

Graphic Essay 2

‘Rewild My Street’: a model for community-led urban rewilding

Siân Moxon

<https://orcid.org/0000-0001-6464-1294>

Abstract

Nature is unintentionally generous to humans, providing valuable ecosystem services, and enhancing our health and wellbeing. Humans are less generous to nature, being responsible for environmental problems, including alarming biodiversity loss. This essay argues for the forging of a more symbiotic relationship between humans and nature, by applying ‘rewilding’ principles to cities to benefit both wildlife and people. Private residential gardens, which make up a quarter of cities, are crucial to this agenda, but are losing greenspace through changes made by residents. To reverse this trend, a new model for implementing policy is needed, as current initiatives prioritise new buildings and public greenspace. Using the London-based ‘Rewild My Street’ campaign as a case study, the chapter shows that solutions can come from generous designers willing to empower communities to effect change themselves. Through open-access resources focused on architectural drawings, the project seeks to inspire residents to transform their homes, gardens and streets for wildlife. The project itself embodies generosity by gifting a sustainable legacy to future generations and other species; sharing architectural knowledge with the public to enable community participation in change; and offering a model for similar projects.

Nature’s Generosity

Nature is unintentionally generous to humans. It provides ‘ecosystem services’ - resources, and processes, such as building materials and flood prevention - valued at over £920 billion in the UK.¹ Moreover, spending time in natural environments boosts our health and wellbeing, having a restorative effect.² Humans are less benevolent to nature, causing habitat destruction, pollution and climate change through over-exploitation of natural resources. As a consequence, global populations of wildlife have declined by almost 70% from 1970 and we would need one and a half earths to sustain our lifestyle.³ There is therefore both a moral duty and a survival imperative to address the imbalance.

Rewilding Cities

Rural ‘rewilding’ projects that restore natural habitats and reconnect people with nature are encouraging.⁴ The same principle should be applied to urban environments, where over 80% of the UK population lives.⁵ City dwellers would benefit from additional greenspace and wildlife, as spending time in a natural space lowers stress⁶ and more biodiverse urban areas boost residents’ wellbeing.⁷ Further, cities would be enhanced, in terms of appearance, air quality⁸ and resilience to climate change.⁹ In parallel, cities can help wildlife, providing important habitat and helping the recovery of species such as hedgehogs.¹⁰

London offers an opportunity to pilot urban rewilding, having become the world's first National Park City in 2019, with its mayor pledging to increase green infrastructure to 50% and tree cover by 12% by 2050.¹¹ Private gardens, which make up 24% of the UK capital,¹² are crucial to this agenda. However, the equivalent of 2.5 Hype Parks of greenspace is lost each year as residents replace vegetation with hard surfaces, having a significant detrimental effect on their gardens' biodiversity value.¹³

Regulation cannot reverse this trend, as existing gardens largely fall outside its scope.¹⁴ Meanwhile, initiatives to increase greenery prioritise new buildings and public space.¹⁵ It is therefore vital to educate residents on managing their own gardens for wildlife, requiring a new model for empowering communities.

'Rewild My Street'

To this end, the 'Rewild My Street' campaign was launched by a team of architects and ecologists, offering a design toolkit to help Londoners transform their homes, gardens and streets to attract wildlife. The project uses architectural drawings to demonstrate how a typical terraced street could be adapted to increase its biodiversity, aiming to inspire residents to add wildlife features by showing how they can be successfully integrated. Keys cross-reference the drawings to external links to products and activities to help residents attract wildlife, and to expert information on species and habitats to highlight the value of doing so. The guidance is collated in an open-access website, rewildmystreet.org.

The model is intended to be practical, rather than radical, to ensure its success. Most of the measures proposed are simple, inexpensive and easily achievable. Each adaptation can be made in isolation, either through a do-it-yourself activity or off-the-shelf product. These small actions by individual householders could quickly accumulate across a street, neighbourhood and city - and link to other habitats, such as parks. More major proposals are suggested in the public realm to encourage residents to lobby their council for changes.

