

Nature in the Neighborhood – May 2023

Have you hugged a tree today?

Maybe you should. Did you know that people who live on tree-lined streets are less likely to report conditions such as high blood pressure, obesity, heart disease or diabetes? Numerous studies tout the health benefits of trees, for instance, a 2015 study in Toronto found that people who live in neighborhoods with a higher density of trees on their street reported better health and fewer cardio-metabolic conditions compared to those living in areas with lower street tree density.

Research has also linked exposure to trees to mental health, finding that exposure to “urban forests” – that is, collections of trees that grow within a city, town, or a suburb -- reduces mental stress, anxiety, and depression. In other words, you feel better around trees.

And it's not just your health that benefits. The planet's health also benefits. By storing carbon in their roots and branches, urban trees reduce the amount of climate-warming carbon dioxide in the atmosphere. And, because the shade and wind protection trees provide reduces energy consumption for heating and cooling buildings, they also help reduce the carbon dioxide emitted from fossil fuel power plants.

Urban forests also save the community money. A 2016 report found that the trees that line California's streets are worth an estimated \$1 billion a year for the work they do in removing air pollution, storing CO₂, cooling homes, and reducing rain runoff, among other services. The report calculated that, for every \$1 spent on planting or maintaining a street tree, that tree returns, on average, \$5.82 in benefits. Not a bad investment.

Closer to home a 2016 inventory study conducted in Northampton determined the city was saving \$1.3 million annual because of its trees, and Springfield has announced that it had lowered the city energy costs by 25% in part due the addition of trees to its urban forest through the Commonwealth's *Greening the Gateway Cities Program*. See: mass.gov/service-details/greening-the-gateway-cities-program

Add to all this the fact that trees are, well, just pleasant to look at. If you live on or near a tree-lined neighborhood, stop and consider for a moment how less appealing that street would look if all those trees were suddenly removed. That's why landscaping with trees can increase property values, in some cases as much as 20%.

Urban Forests are in Decline

Unfortunately, like the rest of the country, the Commonwealth's urban tree canopy on both public and private land is decreasing. And the communities with the sparsest tree canopy cover are often low-income communities, leaving those residents disproportionately affected by excessive heat and poor air quality. Two Salem State University students recently completed a

study of Swampscott's tree canopy from 2010 – 2016 which revealed significant tree canopy loss. The study revealed a surprising decrease in a relatively short period of time of 110 acres of canopy, going from 1,360 acres of canopy to 1,250 acres.

An Act Establishing the Municipal Reforestation Program

Pending in the legislature is a bill that would create a program to increase tree canopy in Massachusetts communities. *An Act Establishing the Municipal Reforestation Program*, sponsored by Representatives Steve Owens and Jenny Armini in the House (Bill No. H. 869) and Sen. Cynthia Creem in the Senate (Bill. No. S.452), would create an Urban Forest Advisory Council, comprised of members with expertise in urban forestry, to provide advice and technical assistance to municipalities, tree-planting organizations, municipal arborist and state foresters, and gas & electric companies. Sen. Brendan Crighton has also signed on as a supporter of S.452.

The Act would also require participating municipalities to develop a reforestation plan that, among other things, inventories the community's existing tree canopy and identifies optimal sites for planting trees. First priority would be given to sites with less than 20% tree canopy, neighborhoods with high levels of particulate pollutants, environmental justice neighborhoods, and sites deemed to be "heat islands" (i.e., urban areas that experience much warmer temperatures than nearby rural area).

Funding for the program would come from appropriations, bond proceeds, or other funds authorized by the legislature, as well as public and private sources, and would be distributed according to formula developed by the Urban Forest Advisory Council.

The Commonwealth needs this bill because, as the *Greening the Gateway Cities Program* has shown, healthy tree canopies foster healthy communities.

What can you do?

You can support this bill by writing or calling your State Senator and Representative. *For more info on how to do that:* malegislature.gov/StateHouse/Contact

You can also plant, nurture, and celebrate trees in your neighborhood ... and you can always start by giving them a hug.