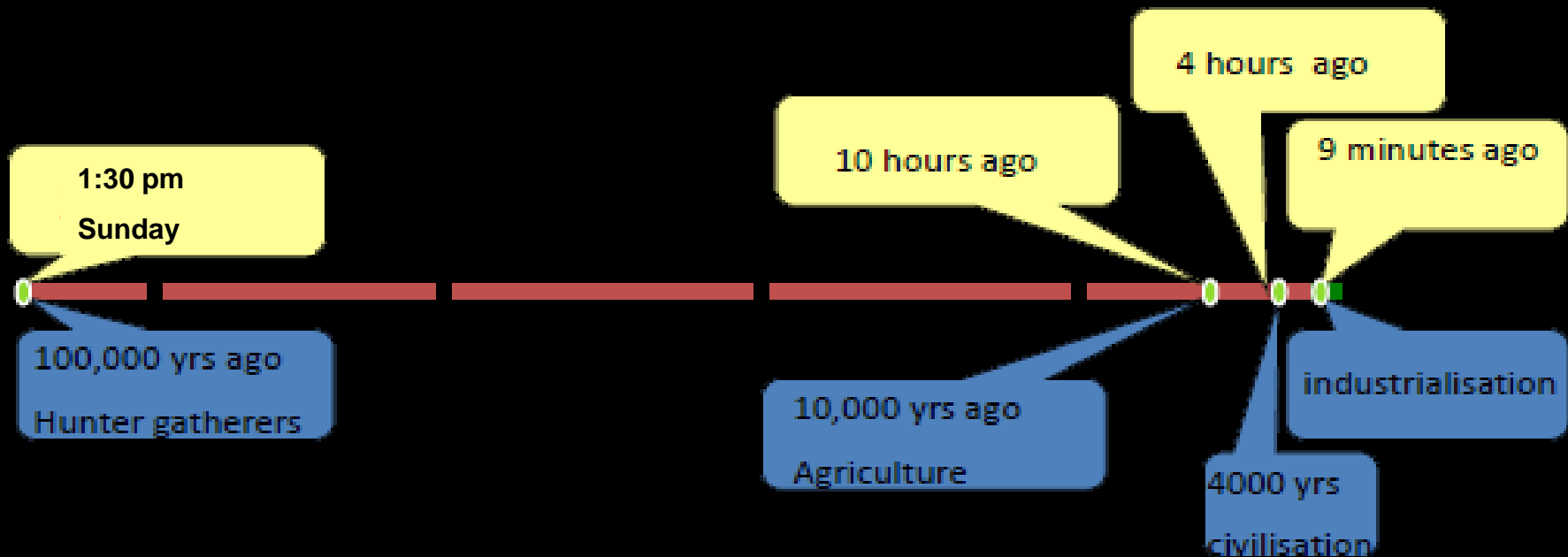
50/60%

20/50%

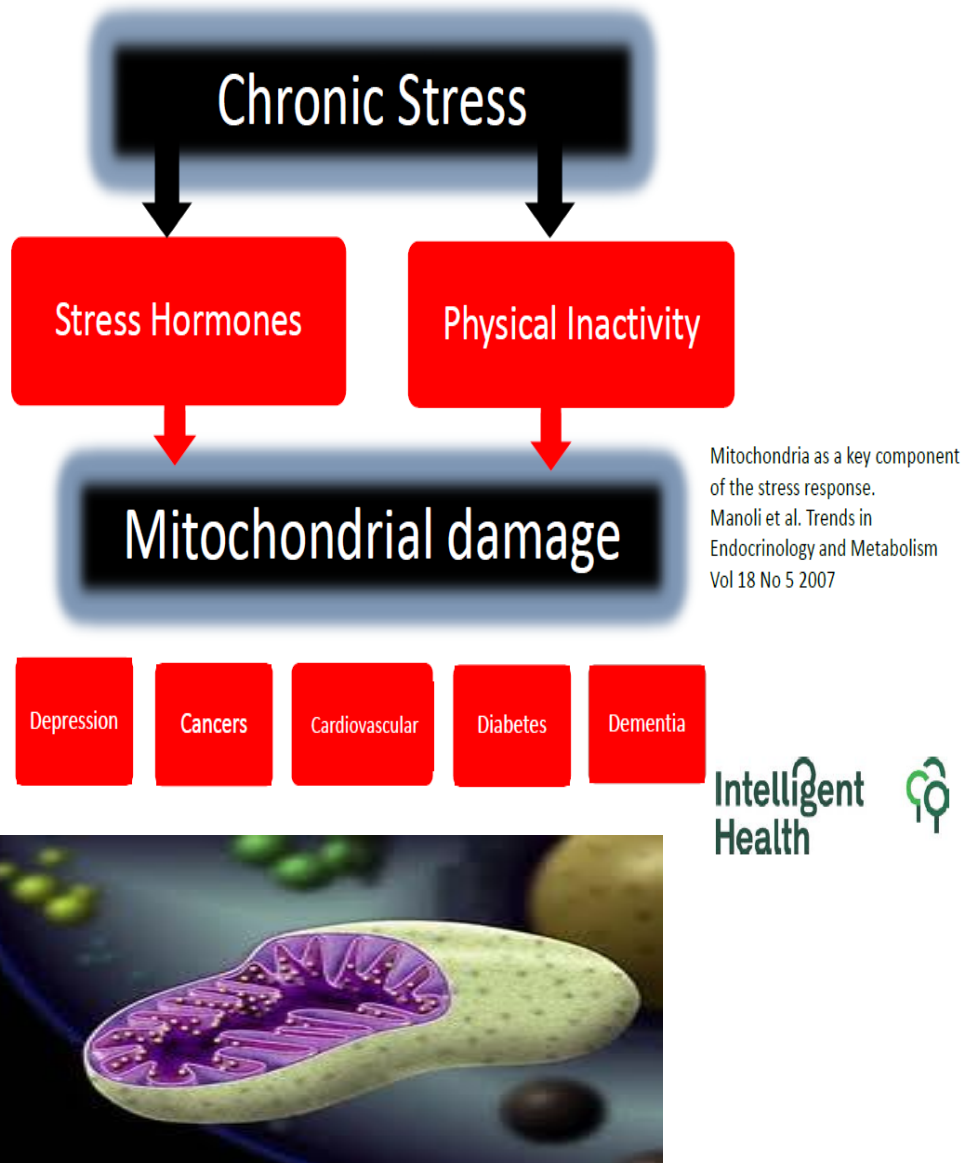
10/90%

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If we take an hour to equal 1000 years then from Sunday to now is 100,000 years; the time from the origin of mankind to today.



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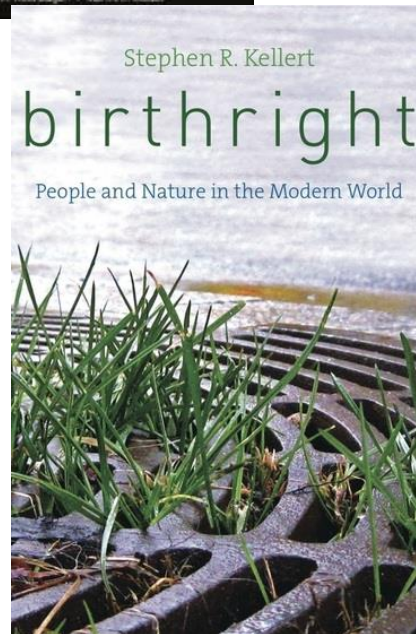
