

The Sustainability Series

**By The Lancaster
West
Neighbourhood
Team**





Biodiversity and Gardens

Gary Grant

Agenda

Introduction – 5 mins

Hannah Smith

Presentation – 30 mins

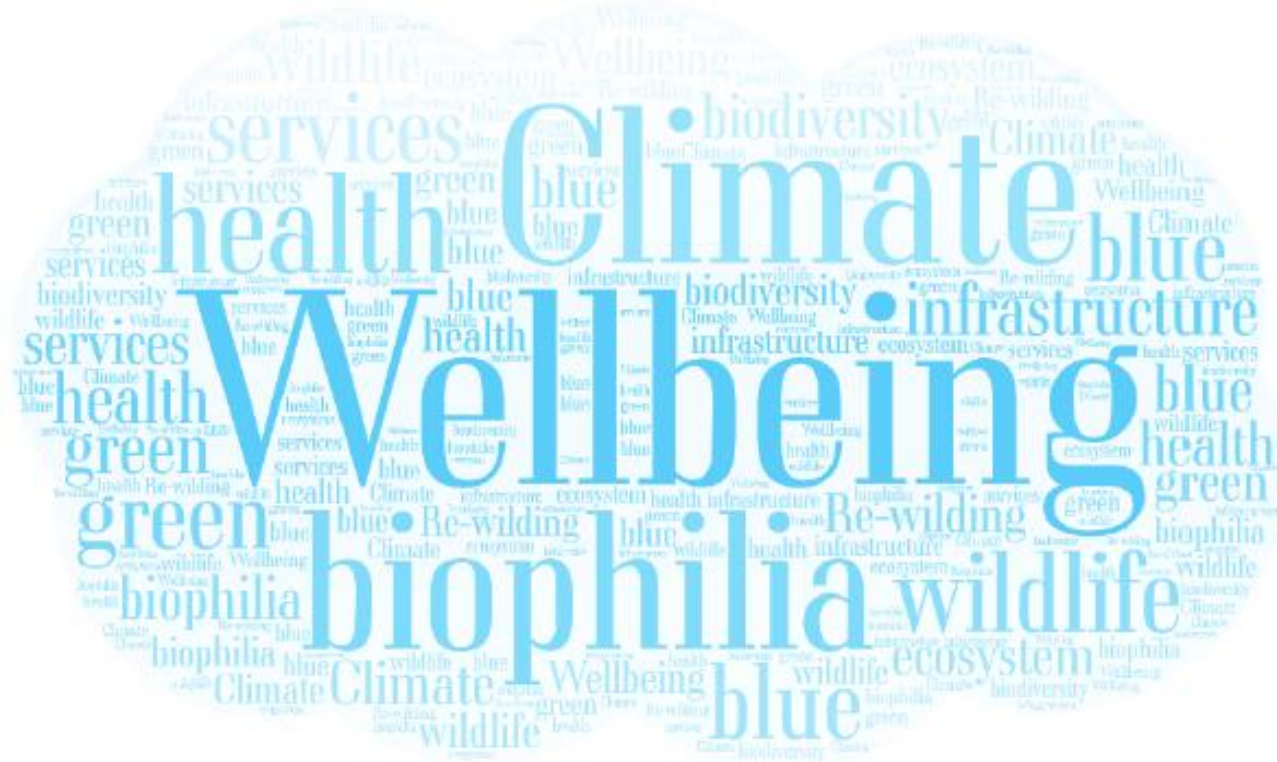
Gary Grant

Q&A – 20 mins

Close



Re-wilding, Wildlife, Biodiversity, Green infrastructure, Blue infrastructure, Nature-based Solutions, Ecosystem services, Climate change adaptation, Resilience, Biophilia, Heath & Wellbeing

