SENATE COMMITTEE ON ENERGY AND ENVIRONMENT

Senator Mike Gabbard, Chair Senator J. Kalani English, Vice Chair LATF

Tuesday, February 2, 2010 Senate Conference Room 225 3:30 PM

## SENATE BILL 2356 <u>Relating to Leaf Blowers</u> Noise and Air Pollution

Aloha Chair Gabbard, Vice Chair English and Committee Members:

Please make the 2010 Legislative Session count. Year after year Hawaii's citizens plead with the State Legislature to seriously consider and act upon bills to restore the peace and tranquility of their homes constantly besieged by incessant weekend and weekday 74-decibel noise and air pollution of fossil-fuel powered weed whackers and leaf blowers. Residents of Hawaii live in homes that require cross ventilation, but are precluded from this natural comfort within their own homes by having to ensure that their windows are sealed shut - or face the consequences of deafening extended noise impacts, stagnant exhaust fumes and layers of dirt settling on their furnishings and belongings.

Leaf-blowing crews scour the landscape on weekends and weekdays, many with two or three of these machines blasting away at the same location. Their handlers appear to derive a sense of power and importance from wielding whackers and blowers that tumble debris around and erode the soil, creating clouds of dust and dirt as they permeate the air with toxic fuel emissions. Studies that have timed these actions and compared them with traditional maintenance methods have concluded that little time is saved by blowing leaves and dirt into piles to be scooped into plastic bags.

Many homes are surrounded by several residential properties, all with their own yard crews of three-to-four maintenance workers with 2-to-3 whackers and blowers whining, grinding and blasting at once. This cumulatively amounts to 7 hours or more of direct noise and air pollution each week.

Given Hawaii's warm climate and open living environment, the State Legislature should be a frontrunner in banning this gas-powered equipment from residential areas. With this example yard crews will return to traditional, less expensive and friendlier maintenance techniques, and manufacturers taking heed will find ways to develop better, quieter and cleaner maintenance equipment in the interest of the greater public health and welfare.

Please amend Senate Bill 2356 by banning this equipment in counties with a population of 500,000 or more residents. Please return the right of peace and quiet and clean air to our neighborhoods.

Sincerely, Michelle S. Matson

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Committee:	Senate Committee on Energy and Environment	LAIE
Measure:	SB 2356, Relating to Leaf Blowers.	
Date:	Tuesday, February 2, 2010	
Time:	3:30 p.m.	
Place:	Conference Room 225	
Testifier:	Daniel D. Palmer, M.D.	

## Chair Gabbard and Committee Members:

I am a retired physician. As a matter of public health, I strongly support the intent of this bill to reduce the use of leaf blowers.

It is easy to see that leaf blowers move leaves and twigs with great force. But leaf blowers move smaller particles with even greater vigor. The smallest particles may be nearly invisible, but the combined volume of small particles may approach the volume of larger material. In contrast, rakes barely disturb these smaller particles. Thus, before leaf blowers become prevalent, the smaller particles largely remained on the ground and were gradually absorbed or incorporated into the soil.

I first became aware of the fine particulate matter raised and distributed by leaf blowers while on an early morning walk down-wind of a leaf blower. The sun was at just the right angle to illuminate an astonishing amount of glittering fine dust. Since then, I hold my breath when passing leaf blowers—as everyone – especially those with heart or lung disease, should.

The small particles are composed of decaying organic matter, bacteria from the decomposition of decaying organic matter, fungi (molds from decomposition of organic matter), fungus spores and hyphae, pollen, fertilizer particles, herbicides and insecticides used on lawns, animal feces including cysts and eggs of various disease causing organisms, rubber particles from tires, metal particles from brake linings, cigarette butts in various stages of disintegration, organic chemicals from automobile emissions, fine carbon particles (Buckey balls, carbon nano-tubules, from diesel and gasoline combustion), coal dust, mineral materials (cadmium, feldspar, mercury, mica, silica, and others), and other materials.

All of the above are now present in the air we breathe in greater volume than they were before the introduction of leaf blowers. In the past, this particulate matter was allowed to percolate into the soil or become chemically or physically attached to it. It is now wafted into the air, again and again, before it can be assimilated. And because the windows of Hawaii homes are almost always open, the particulate matter floating in the air ends up inside our homes as dust.

It seems clear that all of this fine particulate material in the air must affect the lungs and the general health of all age groups, especially children. Recent publications have established an increase in the incidence of asthma over the past several years. It is probable that the inhalation of the increasing volumes of fine particulate material is one cause for the increase in the

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incidence of asthma and other respiratory disease problems. Certainly, this aggravates such problems. Additionally, it has recently been found that the incidence of heart disease and strokes in women is correlated with breathing fine particles in polluted air.

The rise in the incidence of these disorders corresponds in time with the replacement of rakes and brooms by leaf blowers, and with the increase in both the number of leaf blowers used and their power.

Moreover, the noise produced by weed blowers used in residential areas is louder than noise that would be tolerated in an industrial area. The damage that this does to our hearing ability and collective well-being must be significant.

For these reasons, I urge the Committee to pass legislation to reduce the use of leaf-blowers.

## LATE



RL: 2259

## SB 2356 RELATING TO LEAF BLOWERS

Senate Committee on Energy and Environment Public Hearing – February 2, 2010 3:30 p.m., State Capitol, Conference Room 225

> By Peter Rappa, Environmental Center Eileen Ellis, Sea Grant

SB 2356 prohibits the use of gas power leaf blowers; prohibits the use of electric leaf blowers on or near residential zones, except within allowed time periods and prohibits leaf blowing operations from blowing debris onto adjacent property without permission. Our statement on this measure does not represent an institutional position of the University of Hawaii.

Gas powered leaf blowers are a loud and potentially hazardous way to remove leaves and other debris from lawns, driveways, walkways and parking lots. There are four reasons to ban or at least restrict the use of gas powered leaf blowers: 1) they're noisy, leaf-blowers usually generate about 70-75 dB; 2) they pollute the air, particulate matter swept into the air by blowing leaves is composed of dust, fecal matter, pesticides, fungi, chemicals, fertilizers, spores, and street dirt which consists of lead and organic and elemental carbon; 3) they worsen allergies and asthma and irritate the lungs; and 4) they waste gas and emit toxic exhaust fumes. A number of municipalities have already banned them or curbed their use including the cities of Los Angeles, Palo Alto and Santa Barbara in California; Portland, Oregon; and a number of municipalities in the suburban area around Chicago, Illinois.

An argument against banning gas powered leaf blowers is that they save time over other means of cleaning debris. UH grounds keepers have done time studies by area and found the difference in time saved to be in the range of 20 percent. No small savings when you consider that UH groundskeepers manage areas anywhere between 5-10 acres of high traffic landscapes. Yet, even they are looking into alternate ways to collect leaves including the purchase and use of new sweeper that can get in to areas that could not mechanically sweep with our previous sweeper.

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Alternatives to gas powered leaf blowers are available. Rakes, brooms and electric blowers are alternate equipment that can perform leaf cleanup tasks. The first two have been in use since antiquity and have been proven performers since that time. Rakes and brooms are quiet and consume no resources. They produce minimal dust and little debris into the atmosphere and no pollutants from the power source. They are also a good way to burn calories and help keep people fit.

Thank you for the opportunity to comment on this bill.