

Reintroduction of urban ecology to urban planning and design

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Ecosystem degradation, loss of resiliency, and lack of natural lands and their accessibility (green space social equity) in our urban areas demand a paradigm shift to traditional approaches to planning for green infrastructure. The financial sustainability of our cities and the psychological aspects of mental health for its citizens have reached a tipping point driven, in part, by climate change and the lack of proper green infrastructure. A more holistic ecosystem-based approach for greater ecologically functioning areas and more meaningful urban green spaces is needed to increase resiliency, support biodiversity, improve public access to green space, and increase the quality of life in our urban areas. Adoption of new approaches that prioritize environmental systems, ideally interconnected, as integral components of the urban fabric (green infrastructure) is needed and beginning to show signs of emergence – yet more is needed. Integration of a variety of strategically located open and green spaces, either natural (e.g. ecologically based) or managed (e.g. from parks to public gardens and open spaces to urban farms), could better harness ecosystem services to both mend past development practices as well as prepare for the impacts of climate change (e.g. increased rainfall, heat islands, etc.) Designing economically viable and adaptably resilient landscapes is crucial for the long-term health of urban areas. Solutions could range from the restoration of degraded or damaged ecosystems, recovery of abandoned land due to land use changes, or adoption of better environmental design approaches to new or redevelopment projects. This presentation will explore movements occurring in urban site and landscape design and how designers are beginning to address environmental and social challenges associated with resilience, equity, and green infrastructure. Combined, these issues impact the financial sustainability of our urban areas and how they are managed, not least the implications on our mental health.