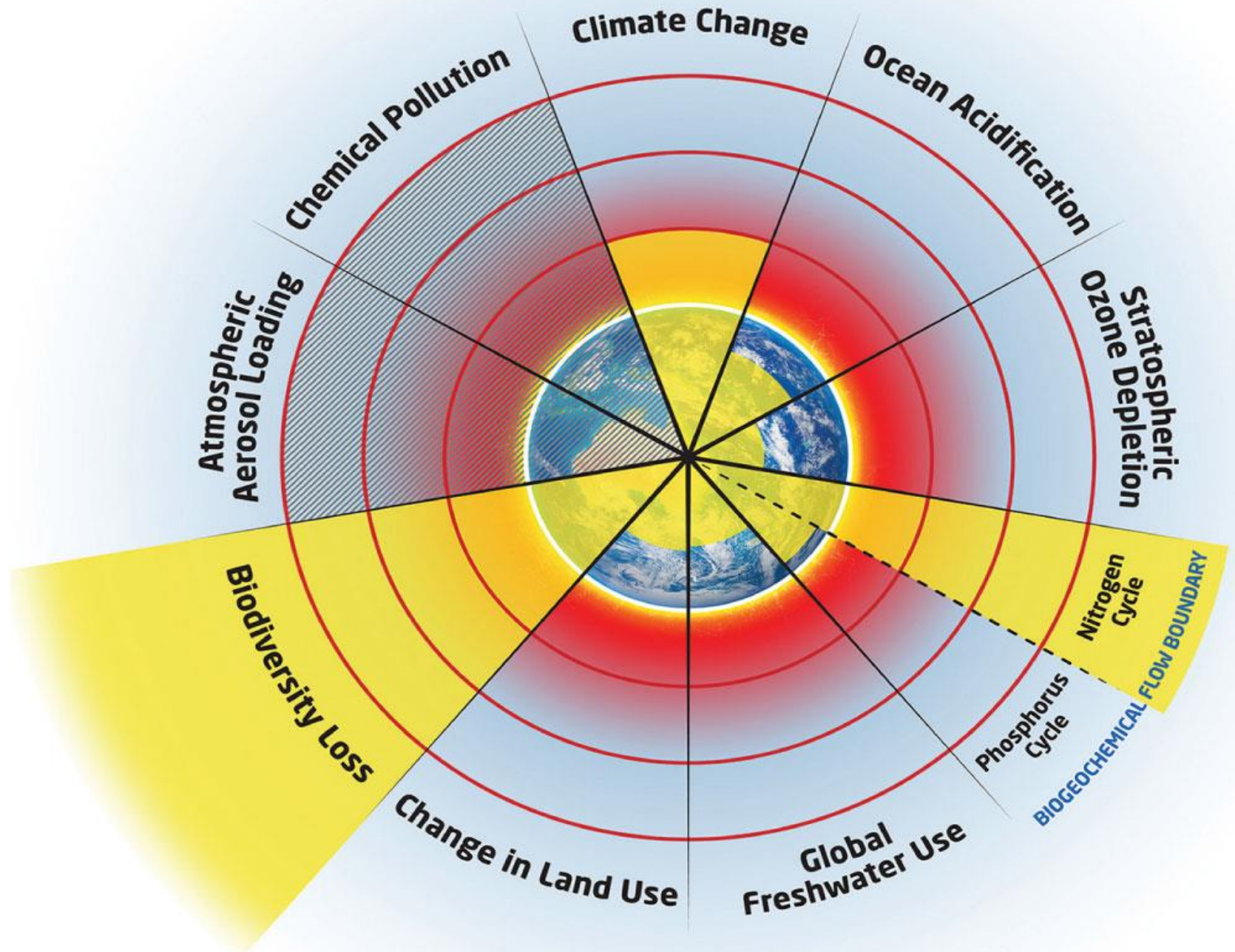


Biodiversity & Urban Greening

Gary Grant

Twitter @ecoschemes

Green
Infrastructure
consultancy



Principles

- Grey to Green (de-pave, expose soil, add soil)
- Planting: Native species or species with documented value for wildlife
- Right plant, right place
- Plants for Pollinators (See RHS List)
- Diversity
- Structure: Places for creatures to shelter or live
- Nurture
- Water (Slow the Flow) also Ponds

What is Green Infrastructure?



“GI represents an approach to land use that has a critical role in meeting many of the challenges we face [social, environmental and economic].

*It achieves this through its multifunctional and connected nature and is underpinned by the concept of **ecosystem services**, an approach which recognises the many benefits that are generated by natural ecosystems”*

Landscape Institute

City Challenges

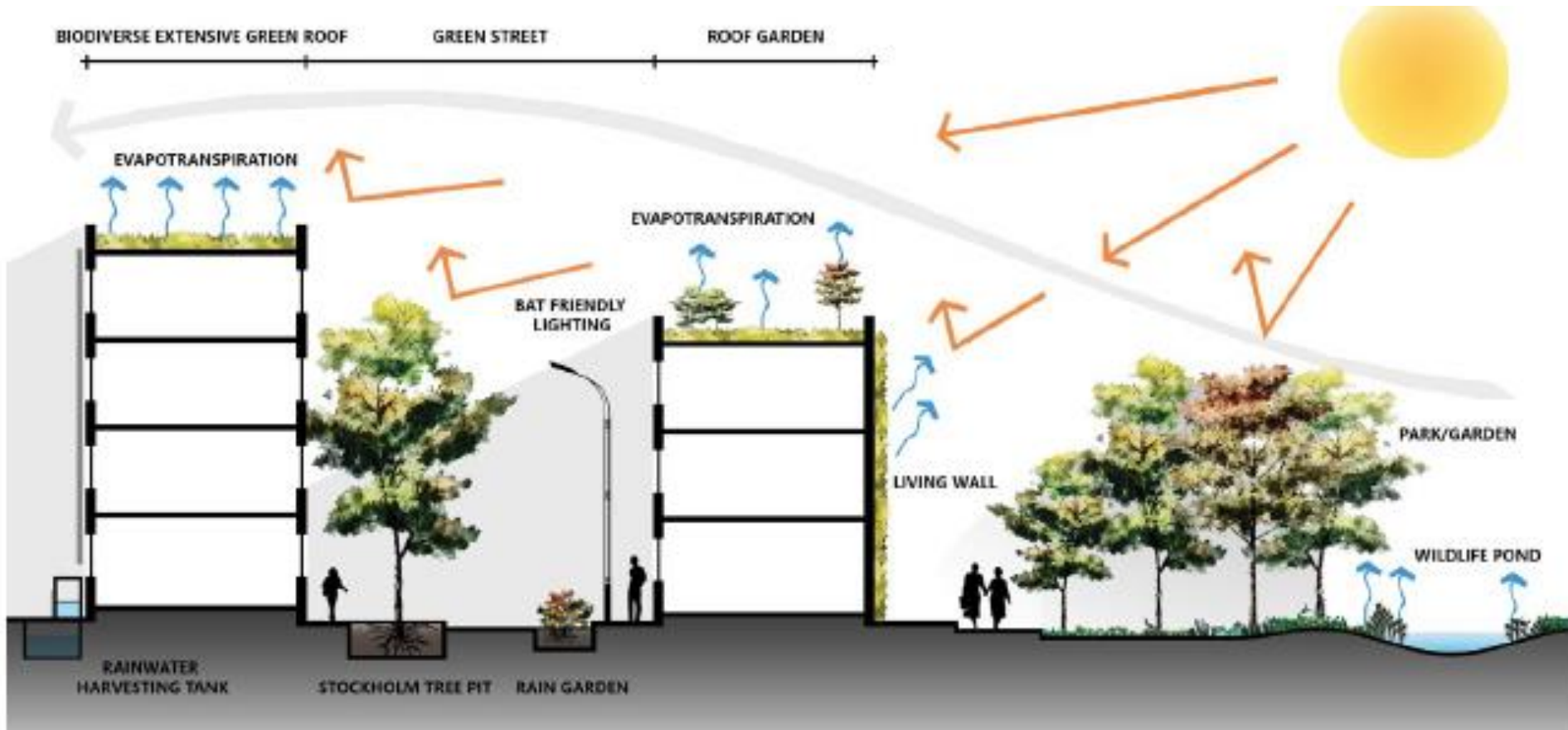
- Hot
- Dry
- Pollution (Air, Water, Light)
- Traffic
- Noise
- Disease
- Crime
- Governance
- Unemployment
- Housing
- Food