<Fig.1 here>

Figure 1. Sectional perspective drawing of proposed street highlighting potential urban wildlife species. Credit: Moxon/Rewild My Street

<Fig.2 here>

Figure 2. Plan drawing of proposed street highlighting potential urban wildlife habitats. Credit: Moxon & Fenyes/Rewild My Street

<Fig.3 here>

Figure 3. Aerial view drawing of proposed street highlighting activities to attract urban wildlife. Credit: Fenyes/Rewild My Street

<Fig.4 here>

Figure 4. Front garden elevation drawing of proposed street highlighting products to attract urban wildlife. Credit: Moxon & Fenyes/Rewild My Street

<Fig.5 here>

Figure 5. Rear garden elevation drawing of proposed street highlighting products to attract urban wildlife. Credit: Moxon & Fenyes/Rewild My Street

A Scalable Model

The project offers a scalable model for urban rewilding, which could underpin the creation of a global network of National Park cities, and foster a more symbiotic relationship between humans and nature. The model itself embodies generosity by sharing specialist architectural knowledge and skills for public benefit, and providing an educational tool for ongoing community participation in change. The intended outcome of creating sustainable urban environments where humans and other species can co-exist will offer something to life beyond humanity, but is hardly selfless, when greening streets benefits cities and the many people that live in them.

Generosity's Potential

The project highlights the potential of generosity in architecture to tackle urgent environmental problems and could inspire other designers to share creative solutions to drive changes in the built environment. Similar projects could focus on other environmental issues, building types or climates to collectively engage the public in the sustainable redevelopment of cities.

Reference list

Department for Environment, Food and Rural Affairs, 'Official Statistics: Rural Population 2014/15', *GOV.UK*, 2020 <<https://www.gov.uk/government/statistics/rural-population-and-migration/rural-population-201415>> [accessed 14 July 2021]

Gaston, Kevin J., Richard M. Smith, Ken Thompson, and Philip H. Warren, 'Urban Domestic Gardens (II): Experimental Tests of Methods for Increasing Biodiversity', *Biodiversity and Conservation*, 14.2 (2005), 395–413 <<https://doi.org/10.1007/s10531-004-6066-x>>

Gill, S.E, J.F Handley, A.R Ennos, and S Pauleit, 'Adapting Cities for Climate Change: The Role of the Green Infrastructure', *Built Environment*, 33.1 (2007), 115–33 <<https://doi.org/10.2148/benv.33.1.115>>

Hayhow, D B, M A Eaton, A J Stanbury, F Burns, W B Kirby, N Bailey, and others, *State of Nature 2019* (The State of Nature Partnership, 2019) <<https://www.rspb.org.uk/our-work/state-of-nature-report/>> [accessed 20 November 2020]

Janhäll, Sara, 'Review on Urban Vegetation and Particle Air Pollution – Deposition and Dispersion', *Atmospheric Environment*, 105 (2015), 130–37 <<https://doi.org/10.1016/j.atmosenv.2015.01.052>>

Lambertini, Marco, *Living Planet Report 2020: Bending the Curve of Biodiversity Loss*, 2020 <<http://www.deslibris.ca/ID/10104983>> [accessed 14 July 2021]

Luck, Gary W., Penny Davidson, Dianne Boxall, and Lisa Smallbone, 'Relations between Urban Bird and Plant Communities and Human Well-Being and Connection to Nature: Urbanization and Human Well-Being', *Conservation Biology*, 25.4 (2011), 816–26 <<https://doi.org/10.1111/j.1523-1739.2011.01685.x>>

Mayor of London, *Urban Greening for Biodiversity Net Gain: A Design Guide*, March 2021 <https://www.london.gov.uk/sites/default/files/urban_greening_and_bng_design_guide_march_2021.pdf> [accessed 16 July 2021]

Mayor of London, *London Environment Strategy*, 25 May 2018 <<https://www.london.gov.uk/what-we-do/environment/london-environment-strategy>> [accessed 19 November 2020]

Office for National Statistics, *UK Natural Capital Accounts: 2020*, 2020 <<https://www.ons.gov.uk/economy/environmentalaccounts/bulletins/uknaturalcapitalaccounts/2020>> [accessed 14 July 2021]

Park, Bum Jin, Yuko Tsunetsugu, Tamami Kasetani, Takahide Kagawa, and Yoshifumi Miyazaki, 'The Physiological Effects of Shinrin-Yoku (Taking in the Forest Atmosphere or Forest Bathing): Evidence from Field Experiments in 24 Forests across Japan', *Environmental Health and Preventive Medicine*, 15.1 (2010), 18–26 <<https://doi.org/10.1007/s12199-009-0086-9>>

Smith, Chloe, *London: Garden City?: Investigating the changing anatomy of London's private gardens, and the scale of their loss*, 2010 <<http://downloads.gigl.org.uk/website/LondonGardenCity.pdf>> [accessed 14 July 2021]

Wade, Mike, 'Meet the Knepp Group: The Billionaires Dedicated to "Rewilding" the Environment', *The Times Magazine*, 17 December 2018 <<https://www.thetimes.co.uk/article/meet-the-knepp-group-the-billionaires-dedicated-to-rewilding-the-environment-dgqrmx19w>> [accessed 14 July 2021]