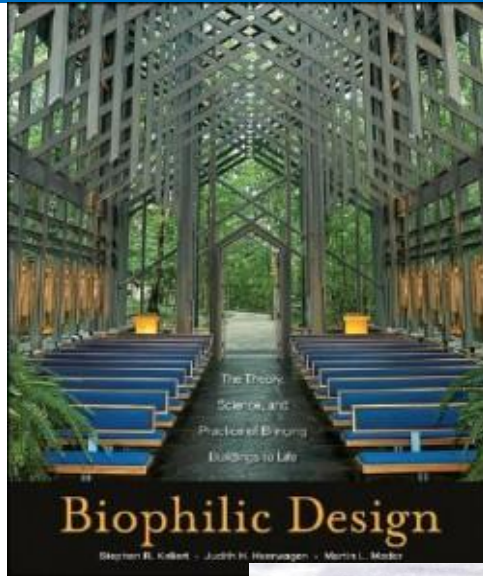
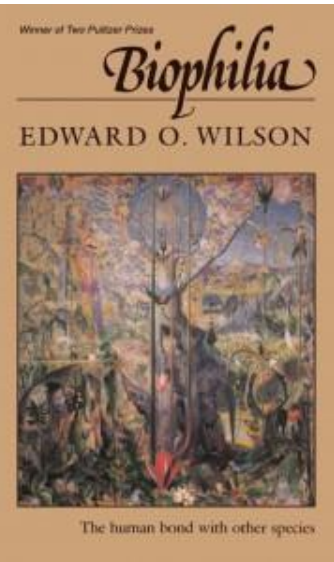


Non-communicable diseases represent a new frontier in the fight to improve global health. Worldwide, the increase in such diseases means that they are now responsible for more deaths than all other causes combined.

