

Copyright 2024. Toronto Star Newspapers Limited. Reproduced with permission of the copyright owner. Further reproduction or distribution is prohibited without permission. All Rights Reserved. The present document and its usage are protected under international copyright laws and conventions.

PubliC Certificate issued on August 6, 2024 to English Account NG C3 for personal and temporary display.
news-20240625-TTAW-df9714d0-2f3d-11ef-9711-cb327fca0a24

Source name

The Star (Toronto, ON) (web site)

Source type

Press • Online Press

Periodicity

Continuously

Geographical coverage

Regional

Origin

Toronto, Ontario, Canada

Tuesday, June 25, 2024

The Star (Toronto, ON) (web site) • 954 words

The number of bird species you live near could dramatically change your mental health. Here's why

www.thestar.com

Don't just stop to smell the roses - make sure you listen to the birds and look at the trees, too.

A new study out of Carleton University has shown that living in neighbourhoods with a higher variety of bird and tree species is associated with positive mental health.

It builds on a wave of research that shows how significantly exposure to nature can benefit your mental and physical health - decreasing stress, depression and anxiety, along with rates of diabetes, strokes and heart disease.

But the Carleton study - which analyzed data across 36 Canadian cities to show bird diversity increased the probability of good mental health by nearly seven per cent, and tree diversity increased it by more than five per cent - helps demonstrate a tie between mental health and biodiversity, too.

"We were surprised that (bird and tree diversity were) significant at all, because there's so many different factors that go into influencing people's mental

health in a city," said Rachel Buxton, a professor at Carleton and lead author of the study. "When we compared it to things like employment or education or marital status or smoking or drinking, we thought that it just wouldn't come out as important... We were surprised it came out significant at all."

The study, published this month, used data from eBird, a crowdsourced app managed by Birds Canada, and a national forestry inventory to measure species diversity across cities including Toronto, Ottawa, Vancouver and Calgary. Researchers then compared that data with self-reported mental health.

Even when controlling for other variables like socioeconomic status, Buxton and the other researchers still found a strong association between bird and tree diversity and mental health. As the number of bird and tree species increased in a postal code, so too did the probability of good mental health.

In fact, bird and tree diversity had a similarly-sized effect on mental health as your daily intake of fruits and veggies.

The benefits of nature

Increased bird and tree diversity also leads to an increased probability of good mental health, a Carleton University study has found.

The study did not establish that biodiversity causes good mental health and requires more digging to test the findings, Buxton said. But her findings are in line with a vast ocean of research spanning years and countries that confirm a link between green space and health.

One study from the 1980s showed hospital patients recovered faster after surgery if they had a view of nature from their window. Research by Marc Berman, now chair of the University of Chicago's department of psychology, found Toronto neighbourhoods with more trees had lower rates of health issues like heart attacks, strokes, diabetes, and kidney and liver disease.

In 2012, Berman and others sent study participants on two walks - one in nature and one in the city - while asking them to perform attention and memory tasks. Performance improved 20 per cent in nature. And tests have demonstrated that

simply showing people pictures or playing sounds of nature and cities can reproduce some of the same benefits.

There's also evidence showing how beneficial bird noises are. Two years ago, German researchers found listening to recordings of a high diversity of bird-songs decreases depression, anxiety and paranoia. After all, biodiversity applies to the ears as well as the eyes, according to Holli-Anne Passmore, who studies nature and well-being at Concordia University of Edmonton and was not involved in the Carleton paper.

She's currently researching whether listening to bird sounds while studying reduces exam stress.

"We are bombarded with noise," Passmore said, "but sounds of nature tend to be something we can hear without using a lot of cognitive resources."

Why does nature matter?

Why nature is so beneficial is more of an open question. One hypothesis is that because our brains evolved in nature, we can process natural stimulation more easily, with less work for the brain.

"We're living in kind of a very small window of time of the human brain," said Berman, who was also not involved with the Carleton paper. "A lot of our cognitive processing was evolved in a very different kind of environment and maybe sort of tuned to that."

It's a possible explanation for why biodiversity is associated with good mental health, too, Buxton said.

"If you have more different types of trees, more different types of birds, likely your needs are going to be met in that

sort of environment - you have more things to eat, you have more shelter," she explained. "We've evolved to be attracted to environments that have a higher number of species in them."

What does this mean for you?

For individuals, the lesson of this research is to soak in all the nature you can. But it's not just about time spent - it's also about paying attention to the nature around you, Passmore said.

That could mean noticing trees, birds, bees or flowers when you walk from your house to the car or bus stop - or it could be as simple as taking your earbuds out and listening to the birds chirping, Berman said.

On a larger scale, the importance of nature for health should change the way we design cities, Berman said. Instead of building cities only to efficiently move and house people, nature should also be a consideration.

The bottom line: nature matters.

"Everybody kind of likes nature, but I think it tends to be viewed as an amenity and not a necessity," Berman said.

"What this research and other research is showing is that it's a necessity. It's not an amenity. It's something we need."

This article appeared in The Star (Toronto, ON) (web site)

https://www.thestar.com/life/health-wellness/the-number-of-bird-species-you-live-near-could-dramatically-change-your-mental-health-heres/article_df9714d0-2f3d-11ef-9711-cb327fca0a24.html