Science Societies

Transforming urban soil research through community engagement

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Led by University of Oklahoma Ph.D. candidate Tiffany Legg, University of Oklahoma Environmental Studies capstone students conducted soil sampling in Oklahoma City's John F. Kennedy community. Collaborating with local residents, the team addressed concerns about industrial disturbances and soil contamination. Photo by Carrie Leslie.

The role of urban soils has become central to some of today's most pressing environmental challenges, from industrial contamination to inequitable land use. These challenges have significant impacts on community health, placing environmental justice (EJ) at the forefront of urban soil research. However, scientists studying the soils that underpin the physical and ecological well-being of EJ communities may be ill equipped to navigate the complex social dynamics and histories that accompany urban soil research.

An interdisciplinary team at the University of Oklahoma partnered with the John F. Kennedy community in Oklahoma City, OK to study industrial soil contamination, placing community engagement at the heart of their work. Drawing on insights from the social sciences and lessons learned during this collaboration, the researchers present a practical framework for engaging communities in a recent article published in the *Soil Science Society of America Journal*. This framework emphasizes building trust, valuing local knowledge, and involving community stakeholders throughout the research process. The findings highlight that fostering these connections is crucial for conducting meaningful and impactful urban soil research.

This framework encourages researchers to align their research goals with community aspirations, such as pursuing measurable environmental improvements. By adopting this approach, research becomes a collaborative effort with community stakeholders to address challenges and achieve meaningful results.

Dig deeper

Legg, T. A., & Hodges, C. (2024). Toward a community-engaged framework for urban soil research. *Soil Science Society of America Journal*, *88*, 1911–1918. https://doi.org/10.1002/saj2.20776

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