Secretary General United Nations 2011

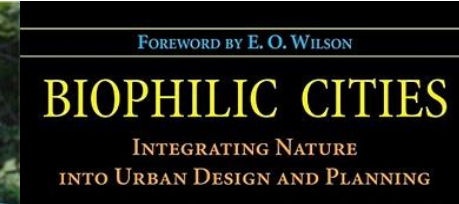
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Biophilia - E.O. Wilson



Tim Beatley, PhD.

Teresa Heinz Professor of Sustainable Communities,
University of Virginia;



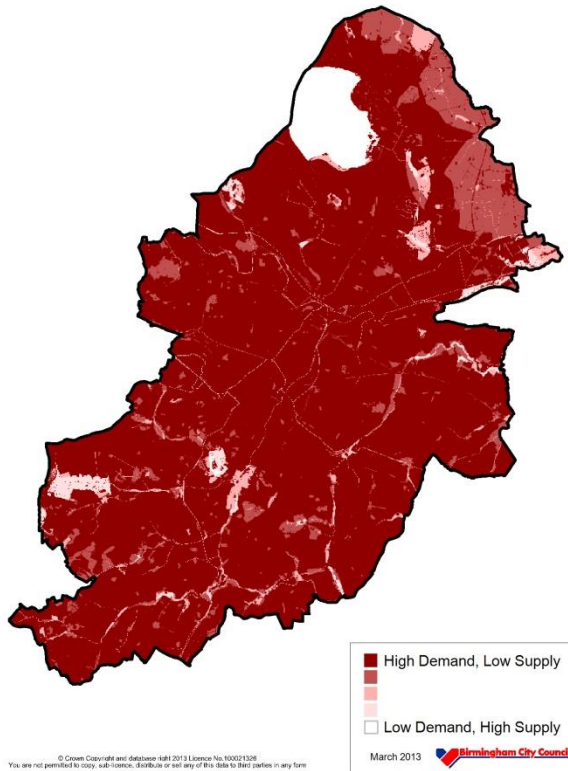
Stephen R. Kellert

Tweedy Ordway
Professor of Social
Ecology at the
Yale University
School of Forestry
and Environmental
Studies

: **biophilia hypothesis**,
idea that humans possess an innate
tendency to seek connections with
[nature](#) and other forms of [life](#). biophilia
is “the passionate love of [life](#) and of all
that is alive.” The term was later used by
American biologist [Edward O. Wilson](#) in
his work *Biophilia*, which proposed that
the tendency of humans to focus on and
to affiliate with nature and other life-
forms has, in part, a genetic
basis. (Harvard University Press, 1984)

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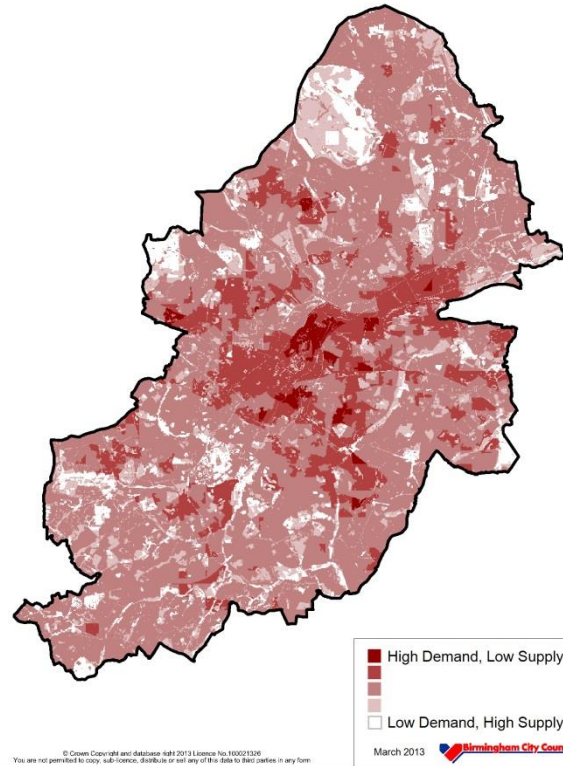
Biodiversity Services Supply and Demand map



