Biodiversity of Accessible Greenspace for Vulnerable Population Groups: citizen science data analysis

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Abstract
Accessible greenspace biodiversity is a crucial element for human wellbeing. In this study, we explore the connection between social vulnerability, accessibility to greenspaces, and biodiversity in urban areas. To achieve this, we utilize citizen-science data on public greenspace and species identification. Our findings reveal that areas with high population vulnerability generally have shorter distances to greenspaces. This unexpected result can be attributed to the inclusion of informal greenspaces in our analysis. However, the biodiversity of greenspaces accessible to vulnerable communities tends to be lower. This relationship varies across regions, with some areas showing improved access to high biodiversity spaces for vulnerable populations. This positive outcome can be attributed to revegetation efforts. Our study emphasizes the significance of considering biodiversity when assessing greenspace accessibility. The utilization of grassroots citizen science data enhances our understanding of greenspace quality. These findings hold significant implications for addressing racial and socioeconomic disparities in greenspace accessibility.

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