

Trees Foster Health and Healing: A Conversation

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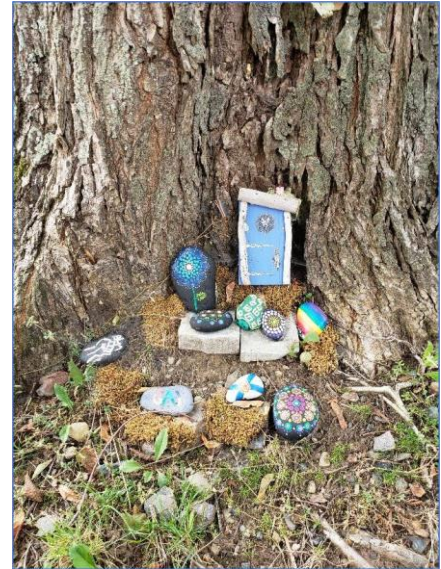
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Kate: I'm a nature lover and a gardener, so the idea that trees in the city foster our health and healing has always been clear to me. I was fortunate to grow up when kids were relatively free to roam, and we spent a lot of time adventuring in empty lots and nearby woodlands, so trees hold a special place in my heart.

My children are also drawn to find respite in nature. Our treed yard was a boon to them when they were young. I have vivid memories of them sprawled on their backs on summer days under the massive red maple in our backyard, taking in the majesty of its leafy canopy against a blue sky. One of my sons often struggled with the everyday stress of growing up. When life was too much to take, he would retreat to the woods behind our house to gather his thoughts and find some calm in the lean-tos and forts he built in the shelter of the hemlocks.

Shauna: Yes, I believe we all have this instinct – the one that draws us outdoors when feelings of stress, anxiety, anger, or lethargy become too much for four walls to hold. The one that brings us to quiet forested areas when we “need to get away”. The one that sends us up to the top of a beech tree when we feel playful and down under the shade of an oak tree when we feel blue. The one that tells us that nature is a place to heal.

Kate: I think for many people the park closures during the Covid-19 lockdown this spring underlined the irreplaceable value of urban trees and greenspace for health. Luckily, Haligonians were still able to benefit from our urban forest from the city sidewalks during those early spring days – the wonderful thing about trees is that they are still fascinating without their foliage, and we can fully appreciate the awe-inspiring strength and beauty of their woody framework and the sculpted detail of their bark.





Shauna: Absolutely! I feel as inspired by the empty frozen branches reaching across North Street as by the cathedral ceiling towering over Elm Street at the height of summer! Watching the transformation of these tree-lined streets through the seasons always makes me feel more connected to the nature around me, more familiar and rooted in place.

Kate: People have known about and employed the healing power

of nature for millennia, so it's quite surprising that a robust body of research about nature's ability to foster health and healing has been slow to materialize. It's good to see that's changing, and there is increasing empirical evidence to support what we know intuitively. There are indications that health benefits from greenspace result in a measurable reduction in healthcare spending (Becker, 2019).

Shauna: When I was studying in Halifax in 2016, the Common Roots Urban Farm was still on Robie Street. Patients of the Nova Scotia Rehabilitation Centre and folks with limited mobility were able to grow food and enjoy nature in the healing garden there (Ward, 2016). But it was not just the gardeners who reaped the restorative benefits of the space - the garden at large made an excellent neighbour to the QEII Hospital by providing a refuge to patients and families who needed time away from the sanitized, sterile institutional halls—time to heal surrounded by green.

Kate: Your story reminds me of the often-cited research piece about hospital patients with views of greenspace who recover faster than those with views of a brick wall (Ulrich, 1984).

Besides multiple restorative benefits, research is revealing more about the ability of urban greenspace – mostly associated with urban trees and forests – to reduce physical harm from pollutants, the ultraviolet radiation from sunlight, and excess city heat, for example (Wolf et al., 2020). There is strong evidence that a visit to the urban forest can boost immune function, and that exposure to urban trees can improve cardiovascular health (Wolf et al., 2020). And it's no surprise that a beautiful urban forest encourages people to get outside and exercise more (Wolf et. al., 2020).

Shauna: Some of these health relationships are remarkable, and not entirely obvious – for example, a Taiwan-based study found that those with regular exposure to green space had a lower prevalence of chronic kidney disease (Chien et al., 2019).

But all this tells us something we know, in our bones, to be true.

Kate: One of the theories from environmental psychology on nature's restorative ability resonates for me. On my walks to work or study in the city, I intentionally choose to detour through parks or streets with a tall canopy of trees. Victoria Park in Halifax is one of my preferred shortcuts, to avoid the heat in the summer, but mostly to give myself a mental break from the noise and activity of city streets. Kaplan (1995) describes what I'm seeking as "attention restoration", or recovery from mental fatigue caused when you are forced into effortful attention (p. 169). These green places prompt spontaneous, effortless thought, a freeing "sense of extent" and connectedness, and a feeling of peace (Kaplan, 1995, p. 174).



Shauna: Spending long stretches in remote wilderness surely sends a healthy dose of dopamine to the brain, but green oases in the middle of cities—like community gardens, parks, and tree-lined streets—can have the same positive impacts.

And we should not overlook the potential of the urban forest to make cities safer. For example, intact urban forests can mitigate the impacts of climate change by stabilizing slopes and attenuating stormwater run-off, thereby reducing flood risk. Cities around the world are recognizing these benefits and creating plans and strategies to recognize and quantify this value.

In all ways, urban trees make cities safer, more therapeutic places to live. And as urbanization increases worldwide, urban greenspace becomes increasingly valuable—not only for our own healing and wellbeing, but for the planet's.

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