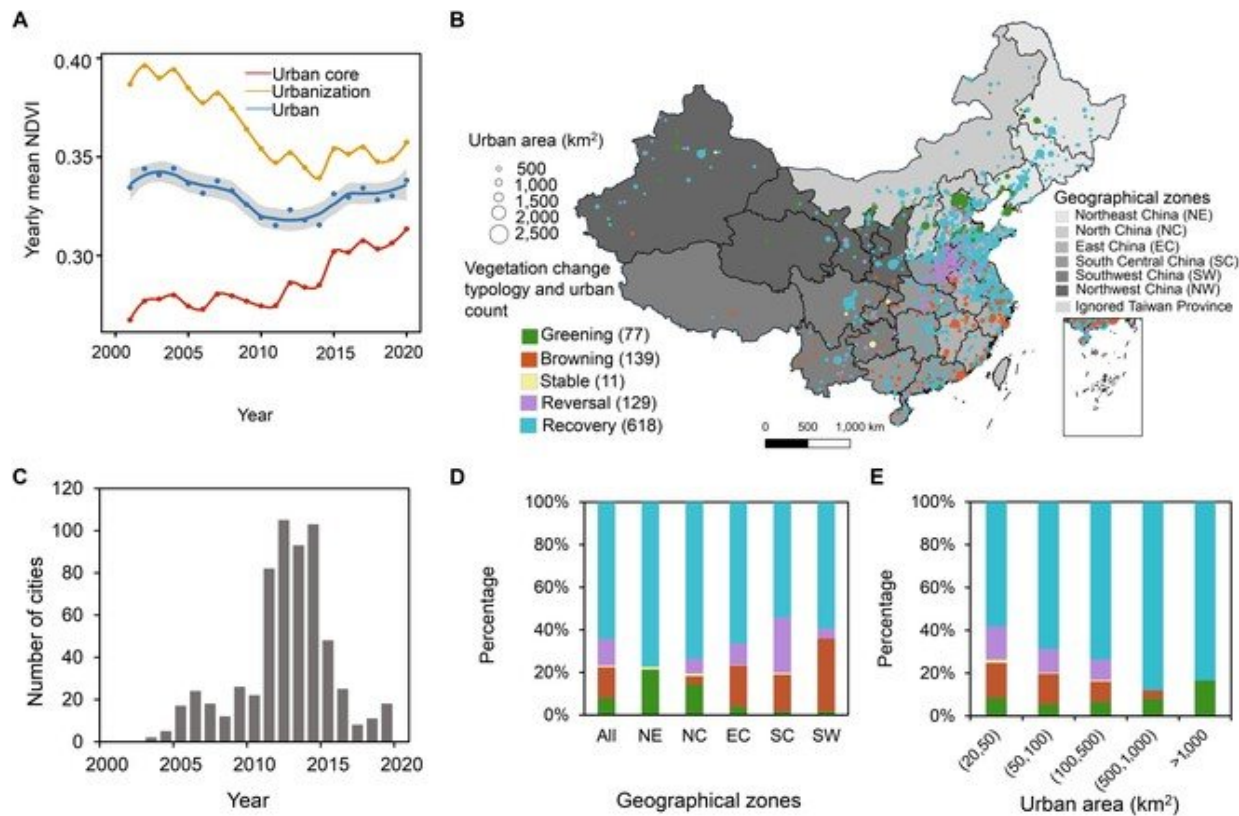


China's urban jungles: How city parks are winning the battle against concrete

March 15 2024



Change types of MODIS NDVI in urban areas for 2001 to 2020. (A) Yearly mean NDVI in urban core and urban expansion areas during 2001 to 2020. (B) Vegetation change types for each urban areas (n = 965), including urban core and urbanization. (C) Number and timing of breakpoints of the class recovery (n = 609). (D) Percent of urban vegetation cover change types for different geographical zones. (E) Percent of vegetation change types for groups of different urban area sizes. Credit: *Journal of Remote Sensing* (2024). DOI: 10.34133/remotesensing.0112

In the face of rapid urbanization, China has embarked on an impressive journey of urban greening, transforming the environmental narrative from degradation to sustainability. The collaboration between the University of Copenhagen and the Chinese Academy of Sciences has yielded groundbreaking insights through satellite analysis of the evolution of greenness in over 974 cities from 2000 to 2020.

This strategic pivot towards revitalizing [urban ecosystems](#) is meticulously documented in a new review [published](#) in the *Journal of Remote Sensing* on February 8, 2024, marking a significant stride in sustainable urban development.

This study delves into the evolving landscape of Chinese cities, showcasing an optimistic trend where the greening of urban cores effectively counters the loss of vegetation due to sprawling urban expansion. By harnessing advanced satellite imagery analysis, researchers meticulously tracked changes in urban vegetation across China from 2000 to 2020. They developed a novel classification system to distinguish between areas of greening, browning, stability, reversal, and recovery.

The findings reveal a pivotal shift post-2011, with more than 60% of the cities demonstrating substantial recovery of greenness. This outcome reflects the positive impact of China's rigorous urban greening policies, which will contribute to enhancing biodiversity, improving air quality, and elevating the quality of life for city dwellers. This research not only highlights the resilience of urban ecosystems but also illustrates the tangible benefits of integrating [green spaces](#) into [urban planning](#).

Dr. Xiaoxin Zhang, the lead author, states, "Our findings provide a hopeful perspective on how urban planning and greening initiatives can

effectively balance [urban expansion](#) with environmental sustainability. It's a testament to China's commitment to building greener, more livable cities."

By conducting a thorough analysis, the study illuminates the complex interactions within our planet's carbon cycle in response to environmental challenges. This provides essential knowledge for advancing [climate science](#) and devising effective management approaches.

More information: Xiaoxin Zhang et al, Urban Core Greening Balances Browning in Urban Expansion Areas in China during Recent Decades, *Journal of Remote Sensing* (2024). [DOI: 10.34133/remotesensing.0112](#)

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