

# Briefing notes

## Addressing topical issues in UK residential markets

Issue 9 | July 2022

In the latest in our series of **Briefing notes** we introduce our concept of the **Eco-Step Score** as a measure of biodiversity in urban areas.

Eco-Step Scores measure the biodiversity potential of an urban area. Environmental credentials have become a priority for investors and consumers. The government, in its Levelling Up White Paper, put an emphasis on bringing wildlife back into our publicly accessible green spaces – which is more complicated than simply adding more green space.

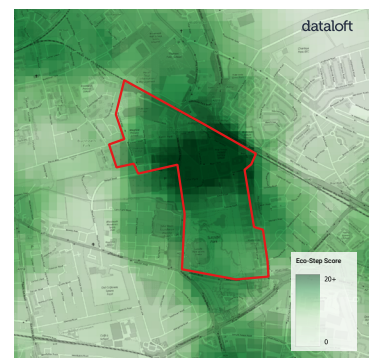
Most urban areas have a good scattering of green spaces where nature can be observed but not all green spaces are of equal value. Wildlife requires a complex arrangement of habitats to provide for all needs, for example, trees for refuge and food, water, bare ground and long grass. Most green spaces in urban areas only have a couple of these habitat structures, meaning wildlife must travel between green spaces to fulfil habitat needs. These are sometimes referred to as 'stepping stones' in ecology and together can form 'wildlife corridors'. In urban areas, habitats often become isolated, like islands, which restrict the possibility of movement for wildlife.

One solution is to have green spaces with diverse habitat types as close together as possible, increasing the potential for greater biodiversity and reducing the need for wildlife to travel far.

We developed our Eco-Steps Score, drawing on a range of green space and habitat data, as a measure of urban biodiversity potential.

## Eco-Step Scores

### Measuring biodiversity in urban areas



This research has been created by Dataloft and is our own opinion. Not for reuse nor repurposing without permission.

## dataloft

Dataloft is an independent consultancy, delivering intelligent, data-driven insight on housing market economics.

Contact **Sandra Jones**

M +44 7714 124681

[dataloft.co.uk](https://www.dataloft.co.uk)

## dRMA

 Dataloft Rental Market Analytics

Dataloft Rental Market Analytics (DRMA) is the UK's largest and most comprehensive single source of achieved rents. It includes over 5 million references, with around 30,000 new tenancies and 50,000 new tenants added each month. Extensive rental data and insight is available semi-automated or in conjunction with bespoke Dataloft Consult analysis.

## How we calculate **Eco-Step Scores**

**Map 1** shows green spaces in an area of south east London. Initially this appears 'green' and 'biodiverse'. However, the quantity of green spaces does not necessarily reflect the quality. We need to look at what is within the 'green' areas.

To look within the green areas, we devised a series of spatial calculations, algorithms and cross references with other datasets to produce a more ecologically descriptive picture of the habitat **stepping stones**. This also allows us to apply a weighting, and give greater weight to **stepping stones** that are closer to one another.

**The stepping stones provide the data for our Eco-Step Score system.** We created a grid of 50m x 50m squares covering London and shaded each square according to its Eco-Step Score. The score is the number of **stepping stones** within 500m of each grid square.

**Map 2** shows the same area of south east London shaded to show its Eco-Step Scores. In London, the most frequent Eco-Step Score ranges between 9 and 13 but a quarter of all localities in London scored over 19 and another quarter less than 8.5.

### Scoring system

Eco-Step Scores give a simple proxy measurement of biodiversity for any urban area. In **Map 1**, darker areas have more **stepping stones** nearby and lighter areas fewer. Areas close to the larger urban parks score well but so do many riverside areas, due to mudflats and water.

We compared the system to the highly detailed Greenspace Information for Greater London (GiGL) Biodiversity Hotspot for Planning data. They broadly report the same distribution of biodiversity. However, the GiGL data is London specific and the Dataloft Eco-Step Scores can be applied across all urban areas in England as a rapid and less costly desktop analysis.

