

LET'S TALK TRASH – MAY 20221

Burn Smart - Wood Stoves: Being from Alberta (few trees, plentiful natural gas), I came to Lasqueti wood stove 'illiterate'. I had no idea how to start, feed, dampen, or maintain a contained fire but I learned quickly in order to stay dry and cozy. Now, my wood stove is the heart of my home; it heats the space, bakes the cookies, and makes hot water (in winter). I thought I knew everything I needed to know about building clean burning, efficient fires but researching for this article has led to refining some of my practices.

This month, the qRd's Let's Talk Trash team is running a Burn It Smart campaign to educate folks on how to best use a wood stove. Since, I learned some things from the available information, maybe you will too!

Burning Smart begins with good wood. Firewood needs to be seasoned for at least six months and kept sheltered from the weather. It should have less than 20% moisture content (you can buy a moisture meter to check or knock two pieces of wood together listening for a hollow sound). A variety of smaller sizes in the wood pile helps with starting fast, hot fires. Pieces should not be larger than 10-15 cm in diameter for maximum surface burn area and increased efficiency. Overly large pieces tend to smoulder.

Use dry kindling and newspaper or brown bags to start your fire. Keep it small until the stove is hot and then add larger pieces. Leave the vents open for the first 10-15 minutes to complete combustion. Stack pieces loosely so that air can reach all the pieces at once. Add three or more pieces to form a sheltered pocket of glowing coals to sustain the fire. When the wood is well-charred it needs less air to burn. Once your fire is established, you can close the vents to prevent heat loss up the chimney. That's a good time to step outside to see if you're 'Burning Smart' by looking at your chimney. A good fire shouldn't make visible smoke.

Smoke from your fire means unburned fuel, which means more pollution (particulate matter, carbon monoxide, volatile organic compounds and polycyclic aromatic hydrocarbons) and a waste of precious tree resources. Overloaded or completely damped down stoves create smoky conditions!

Keep your chimney clean and clear. This reduces the risk of chimney fires from built up creosote. Clean the ash from the wood box regularly leaving 1 inch at the bottom for maximum efficiency. Ash from untreated wood is great for the garden!

Please don't burn wet, green, painted, pressure treated wood or wood from the beach. Driftwood is soaked in salt and burning it releases sodium and chlorine ions (which lead to formations of toxic compounds). Burning driftwood also corrodes your stove and venting system. Also, burning garbage, plastic, treated or painted wood is illegal in BC because this creates toxic air conditions inside and outside of your home.

As we all share the resource of the air, think of your family, friends, neighbours and wildlife when you choose your fuel. In communities where wood heating is common, wood smoke can be

responsible for smog and health problems for vulnerable people. Wood smoke can irritate the eyes, nose and throat causing headaches, nausea, dizziness and asthma.

Beyond choice of wood, emissions vary greatly depending on your stove. Stoves from the 70's and 80's would produce 4.2 grams of particulate/hour. Since 2020, new stoves have been required to produce no more than 2.0 grams particulate/hour. If your stove is EPA (Environmental Protection Agency) Certified and you are using it right, you'll make 70% less smoke and use 30% less firewood. This spring, if you consider upgrading your old wood stove to a cleaner burning model, you can get a \$400 rebate through the provincial Wood Stove Exchange Program (WSEP). Upgrades to pellet, propane, gas, and electric heat pumps can receive \$550 in rebates from the WSEP along with additional rebates from Fortis Gas and BC Hydro.

Clean air is everyone's right. Protecting air quality is everyone's responsibility. Please direct any questions regarding the program to the Let's Talk Trash Team at 604-485-2260 extension 308 or info@letstalktrash.ca.

Burning dirty fires, stinks!

Tune into Let's Talk Trash's recorded Zoom info session on Burning It Smart with guest, Ron Spreeuw. Ron has been WETT certified since 1998 and installing wood stoves since 1991. Video available through *LetsTalkTrash.ca* drop down tab on wood stoves.