• Biodiversity

• Education

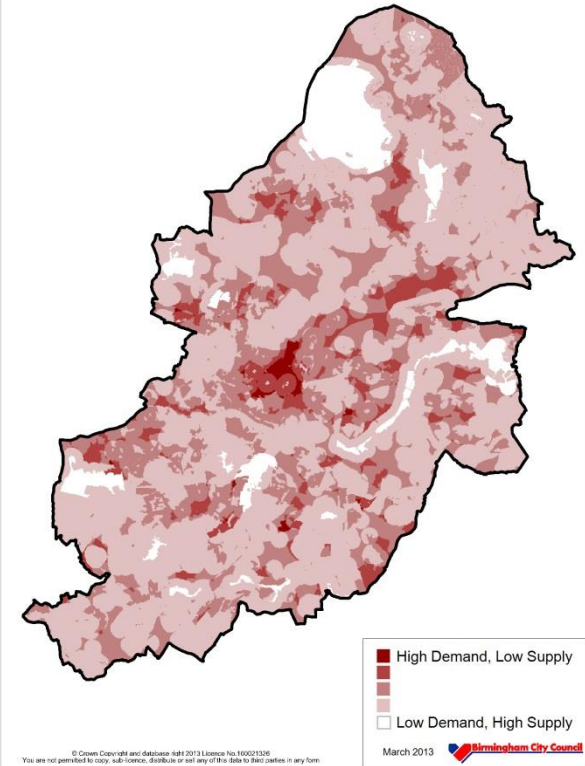
Local Climate Services Supply and Demand map



* Local Climate

* Aesthetics & mobility

Recreation Services Supply and Demand map

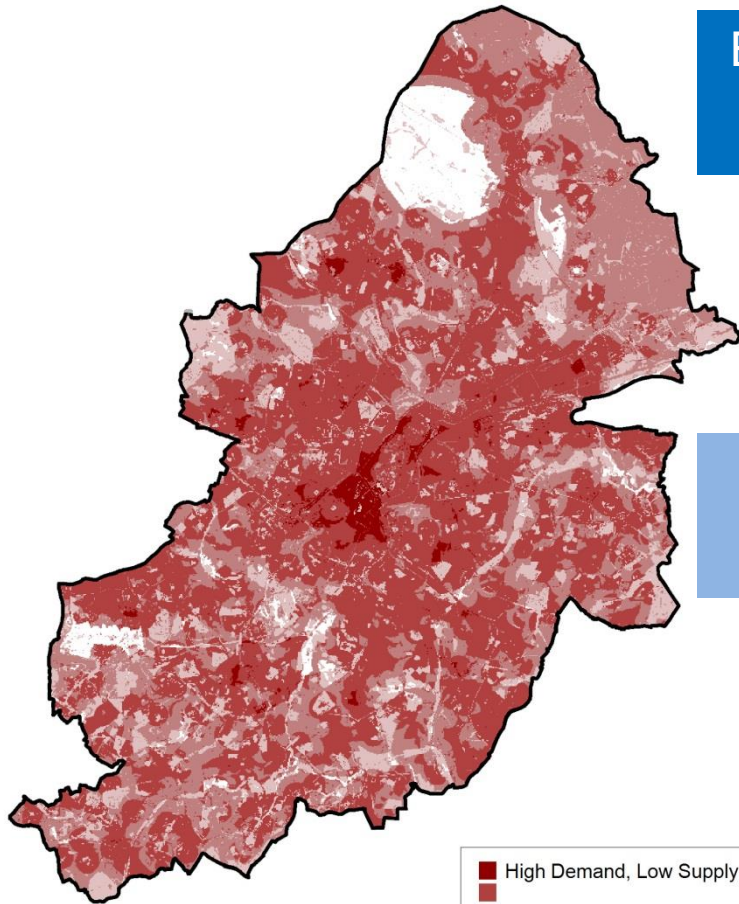


* Recreation

* Flood risk

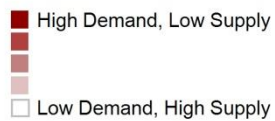
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The Multi-layered Challenge map for Birmingham