White, Mathew P., Sabine Pahl, Katherine Ashbullby, Stephen Herbert, and Michael H. Depledge, 'Feelings of Restoration from Recent Nature Visits', *Journal of Environmental Psychology*, 35 (2013), 40–51 <<https://doi.org/10.1016/j.jenvp.2013.04.002>>

¹ Office for National Statistics, *UK Natural Capital Accounts: 2020*, 2020 <<https://www.ons.gov.uk/economy/environmentalaccounts/bulletins/uknaturalcapitalaccounts/2020>> [accessed 14 July 2021]

² Mathew P. White, Sabine Pahl, Katherine Ashbullby, Stephen Herbert, and Michael H. Depledge, 'Feelings of Restoration from Recent Nature Visits', *Journal of Environmental Psychology*, 35 (2013), 40–51 <<https://doi.org/10.1016/j.jenvp.2013.04.002>>

³ Marco Lambertini, *Living Planet Report 2020: Bending the Curve of Biodiversity Loss*, 2020 <<http://www.deslibris.ca/ID/10104983>> [accessed 14 July 2021]

⁴ Mike Wade, 'Meet the Knepp Group: The Billionaires Dedicated to "Rewilding" the Environment', 17 December 2018, the times magazine <<https://www.thetimes.co.uk/article/meet-the-knepp-group-the-billionaires-dedicated-to-rewilding-the-environment-dgqrmxl9w>> [accessed 14 July 2021]

⁵ Department for Environment, Food and Rural Affairs, 'Official Statistics: Rural Population 2014/15', GOV.UK, 2020 <<https://www.gov.uk/government/statistics/rural-population-and-migration/rural-population-201415>> [accessed 14 July 2021]

⁶ Bum Jin Park, Yuko Tsunetsugu, Tamami Kasetani, Takahide Kagawa, and Yoshifumi Miyazaki, 'The Physiological Effects of Shinrin-Yoku (Taking in the Forest Atmosphere or Forest Bathing): Evidence from Field Experiments in 24 Forests across Japan', *Environmental Health and Preventive Medicine*, 15.1 (2010), 18–26 <<https://doi.org/10.1007/s12199-009-0086-9>>

⁷ Gary W. Luck, Penny Davidson, Dianne Boxall, and Lisa Smallbone, 'Relations between Urban Bird and Plant Communities and Human Well-Being and Connection to Nature: Urbanization and Human Well-Being', *Conservation Biology*, 25.4 (2011), 816–26 <<https://doi.org/10.1111/j.1523-1739.2011.01685.x>>

⁸ Sara Janhäll, 'Review on Urban Vegetation and Particle Air Pollution – Deposition and Dispersion', *Atmospheric Environment*, 105 (2015), 130–37 <<https://doi.org/10.1016/j.atmosenv.2015.01.052>>

⁹ S.E Gill, J.F Handley, A.R Ennos, and S Pauleit, 'Adapting Cities for Climate Change: The Role of the Green Infrastructure', *Built Environment*, 33.1 (2007), 115–33 <<https://doi.org/10.2148/benv.33.1.115>>

¹⁰ D B Hayhow, M A Eaton, A J Stanbury, F Burns, W B Kirby, N Bailey, and others, *State of Nature 2019* (The State of Nature Partnership, 2019) <<https://www.rspb.org.uk/our-work/state-of-nature-report/>> [accessed 20 November 2020]

¹¹ Mayor of London, *London Environment Strategy*, 25 May 2018 <<https://www.london.gov.uk/what-we-do/environment/london-environment-strategy>> [accessed 19 November 2020]

¹² Mayor of London, *London Environment Strategy*.

¹³ Chloe Smith, *London: Garden City?: Investigating the changing anatomy of London's private gardens, and the scale of their loss*, 2010 <<http://downloads.gigl.org.uk/website/LondonGardenCity.pdf>> [accessed 14 July 2021]

¹⁴ Kevin J. Gaston, Richard M. Smith, Ken Thompson, and Philip H. Warren, 'Urban Domestic Gardens (II): Experimental Tests of Methods for Increasing Biodiversity', *Biodiversity and Conservation*, 14.2 (2005), 395–413 <<https://doi.org/10.1007/s10531-004-6066-x>>

¹⁵ Mayor of London, *Urban Greening for Biodiversity Net Gain: A Design Guide*, March 2021 <https://www.london.gov.uk/sites/default/files/urban_greening_and_bng_design_guide_march_2021.pdf> [accessed 16 July 2021]