### How to use Eco-Step Scores

Eco-Step Scores give a simple proxy measurement of biodiversity for any urban area. They can be calculated for a single development or estate, or wider.

#### Eco-Step Scores can be used

**To compare** one development or locality to another.

**To help investors assess ESG credentials.** Biodiversity is an important consideration for investors seeking to meet ESG criteria.

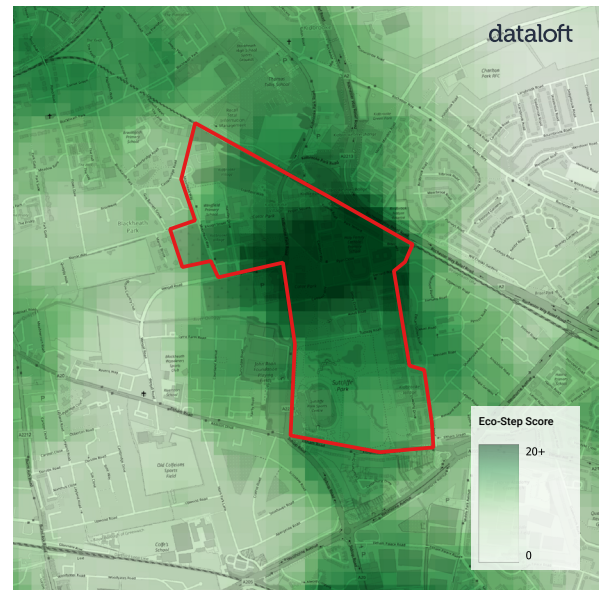
**As part of a marketing campaign.** Eco-credentials attract environmentally-conscious residents to a development.

**As evidence for a green infrastructure retrofit.** An owner or provider can improve an Eco-Step Score with relatively small interventions.

**In planning and scheme design.** The scores can be adapted to model the effects of planned green infrastructure by incorporating information from development masterplans.

Map 1

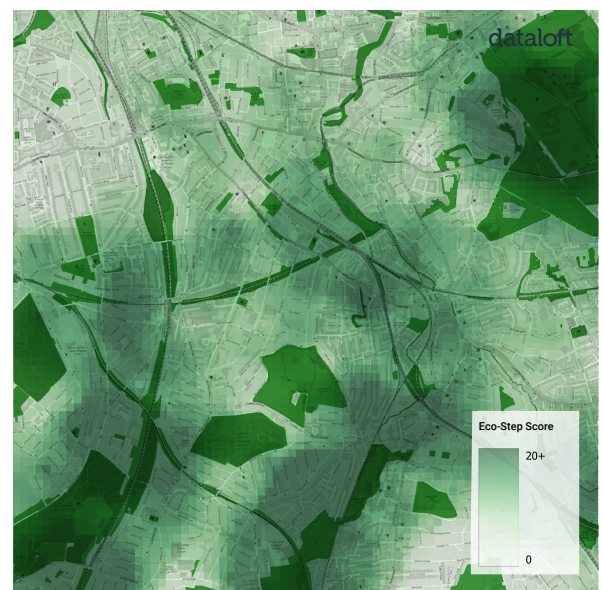
### Green spaces in an area of south east London



Dataloft, © OpenStreetMap. Contains Ordnance Survey data © Crown copyright and database rights 2022

Map 2

### Eco-Step Scores in an area of south east London



Dataloft, © OpenStreetMap. Contains Ordnance Survey data © Crown copyright and database rights 2022

### Eco-Step Scoring system

	20+	>19.0	Areas with many, very clustered or more complex habitats
		13.2–19.0	Areas with many, fairly clustered or complex habitats
		8.5–13.2	Areas with more, closer, or more varied habitats
	0	0–8.5	Areas with few, isolated or very basic habitats