Birmingham –
a global first

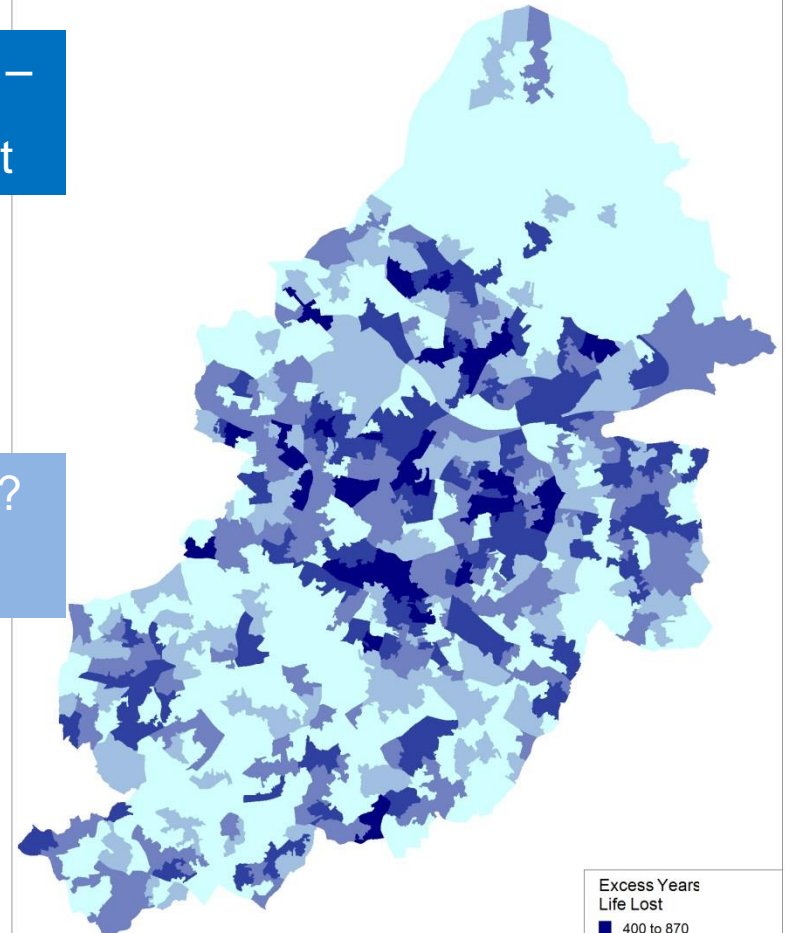
Manchester?
New York?



March 2013 Birmingham City Council

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Excess Years Life Lost at LSOA



Excess Years Life Lost



An Adapted City

The City's Blue Network

A Healthy City

The City's Productive Landscapes

The City's Greenways

The City's Ecosystem

The City's Green Living Spaces



Green Living Spaces Plan

September 2013

“A healthy natural environment is not a luxury - something that we think about after we have fixed the economy, or problems with physical and mental health and education. The natural environment provides the fundamental underpinnings for a healthy, successful society...

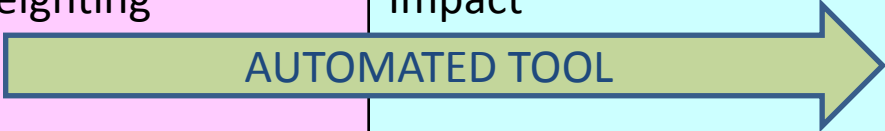
....Birmingham's Green Living Spaces Plan is visionary in recognising the fundamental value of the City's natural capital, and how the services this capital provides underpin economic opportunities.