Benefits of Green Infrastructure:

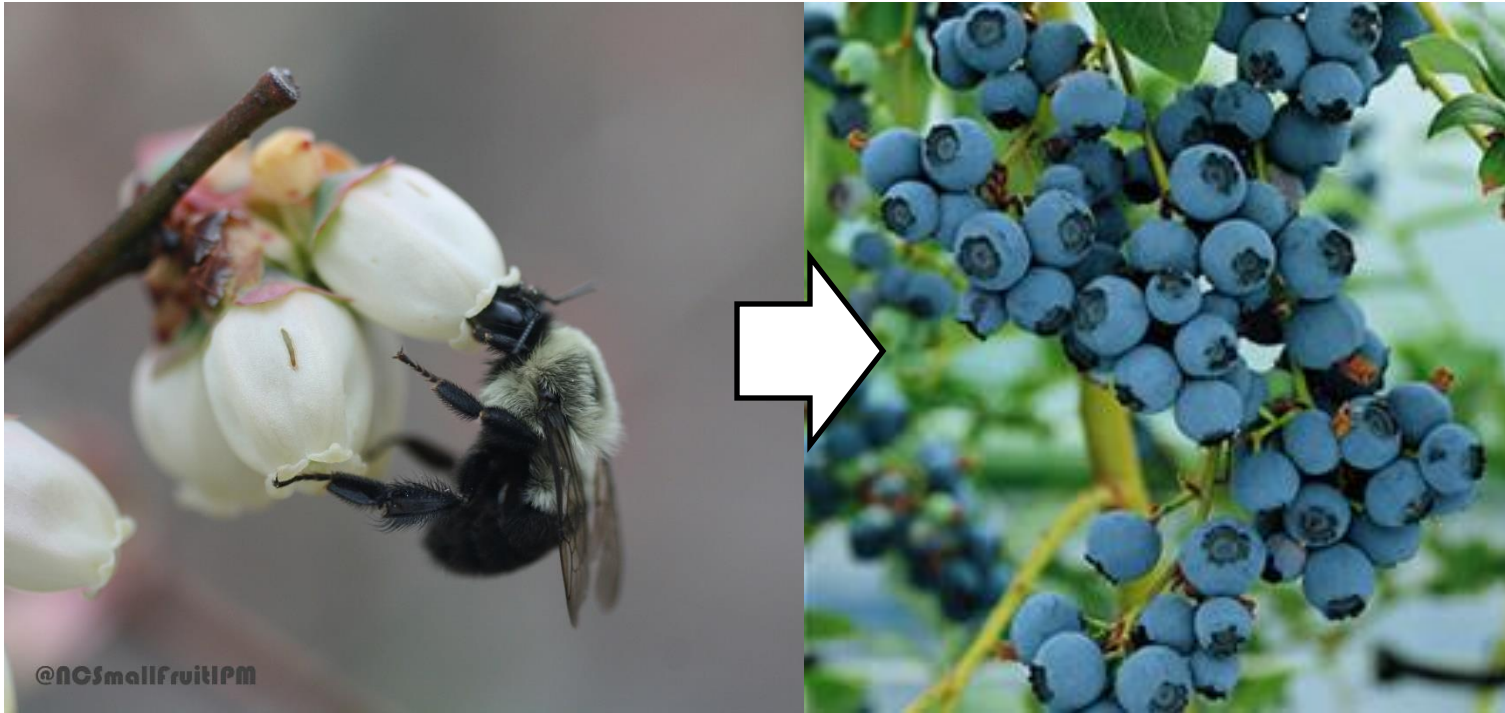
- Stormwater management
- Water supply
- Microclimate
- Shade
- Cooling
- Windbreaks
- Reduces energy use
- Sequesters carbon
- Clean air
- Clean water
- Less noise
- Food
- Health and Wellbeing
- Community Cohesion
- Education
- Biodiversity
- Reduces requirement for grey infrastructure

