

## The unintended consequences of leaf blowers

Two-stroke engine powered leaf blowers have come to be one of the most widely used tools to maintain properties in town. They are the tool of choice for removing leaves and are used by both landscaping services and residents. While the effectiveness of leaf blowers for removing everything unattached from surfaces is obvious, there are several side effects that get overlooked or treated with indifference. These effects are serious and impact everyone in town, even those who don't even use leaf blowers.

The data about the health risks from blower use are well established by science<sup>1</sup>. The fact that many of these effects occur only after regular exposure and not immediately at the time of blowing, can make the link between cause and effect more difficult to understand. However, it doesn't make the following risks less severe:

1. **Toxic exhaust:** More than 30% of a leaf blower's fuel/oil mixture gets emitted unburned as an aerosol that contains a host of toxins that can cause eye, skin and respiratory tract irritation, neurological effects, and has been linked to lymphoma, leukemia and other types of cancer. The carbon monoxide in the exhaust can cause both mild and serious effects to the operators, from headaches, dizziness, weakness, and nausea to vomiting and disorientation.
2. **Particulate matter:** Blowers emit particulates that can lodge deep inside the lungs, causing or exacerbating asthma and other respiratory problems and increasing the risks of myocardial infarction, stroke, arrhythmia and heart failure. These impacts are even more serious in children, the elderly, and people with pre-existing conditions. Fine particulates stay suspended in the air we breathe for as long as a week or more, larger particulates can float in the air for hours to days, creating a risk not only for those who operate the blowers and are inhaling high particulate concentrations, but for all of us, after the particulates enter our homes, workplaces and schools.
3. **Noise pollution:** There is no longer a single day when you can't hear a leaf blower in your Barrington neighborhood: there is an inescapable cacophony disturbing residents repeatedly throughout the day, even within the walls of their homes. Noise is not just a nuisance—it impacts our work, our communications, our mental and physical health, our stress levels, and our children's ability to study.
4. **Impact on Landscape Workers:** Those who operate the leaf blowers face the highest concentrations of carbon monoxide, particulate matter and extreme and prolonged noise exposure, and are under a significantly increased risk to become seriously ill. The sad truth is that many of these workers have few employment options and little recourse for unsafe work condition.
5. **Environmental impact:** Leaf blowers blow away not only leaves, but also mulch and other kinds of organic matter needed for healthy soil—and they blow away a lot of soil, too. The loss of protective cover unnecessarily exposes plants to pathogens and diseases, which, in turn, often increases the use of toxic pesticide and fungicide treatment. The blowers disturb and displace beneficial insects and critters important to healthy gardens and ecosystems. Many birds, for example, depend on the insects found in the leaf litter layer to feed their young. They also can disperse chemicals, fertilizers, and pesticides from the ground into the air we breathe, and spread them across a large area, making it easier for rains to carry them into the Bay.

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<sup>1</sup> A summary and a listing of published data can be found at <https://chasesantacruz.org/impacts-of-leaf-blowers>

In an effort to reduce these impacts, I would like to offer the following suggestions:

1. **If you own a leaf blower, switch to readily available electric blowers.** They are less noisy, you don't breathe the exhaust, and, over the lifetime of the equipment they are less expensive than your current gas-powered blower, so you'll even save money.
2. **If you have a landscaper, ask them to provide service with battery driven electric leaf blowers,** which at least will avoid polluting exhaust and reduce noise. One reason that landscapers don't offer these services yet is because there is not enough expressed demand. So, ask for it, and let them know you have concerns about the emissions so close to where you live and sleep.
3. **Minimize the use of leaf blowers:** Don't blow at times where the amount of leaves and debris are minimal. If you have a weekly maintenance contract, call the landscaper during those weeks and ask them to skip blowing.
4. **Leave the leaves under your shrubs and trees:** They are natural mulch, sustain butterflies and insects and the birds who eat them, and you save on mulch and fertilizers.
5. **Low-maintenance native plants and native trees** are a great option for those who are interested in making their yard as sustainable as possible. Converting some, or most of your lawn to beds this way not only eliminates the need for blowing, because native plants thrive in a layer of leaves as the "native" mulch they're used to. They also don't need chemical fertilizers, pesticides, nor much watering, if any. And, as a bonus, native plants and trees support a diversity of native insects, butterflies and birds. They even look good. Native plants and trees are major contributors to resilience: they absorb rainwater that would run off a lawn, they are cooling in hot weather and they restore and sustain biodiversity. For more information on going native with your lawn visit [riwps.org](http://riwps.org) and [grownativemass.org](http://grownativemass.org).
6. **Of course, you can simply give up blowing altogether and use a rake and a broom.** It's more work, but you get the health benefits from a workout in fresh air, save money for the gym and you'll feel good about it.

Thank you for considering these suggestions, and for helping to reduce pollution and noise in the environment all of us live and breathe in.

Hans Scholl

Vice Chair, Town of Barrington—Resilience and Energy Committee