

Gas-Powered Leaf Blowers Annotated Short Reading List

General

1. [“What to Do About Gas-Powered Leaf Blowers,”](#) Quiet Communities, 2021
 - A comprehensive, extensively researched overview of the issues with gas-powered leaf blowers, with an accompanying list of linked references.
2. [“Get Off My Lawn,”](#) *The Atlantic*, April 2019
 - A very accessible account of the issues by journalist James Fallows, recounting Washington, DC’s successful effort to ban GLBs starting 1/1/2022.
3. [Sample Ordinances & Rules Governing Gas-Powered Leaf Blowers](#)
 - A chart of a sample of local ordinances from across the Northeast.

Noise

4. [“Lawn and Garden Equipment Sound: A Comparison of Gas and Battery Electric Equipment,”](#) *Journal of Environmental and Toxicological Studies*, December 4, 2018.
 - Compares noise characteristics of leading commercial models of gas and battery electric blowers. Key finding: GLB noise is louder than electric blower noise and able to carry harmful levels of noise over long distances and penetrate through windows because of a strong low frequency component that differentiates it from electric battery blower noise.
 - Also see:
 - i. [“Understanding Leaf Blower Noise,”](#) Quiet Communities, Spring 2021. A narrated slide presentation with helpful graphic representations of the different qualities of gas and battery leaf blower noise.
 - i. [“Noise: Battery v. Gas Powered Leaf Blowers,”](#) a one-page summary including examples of specific models of leaf blowers.
5. [“Too Loud! For Too Long!”](#) Centers for Disease Control, February 2017.
 - CDC factsheets and infographics highlighting the fact that hearing loss is the third most chronic condition in the US. “Being around too much loud noise – like using a leaf blower or going to loud concerts – can cause permanent hearing loss.”
6. [“Auditory and Non-Auditory Effects of Noise on Health,”](#) *The Lancet*, October 30, 2013.
 - “Observational and experimental studies have shown that noise exposure leads to annoyance, disturbs sleep and causes daytime sleepiness, affects patient outcomes and staff performance in hospitals, increases the occurrence of hypertension and cardiovascular disease, and impairs cognitive performance in schoolchildren.”
7. [“How Do We Protect Our Ears? How Do We Protect Our Bodies?”](#) PLANET – Professional Landcare Network, 2012
 - Industry safety training program for land care employees on noise and hearing loss. A key learning on page 3: “How many tools/equipment in land care are too noisy? (Almost all.)” See page 5: “Is our equipment noisier than 85 decibels? Yes. Most of it is. Some are more than 1,000 times noisier.”

Medical

8. [“Gasoline Powered Leaf Blowers,”](#) Massachusetts Medical Society (MMS), 2017
 - Background memo supporting a resolution adopted by the MMS acknowledging health risks of GLBs due to noise and air emissions.
9. [Resolution on Gas-Powered Leaf Blowers,](#) Medical Society of the State of New York resolution, 2016
10. [“Medical Grounds for a Restriction on Internal Combustion Power Tools and Leaf Blowers,”](#) Mount Sinai Children’s Environmental Health Center, April 2010.

Emissions

11. [“National Emissions from Lawn and Garden Equipment,”](#) Environmental Protection Agency, 2015.
 - Quantifies the amount of annual emissions from gas lawn and garden equipment by type of equipment and describes the adverse health effects of those emissions, namely cancer, heart disease, stroke, premature death, heart attack, stroke, congestive heart failure, asthma, chronic obstructive pulmonary disease, and developmental and neurological conditions. Key findings:
 - o Handheld tools (powered by 2-stroke engines, including leaf blowers) account for the vast majority (approx. 90%) of fine particulate emissions from lawn and garden equipment.
 - o Gas lawn and garden tools are significant contributors to nonroad emissions of volatile organic compounds from non-road as well as all sources, including vehicles, power plants, agriculture, and industry. For instance, gas lawn and garden equipment accounts for 8% of all benzene emissions; benzene is a human carcinogen.
12. [“Small Engines in California,”](#) California Air Resources Board, August 9, 2017
 - “For the best-selling commercial leaf blower, one hour of operation emits smog-forming pollution comparable to driving a 2016 Toyota Camry about 1100 miles, or approximately the distance from Los Angeles to Denver. ... By 2031, small engine emissions will be more than twice those from passenger cars.”
13. [“Particle Pollution and Health,”](#) Environmental Protection Agency, 2012
 - A 3-page fact sheet from the EPA describing the thousands of studies showing fine particle pollution is harmful to health.

Alternatives to Blowing

14. [“Are Grass Clippings Good for My Lawn?”](#) Lawn Doctor, June 2016
15. [“What to Do with Grass Clippings,”](#) Scotts web site
16. [“Don’t Blow It!”](#) Exhibit, Earthplace, 2018+
17. [“We Leave the Leaves,”](#) Sustainable Westport and Earthplace initiative, fall 2020

Golf Courses

18. [“Fully Charged,”](#) *Golfdom*, November 5, 2018.
 - This article from a publication aimed at golf course superintendents highlights efforts by a number of courses to transition to greener maintenance equipment.
19. [“Golf Courses and the Use of Leaf Blowers,”](#) memorandum of interviews with golf course superintendents. April 7, 2021
 - Summarizes phone interviews with superintendents of two PGA-quality golf courses, including one in the Boston area, that use battery-powered equipment.

Cost of Equipment

20. [Leaf blower specs](#), from “Mitigating the Health, Environmental, and Quality of Life Impacts of Gas Leaf Blowers,” Scarsdale Conservation Advisory Council, December 2020