Multi-functionality



Benefits

Green Infrastructure : Value – Pollination Services

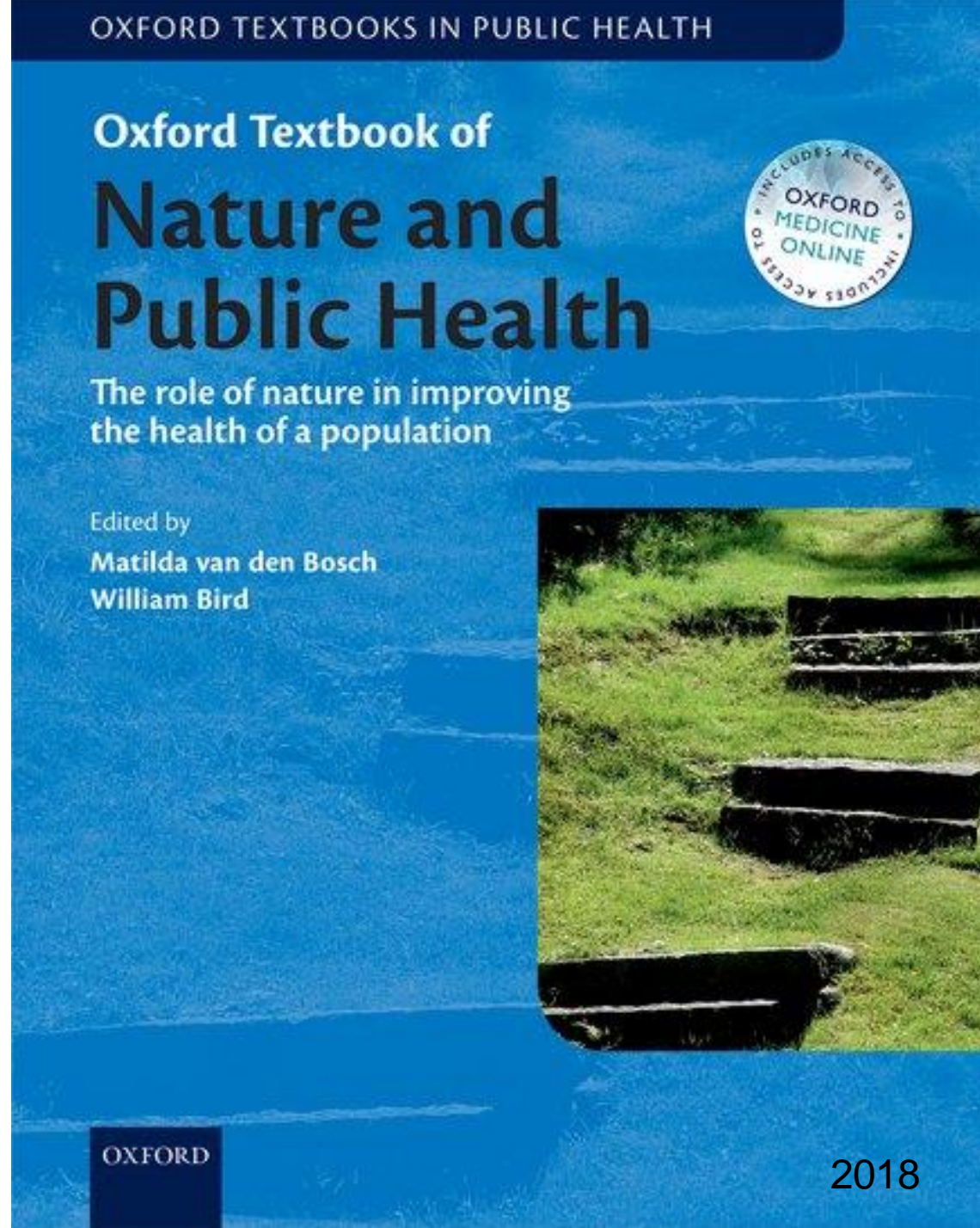


1 Bee = 6000 Blueberries

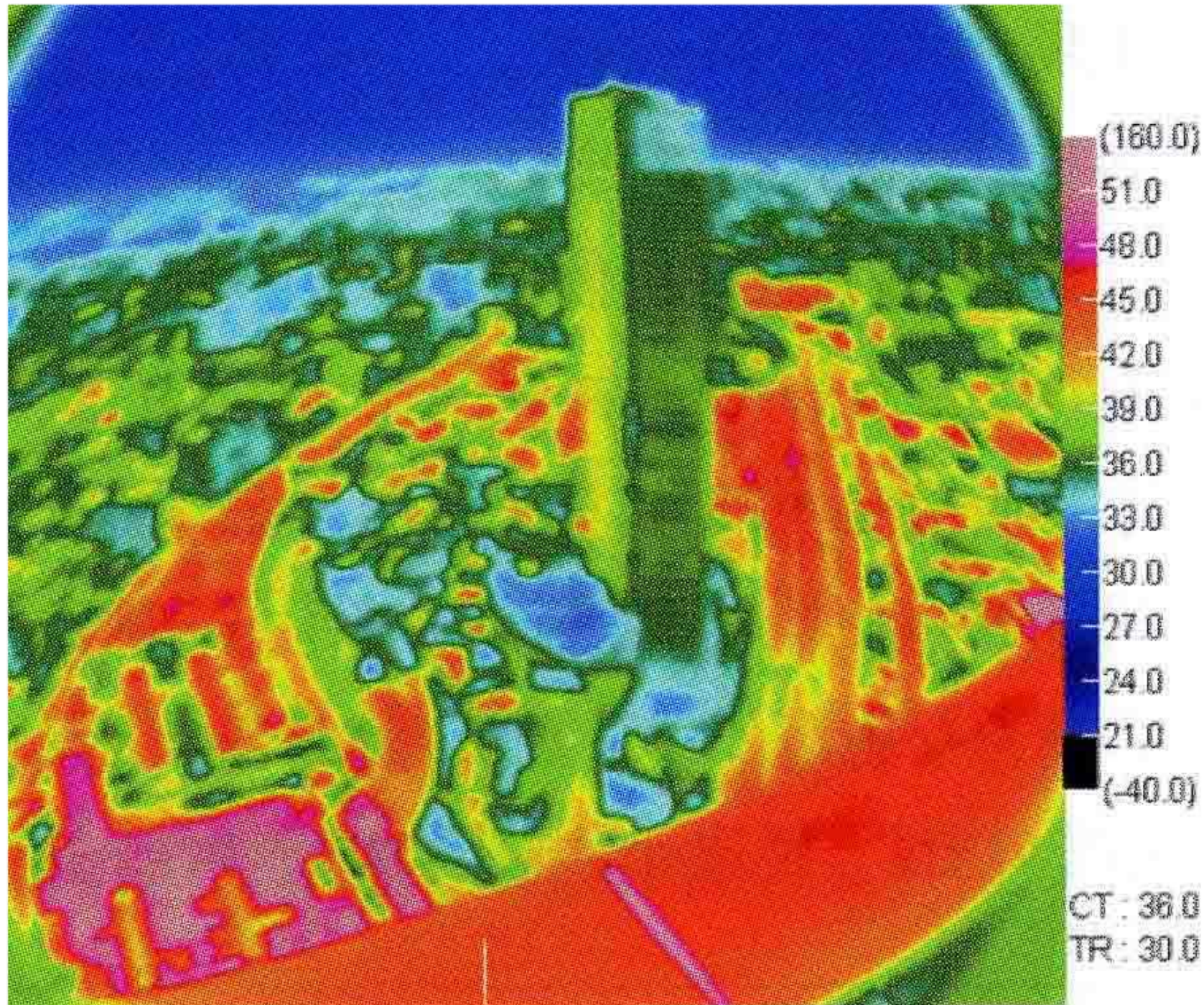
In one year, a single native south-eastern blueberry bee visits about 50,000 blueberry flowers, assisting in the production of more than 6,000 marketable blueberries.

It is estimated that bees provide \$3B worth of pollination services in the US.

