



OPINION

Autumn's song shouldn't include the leaf blower

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Fall is a splendid time to celebrate trees. The sounds of leaves crunching underfoot or rustling along the footpath and earthy smells are reminiscent of childhood leaf forts.

Once upon a time, autumn's song was punctuated by swooshing and sweeping brooms, and scratching of the earth by human-powered rakes. But today, it's a cacophony of two-stroke, gasoline-powered leaf blowers. It's disrupting and disconcerting. In fact, it's deleterious to children, wildlife and the atmosphere.

Every doctor at the Mount Sinai Children's Environmental Health Center in New York signed a letter unequivocally stating that leaf blowers pose multiple hazards to human health. Children are the most susceptible because they breathe more air per kilogram of body weight than adults. Their lungs, ears, eyes and autoimmune systems are far more sensitive to environmental hazards.

Let's examine what scientists know about leaf blowers and exactly what kind of harm's way our children are facing:

According to both the American and Canadian Lung Associations, leaf blowers stir up acutely toxic levels of lead, arsenic, cadmium, chromium nickel and mercury in street dust. Exposure to these heavy metals is known to cause irreparable damage to children's brains, kidneys and central nervous systems.

A gas-powered leaf blower generates more than 75 decibels 16 metres away from the machine. The World Health Organization warns that exposure to loud noise above 75 decibels damages the human ear drum. Japanese fetuses exposed to similar loud noise have been found to weigh less – noise causes constriction of the uterine blood vessel, which supplies nutrients and oxygen to developing babies.

Not only are leaf blowers capable of impairing children's hearing, health, learning and behaviour, but they interfere with communication, create stressful levels of frustration and aggravation even after the noise abates, reduces accuracy of complex tasks and interrupts rest. Noise-disrupted sleep produces stress hormones, which, in turn, accelerate aging and heart disease. Cardiac disease is the No. 1 killer in North America.

In addition, the U.S. Environmental Protection Agency notes that loud noise causes stress, and human bodies react by increasing adrenalin, thereby elevating heart rates and blood pressure. A Dutch study has further corroborated these findings: Researchers found that 15 minutes of loud noise equivalent to a leaf blower interferes significantly with the human autoimmune system, resulting in high levels of the stress hormone cortisol.

Leaf blowers damage plants by driving a gale force wind comparable to a Category 5 hurricane in excess of 290 kilometres an hour. Leaves are ripped off their branches and new growth is destroyed. Nature's mulch is blown away from beneath shrubs and trees, denying nutrients to plant roots. Beneficial insects are killed, including ladybugs, ants and spiders. The noise, fumes and hot air harm pollinators: bees, butterflies and hummingbirds.

According to the California Air Resource Board, the carbon monoxide emitted from a gas-powered leaf blower operating for half an hour is equal to that emitted by an average-sized automobile over 700 kilometres. One hour of use released up to 500 times the hydrocarbons, 49 times the particulate matter and 26 times the carbon monoxide as released by an average-sized car.

Leaf blowers emit 2.4 million metric tonnes of carbon dioxide annually in the United States. That's 6.4 million barrels of oil – a giant carbon footprint.

It's time to reinstate autumn's timeless song, and protect our children's health and the environment from toxic gasoline-powered leaf blowers.

Reese Halter is a broadcaster, writer and biologist. His latest book is The Incomparable Honeybee.

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