

FIRST STEPS OF POLLINATOR-PROMOTING INTERVENTIONS IN EASTERN EUROPEAN URBAN AREAS

Süle G., Kovács-Hostyánszki A., Sárospataki M., Kelemen T. I., Halassy G., Horváth A., Demeter I., Báldi A., Szigeti V.

Background

Urbanisation is a major driver of biodiversity loss. However, pollinators can be supported in cities by providing food and nesting opportunities through the thoughtful management of green spaces. In densely populated, heavily built-up, and constantly changing urban environments, it is challenging to find solutions that satisfy both nature conservation goals and the preferences of local residents. Various approaches exist to support pollinators in public areas, such as reducing mowing frequency in parks and road verges, sowing flower strips, and installing bee hotels. Despite these opportunities, pollinator-promoting interventions have been relatively rare in Eastern Europe, and their ecological and social impacts remain unstudied.

Objective

This study investigates the effects of extensive mowing and annual flower sowing on vegetation, floral resources, and pollinators in Hungary.

Results

- Both pollinator-promoting interventions had positive, albeit minor, effects, mainly due to the extreme drought in 2022 and some management inaccuracies.
- Extensively mown sites had taller and greener vegetation with more flowers and attracted more pollinators compared to frequently mown control sites.
- Sown flower patches provided food resources and attracted pollinators primarily in the second half of the season. In spring and early summer, these areas were mostly unused by pollinators, as they were empty seedbeds or seedlings due to annual soil disturbance and reseeding.
- The two interventions have had a positive effect and may complement each other within a year.

Key messages

- To develop urban ecosystems that are resilient to climate and environmental changes, we recommend using primarily native and mostly perennial seed mixtures, combining different intervention types, planning for long-term outcomes, and avoiding management inaccuracies (e.g. unplanned mowing).
- The most effective approach would be to combine both intervention methods—for example, by overseeding existing green spaces with native species and managing them with a mosaic mowing regime.
- Greater citizen engagement and awareness can also play a crucial role in ensuring the long-term sustainability of these initiatives.

Sources

Süle, G., Kovács-Hostyánszki, A., Sárospataki, M. et al. First steps of pollinator-promoting interventions in Eastern European urban areas – positive outcomes, challenges, and recommendations. *Urban Ecosyst* 26, 1783–1797 (2023).
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