- Clean Air & Water
- Exercise
- Psychological
- Biophilia

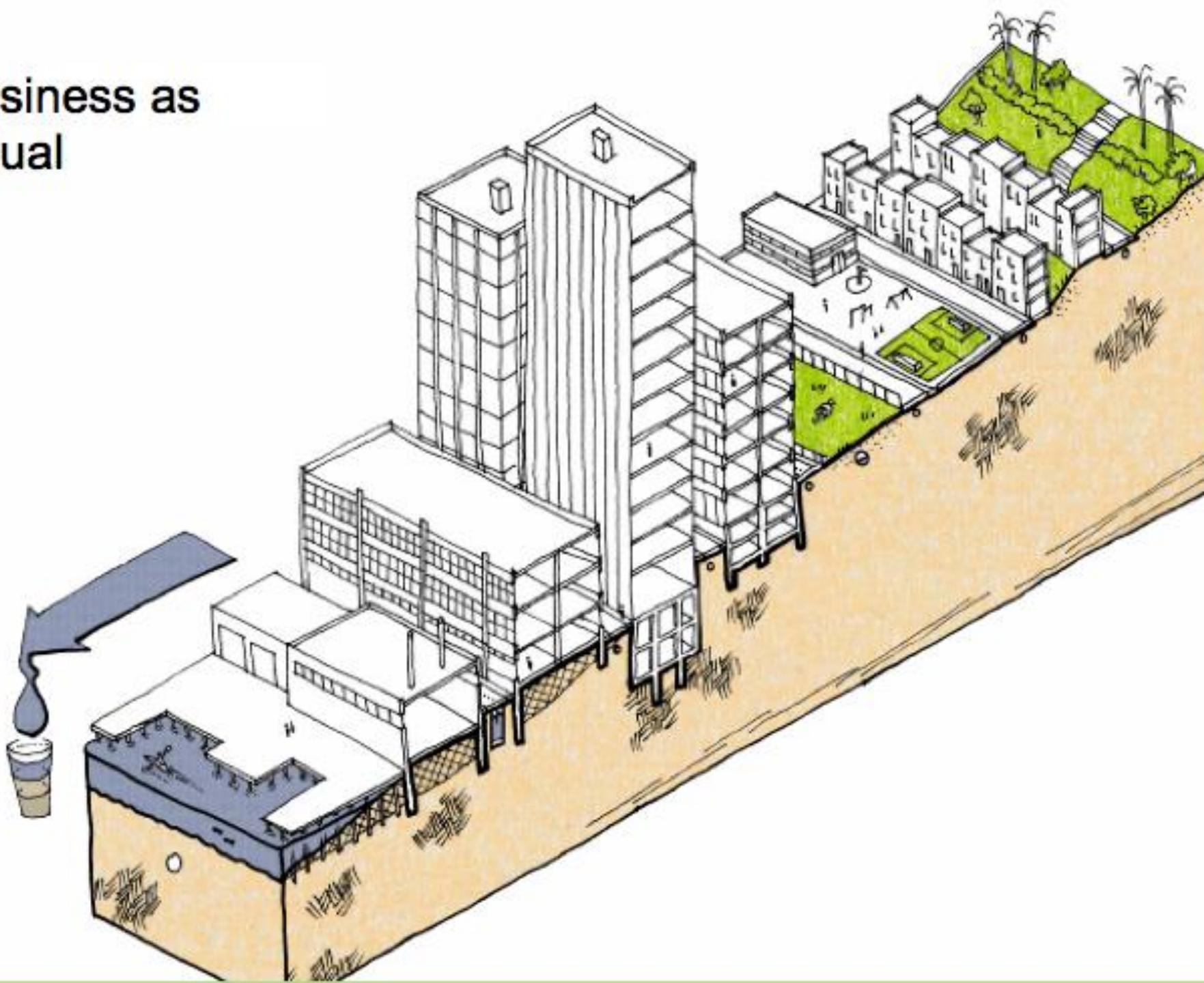




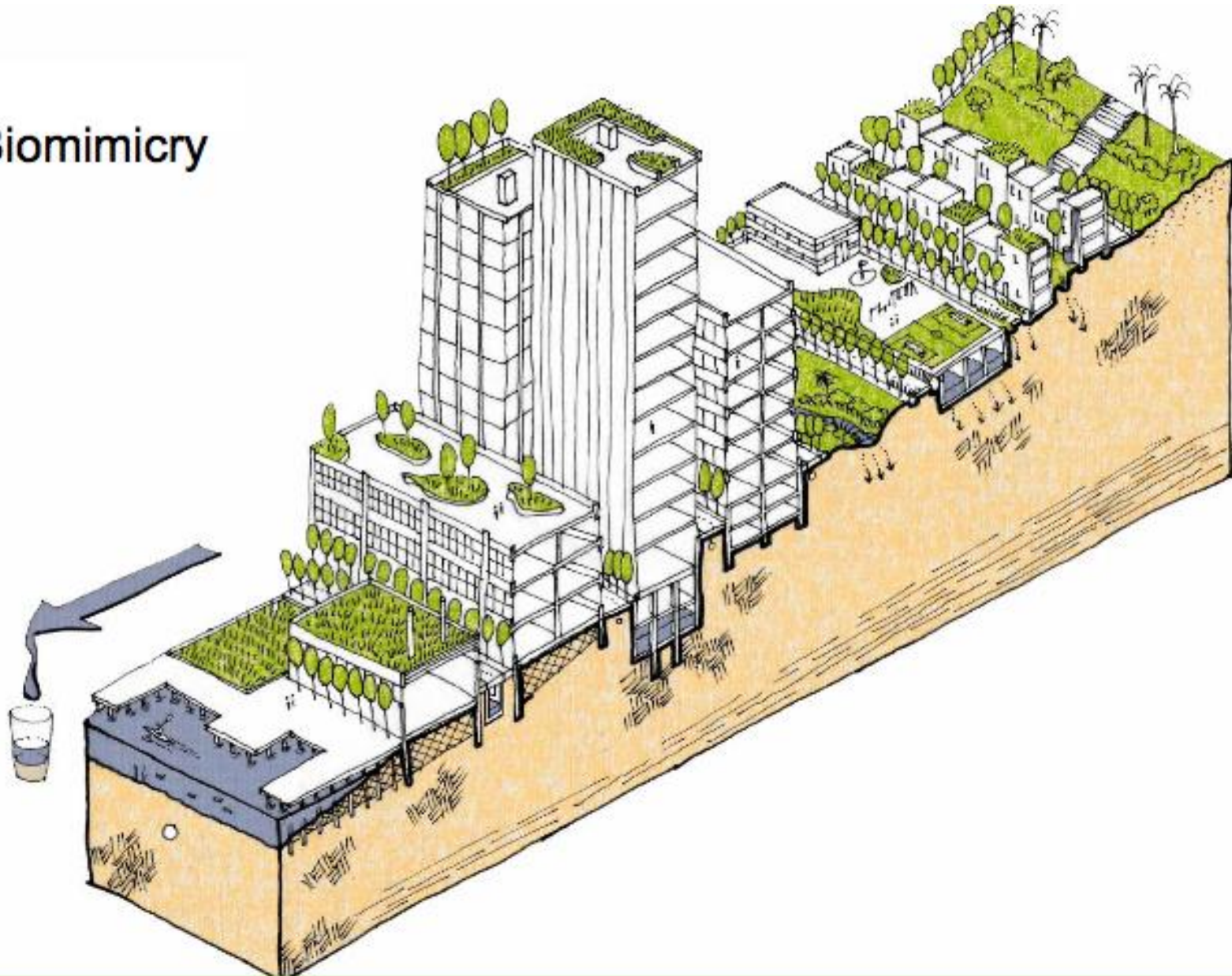




Business as Usual



Biomimicry



Projects



Natural History Museum Wildlife Garden (planted 1995)



Rain Garden

- De-pave
- Pavement re-laid to drain into garden
- Free draining yet water absorbent soil
- Planted for biodiversity
- Overflow to next rain garden
- Final overflow to conventional drain

Better Bankside

Bridget Joyce Square W12





Bridget Joyce Square W12. Rain garden and scooter track

HQ of Transport for London

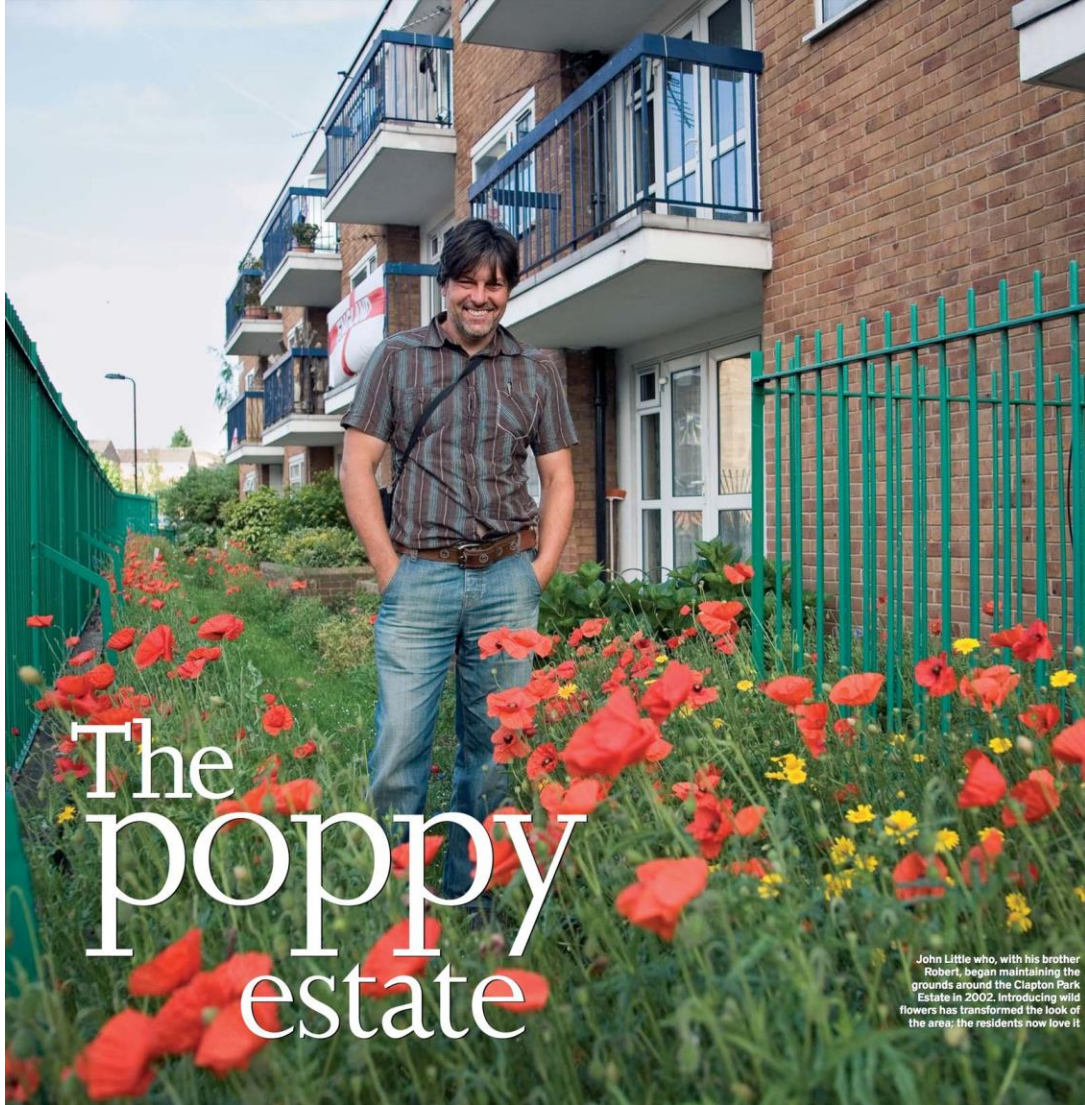




Crédit photo Aino Adriaens

Biosolar Roof

Ecology Consultancy



John Little who, with his brother Robert, began maintaining the grounds around the Clapton Park Estate in 2002. Introducing wild flowers has transformed the look of the area; the residents now love it

Clapton Park Estate, Hackney

John Little: 'Best thing a grounds maintenance person can do is to remove their ear defenders and start listening to people

COMMUNITY GARDENING

FROM THE OUTSIDE, the Clapton Park Estate in Hackney, East London, looks similar to many other inner-city developments. There is a mix of medium and low-rise flats, a couple of tower blocks and a shopping square where children tend to loiter. The 1,200 properties are an enduring reminder of the early 1970s, and your instinct, based on driving through many all-too-similar estates, is that there is little chance of being bowled over by unusual plantings or colourful flower displays.

