

Guest essay: Leaf blowers – a small part of a larger movement Evanston should lead

Let's reduce unnecessary noise

May 17th, 2023



Gas-powered leaf blowers are now largely banned in Evanston. Credit:BobSeidenberg

By Nina Kraus

As most Evanston residents know, gasoline-powered leaf blowers **are now prohibited here**. The primary and publicized reason for their prohibition is the Climate Action Resilience Plan (CARP), in which Evanston has vowed carbon neutrality and zero waste by 2050. A second outcome is the mitigation of the sound nuisance gas-powered blowers bring to our neighborhoods. The minute the manic angry bee swarm sound of a leaf blower starts up, it sets us on edge. The absence of the worst offenders, the gas-powered variety, is welcome.

The leaf blower discussion brings into focus much larger issues on which Evanston is in a position to lead by example.

People tell me they are stressed and have difficulty concentrating. Surely this has many causes, but one may be environmental noise; hearing is our “alarm sense.” We are wired to pay attention to sound, whether it is welcome or unwelcome.

We are constantly distracted by sounds announcing someone has unlocked their car door or our laundry is dry. The sound of a neighbor’s leaf blower is the sort of sound most would consider background noise. For this reason, we tend to ignore it. But are we really tuning it out, or are we simply adapting our lives to a constant state of low-level alarm?

We have all had the experience of noticing a sound only when it goes away. Often it is an air conditioner compressor or an idling truck. The air conditioner cycles off or the ignition is cut, and suddenly we “hear” the silence. And we sigh in relief. We momentarily revel in the peace until the noise starts up again or is replaced by the next aural annoyance. If our ears are not being damaged and we can mostly tune them out, why should these noises concern us? We should be concerned for the sake of our brains.

People also say they have difficulty making and keeping connections. However earnestly people may seek connections through social media, loneliness, depression and disconnection seem to be worsening over time. So how do we – how do I – make connections in this less-connected moment?

Sound is at the root of how we make and keep connections. It shapes who we are biologically and how we connect with the world. When the world is falling apart, sound can connect us. Sound holds one key to fostering the sense of community we’re looking for. Sound connects us when we speak.

The hearing brain is vast. It engages how we think, remember, feel, move, coordinate our senses – even our guts.

Chronic noise exposure can lead to an overall decrease in quality of life, elevated stress hormones, problems with memory and learning, difficulty performing challenging tasks, stiffening of blood vessels and other cardiovascular diseases.

Damage to children’s brains

Noise is especially harmful for the developing brain. Children’s brains are primed to extract meaning from sound and are typically good at doing so. But the ability to take meaning from sound can be compromised by

chronic exposure to meaningless sound such as white noise and leaf blowers – almost anything that could be called noise.

So the banning of gas-powered leaf blowers in Evanston is a step forward, not only for the environment, but for the brain health of everyone in hearing range.

Evanston is a special place. I have long adored my green, tree-filled, Evanston neighborhood. And I am proud Evanston has taken this step.

In the end, a good deal of responsibility rests on us as citizens. As long as we continue to pay for noisy lawn care, we will have noise. Should we decide to settle on quieter options, economic forces will drive that change. I just had a lovely spring clean-up with no power tools – rakes and brooms only. We may have to pay a bit more, especially at first, but lawn care is a luxury. Mental and cognitive health are way more expensive to maintain in the long run.

I am not advocating for more regulation but rather that we think about the ways we can each do our part to reduce unnecessary noise.

Let's keep Evanston as forward-thinking in maintaining the mental health for its residents as it is in maintaining the environmental health of the planet.

I am a biologist specializing in the hearing brain; I invite you to read a book I've written called *Of Sound Mind: How our brain constructs a meaningful sonic world*. It is my love letter to sound. In it I detail the best biological reasons I know for avoiding noise to promote brain health.

Kraus has a doctorate in neuroscience and is the Hugh Knowles professor and director of the [Auditory Neuroscience Laboratory](#) at Northwestern University.