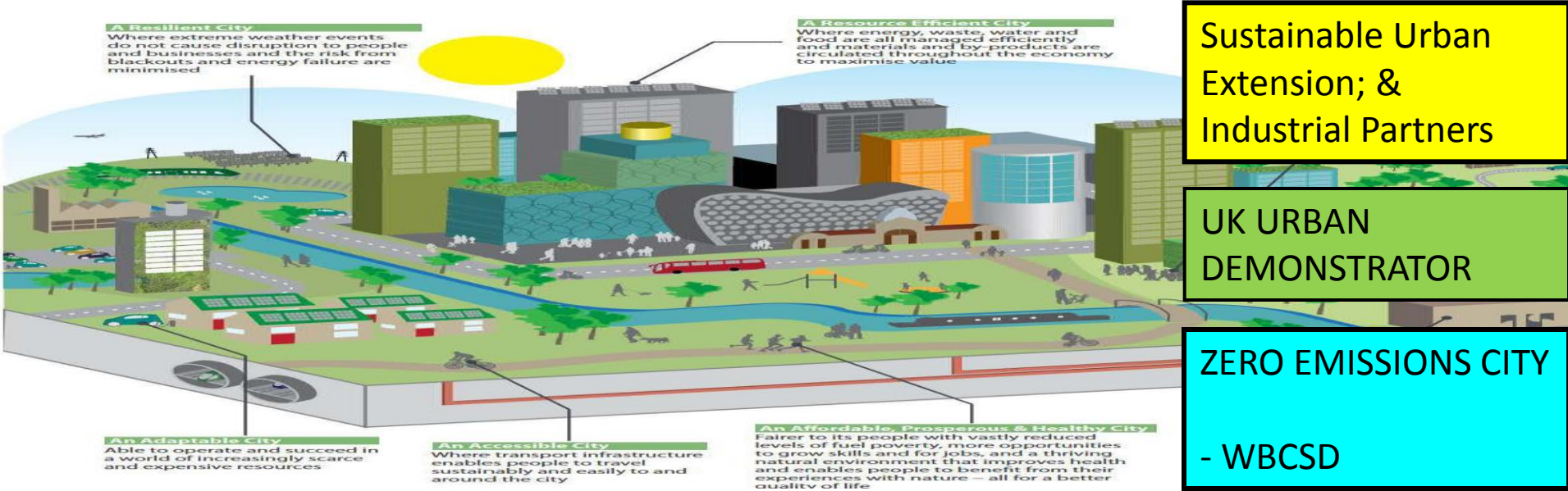
‘Pioneering’ and ‘best practice’ can be over-used terms. But not here.”

Professor Sir John Lawton CBE, FRS

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Natural Capital Planning Tool - NCPT			(R.I.C.S.)
10 Ecosystem Services	Multiple Benefits	Stakeholders & Co-investors	Returns on Investment
25 indicators Ecosystems Impact Score	Ecosystem Service Weighting	Ecosystem Service Impact	Development impact score & options +VE





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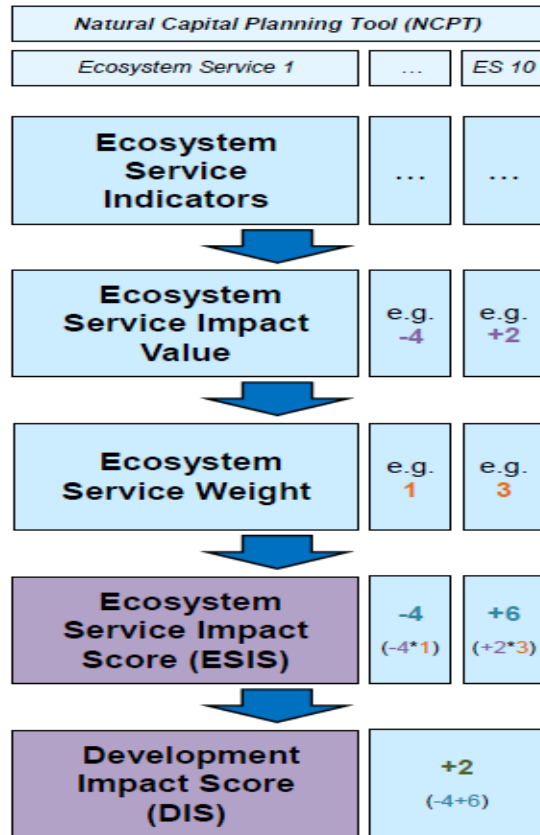



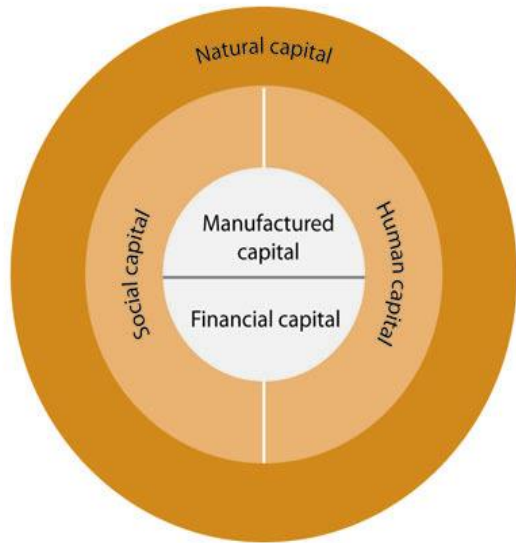
Figure A: NCPT Framework and Functionality