When I visited last year, however, my preconceptions were dashed. Turning into the estate from Redwald Road, opposite a 20-storey tower block and directly below a three-storey block of flats where several England supporters' flags fluttered in the breeze, I saw a dramatic sweep of red flowers flourishing – a mass of corn poppies (*Papaver rhoeas*) that completely filled every gap in an 18m-long border.

This really defines the look of Clapton Park and is the reason why local kids call it the poppy estate,' says John Little who, along with his younger sibling Robert, is responsible for the estate's 120 areas of green space, many of which boast an equally striking show of colour. Together, the brothers run the Grass Roof Company, actually based some 30 miles away at Horndon on the Hill, Essex, which also maintains the grounds around several primary schools, using similar techniques and palettes of plants (see p325) to those used on the estate.

The company successfully bid for the estate's ground-maintenance contract in 2002. At the time, John and Robert had

Urban East London may seem an unlikely place to see thriving cornfield plants but, thanks to groundsman John Little, the Clapton Park Estate is awash with flowers, as Martyn Cox found. Photography by Jane Sebire



The removal of a neglected rose bed has allowed some residents to grow their own vegetables (above)

no experience of grounds maintenance, but had designed and built several areas on the estate. 'We had got on really well with the residents,' says John. 'When the tender came up, the tenants' group asked us if we wanted to apply. As they were such a nice bunch of people, we did.'

The green spaces they inherited were mainly laid to grass, with bare strips of earth around the edges that were usually sprayed several times a year with herbicide in order to keep the weeds down. 'It looked so boring and, on the first day we arrived, I wondered whether we'd made the right decision; I couldn't bear the thought of just cutting grass,' he says.

In order to reduce the old regime of spraying off weeds, John decided instead to experiment with sowing wildflower seeds, hoping it would provide colour, reduce watering and stifle weed growth. 'We didn't consult anyone before doing it, but simply sowed a native cornfield flower mix in a patch outside a block of flats and waited for it to bloom.'

The residents loved it. John now sows seeds wherever he can, and while he has not totally given up spraying, he ▶



Flora Gardens Estate, Hammersmith



Queen Caroline Estate, Hammersmith & Fulham



Climate Resilient Housing Hammersmith & Fulham

Living in the Landscape



A bold new framework for landscape and green infrastructure in Thamesmead

THAMESMEAD™ | Peabody



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Infrastructure
consultancy





Rubens Hotel at the Palace, Victoria, London 2013













Tooley Street Vertical Rain Garden





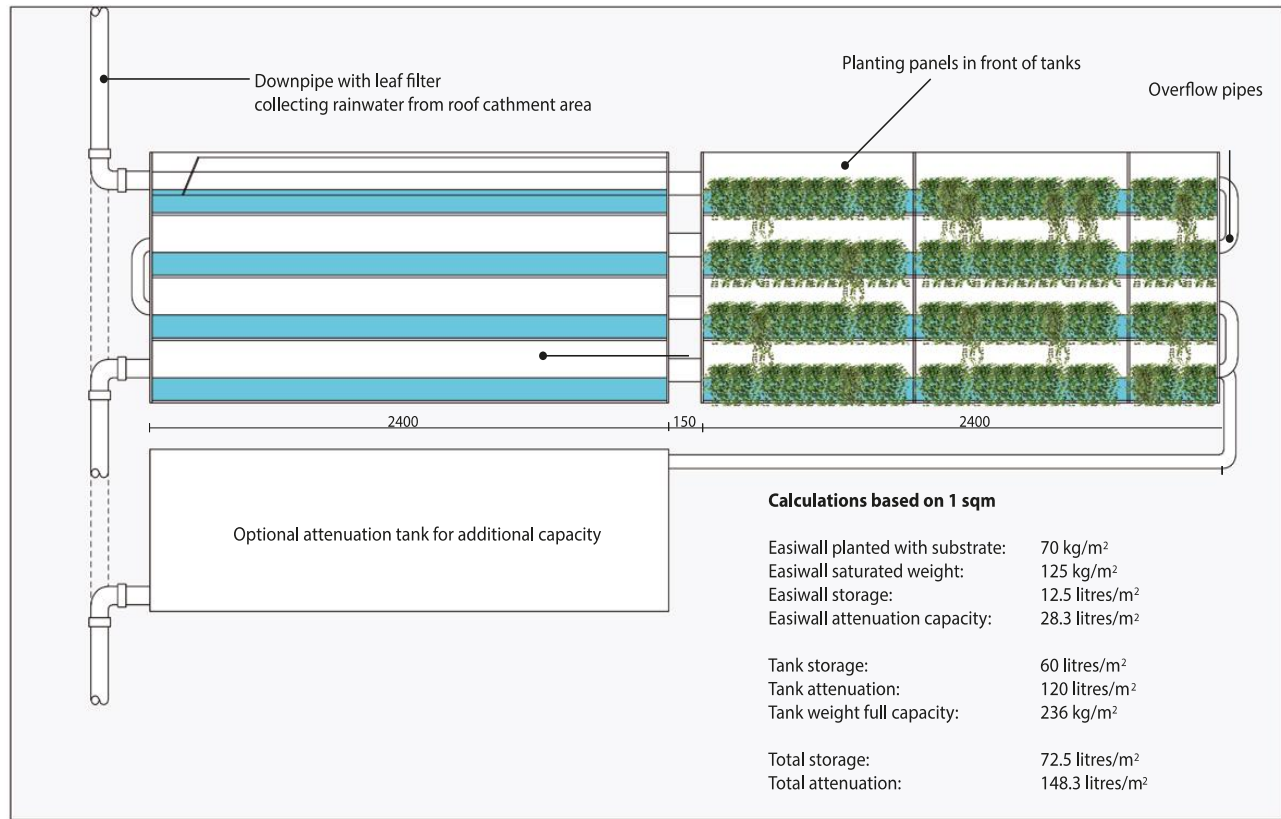
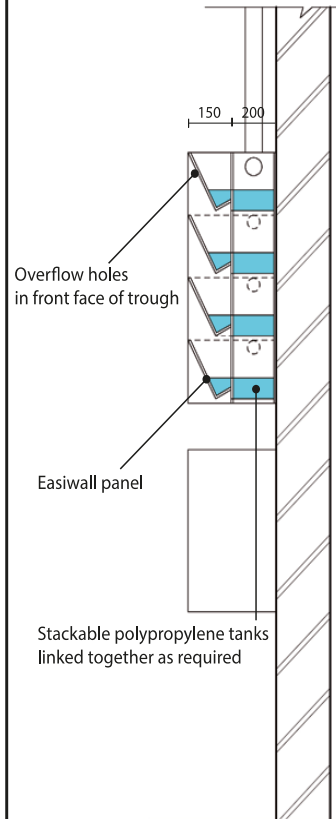
Vertical Rain Garden – uses water from roof only



