Can Mobile Phone Data Reveal the Power of Wildflowers in Cities?



WHAT'S THE ISSUE?

Cities are increasingly turning to green spaces to improve health and wellbeing. Wildflower planting has become a popular, low-cost way to make parks more attractive and improve biodiversity. One challenge is how do we actually measure whether these strategies get more people outdoors and using green spaces? Traditional surveys and headcounts are expensive and patchy, leaving policymakers with little hard evidence.

WHAT'S NEW?

This research used anonymised mobile phone location data to track visits to green spaces across Liverpool. By comparing wildflower-planted sites to similar spaces without wildflowers, the study tested whether the flowers drew in more visitors. Results showed a small spike in visits in May, the start of the flowering period, but no consistent increases afterward. The study also discusses the strengths and weaknesses of using mobile data for policy makers.



Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Month

Trends in monthly visits to urban green spaces between intervention (wildflower sites) and synthetic control areas. Where the lines are higher on the plot, this represents months with a greater number of visits to green spaces. The vertical dotted lined represents when the wildflower sites flowered.

WHY IS THIS IMPORTANT?

Urban planners and councils need reliable evidence to justify investments in greening projects. While wildflowers may not dramatically boost visitor numbers on their own, they bring other benefits such as supporting pollinators, improving soil, and contributing to climate resilience.

This study also provides a reality check on "big data". Mobile phone data can be powerful, but it has limitations, biases, and ethical concerns. Used wisely, though, it could help cities better evaluate and design healthier urban spaces.

WHAT'S NEXT?

Future research should combine mobile phone data with other approaches, like community engagement and biodiversity surveys, to capture the full value of green space projects. Better guidelines are needed to ensure ethical, accurate use of mobile phone data.

Policymakers should see wildflower planting not as a silver bullet for boosting footfall, but as part of a broader package that includes programming and public and community involvement to truly unlock the benefits of urban nature.

Authors

Mark Green
Wenjing Zhang
Polly Moseley
Richard Scott
Olly Butters
Ruoyo Wang
Benedict Wheeler
Rebecca Geary
FULL ARTICLE