



New report puts weight of numbers behind common knowledge about the worth of our green umbrella.
Photo By Paul Terefenko

News

Money does grow on trees

The reasons for planting a canopy overshadow today's trend toward tiny trees

|By Paul Terefenko

A large mulching machine was parked a few houses down from mine the other week. Workers were busy tearing a big old tree limb from limb. I didn't have a deep relationship with the dismembered tree, but the loss of its towering mass of leaves still bummed me out.

Turns out I'm not alone. Trees affect us. Sounds obvious, but the extent of their influence will soon be easier to gauge. The city is days away from releasing study results about the composition and condition of the city's canopy, its ability to ease greenhouse gas and store carbon, its real-estate advantages and a host of other surprising social pluses.

"Some smart researchers were fed all kinds of data. They crunched the numbers and determined the value of our forest in a number of ways," explains Richard Ubbens, director of Toronto Parks, Forestry and Recreation.

While the report, *Every Tree Counts: A Portrait Of Toronto's Urban Forest*, isn't yet available in full, much of its key info is. For example, we now know the replacement value of the city's urban forest is \$7 billion just for the planting and decades-long growing.

The numbers remind us that the urban forest is more than an aesthetic issue. The next time someone challenges the assertion that Toronto trees store carbon, you can answer, "They do – 1.1 million tonnes or 31.6 million dollars' worth, thank you very much."

"I'm hoping this study will give us the hard and fast numbers to justify investment," says Janet McKay, director of Local Enhancement & Appreciation of Forests (LEAF), a non-profit protecting the city forest on private land.

As it stands, municipalities are responsible for urban forests, and cities' green investment dollars are limited. But this study carries a message to the premier that while wind turbines are nice and Samsung is an okay place to invest, Toronto's urban canopy annually provides over \$60 million in tangible enviro services like reducing carbon emissions and energy costs, not to mention stormwater pluses.

"Trees are the only piece of urban infrastructure that's appreciating in value as it ages," Ubbens points out. "We're planting 109,000 to 110,000 a year now." That's up from a modest 9,000 just over a decade ago. Today the canopy covers 20 per cent of the city; the goal is 30 to 40 per cent coverage.

"We're also pruning three times as many trees," Ubbens says. That means proper trimming, and defending urban trees from utility-company limb cutting, construction, renos, bugs and arbitrary removals.

But there are hurdles beyond the expense that comes with nurturing trees, like getting the public onside with planting giant yard trees rather than stunted fruit-bearing species.

"In the late 80s, everyone wanted a flowering crabapple," Ubbens recalls. "That's rarer now. More people are realizing that a tree can shade their home." He acknowledges, though, that increased population density due to development and more people cramming into single-family homes can push out thoughts of planting large trees on one's property.

"It's a lost opportunity when people go for small ornamental or non-native trees in a location that could sustain

something far better,” says McKay. “We have the opportunity to discuss that.” She adds that LEAF goes 50-50 with residents on costs and maintains contact to ensure tree survival rates.

So far they’ve planted 15,000 trees, few in comparison to the city but significant enough to shake the shrub mentality out of urban landlords.

Okay, so the city’s taken steps to determine trees’ quantitative value when it comes to pollution, sequestration, air filtration and carbon fuel offsets. But what about their psychological value?

That’s where the University of Washington’s Kathleen Wolf comes in. “You often hear that trees offer beautification and aesthetics, but it’s so much deeper than that,” she says. “We respond psychologically in ways that we’re not even conscious of.” There are documented instances of people grieving the post-Katrina loss of trees, she points out.

Wolf’s background in landscape architecture and environmental psychology, and her compilation of 40 years of research on city greening for the U.S. Forest Service, informs her research into trees’ mental impacts.

Several studies have shown “that people heal faster after surgery if they have a view of trees and green,” says Wolf. “[Patients] use fewer pain-killing drugs and leave hospitals sooner.”

Trees also help those suffering from the effects of stress: elevated blood pressure, increased heart rate, anxiety. “Contact with nature, even brief encounters after a stressful experience, showed diminished stress responses,” says Wolf, noting that studies use instruments to measure changes in addition to patients’ observations.

“The work of Rachel and Stephen Kaplan at the University of Michigan has shown that our ability to focus on things is improved by having green experiences,” says Wolf.

Camping in the deep woods for a week isn’t the only option. Just walking through a peaceful green space during your lunch break can help. “Another Kaplan study found that people with a green view in their workplace report greater job satisfaction and less absenteeism,” Wolf says.

All this makes you want to plant 100,000 trees across Toronto. Good thing the city’s already doing that. Now do it yourself and convince those neighbours dragging wimpy ornamental shrubs from Home Depot to reconsider wasting prime airspace.

You’ll be able to pat yourself on the back today, and again in 2050, when the investment matures.

TREE TALLY

- Toronto’s tree canopy coverage is 20 per cent; the goal is 30 to 40 by 2050.
- The dollar value of our urban forest is \$7 billion.
- Over 60 per cent of our canopy is on private property.
- We have 144 different tree species, but 41 per cent are ash and maples.
- City trees provide \$60 mil in annual enviro services, including storing 1.1 million tonnes of carbon and reducing energy use by 41,200 megawatt hours.
- An average 84,000 trees were planted yearly by the city between 2005 and 2009.

From Every Tree Counts: A Portrait of Toronto’s Urban Forest

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