

Urban Forestry/Urban Greening Research

Green Cities: Good Health



W UNIVERSITY of WASHINGTON

summaries of scientific research about human health and well-being and urban nature experiences

Crime & Public Safety

How Trees and Vegetation Relate to Aggression & Violence

There are conflicting public attitudes about city trees and vegetation. On one hand, experiences in natural settings are believed to promote healing and renewal. Yet in urban settings the presence of vegetation is often implicated as a screen for criminal activity. This briefing summarizes the research findings on the relationship between urban vegetation and crimes, aggressive behavior, and safety. The science findings are not conclusive and may even seem inconsistent or conflicting, yet certain patterns and relationships appear across several studies.

Research Highlights:

- Concerning minor crimes, there is less graffiti, vandalism, and littering in outdoor spaces with natural landscapes than in comparable plant-less spaces. (Brunson, 1999, Doctoral Dissertation)
- Public housing residents with nearby trees and natural landscapes reported 25% fewer acts of domestic aggression and violence. (Kuo and Sullivan, 2001, Environment and Behavior)
- Public housing buildings with greater amounts of vegetation had 52% fewer total crimes, 48% fewer property crimes, and 56% fewer violent crimes than buildings with low amounts of vegetation. (Kuo and Sullivan, 2001, Environment and Behavior)
- Studies of residential neighborhoods found that property crimes were less frequent when there were trees in the right-of-way, and more abundant vegetation around a house. (Lorenzo and Wims, 2004, Fl State Hort Society; Donovan and Prestemon, 2012, Environment and Behavior)
- In a study of community policing innovations, there was a 20% overall decrease in calls to police from the parts of town that received location-specific treatments. Cleaning up vacant lots was one of the most effective treatment strategies. (Braga and Bond, 2008, Criminology)
- Vegetation can be managed to create a reassuring environment, reduce fear, and increase citizen surveillance and defensible space. Principles of Crime Prevention Through Environmental Design (CPTED) suggest how to achieve safer places.

More information at: www.greenhealth.washington.edu

Additional social science about urban vegetation, crime, and public safety can be found at the Green Cities: Good Health web site (including research sources & citations).

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