Ecology Consultancy



Vertical Rain Garden,
social housing near Tower Bridge

**Notes**

1. We recommend that tank loading is transferred to ground wherever possible
2. Tank dimensions can be reduced or increased to suit requirements
3. Tanks do not need to be mounted behind panels and can be located elsewhere



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 London, SW19 8JZ

Project title

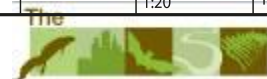
Treebox Water Storage Living Panel
 Vertical Raingarden

Drawing title
Panel details

Drawn	Date
MM	24/03/2014
Checked	Scale
	1:20

Sheet

Revision

Ref
Typical

Ecology Consultancy

Conclusions:

- Work with nature, not against it
- More soil, vegetation & water (green & blue infrastructure)
- Multi-functional approach

Useful Resources

Wildlife Gardening

<https://www.wildlifetrusts.org/gardening>

<https://www.rhs.org.uk/science/conservation-biodiversity/wildlife/plants-for-pollinators>

Susdrain – The Community for Sustainable Drainage

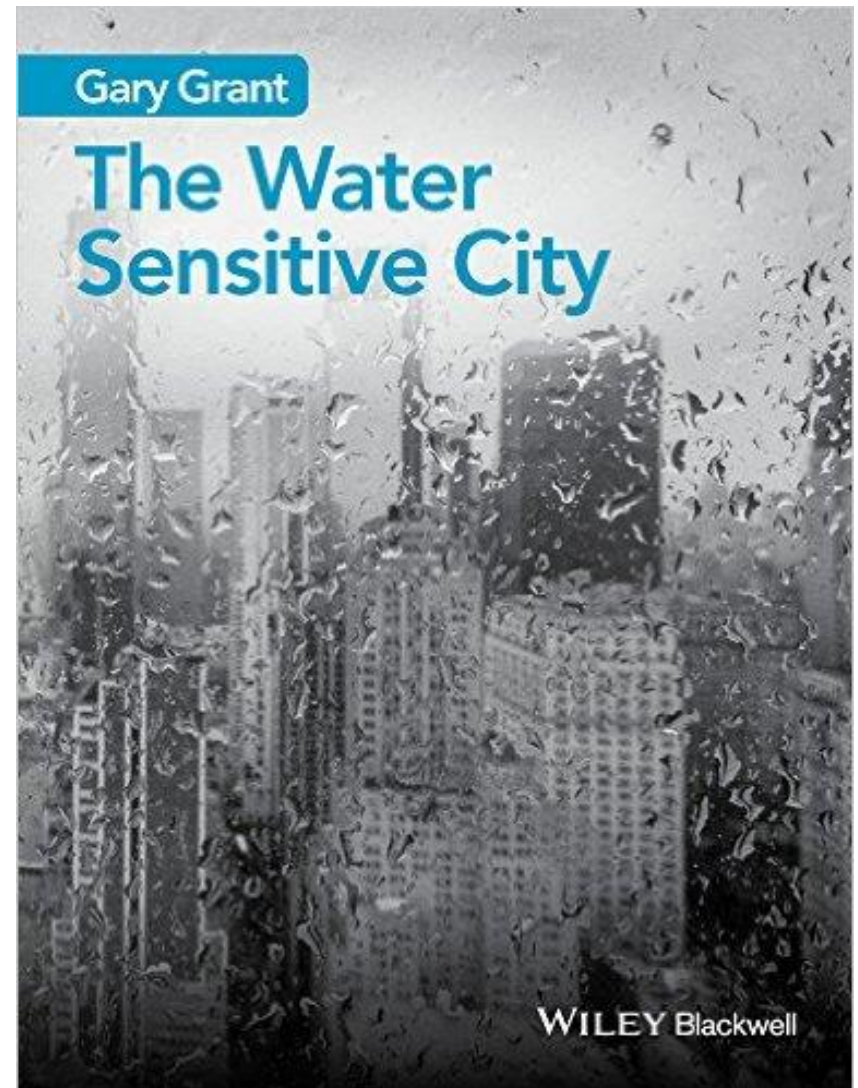
<http://www.susdrain.org/>

Victoria Improvement Business District (2013). *Green Infrastructure Audit Best Practice Guide*

https://www.london.gov.uk/sites/default/files/bestpracticeguide_a4-10.pdf

Green Roofs

www.livingroofs.org



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