

Oregon study shows large yard trees and street trees help reduce crime

Ts there anything trees can't do? They conserve energy, control stormwater, increase property value and provide beauty. And as a recent study has revealed, large yard trees and street trees may also reduce crime.

The study measured trees

at 2,813 single-family homes in southeast Portland, Ore., and compared this information with data on crime occurrences. The study accounted for the influences of a wide array of factors that could explain crime occurrences — including the overall appearance of a house, its market value, visual barriers like fences or walls, crime prevention measures, the proximity of the house to commercial

areas and busy streets and the house's placement on a city block. After looking at the data, a trend emerged houses fronted with more street trees had lower crime rates. This result held for total-crime rates as well as specific property crimes such as vandalism and burglary. Houses with larger yard trees also had lower crime rates.

Deterring criminals

At first glance, these find-

ings might be surprising, or even confusing. Portland landscape designer Linda Engstrom, who has been in the business for 30 years, expressed concern with sending the wrong signal.

"If you have good landscaping with really nice trees, I would think that would signal 'money,' and actually draw criminals in," she said.

But this study specifically found that not to be true.

The analysis included the market value of a house and its overall appearance. By keeping these variables constant, and then comparing houses with and without trees, it became clear that the presence of street trees and large yard trees reduced crime.

The crime-reducing power of trees was first researched in Chicago, in a 2001 study showing that crime rates were lower in and around apartment buildings where trees grew. Study authors offered the explanation that trees create a relaxing environment that low-

ers stress among apartment residents and even potential criminals. This finding agreed with earlier research showing that trees can reduce stress for people who live around them or see them on a regular basis.

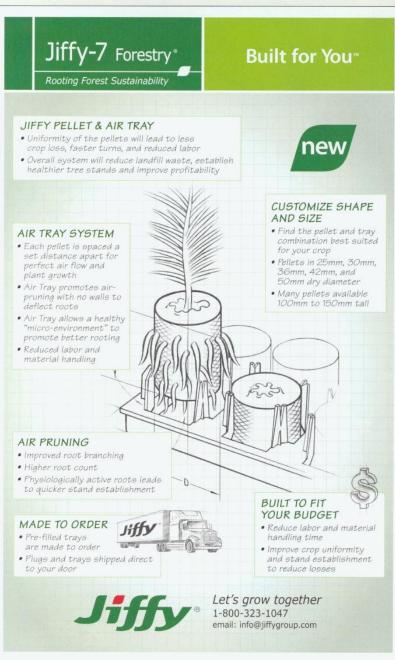
Stress reduction might indeed be part of the overall benefit residents receive from large trees and yard trees. But in terms of how they actually influence crime, the recent science on human behavior has begun to focus more on the visual cues potential criminals pick up from a particular neighborhood. Greg Saville, a criminologist, former law enforcement officer, and urban planner based in Washington has worked extensively in the field of Crime Prevention Through Environmental Design or CPTED. He helps neighborhoods across the country improve their understanding of the ways in which the built environment can create conditions that discourage criminal activity.

"Crime is so complicated," he explained. "But one thing that really makes a difference is the aesthetics of an environment. Trees and other foliage can make a place look well cared for. It can project a sense of authority in that neighborhood."

This sense of authority can act to discourage crime. Saville's explanation fits well with the basic premise of the "broken window hypothesis," which claims that signs of neighborhood neglect, such as broken windows or graffiti, send a signal to potential criminals that a neighborhood is run down and that local residents may not take steps to protect it from those who aim to do it harm.

Take precautions

If trees provide a "keep out" signal to potential criminals, does this mean we should start filling our yards with greenery? The answer is not necessarily yes. The Portland study found that in cases where yards contained many small trees, vegetation may actually facilitate crime. Consistent with



the concepts advanced by CPTED, these smaller trees can obstruct views, making it easier for criminals to hide and carry out their shady business. Stephanie Reynolds is the crime prevention program manager for the City of Portland, and found this study to reinforce the advice her office gives to homeowners.

"This study supports the idea that visibility is very important," she said, adding that not all small trees are bad. "Eventually young trees will grow and get their leaf canopy up high enough for you to regain visibility. I advise people to look out for lines of sight, and try not to plant that small tree in the way."

The view-obstruction story was bolstered by the study's findings regarding other view-obstructing features found at many residences in southeast Portland. For example, houses with tall barriers around their back vards, like a fence with solid slats, had higher crime occurrence. In short, property and landscape features that are sometimes meant to provide privacy can also provide cover for criminals. Finding the right balance between privacy and visibility is a familiar challenge for landscape designers. "Privacy is a big issue," said Linda Engstrom. "Yet I always try not to screen windows. I also try to make front yards open and neighborhood-friendly.

While it can be tricky to apply the results of any study to new places and situations, this study of the impacts of trees on crime in Portland can still provide some useful advice to homeowners and landscapers. For example, plant new yard trees in places that don't block views from windows and don't significantly obstruct the view of the house from the street or from neighboring houses. The placement of street trees doesn't appear to be as important.

Overall, the study's findings add to an emerging body of research showing that trees provide a surprisingly wide range of benefits. Specifically, large trees and street trees confer crime reduction benefits that residents on the street universally enjoy. And universal enjoyment may in fact have a lot to do with calming crime. An attractive neighborhood is more likely to draw people out, putting more "eyes on the street" and making it safer.

"Trees are incredibly important," Saville said. "We are attracted to beauty, and trees can make streetscapes beautiful places." $\ensuremath{\mathsf{NM}}$

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