Langley SUE initial master plan concept capacity test



1. Housing quality and design
2. Access to healthcare services and other social infrastructure
- 3. Access to open space and nature**
4. Air quality, noise and neighbourhood amenity
5. Accessibility and active travel
6. Crime reduction and community safety
7. Access to healthy food
8. Access to work and training
9. Social cohesion and lifetime neighbourhoods
10. Minimising the use of resources
11. Climate change

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Source: Forum for the Future (2013)
Five essential capitals for human wellbeing

“Gain Sharing” Devo principle

CORPORATE NATURAL
CAPITAL ACCOUNTS

25 YEAR NATURAL CAPITAL PLAN

U
R
G
E
N
C
Y

Natural Capital balance sheet- example

Assets		Year 2013		
		Renewables		Total
		Private	External	Value
		£'m	£'m	£'m
1	Baseline value (2010)	10.1	10.4	20.5
2	Gains/(losses)	1.5	2.5	4.0
3	Additions/(disposals or consumptions)	1.0	1.0	2.0
4	Revaluations and adjustments			
Gross Asset Value		12.6	13.9	26.5
Liabilities		Private	External	
5	Legal provisions			
6	Other maintenance provisions	(1.0)	(1.5)	(2.5)
Total maintenance provisions				(2.5)
Total Net Natural Capital				24.0

Natural Capital Committee SONC 3 (27/01/2015)

(Case Study Birmingham- first World City)

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PIONEERED BY THE ROCKEFELLER FOUNDATION

100 RESILIENT CITIES



net zero



Zero Emissions Cities

The Future Council

Making a positive difference every day to people's lives



WEST MIDLANDS COMBINED AUTHORITY

GROWING THE UK ECONOMY THROUGH A MIDLANDS ENGINE

BIRMINGHAM • COVENTRY • DUDLEY • SANDWELL • SOLIHULL • WALSALL • WOLVERHAMPTON

GOVERNANCE

MOBILITY & COMMUNICATIONS/
DIGITAL

INTEGRATED DEVELOPMENT

INEQUALITY

UNEMPLOYMENT-
YOUTH
EMPLOYMENT &
SKILLS

MACRO-
ECONOMICS

NATURAL
RESOURCES

Landscape
Scale

3
PRIORITIES

“A MIDLANDS
ENGINE”

4 PILLARS
& STRESSES

A NATURAL
RESOURCES
UNIT

Birmingham: The UK's First Biophilic City

Biophilic Cities - Cities that achieve a deep affinity with nature



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Questions & Answers?

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<http://www.birmingham.gov.uk/greencommission>

<http://www.birmingham.gov.uk/greenlivingspaces>

<http://www.birmingham.gov.uk/plan2031>

http://birminghamclimate.com/ie_index2.html

<http://www.wbcsd.org/home.aspx>

<http://uknea.unep-wcmc.org/>

http://www.local.gov.uk/health/-/journal_content/56/10180/3510483/ARTICLE

<http://www.bmj.com/content/348/bmj.g2407>

<http://www.intelligenthealth.co.uk/team/dr-william-bird/>

http://www.landscapeinstitute.co.uk/PDF/Contribute/PublicHealthandLandscape_CreatingHealthyPlaces_FINAL.pdf

<http://www.cell.com/trends/endocrinology-metabolism//retrieve/pii/S1043276007000690?cc=y>

<http://www.theguardian.com/cities/2014/apr/03/birmingham-san-francisco-oslo-global-green-biophilic-cities-club>

<https://www.naturalcapitalcommittee.org/>

<https://www.thersa.org/discover/publications.../devo.../Download> [Cached](#)

<http://www.westmidlandscombinedauthority.org.uk/>

<http://www.overshootday.org/>

http://www.mckinsey.com/insights/urbanization/urban_world

<http://biophiliccities.org/>

<http://www.farrellreview.co.uk/>

