

### LEAF BLOWER Q & A

#### 1. Do battery powered lawn blowers cost more than GLBs (Gas Lawn Blowers)?

From our research, we have found that electric blowers are about 20% more costly for the initial outlay, but that is because its power source comes with the package. The cost of gas is not included in the purchase price of a gas blower. A battery pack can be charged and swapped out quickly and blowers require no maintenance. Several studies have shown that once maintenance and fuel are factored in, an electric blower provides significant savings over the course of its lifetime when compared with a gas blower.

# 2. Do battery-powered blowers draw their electricity from fossil fuels, and if so, aren't they just as polluting as gas blowers?

In 2020, 56% of CT's electricity generation came from natural gas, a fossil fuel and 40% came from non-fossil fuel sources including nuclear, solar and wind. By contrast, gas leaf blowers are powered by two stroke engines that were invented over 140 years ago. Two-stroke engines derive their power from an inefficient fuel/oil mixture in which as much as 30% of the fuel mixture escapes unburned into the atmosphere, releasing toxic pollutants. Two stroke engines are considered the dirtiest engines in the world. A study found that a half hour of work with a two-stroke leaf blower is the equivalent of emitted hydrocarbon as a 6200-pound pick-up truck driving a distance of 3,900 miles. Electric leaf blowers, on the other hand, produce no emissions.

#### 3. Electric batteries may contain rare earth metals from strip mines, many in developing countries, so why would we want to use them?

As the world strives to meet its emissions targets, greater investment is being made in developing sustainable mining technology and more effectively recovering the materials in spent lithium-ion batteries. Spent batteries are accepted for recycling at Home Depot and Lowes. Electric batteries are more efficient and less polluting than gas motors where 30% of the gas is left uncombusted and emitted as dirty raw exhaust.

### 4. Is it true that the noise level on an electric blower is not that different from a GLB?

The decibel level of a GLB is about 85 -100 decibels and an electric blower about 70 db. Although that may not seem like a big difference, the decibel scale is logarithmic, so that with every increase in 3 decibels the intensity DOUBLES. For this reason, a GLB sounds much louder. Further, the noise emitted by gas leaf blowers operates on a lower frequency which is capable of traveling across longer distances and penetrating through windows and walls.

# 5. Shouldn't landscapers have the right to make their own choices for themselves?

Residents have rights too and there are workable alternatives. The noise from gas leaf blowers cannot be confined to one property. Excessive noise and pollution adversely affects the health and quality of life for all neighbors.

#### 6. Leaf blowers can be loud, but are they really such a big deal?

GLBs produce a low frequency noise that travels long distances and has a high penetrating power that can penetrate walls, cement barriers, and many kinds of hearing devices as compared to electric sound waves. This can be extremely stressful. The high levels of noise that comes from GLBs in particular have been shown not only to be stressful but pose health risks including hearing loss, hypertension and dementia. According to Dangerous Decibels, a public health campaign that aims to reduce hearing loss, leaf blowers from a distance of 50 feet range from 64 decibels to 78 decibels (dB). Blower operators hear 95 to115 dB. Noises 85 dB and above are considered harmful to hearing. With so many people working from home, the noise produced by GLBs has disrupted many Greenwich residents' lives and health.

#### 7. What else can I do to manage my yard sustainably?

The best thing you can do is limit your use of any blowers. Freshly cut grass and mulched leaves are a natural fertilizer for your lawn, so there is no need to add any commercial fertilizers in the spring. Run over the leaves on your lawn with a mower to mulch them. If you have too much mulch, put the excess around trees or into woods. Mulching leaves in your beds creates a home for overwintering beneficial insects and creates great soil. By avoiding the high force from leaf blowers you are protecting topsoil, and providing pollinator habitat for beneficial insects as well as protecting animals, pets and wildlife vulnerable to the dust, fine particulates and extreme noise.

### 8. Will restricting gas leaf blowers put landscapers out of business ?

Gas leaf blowers are replaced about every three years, so a phased approach will allow landscapers to replace their gas equipment with battery powered ones. If there is a restriction, it will put everyone on equal footing. Landscapers can look for opportunities to do bulk purchasing with other landscapers to qualify for discounts.

#### 9. Are electric leaf blowers as effective as gas powered ones?

Electric leaf blowers operate with about 80% of the power of gas blowers. According to the American Green Zone Alliance, electric leaf blowers can complete the job on an equal footing with gas blowers for ten months out of the year. They are powerful enough to handle spring clean ups, summer use, and fall leaf pick up in conjunction with mulch mowing. Gas leaf blowers have the advantage in late fall when leaves are wet because their maximum air speeds are 206 - 239 mph while electric blowers operate at 120-200 mph.

#### 10. How long do the batteries on electric blowers last?

Electric batteries have improved dramatically. All-electric landscapers use models that last 1-2 hours when used on a high setting. For light summer work, using low to medium power settings, electric blower batteries can last up to 5 hours. Electric landscapers charge multiple batteries for a work day, and most re-charge their batteries easily at client's homes outdoor outlets at a cost of 20 cents per charge. Fast charge batteries such as Husqvarna, take as little as 45 minutes to recharge.